Kay Mercer
750 Shannon Hill Dr.
Paso Robles CA 93446

Ms. Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor [95814]
Sacramento, CA 95812-0100
commentletters@waterboards.ca.gov

Subject: SWRCB/OCC File A-2239(a)-(c)

Dear Jeanine:

This letter is written in response to request for comments on the proposed SWRCB/OCC File A-2239 (a)-(c) (Draft Order). Thank you for providing an opportunity to provide input. Comments provided are lengthy; however, there is, quite simply, a lot to say!

It is understood that the final adopted SWRCB/OCC File A-2239 (a)-(c) Waste Discharge Requirement (WDR) is precedential and will impact Irrigated Lands Regulatory Programs throughout the State of California. Therefore, your thoughtful consideration of comments pertaining to the Draft Order is greatly appreciated.

KMI is a small consulting firm providing grower and landowner clients with agricultural regulatory compliance and management practice assistance on the Central Coast. Additionally, KMI provides pro bono consulting to trade associations. For the last 12 years, KMI has been involved with agricultural water quality issues on the Central Coast and has provided water quality education, outreach, technical training, tracking legislative, policy and regulatory development, and assisting growers in water quality improvement projects.

While the Draft Order that is under consideration pertains to the East San Joaquin Water Coalition in Central Valley of California, it is presented as being precedential and providing a framework for the future Irrigated Lands Regulatory Program (ILRP) throughout the state of California. Therefore, comments provided herein have a Central Coast perspective and consider the ramifications of adopting this Draft Order on the Central Coast. General Comments regarding the Draft Order are as follows.

There is a theme throughout the Draft Order concerning how to achieve the appropriate balance. How can a regulation balance economic and environmental sustainability? How can a regulation balance the Human Right to Privacy against the Public's Right to Know? How can a regulation balance the need for streamlined efficiency with collecting enough information to measure the effectiveness of the regulation?

The Draft Order Is Too Complicated

The Draft Order is overwhelming in the amount of information it requires growers to collect and report and the administrative and technical burden it places on the Coalitions, and the Regional

Water Board Staff. Consequentially, there were various testimonies provided at the May 4, 2016, SWRCB workshop that the Draft Order does not bear a reasonable relationship between the regulatory burden imposed and the expected environmental benefits pronounced.

Because the Draft Order overreaches, it will likely result in ongoing program modifications. Twelve year of experience with the Central Coast Ag Order has demonstrated that complex, poorly defined, and constantly modified programs create stress, uncertainty, and lawsuits. Ultimately, this prevents strategic planning in both the business and public realms.

Coalitions

In general, this Draft Order demands too much of Coalitions with volunteer boards members. The liability is great and is not offset by program benefits. The question becomes "Why would an individual assume the liability of serving in a leadership capacity for a program that overreaches, will probably be subject to third party lawsuits, and will be administratively difficult?"

In terms of a Coalition's membership, this Draft Order potentially creates an environment in which the members do not perceive a risk/benefit ratio that is positive enough to entice them to remain in the Coalition. If growers are required to report individual field-level data, it is expected that members will depart.

Coalitions that broadly address the ILRP do not exist on the Central Coast. Regrettably, attempts to form and develop Coalitions here have been disappointing.

- During 2010-2012, negotiations of the current Order, the Central Coast Regulated Agricultural Community submitted a Water Quality Protection Plan (WQPP), alternatively called the Ag Alternative Approach, to the Central Coast Regional Water Quality Control (CCWRQCB) Board. The WQPP consisted of a third-party approach that involved management practice audits and third party verification. Overall, it is believed that the WQPP was not given serious consideration by CCRWQCB. No attempts were made by the Regional Board to work with Agriculture to overcome perceived program deficiencies so that the WQPP could be integrated into the IRLP.
- CCRWQCB will say that the final adopted Ag Order encouraged the formation of third party groups; however, the established public review process of Coalition formation was not conducive to formation and was petitioned by Agriculture.
- The Central Coast Agricultural Community formed the Central Coast Groundwater Coalition to manage Groundwater Monitoring. Quite honestly, the effort was a trial for how well Coalition will work. The incentive for forming the Coalition was based on the understanding that exact locations of sampled groundwater wells would be "blinded" and the dataset would be analyzed in aggregate. The perception in Agriculture is that Staff did keep uphold agreements. Keeping one's word and honoring contracts is a strong cultural value in the agricultural community. The subsequent failure of the Coalition's mission will impact future formations of Coalitions on the Central Coast.

Operation Size as a Regulatory Trigger

It is not appropriate to focus on an arbitrary statistic, such as operation size, especially when it has yet to be proven that larger growers are a greater threat to water quality. One could make the argument, in respect to operation size, that smaller growers contribute more to water quality impairment because they often lack the resources necessary to self-educate, seek technical assistance and/or implement practices. Alas, one could also argue that operation size, as a category for determining compliance requirements is "classicism" (i.e. a prejudice against or in

favor of people belonging to a particular social class). In reality, it may simply be that emphasis on larger growers streamlines regulatory and enforcement efforts; and if so, this should be honestly articulated, and not cloaked in some rationale that larger growers pose a greater threat to water quality.

Management Practices

Requirements that Sediment and Erosion Control Plans must conform to USDA Natural Resources Conservation Service (NRCS) or be certified are misdirected. NRCS is a federal agency with limited staff that is already overcommitted in California. Not all growers qualify for NRCS assistance because of gross revenues or financial reporting eligibility restrictions. In general, NRCS does not work with growers who do not have service agreements. Additionally, many NRCS sediment and erosion control practices are designed for farming systems in other parts of the country and do not fit well with California farming systems.

Other parts of the country have similarly struggled with documenting sediment loading. In the Chesapeake Bay area, where NRCS provides substantially more on-farm assistance than in California, there has been a concerted effort to assign functional equivalency to grower-implemented, on-farm practices that do not completely conform to NRCS standards. This allows growers the flexibility to customize proactive practices. It also provides agencies with tools to more accurately determine the level of farm water quality protection that is actually being implemented at the farm.

A/R Ratio

The A/R Ratio is a simple, albeit incomplete, indicator of whether a grower is achieving fertilizer efficiency. However, the use of the A/R Ratio as a proxy assessment of how much Nitrogen is left in the field is highly flawed and is based upon erroneous assumptions.

The assumption is that all applied Nitrogen that is not removed by a crop plant is destined for groundwater is simply incorrect. This assumption does not take into account fertilizer volatilization and denitrification.

- Factors that contribute to volatilization are moist soil, heavy dews, high soil pH (>7) high soil temperature (>70^{o}F) or frozen soil, Crop residues, Low CEC or sandy soils, and poorly buffered soils.
- Controlling volatilization is manageable. Practices consist of: awareness, proper fertilizer incorporation, precision application, and use of appropriate formulations of N fertilizer.
- *Example 1*: Montana State University documented that as more than 25% of applied N was lost from broadcast Urea when soils had a temperature of 50^{o} and a pH of 6.5 and in spring moist soils, the percent of applied N lost from broadcast Urea was as much as 62% in soils that are 44^{o}F and pH of 6.5. (Jones, 2013)
- *Example 2*: In field experiments, volatilization of N varied from 3-37%% depending on the variation in soil temperatures, pH, soil type and moisture content. (Jones, 2013)
- Similar variations in soil temperature, pH, soil type and moisture content contribute to denitrification.

There is much room for improved understanding of both processes.

The Expert Panel acknowledged these dynamics in their discussion of the A/R Ratio. They determined there were too many knowledge gaps pertaining to volatilization and denitrification to effectively account for them in a regulatory program. The need for streamlined regulation is laudable, however, this does not erase the fact that the A/R Ratio is overestimating load by not

accounting for nitrogen removal from the system. The assumption that all applied nitrogen actually makes it into the soil is inaccurate and unsophisticated.

The reliability of the A/R Ratio as a regulatory tool depends upon precise and accurate reported grower information. It is known on the Central Coast that Total Applied Nitrogen Applied data are somewhat compromised by inaccurate reporting. While the CCRWQCB Staff vouch for the data's accuracy, conversations with individual growers about their reporting illustrates a lack of understanding of the Total Applied Nitrogen requirement, growers' incapacity to collect reliable information, and/or growers' inability to accurately complete the form.

Considering the State Water Board intends to impose the Draft Order requirements to over 85,000 growers as part of the ILRP throughout the state, any doubt about the producing reliable data is troubling. What is lacking in this Draft Order and the Central Coast Draft Order is a program that builds growers' abilities to accurately measure, collect, track, report and analyze data with competency and accuracy. There is such a sense of urgency to implement a regulation that it creates an unacknowledged lag between growers' understanding of the issue, growers' comprehension of what is required, and growers' ability to comply in an accurate manner.

The simplicity of the A/R Ratio is its beauty, and also, its flaw. A flat, numerical value used as a performance measure of a highly dynamic and variable biological system may result in inaccuracies that are propagated over time.

Trade Secrets, Confidential and Proprietary Information

Comments made in the proposed order about protecting trade secrets, proprietary and confidential information are contradictory. In the Background section of the Draft Order, Staff asserts:

> "…At the same time, the water boards have acknowledged that growers have a legitimate interest in protecting confidential business practices and recognized the need to preserve the tradition of agriculture in California and the ongoing viability of agriculture as an essential drive of the state's economy."

Throughout Section A. Compliance with the Water Code and the Nonpoint Source Policy, growers are instructed to submit information that is clearly considered proprietary to their operations and which should be treated as confidential/proprietary/private business information or a trade secret. Examples of such data points are: field-specific cropping patterns, yield data, or management practices that are identified by exact location; and crop evapotranspiration, irrigation, and fertilizer applications that based upon crop needs. Each of these types of data points contains timing elements that are unique to each farming operation. Some contain information that may be back calculated in order to determine specific financial information.

Unfortunately, SWRCB has provided insufficient assurances about how the state will protect trade secrets or proprietary/confidential/private technical or business information. And perhaps, such assurances by SWRCB Staff would be meaningless. Previous assurances made by the SWRCB Counsel and CCRWQCB Staff during 2010-2012 negotiations of the Central Coast ILRP Order appear to have been misrepresentations. For example, Frances McChesney, SWRCB Counsel, provides the following during Water Board hearings:

> *"…Correct. That's why it's up to the farmer to identify what they think is proprietary. And there's quite a bit of case law. This has been a big issue in the case law about how to do that, including in the area of agricultural information. But it's really up to them to identify*

what they think is confidential. And it only becomes an issue if then someone makes a public record act request for the document and then which – the process then is to go back to the farmer and say, "Justify why you think this is proprietary because we've been asked for it." So it's not released until they agree to it.…Yeah. It's really up to them to say what they think is proprietary. I've actually been doing -- been an attorney for the Board now for 25 years and only once has anybody ever asked for a report. It's never been an issue in my experience. It's been pretty straightforward. They identify it; we keep it confidential." straightforward. They identify it; we keep it confidential."

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Also, as part of the Central Coast ILRP negotiations, CCRWQCB Staff produced an FAQ that states:

> *"Will proprietary information be released to the public as a result of the draft Order? No. The Water Code and other laws protect trade secretes from public disclosure."*

The brevity and lack of particulars in this statement provides the reader with false assurances that reported data will not be publically disclosed.

Whether representations made to the Water Board, growers and the public were intentional or erroneous doesn't matter. The fact is decisions made to adopt the 2012 CCRWQCB ILRP Order were based upon these representations.

Of course, Water Board Staff are required to balance the public's right to know with the rights of the individual to maintain privacy. The Public Records Act states:

> *"Disclosure of the information is against the public interest because there is a necessity for preserving the confidentiality of the information that outweighs the necessity for disclosure in the interest or justice… In determining whether disclosure of the information is against the public interest, the interest of the public entity as a party in the outcome of the proceeding may not be considered."*

Further, the Public Records Act states that

> *"A public entity has a privilege to refuse to disclose information and to prevent another from disclosing such information, if the privilege is claimed by a person authorized by the public entity to do so."*

Nevertheless, as the situation on the Central Coast demonstrates, there is uncertainty about whether the Water Boards are fully evaluating *all* the laws that govern this issue. It stands to reason; if there were any sort of balancing act, then, some information would *not* be disclosed.

At the state level, The California Public Records Act exempts certain types of information as being trade secrets:

> *6254.7(d) Trade secrets…may include, but are not limited to, a formula, plan, pattern, process, tool, mechanism, compound, procedure, production data, or compilation of information which is not patented, which is known only to certain individuals within a commercial concern who are using it to fabricate, produce, or compound an article of trade or a service having commercial value, and which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it.*

6254.15. Nothing in this chapter shall be construed to require the disclosure of records that are any of the following: corporate financial records, corporate proprietary information, including trade secrets…

6254.20. Nothing in this chapter shall be construed to require the disclosure of records that relate to electronically collected personal information, as defined by Section 11015.5, received, collected, or compiled by a state agency.

6254 (e)…market or crop reports, which are obtained in confidence from any person.

Note: According to the Business Dictionary a *crop report* is "a report document that shows the amount of agricultural produce grown at a particular time". This would constitute any piece of information that could be used to calculate the amount of agricultural produce such as cropping patterns, crop rotations, crop yield, acreage and units of production, acres "disked in", culls, price per unit of production, or number of inputs per acre.

Trade Secrets protection is not limited solely to the Public Records Act (6276), which states:

"Records or information that are not required to be disclosed pursuant to subdivision (k) of Section 6254 includes exemptions created by other state laws."

Many other state and federal laws govern what may be disclosed by a public agency. Other laws provide examples of what has been traditionally considered trade secrets or confidential/ proprietary/private information. For example, the 1970 CFR Title 7, Chapter IX, Part 900, Subpart 90.407, discusses confidential information in Connection with Marketing Orders for Fruits, Vegetables, and Nuts Pursuant to the Agricultural marketing Agreement Act of 1937. Here, producer information is treated as confidential information. From a historical perspective, much of the data that have been determined to be subject to public disclosure by the Water Board, would be protected under other state and federal laws. In general, these data are considered essential to the very nature of farming operations, and thus, have been afforded respect. There appears to be inconsistency in how these data are treated by the Water Board.

Further, The Public Records Act states that public disclosure should not occur if:

"Disclosure is forbidden by an act of the Congress of the United States or a Statute of this state."

At the federal level, CFR, Title 18, Chapter 90, Protection of Trade Secrets, Code section 1839, defines the term "trade secret" as:

"All forms and types of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes, whether tangible or intangible, and whether or how stored, compiled, or memorialized physically, electronically, graphically, photographically, or in writing if a) the owner thereof has taken reasonable measures to keep such information secret; and b) the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, the public;"

The 2016 Defend Trade Secrets Protection Act amends Title 18 above. The sections that would apply to inappropriate use of trade secrets in the ILRP states:

"An owner of a trade secret that is misappropriated may bring a civil action under this subsection if the trade secret is related to a product or service used in, or intended for use in, interstate or foreign commerce. As applies to this situation, application of the term 'misappropriation' would be:

"(B) Disclosure or use of a trade secret of another without express or implied consent by a person who—

"(ii) At the time of disclosure or use, knew or had reason to know that the knowledge of the trade secret was—

"(II) Acquired under circumstances giving rise to a duty to maintain the secrecy of the trade secret or limit the use of the trade secret; or
"(III) Derived from or through a person who owed a duty to the person seeking relief to maintain the secrecy of the trade secret or limit the use of the trade secret;"

On the whole, SWRCB policies on privacy, public disclosure and data use and re-use are not very well developed. The current SWRCB policy on pubic disclosure states:

In the State of California, laws exist to ensure that government is open and that the public has a right to access appropriate records and information possessed by state government. At the same time, there are exceptions to the publics right to access public records. These exceptions serve various needs including maintaining the privacy of individuals. Both state and federal laws provide exceptions.

Without more detailed guidance, the regulated community and the public are to question which laws are being consulted concerning data privacy and/or public disclosures and whether there is subjective and uneven application of the law(s).

Concerns regarding data sharing and (mis)use

Of course, reporting the data is not the only grower concern; there is added concern about what will be done with the data once it is reported. Concerns are enumerated below.

1. **Concerns about possible violations of the Human Right to Privacy resulting from electronic reporting and propensity profiling associated with Big Data.**

The UN Universal Declaration of Human Rights to Privacy, Article 12, states:

"No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation."

Key findings in a recent white paper "found that most, if not all countries' existing legal structures, provide an inadequate foundation for the conduct of systematic access, both from a human rights perspective and at a practical level. Among the questions to explore is "How can we give meaning to privacy in an era of systematic collection and trans-border surveillance?" If bulk collection is an inevitable reality of the digital age, how can we apply human rights principles, such as necessity and proportionality, to claims that it is necessary to collect all the data to serve certain compelling governmental needs? (Nojelm, 2013)

To add context, the Pew Foundation surveyed Americans to determine their attitudes about the pros and cons of Big Data. It was found that 93% of American adults say that being in control of who can get information about them is important (73% of which said is was VERY important) and 90% say that controlling what information is collected about them is important (65% think it is very

important). Only 6% of adults surveyed were very confident that government agencies can keep their records private and secure, while another 25% say they are somewhat confident. There were also marked differences in the benefits perceived from the use of big data. Some felt is would lead to positive social change while others perceived that it would be used for nefarious purposes. (Pew 2012)

"The ability to preserve the privacy of citizens, and of companies, who have some involvement with governmental agencies, becomes increasingly difficult as the ability to manipulate and store information grows. Complicating the picture is the ability of systems like GIS to create entirely new data out of old information, which may then indirectly reveal information that is supposed to be private". (Lynch, 1994)

2. Concerns about data hacking.

"As … government builds for the future, it must do so in a safe and secure, yet transparent and accountable manner. Architecting for openness and adopting new technologies have the potential to make devices and data vulnerable to malicious or accidental breaches of security and privacy. They also create challenges in providing adequate notice of a user's rights and options when providing personally identifiable information (PII)…Moving forward, we must strike a balance between the very real need to protect sensitive government and citizen assets given the realities of a rapidly changing technology landscape. To support information sharing and collaboration, we must build in security, privacy, and data protection throughout the entire technology life cycle."(Executive Office of the President)

3. Concerns about competitors stealing production information and loss of competitiveness.

"Trade secrets on the farm or in the agricultural business may be formulas for fertilizer, planting patterns, spraying devices and methods of using them, breeding processes, and any other specialized information or knowledge that is valuable to its owner as a secret. Technical and business information can be a trade secret if it is kept a secret. Even information about systems and procedures that were tried but later abandoned because they were failures can constitute a trade secret…Trade secrets do not have to be written down, they do not have to be original, and they do not require registration in order to enforce them… Employees and contractors might take both confidential and trade secret information with them simply because they were party to its creation or used such information in course of their employment." (IceMIller, 2016)

4. Concerns about regulatory liability for reporting data without proper context.

5. Concerns about regulatory action as a result of submitting imperfect data.

6. Concerns that Water Boards "cherry pick" data to tell a story.

7. Concerns about propagating "junk" data.

"Individuals, at the moment, have no way to access, check, and correct discrepancies as they appear. Errors may be passed far beyond the site where they first occur and be almost impossible to correct. In a data mosaic, such an error might even be propagated further. Individuals with bad credit ratings might be thrown together into a related category, and the reason for being placed in this new category within a new database might then be obscured. The original error would then be compounded, and becomes even more difficult to correct. Who is responsible? Who should be? Questions like this are still open to debate." (Lynch, 1994)

Poor quality data can mislead. The entire process of data design, collection, analysis and dissemination needs to be demonstrably of high quality and integrity. (Un Secretary-General 2014)

8. Concerns about the risk of third-party nuisance lawsuits.

9. Concerns about media misuse of information to push a political agenda, or demonize and ruin reputations.

The following four initiatives are examples of ways that data may be misused.

1. Artificially inflating exceedances or toxicity through selective use of data
2. Creating guilt by association
3. Intimidation and Harassment
4. Selective outrage to influence media reportage, legislation and/or policy and regulation

(Wachob, 2014)

Additionally, growers fear "hacktivism", which means the use of online protest or smear campaigns for political ends. (Greenwald 2014)

10. Concerns that government is transferring enforcement activities to activists' legal and media attacks so that due process is lost.

Sophisticated techniques are being developed and used in lieu of "traditional law enforcement" against people suspected (but not charged or convicted) of ordinary crimes. (Greenwald 2014)

11. Concerns about the loss of information flow and impacts to private contractual agreements.

12. Concerns about loss of marketing competitiveness and technical superiority in international trade.

"As the global population continues to climb and climate change makes arable soil and water for irrigation ever more scarce, the world's next superpower will be determined not just by which country has the most military might but also, and more importantly, by its mastery of the technology required to produce large quantities of food." (Genoways, 2015)

13. Concerns about foreign espionage of intellectual capital.

U.S. companies annually suffer billions of dollars in losses due to the theft of their trade secrets by employees, corporate competitors, and foreign governments. Stealing trade secrets has increasingly involved the use of digital technologies, thus making the theft relatively anonymous and difficult to detect. The Chinese and Russian governments have been particularly active and persistent perpetrators of economic espionage with respect to U.S. trade secrets and proprietary information. The tools, tactics, and methods used by such perpetrators vary widely but increasingly have involved the use of cyberspace and sophisticated technologies that "make it possible for malicious actors, whether they are corrupted insiders or foreign intelligence services (FIS), to quickly steal and transfer massive quantities of data while remaining anonymous and hard to detect" (Yeh, 2016).

A 2011 report prepared by the Office of the National Counterintelligence Executive, listed "agricultural technology" among the targets "likely to be of greatest interest" to spies from emerging powers. "Surging prices for food," the report stated, "may increase the value of and interest in collecting U.S. technologies related to crop production, such as genetic engineering, improved seeds, and fertilizer." Since that report, the Department of Justice has cracked down, successfully prosecuting foreign nationals for stealing secrets related to organic fertilizer production and an unidentified "new food product" The FBI expounded that "identifying and deterring those focused

on stealing trade secrets, propriety [sic] and confidential information, or national security information is the number two priority for the FBI, second only to terrorism." (Genoways, 2015)

14. Concerns about food security and bio-terrorism.
Department of Homeland Security's role in Food Defense and Critical Infrastructure Protection, Office of Inspector General, PIG-07-33, February, 2007.
https//www.oig.dhs.gov/assets/Mgmt/OIG_07-33_Feb07.pdf

Economic Analysis

The Draft Order fails to include an economic analysis of additional requirements, as required by Porter Cologne, Section 13141:

> *"However, prior to implementation of any agricultural water quality control program, an estimate of the total cost of such program, together with an identification of potential sources of financing, shall be indicated in any regional water quality control plan." Please note: This paragraph from Porter Cologne was NOT part of the original 1969 adoption of Porter Cologne. It was added as a qualifier to this section sometime between 1969 and 2002.*

SWRCB Staff asserts:

> *"We resolved that question [of whether a cost analysis is required] in Order WQ-2013-010 by finding that section 13141 only applies to an agricultural water quality control program that is adopted within a water quality control plan, not through a permitting action, like the Eastern San Joaquin Agricultural General WDRs".*

Quite frankly, to a layperson this argument resembles an excuse rather than a true legal reason. It is clear. The ILRP Waste Discharge Requirement (WDR) is a permit. However, permits, such as the ILRP WDR, provide the regulatory authority for Total Maximum Daily Load Programs, which ARE adopted into the Basin Plan as Water Quality Control Plans. The IRLP WDR clearly is an integral component of a Water Quality Control Plan and, hence, should conform to Porter-Cologne Section 13141.

Conversely, by State Water Board's own admission, the Irrigated Lands Regulatory Program is a program. Their Web-Site states in the "Programs" section:

> *"To prevent agricultural discharges form impairing the waters that receive these discharges, the Irrigated Lands Regulatory Program (ILRP) regulates discharges from Irrigated Agricultural lands. This is done by issuing waste discharge requirements or conditional Waivers of WDRs (Orders) to growers."*

SWRCB Staff continues in the Draft Order:

> *"Nevertheless, it is important for the regional water boards to consider costs when adopting irrigation lands regulatory programs. In this case, the Central Valley Water Board incorporated an analysis of costs in the information sheet. We also note that the Central Valley Water Board's Water Quality Control Plan for the Sacramento and San Joaquin River Basins includes an estimate of potential costs and sources of financing for the Central Valley Water Boar's long-term irrigated lands program at page IV. 38-IV. 39."*

However, the referenced document, Estimated Costs of Agricultural Water Quality Control Programs and Potential Sources of Financing, on page IV. 38-IV. 39, is woefully inadequate. It reads:

> *"…The Long-Term [Irrigated Lands Regulatory] Program will be based, in whole or in part on six alternatives described in the* Irrigated Lands Regulatory Program in the Environmental Impact report (Final PEIR;ICF International 2011) certified by resolution r4-201-0017. The cost estimate below is based upon and encompasses the full range of those alternatives.
>
> *The cost estimate for the Long-Term Program accounts for program administration (e.g. Board oversight and third0party activities0, monitoring for groundwater and surface water quality, a and implementation of management practices throughout the Central Valley. The estimated cost for the annual capital and operation costs to comply with the Long-Term Program range from $216 million to $1,321 million (2007 dollars). This cost estimate is a cumulative total that includes costs from the Sacramento River and San Joaquin River Basins and the Tulare Lake Basin.*

Since this document is not very informative, it is necessary to review the actual costs estimates in the Final PEIR. They are contained in The Non Regulatory Amendments to the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins and the Tulare Lake Basin to Provide a Cost Estimate and Potential Sources of Funding for a Long-Term Irrigated Lands Program. Section 3.2 Estimated Total Costs. As explained above, costs were determined for different program alternatives. Unfortunately, upon reading the detailed cost estimates, none of the enumerated alternatives were similar to the regulatory scheme proposed in the Draft Order. Alternatives 3-5 assume that Region 5 Water Board Staff is working directly with growers, while alternatives 1 and 2 underestimate the amount of work being required by the growers and the Coalitions. Therefore, the referenced economic analysis fails to fully calculate the incremental costs of the Draft Order to individual growers, Coalitions, and the Region 5 Central Valley Regional Water Quality Control Board. It does not estimate the lost opportunity costs of growers for opting out of the Coalitions and/or Coalitions losing voluntary participation of Board members. It does not calculate the increased costs to growers for opting to enroll in individual WDRs. It does not calculate the agency costs of administering individual WDRs or trying to regulate and enforce on growers who simply ignore the WDR. It does not estimate the incremental risks from third party lawsuits.

It should be noted that the cost estimates SWRCB Staff are relying on are in 2007 dollars. Additionally, in the Central Valley Regional Board's own analysis of their Cost Estimates, they lament that information on management practice implementation is limited and much of the available data are 10 years old. That was in 2010. Today, the data are 16 years old.

According to the Region 5 Staff PEIR cost estimates, "the estimated cost of management practice implementation represents the largest cost, with the greatest uncertainty." The lack of a cost estimate in the Draft Order means that the SWRCB has failed to capture incremental compliance costs, which are over and above costs in the currently adopted East San Joaquin Water Coalition WDR. These incremental costs are:

- Increased individual nutrient sampling and analysis, and/or data collection, collation, tracking, planning, reporting and analysis.
- Increased individual grower irrigation sampling and data collection, collation, tracking, planning, and reporting.
- Individual groundwater monitoring and reporting.

- Individual drinking water well monitoring, notice, verification, and posting requirements.
- Individual management practice effectiveness assessments.
- Increased Third-Party Coalition data collection, collation tracking, planning, reporting, analysis, training, and followup costs. In Staff's own words "This order sets out a number of new metrics and approaches to measuring and reporting on management practices, particularly with regard to nitrogen application and also requires revisions to both the surface water and groundwater monitoring provision on f the General WDRs….
- Research to determine appropriate nitrogen application metrics,
- Correlation of practices with the data received through monitoring and the reporting of the nitrogen application data.
- Increased Water Board Staff's data collection, collation, tracking, and analysis, as well as data feedback to the Coalitions.
- Increased Water Board Staff's administrative oversight of Coalition data management and grower interactions
- Increased Water Board Staff's enforcement activities to ensure compliance with this complicated program.

Failure to produce a cost estimate for the WDR and the attempt to make a direct comparison of the Draft Order with the 2011 Region 5 PEIR Economic Analysis does not pass the straight-face test.

Finally, CWC Section 13260 (B) states:

> *The total mount of annual fees collected pursuant to this section shall equal that amount necessary to recover costs incurred in connection with the issuance, administration, reviewing, monitoring, and enforcement of waste discharge requirements and waivers of waste discharge requirements.*

Since the Draft Order provides an insufficient evaluation of increased agency requirements, it will be impossible to calculate fees needed to comply with CWC Section 13260.

Elected officials, State Water Board members, the regulated community, and the public deserve the right to know how much this complicated, long-term, and overwhelming program is going to cost in terms of impacts to businesses, potential alterations to community tax structures, and increasing State fees. The State Water Board Members should remand the Draft Order for revision.

Ambiguity, Uncertainty and the Inability to Ascertain Risk Creates Unnecessary Liability

There is uncertainty whether the proposed Ag Waiver will realize any of the on-the-ground water quality protection it publicizes. On May 4, 2016, there was testimony that the Draft Order appears to be a paper chase.

Words that create ambiguity and uncertainty, such as: sufficient, meaningful, reasonable, and appropriate, are sprinkled throughout the Draft Order. Such words allow for a great degree of subjectivity on the part of the Water Board Staff and broad interpretation of noncompliance by various interests. Sometimes these words reduce the regulatory burden: most often, they do not.

Unfortunately, the over reaching nature of the Draft Order makes it very difficult to assess unintended ramifications or to envision unforeseen consequences. Ambiguity, uncertainty, and the inability to determine consequences are an anathema for businesses as they are unable to determine their risks and liabilities. Currently, growers cannot assess costs or risks associated with

compliance/non-compliance or the mid- to long-term possibilities of third party litigation. Presently, growers and their service providers cannot determine how the Draft Order will affect grower solvency, financing, insurance, or legal considerations or data management liabilities. Service providers cannot determine how their business relationships may be impacted with their grower clients or what their future liabilities will be when today's services are second-guessed as better solutions are developed in the future. The nature of liability may result in grower and service provider attrition. It may prevent growers from seeking innovations and solutions.

Reliance on the Ag Expert Panel

KMI attended all but one of the Nitrate Expert Panel meetings. The Expert Panel should be commended on their diligence and thoughtfulness of the questions placed before them. Unfortunately, the use of the Ag Expert Panel's recommendations in the Draft Order fails to take into account the Panel's thorough discussion of improvement lag times, current grower (in)capability, and the industry's current technical (in)capacity. As a result, unless the Draft Order is amended to reflect these challenges and limitations, there will be short-term chaos and exploitation.

Recommendations and Conclusions:

When dictating the use of Coalitions, please consider the lack of trust that has evolved over the past eight years on the Central Coast. Continual collaborative failures between CCRWQCB and the Agricultural community will be very difficult to overcome. Please build more flexibility into the program in respect to Coalitions and do not assume that the state can mandate trust.

The issue of what is reasonable is sprinkled throughout the Draft Order. However, considering the complicated and overwhelming nature of what is required, there does not appear to be a reasonable connection between the burden imposed on the agricultural community and the environmental benefits derived from the Draft Order.

The Water Boards must strike a balance between many opposing tensions. SWRCB writes:

> "…On one-hand, [the Water Boards] require sufficient data collection and reporting to allow for meaningful feedback on the program, but, on the other hand, avoids extensive data requirements that demand excessive and unwarranted time and costs to produce and analyze on the side of the Members, the third-party and water board staff. In striking that balance, the Board also takes into consideration Member concerns with disclosure of trade secrets and proprietary business information."

As testified on May 4, 2016, the data measurement, collection, tracking, reporting and analytical requirements of the Draft Order are too extensive and too expensive.

The Bottom line is that the proposed Draft Order fails to do what it *should* do.

The Draft Order should articulate more specific processes for protecting reported trade secrets and confidential/proprietary/business data from public disclosure; but, as current assurances seem disingenuous.

The Draft should create a long-term program that builds on itself and exacts the lowest burden possible on the regulated community while slowly and steadily improving water quality. Instead, it

over-reaches in an effort to create an instant measure of whether the WDR is effective.

Please consider the following recommendations for improvement:

- The Proposed Order claims since it isn't *required* to do an economic analysis; it will not. References to an existing cost estimate are inadequate. SWRCB should inform elected officials, the regulated community, and the public of the price tag associated with this program and adoption of the Order should not proceed until a credible effort has been made to produce an economic analysis. **Deliverable: Do a cost estimate of the proposed requirements in the Draft Order.**

- Create a robust 21st Century discussion about how to ensure data accuracy and quality. **Deliverable: Create an independent, third party Data Quality Accuracy Advisory Panel consisting of agency, IT and agricultural representatives**.

- Create a robust, 21st Century dialog about how to balance a basic Human Right to Privacy with the 21st Century's Public Right to Know. **Deliverable:**
  - **Create a Human Right to Privacy Bill of Rights.**
  - **Develop more transparent and specific policies with well-articulated criteria about data use management, privacy protection, and public disclosure.**
  - **Work with the Governor's office and the legislature to objectively determine what is a "public record" in today's cyber-environment.**
  - **Provide training to growers about steps that are needed to protect trade secrets.**

- In a recent court case, a judge issued a protective order that required restricted access to data as well as a "special master" (subject matter expert) to monitor the information to prevent its misuse (McCambridge, 2016). **Deliverable: Require each Water Board to create an independent, third-party "Special Data Master" that establishes clear norms and legal frameworks to guide data protection, use, and re-use of information delivered through a myriad of on-line digital and GIS sources.**

- Implement a phased approach in the Draft Order to build a more accurate and streamlined system. **Deliverables:**
  - **Phase 1. Work with Agronomists to train growers on *HOW* to take proper soil nitrate and water nitrate concentration samples.**
  - **Phase 1. Work with IT consultants to set up links between subsets of the Farm Water Evaluation Plan Template and compliance forms to ensure consistency between documents and accuracy of information.**
  - **Phase 1. Do an in-depth grower technical and administrative needs assessment across the state, across commodities and across technical service providing organizations. Address gaps through phases and streamlining in the Draft Order where there are technical assistance gaps.**
  - **Phase 2. Work with the IT industry and academia to create a streamlined data collection system for growers to implement on the farm.**
  - **Phase 3. Work with the IT industry to report total Nitrogen Applied data in a manner that blinds data from which financial information can be back calculated by the public.**
  - **Phase 4. Work with federal and state agencies, academia, and agronomists to develop accurate, appropriately scaled and meaningful groundwater and surface water models for nitrates.**

- **Phase 5. Work with federal and state agencies, academia, and agronomists to develop accurate, appropriately scaled and meaningful groundwater and surface water models for other constituents of concern.**

- Since SWRCB has, in practice, previously required ALL reported compliance information to be subject to public disclosure, then, this establishes a strong rationale for Government to focus on how to best manage and utilize aggregated information. Otherwise, the human right to privacy is jeopardized. **Deliverable: Eliminate individual grower reporting of field-specific data from which financial information may be back-calculated or from which Propensity Profiling may be done in combination with other data sources.**

Thank you for your consideration of these comments. KMI respectfully requests that the State Water Board consider these comments to recommended expressed concerns and recommended changes.

Most Sincerely,

Kay Mercer
President

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