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Thursday, December 21, 2017

Ms. Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor (95814)
P.O. Box 100
Sacramento, CA 95812
commentletters@waterboards.ca.gov

Via Email

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

Dear Ms. Townsend,

Environmental Law Foundation and the Environmental Justice Coalition for Water write to oppose, in its current form, the Modified Eastern San Joaquin Agricultural WDRs. While we support the goal of regulation of agricultural pollution in the Central Valley, this Order fails to comply with the law and will not effectively reduce water pollution in the Eastern San Joaquin Region nor should it be a precedent for other agricultural orders statewide. For the reasons set forth below, we oppose it.

1. The ESJ Order Must Be Transparent

a. The ESJ Order's Reporting System Does Not Allow the Public or the Regional Board to Verify that the Program is Working

This Order[1] gives an extraordinary amount of power and discretion to the East San Joaquin Water Quality Coalition ("Coalition" or "Third Party"), setting it up as a regulatory body in its own right. The Central Valley Regional Water Quality Control Board's ("Regional Board's") job, under the Order, is to supervise the Coalition's activities, not the growers'. Under the doctrines discussed above, such an arrangement requires extreme care to protect the public's access to information and to provide assurance that the people, through the State and Regional Boards, retain ultimate authority over protection of water quality. This Order fails these tests.

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[1] State Water Resources Control Board, Order No. WQ 2018-, In the Matter of Review of Waste Discharge Requirements General Order No. R5-2012-0116 for Growers Within the Eastern San Joaquin River Watershed that are Members of the Third-Party Group, SWRCB/OCC Files A-2239(a)-(c) ("ESJ Order" or "Order").

At its root, this Order relies on growers to implement management practices that will, in theory, reduce loading of pollutants to waters of the state. The Coalition, not the Regional Board, receives all reported data on these management practices directly from the growers. (ESJ Order at 51.) The Coalition, not the Regional Board, is given the responsibility of interaction with the growers, whether for education and training, or "follow-up" should a grower be identified as an "outlier" in its nitrogen application. (ESJ Order at 55.) The use of a coalition as an intermediary between the Regional Board and the growers may not per se be unlawful. But this Order oversteps legal boundaries because the State Board allows too little data to flow to the public to verify that the program is working to improve water quality.

The Central Valley Board receives a membership list containing members' contact information and geographic information about each parcel farmed by the member.[2] The Regional Board also receives a number of summary reports based on data collected and analyzed by the Coalition. These include the Irrigation and Nitrogen Management Plan Summary Report, an Annual Report on Management Practice Implementation and Nitrogen Application, a Groundwater Quality Assessment Report, a Sediment Discharge and Erosion Assessment Report, Surface Water Exceedance Reports, and a Monitoring Report. To the extent that these reports rely on information about individual growers' management practices or nitrogen application, these reports are based on data that is reported only to the Coalition. Thus, this data is secret and completely unverifiable by the public or the Regional Board. That the public must trust that the Coalition is accurately summarizing and characterizing the raw data that go into these reports is a facial violation of the Nonpoint Source Policy, which requires that there be a permanent, public record which allows the public and the Regional Board to reproduce the results of monitoring programs.[3] Without the raw data, the conclusions of these reports will not be reproducible.

The Order directs the Regional Board to use the data in the anonymized tables to verify the reports. (ESJ Order at 78-9.) As discussed below, however, the anonymized data is missing several key parameters, such as location and field size, that are necessary for effective verification. The sum total of the data that the Regional Board will receive from the Coalition on individual members is represented in the four data tables described at pages 51-54 of the Order and example tables are attached to the Order. The purpose of anonymizing the data tables, as described below, is to prevent the Regional Board or the public from associating any of the information in the membership list with any grower's farming practices or data.

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[2] Revised WDRs at 32.

[3] Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program ("Nonpoint Source Policy"), at 14, available at https://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_iepolicy.pdf

Table 1 (reproduced in Figure 1 below) contains a summary of information from the Irrigation and Nutrient Management Report (INMP Report),[4] the Farm Evaluations,[5] and the Management Practice Implementation Report (MPIR).[6] The data is identified by an "anonymous member ID" and broken down by "field." The fields are not labeled with any geographic information nor is the size of the fields listed. Multiple fields may be combined into "management units" and listed together.[7]

Figure 1:

TABLE 1
Sample Field-Level Management Practice Data Reported to the Regional Board by Anonymous Member ID*
(Second Staff-Proposed Draft Order)

ID	Data from INMP Summary Report						Data from Farm Evaluation			Data from MPIR			
Anonymous Member ID	Crop	Outlier Notification? (Annual)	INMP Certification Method (Annual)	Irrigation Method	Irrigation Practices (Annual)	Nitrogen Management Practices (Annual)	Pest Management Practices (Every Five Years)	Sediment and Erosion Management Practices (Every Five Years)	Irrigation wells? Abandoned wells? (Every Five Years)	In a SQMP area? (Annual)	Practices implemented to comply with SQMP	In a GQMP area?	Practices implemented to comply with GQMP
243721	Tomato$_1$	Yes	CCA	Drip	Measured soil moisture	Evaluated crop nitrogen need; used fertigation	Followed label restrictions	Used off season cover crop	Yes, No	No	NA	No	NA
243721	Tomato$_2$	No	CCA	Drip	Weather-based measured soil moisture	Used tissue/petiole testing	Used drift control agents	Stabilized creek and stream banks	Yes, Yes	No	NA	No	NA
243721	Corn	No	Self	Furrow	Tailwater return	Used split fertilizer applications	none	No irrigation drainage	Yes, Yes	No	NA	No	NA
341962	Almond	No	NRCS	Drip	Weather-based scheduleing	Used split fertilizer applications	Used buffer zones	Field is lower than surrounding terrain	Yes, No	Yes	Limited edge of field spraying	Yes	Used split fertilizer application
810619	Corn	No	CCA	Furrow	Tailwater return	Tested irrigation water nitrogen concentration	Used vegetated drain ditches	Flow dissipaters, stabilitied creed and stream banks	No, No	Yes	integrated pest management	No	NA
810619	Alfalfa	Yes	Self	Border flood	Laser-leveled fields	none	Applied no pesticides	Used in-furrow dams	No, Yes	Yes	integrated pest management	No	NA
781936	Almond$_1$	No	CCA	Sprinkler	Measured soil moisture	Tested soil for residual nitrogen	Mapped sensitive areas	irrigated with drip or micro irrigation syst.	Yes,No	No	NA	Yes	Compost added to soil
781936	Almond$_2$	No	CCA	Flood	Irrigation based on crop water need	Tested soil for residual nitrogen	Used end-of-row sprayer shutoff	Planted cover corps or native vegetation	Yes, Yes	No	NA	Yes	Compost added to soil

*The data in this table is for illustrative purposes only and does not represent actual data collected.

[4] Growers prepare individual INMP Reports annually and submit them to the Coalition. (California Regional Water Quality Control Board, Central Valley Region, Order No. R5-2012-0116, Revision 4 ("Revised WDRs"), at 27-28, available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/a2239/esj2239_draft2_appa.pdf.) The Regional Board never sees the actual INMP Reports, only a summary (ESJ Order at 74.).

[5] Growers prepare individual Farm Evaluations on a five-year basis and submit data from them to the Coalition. (Revised WDRs at 25.) The Regional Board never sees the actual Farm Evaluations.

[6] Growers prepare individual MPIRs and submit them to the Coalition (California Regional Water Quality Control Board, Central Coast Region, Attachment B to Order No. R5-2012-0116, Revision 4, Monitoring and Reporting Program ("MRP") at 7, Revised WDRs at 31. The Regional Board never sees the actual MPIRs. (See MRP at 23.)

[7] See MRP at 26.

Table 2 (reproduced in Figure 2 below) is broken down by the same anonymous member ID and field, but contains per-acre nitrogen applied and removed data. Again, geographic information and field size is not included.

TABLE 2

Sample Field-Level Nitrogen Data Reported to the Regional Board by Anonymous Member ID*

(Second Staff-Proposed Order)

Anonymous Member ID	Crop for each field	N Applied via Fertilizer (lbs/ac)	N Applied via Organics/ Compost (lbs/ac)	N Applied via Irrigation (lbs/ac)	Total Nitrogen Applied (lbs/ac)	Nitrogen Removed (lbs/ac)	A/R	A-R (lbs/ac)	3 yr A/R
243721	$Tomato_1$	180	10	6	196	148	1.3	48	1.3
243721	$Tomato_2$	150	0	45	195	60	3.3	135	3.7
243721	Corn, silage	230	0	17	247	210	1.2	37	1.4
341962	Almond	180	5	22	207	140	1.5	67	1.3
810619	Corn, grain	200	0	5	205	120	1.7	85	1.6
810619	Alfalfa	0	0	35	35	510	0.1	-475	0.1
781936	$Almond_1$	250	0	0	250	130	1.9	120	2.1
781936	$Almond_2$	135	10	31	176	54	3.3	122	3.6

*The data in this table is for illustrative purposes only and does not represent actual data collected.

Figure 2:

Table 3 (reproduced in Figure 3 below) contains per-acre nitrogen applied and removed data, this time listed by an anonymous APN ID. Again, geographic information and field size is not included.

Figure 3:

TABLE 3
Sample Field-Level Nitrogen Data Reported to the Regional Board by Anonymous APN ID*
(Second Staff-Proposed Order)

Anonymous APN ID	Crop for each field	N Applied via Fertilizer (lbs/ac)	N Applied via Organics/ Compost (lbs/ac)	N Applied via Irrigation (lbs/ac)	Total Nitrogen Applied (lbs/ac)	Nitrogen Removed (lbs/ac)	A/R	A-R (lbs/ac)	3 yr A/R
AQRTM	$Tomato_1$	180	10	6	196	148	1.3	48	1.3
AQRTM	$Tomato_2$	150	0	45	195	60	3.3	135	3.7
AQRTM	Corn, silage	230	0	17	247	210	1.2	37	1.4
GJZQN	Almond	180	5	22	207	140	1.5	67	1.3
MNOPR	Almond	180	5	22	207	160	1.3	47	1.2
CFRMO	Corn, grain	110	0	5	115	92	1.3	23	1.6
QZIFE	Corn, grain	110	0	5	115	92	1.3	23	1.6
QZIFE	Alfalfa	135	10	31	176	54	3.3	122	3.6
ROTBM	Almond	250	0	0	250	130	1.9	120	2.1
LGTVI	Almond	135	10	31	176	54	3.3	122	3.6

*The data in this table is for illustrative purposes only and does not represent actual data collected.

Table 4 (reproduced in Figure 4 below) lists nitrogen applied and removed data, this time by township. Townships are six miles by six miles square.[8] This table does contain acreage information on the crops grown in each township. The acreage is not broken down by grower, even anonymously. And the township data in Table 4 is not tied to either the anonymous member IDs listed in Tables 1 and 2 or the anonymous APN ID in Table 3. There is no information about management practices other than nitrogen application. For instance, there is no information about pesticide use, sediment control, cover cropping, or timing and split of fertilizer application.

Figure 4:

[8] ESJ Order, Attach. A, at 23.

TABLE 4
Sample Township-Level Nitrogen Data Reported to the Regional Board*
(Second Staff-Proposed Order)

Township Range (TR)	Crop	Total Acreage (ac)	N Applied via Fertilizer (total lbs)	N Applied via Organics/Compost (total lbs)	N Applied via Irrigation (total lbs)	Total Nitrogen Applied (total lbs)	Nitrogen Removed (total lbs)	A/R	A-R (total lbs)
02S07E	Almonds	88	20000	60	2390	22450	22400	1.0	50
02S07E	Corn, silage	54	12420	0	650	13070	11340	1.2	1730
02S07E	Walnuts	35	5250	0	500	5750	3575	1.6	2175
05S14E	Almonds	115	20700	0	3540	24240	16100	1.5	8140
05S14E	Corn, grain	600	66000	250	0	66250	55200	1.2	11050
05S14E	Grapes	112	2800	75	200	3075	3140	1.0	-65
05S14E	Oats	32	--	--	--	--	--	--	--
05S14E	Pistachios	1293	155160	0	3550	158710	108612	1.5	50098
05S14E	Wheat	1040	156000	200	900	157100	104000	1.5	53100
06S09E	Almonds	38	5700	0	705	6405	2052	3.1	4353
06S09E	Corn, grain	2144	235840	0	9858	245698	197248	1.2	48450
07S11E	Almonds	4696	657440	2000	3250	662690	422640	1.6	240050
07S11E	Tomatoes	891	160380	0	9928	170308	131868	1.3	38440
07S11E	Walnuts	105	15750	45	0	15795	8400	1.9	7395
08S13E	Barley	400	57000	200	400	57600	32000	1.8	25600
10S15E	Almonds	9328	2000000	800	14048	2014848	1679040	1.2	335808
10S15E	Corn, grain	387	42570	250	0	42820	35604	1.2	7216
10S15E	Tomatoes	91	12000	30	500	12530	17900	0.7	-5370
10S15E	Walnuts	80	11500	0	50	11550	9600	1.2	1950
11S17E	Almonds	9817	1511000	0	820	1511820	1079870	1.4	431950
11S17E	Corn, silage	54	12420	0	650	13070	11340	1.2	1730
11S17E	Walnuts	760	140000	300	6000	146300	66500	2.2	79800
13S17E	Almonds	1724	410000	0	3760	413760	258600	1.6	155160
13S17E	Tomatoes	186	19500	10	0	19510	1467	13.3	18043
13S17E	Walnuts	189	30000	200	1550	31750	6250	5.1	25500

*The data in this table is for illustrative purposes only and does not represent actual data collected.

It is true that these tables will allow the public and the Regional Board to answer a certain limited set of questions about nitrogen application and farming practice implementation in the region.[9] Table 2 allows the Regional Board to identify (anonymously) growers who are applying nitrogen at high rates. It then has the discretion, but not the obligation, to request

[9] This assumes, of course, that members are accurately reporting their data to the Coalition and that the Coalition is properly performing the required calculations and reporting them to the Regional Board on these tables. While other orders required submissions to be made under penalty of perjury, this Order does not appear to contain that requirement. The State Board should revise the Order to do so. This point is not to accuse the Coalition of dishonesty. Rather, the public is entitled to verify the data. Regulatory experience from Enron to Volkswagen should remind the Board of the dangers of trusting regulating entities to safeguard the public interest. (See Sonari Glinton, *How A Little Lab In West Virginia Caught Volkswagen's Big Cheat* (Sept. 24, 2015) NPR, https://www.npr.org/2015/09/24/443053672/how-a-little-lab-in-west-virginia-caught-volkswagens-big-cheat.) (Nonpoint Source Policy, at 13-14.) Math errors happen and the public has the legal right to verify that the published data is correct. See generally, Shapiro, *Outsourcing Government Regulation* (2003) 53 Duke L.J. 389; Rechtschaffen, *Deterrence v. Cooperation and the Evolving Theory of Environmental Enforcement* (1998) 71 S. Cal. L. Rev. 1181.)

those growers' identities from the coalition. Table 3 will allow the board to (anonymously) track fields where nitrogen application is high (without knowing where those fields are or how big they are). And Table 4 will allow for nitrogen application data to be tracked over time at actual locations (without knowing which growers, even anonymously, are operating there).

But the list of questions that these tables *cannot* answer is much longer. Below are questions that the public and the Regional Board might like to ask of the program but cannot answer with the information made publicly available by the Order:

- **Are MPs effective in improving water quality?**

Without geographic information, it is impossible to correlate the MPs listed in Table 1 with changes in water quality. If monitoring reveals that a certain water body shows an exceedance for a certain constituent, there will be no way to know if growers in that watershed are failing to implement MPs that addresses that constituent. Likewise, if a water body or groundwater sub-basin shows improvement, it will be impossible to associate that improvement with nearby changes in MP implementation.

Correlating MP implementation with improvements in water quality is the entire point of this order. The mechanism by which this Order is supposed to work is "that a nonpoint source discharge control program link its implementation requirements, with some level of confidence, to expected water quality outcomes, and incorporate monitoring and reporting sufficient to verify that link." (ESJ Order at 17.) But the emphasis on secrecy will prevent the Regional Board from establishing this crucial link.

- **Where are MPs being implemented? Where are MPs not being implemented but should be?**

The public and the Regional Board cannot identify where management practices ("MPs") were implemented or should have been implemented. The management practice information contained in Table 1 has no geographic information whatsoever. And the township data in Table 4 has no information about any MPs other than nitrogen application rate.[10] Thus the public cannot answer a very basic question: where are MPs not being implemented, but should be? For instance, Table 1 lists Grower No. 237241 as having "Stabilized creek and stream banks" on his or her tomato field.[11] Presumably, this tomato

[10] And while nitrogen application rate is extremely important to determining nitrate loading to groundwater, there are a suite of management practices, such as cover cropping and split fertilizer application, that also play a role. The Regional Board and the public will have no idea who is implementing these MPs, or where.

[11] Petitioners also have concerns about the level of detail that Table 1 reports MP implementation. Simply listing "split fertilizer application," for instance, gives very little information about whether the split is timed to achieve agronomic benefits and reduce nitrogen loading. The State Board should explicitly require that as part of the Management Practice Evaluation Program ("MPEP"), GQMPs,

field is next to a stream or a creek. But the Board and the public has no information about whether this grower's other tomato field is next to a creek or stream. If it is next to a creek, and no stabilization was undertaken, there could be cause for Regional Board follow-up. But given this data, there is no way to know. Likewise, the same grower is listed as having used drift control agents, presumably to reduce drift of sprayed pesticides.[12] A resident has no way to know if his or neighbors are applying controls that might prevent pesticide drift onto their property. And the public and the Regional Board has no way of knowing whether growers near surface water bodies are using controls that might reduce pesticide drift into those waters.

- **What fields belong to the largest growers? And are the largest growers applying nitrogen at acceptable rates and implementing MPs?**

The public and the Regional Board cannot identify the largest dischargers (even anonymously) because acreage is not shown in Tables 1-3. All of the data in Tables 1-3 is presented on a per-acre basis. Total field size is not shown. This means that it is impossible to query the data for two very simple questions: Which anonymous IDs represent the largest growers? And are those large growers implementing MPs and applying nitrogen at acceptable rates? Central Valley growers are extremely diverse. But this data does not allow the Regional Board to prioritize very large operations.[13] Nor does it allow the Regional Board or the public to do even the simplest analysis of the data, such as correlating size of operations with nitrogen application rates or MP implementation.

- **Should a field be part of a SQMP or GQMP, but is not?**

Surface Water Quality Management Plans and Groundwater Management Plans are key to the operation of this Order.[14] There will be a public process to determine the geographical scope of such plans and their contents.[15] But the data does not give the public or the regional board the tools to evaluate whether those decisions were correct. Without location information, it is impossible to tell if a field or a grower is on the border of an SQMP/GQMP zone, and thus whether that field or grower's lower requirements are resulting in lower MP implementation, higher nitrogen application, or if those changes are having an effect on water quality inside the management plan zone.

SQMPs, or another public process, the Coalition and the Board set minimum standards that a grower must meet in order to list a certain MP as having been implemented.

[12] While we are aware that the data entries in these tables are examples, produced by staff for illustrative purposes only, the Order does not contain any standards requiring the Coalition to report MP implementation at any level of detail.

[13] Indeed, at the December 6, 2017 Staff Workshop, the State Board heard testimony from many small-scale operators, particularly those growing small fields of Asian vegetables. This data does not allow the Board to identify these very small operations.

[14] Revised WDRs at 37.

[15] *Id.* at 37-38.

- **Are there geographic patterns to MP implementation or nitrogen application?**

Are growers near Turlock doing a better job than growers near Modesto? Without geographic information, the Regional Board and the public cannot analyze the data to tell if MP implementation follows geographic patterns. Given that this order relies on peer-to-peer interaction between growers, it would stand to reason that neighbors might share ideas and knowledge. Differences in soil, weather, or hydrology might reveal hidden patterns that could help the public and the Regional Board better adapt the order to local conditions. But the data will not allow this evaluation.

- **Are my neighbors implementing MPs and reducing nitrogen application?**

At the December 6, 2017 workshop, Staff and Board Members heard from Central Valley residents whose drinking water wells are contaminated with nitrate and other pollutants. These Californians deserve to know who is polluting the public resource that they rely on. This data set does not allow this.

- **Are growers exhibiting strategic behavior?**

Without access to the growers' data, it will be extremely difficult to tell whether growers are manipulating their reporting data to present a more favorable picture. As just one example, this order allows fields to be combined into "management units." It is not hard to imagine the use of management units to hide high application of nitrogen in one part of the unit. Without access to data on field size, this will be impossible to detect.

- **Are there questions we don't know to ask yet?**

There will be many more questions. And because this order has a 10-year compliance window, and because it is precedential, it is likely that more questions will arise in the future. The clampdown on data in this Order will prevent detailed analysis and review of this order when it is time to adopt the next iteration.

The anonymized tables simply fail to provide the information that the public and the Regional Board need to tell if this program is working. This failure violates the Nonpoint Source Policy.

b. The ESJ Order Improperly Allows Anonymized Data

The people have a right to know who is polluting the water. Surface and ground waters belong to the people. (Cal Const., art. X, § 5; Wat. Code §§ 102, 104.) And the people have a constitutional right of access to information about the regulation of their property. (Cal. Const., art. I, § 3, subd. (b)(1).)

i. Legal Background

The California Constitution, statutory law, case law, and the State Board's own policies protect the people's right to access to public information about water pollution. These

authorities lead to two interrelated conclusions: 1) the public must have sufficient information to verify that the Regional Boards are successfully implementing a regulatory program that controls water pollution and 2) that information must be public.

a. Constitution and General Principles

The California Constitution provides that the "people have the right of access to information concerning the conduct of the people's business" and that a "statute, court rule, or other authority… shall be broadly construed if it furthers the people's right of access, and narrowly construed if it limits the right of access." (Cal. Const., art. I, § 3, subd. (b)(1)-(2).) Further, when adopting a new rule "that limits the right of access", the State Board shall only do so with "findings demonstrating the interest protected by the limitation and the need for protecting that interest." (*Id.*, subd. (b)(2).)

Regulating water quality is clearly the "people's business." Under the Constitution, the "use of all water… is hereby declared to be a public use, and subject to the regulation and control of the State…." (*Id.* art. X, § 5.) The Water Code further confirms the public's interest in and ultimate control over the state's water, stating that all "water within the State is the property of the people of the State." (Wat. Code § 102.) If there were any doubt, the Water Code goes on to provide that "the people of the State have a paramount interest in the use of all the water of the State…." (Wat. Code § 104.) Based on these authorities, it is clear that the public has a clear, direct right to information about water pollution.

Perhaps the most direct summation of the public's right to information as well as the Board's duty to provide it, is in the preamble to the Bagley-Keene Open Meeting Act, which requires that State Board meetings be open and available to the public:

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

(Gov. Code § 11120.) The public has the right to know how the government is regulating their water.

b. The Nonpoint Source Policy

The State Board's own policies confirm the public's right of access to data about water quality impacts from irrigated agriculture. In 2004, the State Board adopted the Nonpoint Source Policy. Regional Board and State Board actions, including these WDRs, must

comply with state water policy. (Wat. Code §§ 13146, 13240, 13247.) The Nonpoint Source Policy contains five mandatory Key Elements.[16] Key Element 4 requires that

> A [nonpoint source] control implementation program shall include sufficient feedback mechanisms so that the RWQCB, dischargers, and the public can determine whether the program is achieving its stated purpose(s), or whether additional or different MPs or other actions are required.[17]

Further, "all monitoring programs should be reproducible, provide a permanent/ documented record and be *available to the public*."[18]

The Nonpoint Source Policy could not be clearer. Not only must these WDRs contain sufficient monitoring and reporting to ensure that the public and the Board can tell if the program is working towards achievement of water quality objectives, these mechanisms must be available to the public.

The State Board must issue an order that accomplishes two goals. First, the monitoring and reporting program must be effective. That is, it must be able to determine whether dischargers are causing exceedances of water quality objectives and it must able to determine if the management practices and other requirements of the order are having an actual, measurable effect on those discharges and on water quality. Second, the monitoring and reporting program must be public. The Water Boards may not establish a system where data is kept from the public and themselves.[19]

c. Recent Cases

Moreover, recent court decisions weighing on the need both for effective monitoring and for transparency concluded that agricultural orders that did not include effective and public monitoring programs are unlawful.

One case addressed the Central Valley Regional Board's WDRs for dairy operations. In *Asociacion de Gente Unida por el Agua v. Central Valley Regional Water Quality Control Board* (2012) 210 Cal.App.4th 1255, 1273 ("*AGUA*"), the court held that the monitoring program for that order was insufficient to detect groundwater degradation. The court held

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[16] Nonpoint Source Policy at 11.

[17] *Id.* at 13.

[18] *Id.* at 14 (emphasis added) We note that despite the requirement for a "permanent" record, the Order allows the Coalition to destroy records after 10 years. (Revised WDRs at 40.) Given that this Order contains a 10-year compliance horizon for some requirements, this short record retention requirement is both unlawful and illogical. (See Revised WDRs at 41.)

[19] There are exceptions for trade secret information. (E.g. Wat. Code § 13267(b)(2).) The ESJ Order, however, does not assert that the data it allows the Coalition to keep secret is trade secret.

that the groundwater monitoring was insufficiently detailed to trace exceedances of groundwater objectives back to specific dairies and that the order did not require testing for all constituents of concern.[20] (*Id.* at 1275-77.) In addition, the court also found that the fact that the Regional Board's executive officer had the authority to order more monitoring did not save the order. Discretionary monitoring, without "mandatory standards," "does not ensure that no further degradation" will occur. (*Id.* at 1277.) Thus, if monitoring is a key part of a regulatory scheme, it must contain mandatory features that are capable of achieving its stated purposes.

A superior court reviewing the Central Coast Regional Board's Waiver of Waste Discharge Requirements for Irrigated Lands reached a similar conclusion. (*Monterey Coastkeeper v. Cal. State Water Resources Control Board* (Aug. 10, 2015) at 34, Sac. Sup. Ct. No. 34-2012-80001324, attached as Attachment 1.) That order, like this one, relied on an iterative process of improving management practices to make progress towards achieving WQOs. The court found that the monitoring required by the Regional Board would not be capable of tracing water quality impacts in receiving waters to individual discharges. Because the monitoring data did not "identify the individual dischargers," it could not "identify where the pollution is coming from or whether the grower's management practices are effectively reducing pollution and degradation." (*Id.*)

Another superior court case in the Central Coast found that it is unlawful to allow third parties to maintain water pollution data secret. (*Zamora v. Central Coast Regional Water Quality Control Board* (Oct. 28, 2016) San Luis Obispo Sup. Ct. No. 15CV-0247, attached as Attachment 2.) This case held that the Central Coast Regional Board's procedure for notifying residents that their wells were contaminated with nitrate did not comply with Water Code section 13269 or the Public Records Act. A workplan adopted pursuant to the Central Coast order allowed a third-party coalition to conduct the well testing and send a notification to the grower requiring the grower to in turn notify the well users. The grower was then required to send a confirmation to the coalition when it had notified the well user. The coalition was allowed to keep both of these records secret, allowing the Regional Board the ability only to inspect, but not copy, the records at quarterly meetings. The court ruled that this was improper: "Two pillars of the Water Quality Act are to protect the quality of community water supplies and to promote public

[20] The dairy order provided for monitoring from irrigation supply wells, which are screened across multiple depths and therefore allow for mixing of waters in the sample. This made it impossible to tell whether pollution in the groundwater was from newer (shallower) discharges or older (deeper) discharges. (*AGUA*, *supra*, 210 Cal.App.4th at 1275-76.) Second, the monitoring did not test for all constituents of concern. The information sheet for the dairy order listed the primary constituents of concern as "ammonia, nitrates, phosphorus, chloride, boron, salts, pathogens, and organic matter." (*Id.* at 1276.) But the monitoring program required testing only for "nitrate, electrical conductivity (which measures salts) and phosphorous." (*Id.*)

access.…The public is entitled to know whether the Regional Board is doing enough to enforce the law and protect the public's water supplies." (*Id.* at 2-3.) The court was clear that secrecy in water pollution data was not permissible:

> The Coalition generates three technical documents that intentionally make it difficult for all but the most sophisticated user to figure out the owners and locations of polluted well water. There is no justification for such obfuscation: the strong interest in public accountability cannot be overcome by vague notions of privacy or unsupported allegations of terrorist threats to polluted groundwater supplies.

(*Id.*at 3.)[21]

Lastly, two cases in the Central Coast held that important nitrogen application reporting data is not trade secret. (*Rava Ranches v. California Water Quality Board,* Central Coast Region (Nov. 17, 2016); *Triangle Farms v. California Regional Water Quality Board, Central Coast Region* (Dec. 29, 2016) (Mont. Sup. Ct Nos. 16CV000255 and 16CV000257, attached as Attachments 3 and 4.) Both cases concerned ELF's Public Records Act requests for Total Nitrogen Applied data, which certain growers are required to report to the Central Coast Board. The data includes types of crops, acreage, annual aggregate totals of nitrate levels, location information, and average nitrate concentrations. (*Rava Ranches*, *supra*, at 13.) In response to an argument that the data constituted a trade secret, the court held that the data was not. Applying the balancing test contained in the Public Records act, the court determined that public disclosure of the nitrogen applied data was in the public interest.

d. Nondelegation and Abdication

The State Board must also be mindful that that the law restricts its ability to delegate or abandon its regulatory authority to a third party, especially the growers themselves. The non-delegation doctrine holds that as a regulatory body, the State Board does not enjoy limitless discretion to delegate its regulatory authority to a third party, especially where that third party is the party being regulated. It is a "fundamental" principle of "universal application" that powers conferred upon governmental bodies and their officers "involving the exercise of judgment or discretion are in the nature of public trusts and cannot be surrendered or delegated to others." (*Sacramento Chamber of Commerce v. Stephens* (1931) 212 Cal. 607, 610.) The only possible duties that may be delegated are those of purely ministerial or administrative functions, and even as to these, if the delegation is to a private third party, the delegation is proper only if the public body "retains ultimate control

[21] The Central Coast Groundwater Coalition had justified the need for secrecy, in part, by suggesting that privacy was needed to avoid terrorist threats to drinking water wells. The Court pointed out that the Coalition had submitted no evidence of such threat. (*Zamora*, *supra*, at 15: see also *American Civil Liberties Union of Southern California v. Superior Ct.* (2017) 3 Cal.5th 1032, 1046 ("[V]ague safety concerns" cannot "foreclose the public's right of access" (quotation marks omitted).)

over administration so that it may safeguard the public interest." (*Holley v. Orange County* (1895) 106 Cal. 420, 424; *Intl. Longshoremen's and* W*arehousemen's Union v. Los Angeles Export Terminal, Inc.* (1999) 69 Cal.App.4th 287, 297-98.)

Indeed, "there is a tension when private industry shares responsibility for the governmental regulation of its commercial activities." (*Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463, 1490 [discussing whether State Board improperly delegated regulatory authority over diversion of water for frost protection to members of private industry subject to the regulation].) The Court of Appeal recognized that "members of the industry are well positioned to understand the regulatory needs and the impact of regulation on their business activities," and that therefore mere involvement of a private industry in matters of the industry's own regulation is not per se invalid. (*Ibid.*) Importantly, however, the court acknowledged that not all such delegation of regulatory authority is proper: "[B]y involving members of the regulated industry the agency runs the risks associated with the fox guarding the henhouse. As a result, there is a tight line between lawful and unlawful delegation of regulatory authority." (*Ibid.)*

Similarly, the abdication doctrine holds that "the government may not contract away its right to exercise the police power in the future." (*Avco Community Developers, Inc. v. South Coast Regional Commission* (1976) 17 Cal.3d 785, 800.) The "controlling consideration" is whether the agreement amounts to anything that can be characterized as a "surrender, abnegation, divestment, abridging, or bargaining away" of the public entity's "control of a police power or municipal function." (*County Mobilehome Positive Action Committee, Inc. v. County of San Diego* (1998) 62 Cal.App.4th 727, 738, internal quotation marks omitted; see also *Egan v. San Francisco* (1913) 165 Cal. 576, 583-84 [noting, in the delegation context, that it could "certainly not be claimed that property devoted to the more familiar municipal purposes, such as policing, fire protection, or the assessment and collection of taxes, could be turned over to be administered by private agencies"].)

The abdication of the police power is readily apparent—and impermissible—in situations in which the government has decided to grant special treatment to regulated persons who decide to join in a collective program, such that program members are permitted to opt out of laws that apply to everyone else. The Court of Appeal's opinion in *County Mobilehome*, *supra*, is instructive. There, the County of San Diego had instituted a program whereby it agreed to a 15-year moratorium on enacting rent-control legislation over owners of mobile home parks who decided to opt into the program by signing an accord with the county. (*County Mobilehome*, *supra*, 62 Cal.App.4th at 730-31.) If the county enacted such legislation, the provisions of the agreement with the park owners in the program would have rendered the rent controls inapplicable to them. (*Id.* at 732.) The court determined this program to be an unlawful surrender of the county's police power to regulate rents of the owners who signed the accord. (*Id.* at 739-41.) By distinguishing between park owners who have and have not signed the accord, the county created the "danger of inconsistent application" of regulatory authority. Specifically, residents in mobile home parks would be

at risk of not being protected by rent control laws simply because the resident's park owner chose to participate, while for residents of mobile home parks whose owners did not participate, the county would be free to adopt rent control laws. (*Id.* at 740.)

ii. The State Board Fails to Make Constitutionally Required Findings Before Restricting Public Access to Data

The Board has a constitutional duty to make findings "demonstrating the interest protected by the limitation and the need for protecting that interest." (Cal Const., art I, § 3, subd. (b)(2). A requirement that an administrative agency make findings means that an agency must "bridge the analytic gap between the raw evidence and ultimate decision or order. (*Topanga Assn. for a Scenic Community v. County of Los Angeles*) (1974) 11 Cal.3d 506, 515.) Courts and the public must not be left to "speculate as to the administrative agency's basis for decision." (*Ibid.*)

This order makes no such finding demonstrating the need for making field level data secret, nor could it. The order nods to "concerns with privacy and protection of proprietary information"[22] and states that it "enhances efficacy and accountability" and "retains the privacy protections of the existing order."[23] But it makes no finding explaining what the specific privacy concerns that the State Board is protecting by making all data anonymous. In fact, it reaches the opposite conclusion: "We also note here that we are not persuaded that the INMP Summary Report data constitutes proprietary business information."[24] This is curious given that the first draft of this Order provided for non-anonymized disclosure of field-level nitrogen data, including location information.

A limited set of information may be kept from the public under certain circumstances, but none apply here. The Water Code and the Public Records Act both contain exceptions to disclosure for trade secret information (Wat. Code § 13267, subd. (b)(2); Gov. Code § 6254, subd. (k).) And as discussed in the next section, it is very unlikely that a court would hold that all of this data, or even some of this data, is trade secret. But the State Board avoids analyzing whether the withheld data is trade secret, or whether it falls under any other legal exemption to disclosure, choosing to allude only vaguely to "privacy concerns" and "proprietary information" without specifically identifying what the privacy interests and proprietary information at stake are. The public deserves to know why it is being denied access to this information.

iii. Refusing Access to Data Held by the Coalition Violates the Public Records Act

Courts have long protected public access even to highly specific data about pollution of public resources. In *Uribe v. Howie* (1971)19 Cal.App.3d 194, 200, the Court of Appeal held

[22] ESJ Order at 20.

[23] *Id.* at 53.

[24] *Id.* at 50.

that pesticide spray reports were not trade secrets and could be disclosed to the public even though they showed:

> the name of the commercial operator, the location and owner of the grove, vineyard or other crop being sprayed, the date of application, the number of trees or acres treated, the kind of trees being treated, pests being treated for, the type of pesticide, including combinations of one or more pesticides and strength used, the dosage of each pesticide material used, and the amount of each concentrated pesticide material used in each application.

(*Ibid.*) Building on *Uribe*, the Monterey County Superior Court, as noted above, recently held that nitrogen application data was not trade secret and could be disclosed. (*Rava Ranches*, *supra*; *Triangle Farms*, *supra.*, attachments 2, 3.*)* And the San Luis Obispo County Superior Court held that "there was no justification for… obfuscation" of grower information. (*Zamora*, *supra*, attachment 2, at 3.)

Outside of the context of pollution data, the courts have often weighed in favor of disclosure of information, even personal information, when the public interest demanded it. Courts have required disclosure of public employee salaries (*International Federation of Professional and Technical Engineers, Local 21, AFL-CIO v. Superior Court* (2007) 42 Cal.4th 319, 333 ("*International Federation*"), court records (*NBC Subsidiary (KNBC-TV), Inc. v. Superior Court* (1999) 20 Cal.4th 1178), a county's proprietary GIS basemap, which contained arguably sensitive infrastructure data (*County of Santa Clara v. Superior Court* (2009) 170 Cal.App.4th 1301), and certain emails from public officials' personal accounts (*City of San Jose v. Superior Court* (2017) 2 Cal.5th 608).

The line running through all of these cases is the need for the public to understand what the government is doing. "[P]ublic access makes it possible for members of the public to expose corruption, incompetence, inefficiency, prejudice, and favoritism." (*International Federation*, *supra*, 42 Cal.4th at 333.)

The State Board has drafted this order not to prevent public access to public records, but to *prevent the creation of public records at all.* As expressed by staff in various public workshops, the purpose of allowing Coalition to keep all of the raw data and provide anonymized tables to the Regional Board is to avoid the creation of public records that could be subject to disclosure under the Public Records Act ("PRA"). Under this theory, because the data does not exist within the physical confines of the State Board's offices, it is beyond the legal reach of the public. This theory is flawed for two reasons. First, under the PRA, even off-site records such as these are public records subject to disclosure. And second, the anonymity mechanisms prevent effective control of water pollution, in violation of the Nonpoint Source Policy.

The PRA defines "public records" as "any writing containing information relating to the conduct of the public's business prepared, owned, used, or retained by any state or local agency regardless of physical form or characteristics." (Gov. Code § 6252, subd. (e).) "This definition is intended to cover every conceivable kind of record that is involved in the governmental process." (*Sander v. State Bar of Cal.* (2013) 58 Cal.4th 300, 322 ("Only purely personal information unrelated to 'the conduct of the public's business' could be considered exempt from this definition.").) Furthermore, "[a] state or local agency may not allow another party to control the disclosure of information that is otherwise subject to disclosure." (Gov. Code § 6253.3.)

Public records are not limited to those physically on the premises of the public agency. In *City of San Jose,* the Supreme Court found that public officials' emails were public records subject to disclosure even if those emails were sent from personal email accounts and never existed on the public agency's servers. (*City of San Jose*, *supra*, 2 Cal.5th at 629.) The Court pointed out that the physical location of the documents does not dispose of the question of whether they are public documents: "An agency has constructive possession of records if it has the right to control the records, either directly or through another person." (*Id.* at 623.) "[A] document's status as public… does not turn on the arbitrary circumstances of where the document is located." (*Id.* at 624.) The court frowned on an interpretation of the PRA that allowed a public agency to "shield information from public disclosure simply by placing it in a certain type of file." (*Ibid.*) "Such an expedient would gut the public's presumptive right of access and the constitutional imperative to broadly construe this right." (*Ibid.* (internal citations omitted).)

Therefore, simply housing grower data off-site, at the Coalition's offices or its designated "secure off-site location"[25] does not automatically strip it of its public nature. Because the Regional Board will have the right to request that data at any time,[26] it maintains constructive possession of that data. (See *Consolidated Irrigation Dist. v. Superior Court* (2012) 205 Cal.App.4th 697, 710.) "[A]n agency has constructive possession of records if it has the right to control the records, either directly or through another person." (*Ibid.* (internal citations omitted).)

Nor may the Regional Board preserve the secrecy of this data by refusing to request it from the Coalition. The doctrines of non-delegation and abdication do not permit the Coalition to be the sole regulator of water quality. If growers continue to apply nitrogen at unacceptable rates and the Regional Board refuses to investigate which growers are at fault, it will have unlawfully abdicated its regulatory authority.

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[25] See Revised WDRs at 40.

[26] ESJ Order at 53-54.

iv. Anonymity Makes the Order Unworkable

The grower anonymity provisions also fail for a more practical reason: in order to maintain anonymity, the Board has made the Order unworkable. As discussed at length above, the anonymized data tables simply do not contain enough information to allow the Boards or the public to verify whether the program is working, as required by the Nonpoint Source Policy.

Indeed, the Order does not apply the Nonpoint Source Policy's language to the anonymized reporting system. Rather than make a finding that the Order complies with the policy, (which it must do, but cannot do), the Order states:

> The revisions provide a more detailed set of field-specific data available to the Central Valley Water Board for oversight of the program and provide more transparency and assurance of progress for interested persons outside of the regulatory agency.[27]

This is the wrong standard. In order to comply with the Nonpoint Source Policy, there must be public data that allows reproduction of the results of the monitoring and reporting programs, and that data must be sufficiently robust to ensure that the regulatory program is achieving it stated purpose.[28] As described above, the data the public receives cannot meet this test. The public cannot correlate management practice implementation with water quality changes, cannot see what the largest growers are doing, cannot see whether their neighbors are complying, and cannot verify that any of the data is being reported or analyzed accurately.

And piecemeal editing of the tables will not solve the problems. Because the Regional Board receives a detailed Membership List with grower names, addresses, and geographic information about fields, adding anonymized geographical information to the tables will allow a motivated member of the public to request the Membership List and then painstakingly match that information to the data tables.[29] This appears to be the reason that the tables include such a limited set of information: if they revealed even a little bit more they would reveal too much about the growers. In acceding to the growers' constant demands for confidentiality, this draft has created an unworkable system.

Instead of creating an unworkable, fragile system to protect growers' anonymity, the State Board should do as the law requires: require that the growers report sufficient data to show

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[27] ESJ Order, at 53. The first draft ESJ Order contained non-anonymous field level reporting. The "revisions" referred to here replace that transparent system with the anonymized data tables discussed above.

[28] Nonpoint Source Policy at 13-14.

[29] At the December 6 Workshop, staff stated that adding geographical information to the data tables would compromise anonymity.

that they are in compliance with the Order and make that data available to the public. Given the need to run an effective program, transparency is the only option that works.

c. The ESJ Order's Anonymity Provisions Should Not Be Precedential

This Order makes anonymized data the rule statewide.[30] This would represent a significant step back, especially for regions such as the Central Coast, which already have strong policies in place favoring transparency. In January of 2017, the Central Coast Regional Water Quality Control Board passed a resolution on the Human Right to Water, which directed it to:

> minimize impediments to data access, and work with the State Water Board and other appropriate agencies to maximize the availability and accessibility of data and information regarding drinking water quality to support the development of solutions and inform all stakeholders, including communities that lack adequate, affordable, or safe drinking water.[31]

And the current agricultural waiver in effect in the Central Coast does not provide for any anonymity unless the grower specifically identifies the data that should be protected from disclosure and explains the need for privacy.[32] The Central Coast Regional Board staff then examines the claim and determines if public disclosure of the data is appropriate.

The State Board should not preempt a Regional Board's efforts to increase transparency and public access to data. And because the State Board has failed to articulate clear findings or a clear legal rationale for requiring anonymity, any attempt to do so will not only fail in court but will sow confusion among the regions.

2. The ESJ Order Lacks Enforceable Standards That Will Achieve Groundwater Quality Objectives

Water Code section 13263 requires waste discharge requirements to implement the Basin Plan. The Basin Plan for the Sacramento and San Joaquin Basins contains a maximum

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[30] ESJ Order at 54.

[31] Central Coast Regional Water Quality Control Board, Resolution No. R3-2017-0004, "Adopting the Human Right to Water as a Core Value and Directing Its Implementation in Central Coast Water Board Programs and Activities," January 26, 2017, at 4. Attached as Attachment 5. The Central Valley Regional Water Quality Control Board also has a policy requiring it to explore ways to make information about performance measures that will "realiz[e] the human right to water" more available to the public. (Central Valley Regional Water Quality Control Board, Resolution No. R5-2016-0018, April 21, 2016, at 3. Attached as Attachment 6.)

[32] Central Coast Regional Water Quality Control Board, "Resources for Growers Protection of Trade Secrets and Secret Processes," April 27, 2017. Attached as Attachment 7.

contaminant level for nitrate in groundwater (as nitrogen) of 10 mg/L.[33] The Basin Plan acknowledges that irrigated agriculture is a significant contributor to nitrogen pollution of groundwater.[34] The Basin Plan also contains a program of implementation, which incorporates the Nonpoint Source Policy.[35] And the Basin Plan sets a 10-year deadline for dischargers to comply with water quality objectives.[36]

Groundwater contamination is a substantial, ongoing problem in the Eastern San Joaquin region and statewide.[37] A significant portion of domestic wells are contaminated with nitrate and other constituents. And the burden falls heaviest on those with the least amount of power: communities of color and low-income communities. A significant portion of these communities spend more than 10% of their income on securing clean water to use to drink, cook, and bathe.

It is the State Board's duty to fix this problem by requiring dischargers to meet standards that result in their no longer causing or contributing to exceedances of WQOs. This order fails to require the growers to meaningfully reduce pollution.

i. The Order Requires Empty, Unenforceable Standards

The Order uses the following mechanisms to attempt to reduce loading to groundwater. It establishes "receiving water limitations" that state that:

> Wastes discharged from Member operations shall not cause or contribute to an exceedance of applicable water quality objectives in the underlying

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[33] Central Valley Regional Water Quality Control Board, The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region, Fourth Edition, The Sacramento River Basin and the San Joaquin River Basin ("Basin Plan"), Revised 2016, at III-10, available at https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/2016july_1994_sacsjr_bpas.pdf; see 22 Cal. Code Regs., tit 22, § 64431.

[34] *Id.* at IV-2.00, IV-36.04.

[35] *Id.* at IV-10.00-10.01.

[36] *Id.* at III-2.00. The ten-year period commences with the adoption of the WQO. Arguably, therefore, the deadline has already passed.

[37] Juliet Christian-Smith, et al., Pacific Institute, Assessing Water Affordability: A Pilot Study in Two Regions of California (2013), available at http://d3n8a8pro7vhmx.cloudfront.net/communitywatercenter/pages/52/attachments/original/1394397950/assessing-water-affordability.pdf?1394397950; Caroline Balazs et al. Social Disparities in Nitrate-Contaminated Drinking Water in California's San Joaquin Valley (2011) 119 Social Perspectives 1272, available at http://d3n8a8pro7vhmx.cloudfront.net/communitywatercenter/pages/52/attachments/original/1394397743/Balazs_Social-Disparities-in-Nitrate-Contaminated-Drinking-Water_2011.pdf?1394397743

> groundwater, unreasonably affect applicable beneficial uses, or cause or contribute to a condition of pollution or nuisance.[38]

But the Order differentiates between areas subject to a Groundwater Management Plan ("GQMP") and other areas. In GQMP areas, there is a 10-year time schedule for compliance with these limitations.[39] GQMPs are required in four cases:[40] 1) where there is a "confirmed exceedance,"[41] 2) in "high vulnerability groundwater areas,"[42] 3) where specifically required by the Basin Plan, and 4) where the Regional Board's Executive Officer "determines that irrigated agriculture may be causing or contributing to exceedances of water quality objectives or a trend of degradation of groundwater that may threaten applicable Basin Plan beneficial uses."[43] The GQMPs must contain a set of mandatory components and must achieve compliance with the receiving water limitations within 10 years.[44]

In areas not covered by a GQMP, all members are required to "meet receiving water limitations."[45] Each grower must implement management practices. And each grower must complete paperwork, including a Farm Evaluation documenting the grower's management practices and a nitrogen management plan.[46]

Despite the strong language contained in the GQMP and general requirements, these requirements are empty. There is no evidence that these requirements will achieve water quality objectives in the Eastern San Joaquin region.

The reason for this is implicit in the language of the receiving water limitations and the structure of the order. The receiving water limitations apply to the water discharged below crops' root zone and into groundwater. But monitoring of discharges from individual

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[38] Revised WDRs at 18.

[39] Revised WDRs at 41.

[40] Revised WDRs at 37.

[41] The standard for what constitutes a "confirmed exceedance" relies on an "appropriate averaging period," which is essentially undefined. (Revised WDRs at 37, fn. 35.) When exceedances occur in domestic wells, that means that people are at risk of drinking contaminated water. The State Board should revise this provision to eliminate the averaging period for determining whether an exceedance is "confirmed."

[42] The Coalition defines these areas, subject to Regional Board executive officer approval, in the Groundwater Assessment Report, which is due one year after the implementation of the program. (Revised WDRs at 35; MRP at 15-16.)

[43] Revised WDRs at 37. This determination appears to be discretionary, not mandatory. In other words, the Executive Officer appears to have discretion to not require a GQMP even where data shows a trend of degradation that may have been caused by irrigated agriculture.

[44] Appendix MRP-1 at 1-8; ESJ Order at 14.

[45] Revised WDRs at 18.

[46] ESJ Order at 5.

operations is difficult and expensive.[47] As a result of this dynamic, the State Board has chosen not to monitor groundwater discharge from individual fields. Thus, in order to bridge the gap from farming operations to discharge to groundwater,[48] the State Board must use a method other than individual monitoring. But the State Board fails to employ any such method; in fact, it instructs the Regional Board not to use such a method. This failure to develop and adopt an enforceable metric tying growers' practices to water quality changes means that the Order is likely to fail: "[t]he wish is not father to the action." (*AGUA*, 210 Cal.App.4th at 1260.)

AGUA is instructive here, as the court seized on a similar analytical disconnect in finding that the dairy order violated the anti-degradation policy:

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

(*AGUA*, *supra*, 210 Cal.App.4th at 1261.) If the State Board is not going to require individual monitoring, then there must be a quantifiable, enforceable metric that ties management practices to groundwater quality. And it must then set levels that protect groundwater quality.

But this Order fails to set an enforceable standard that could make up for the lack of individual monitoring. It explicitly declines to allow the GQMPs and the individual requirements to use a regulatory metric that could actually work: an enforceable numeric standard based on nitrogen applied rates.[49] Without a numeric standard tying a grower's practices above ground with the results to water quality underground, there is no assurance that water quality will improve. The order is not enforceable because there is nothing to enforce.

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[47] ESJ Order at 16.

[48] There is both a physical gap separating the root zone, where nitrogen can be beneficially taken into plants, from the vadose zone where its only destiny is to seep further down to groundwater and an analytical gap from assessing farming operations to assessing impacts to groundwater.

[49] ESJ Order at 79-80.

ii. The Order Irrationally Punts on Feasible Standards That Can Have Immediate Positive Effects

The fundamental dynamic causing nitrate groundwater pollution is that certain growers apply more nitrogen fertilizer than crops can take up. The excess nitrogen remains in the soil and leaches downward, past the root zone, and into groundwater. Any order that means to prevent nitrate pollution of groundwater needs to address this fundamental dynamic by ensuring that growers do not overapply nitrogen fertilizer to their fields.

a. A/R and A-R

The Order acknowledges that there is a metric that captures this dynamic: the ratio of nitrogen applied via fertilizer and irrigation water to the nitrogen removed by harvest, sequestered in wood, or removed by other natural processes.[50] This ratio is commonly referred to as the A/R ratio. Fields where the grower is applying much more nitrogen than is removed have a high A/R ratio. Fields where growers apply exactly as much nitrogen as is removed have an A/R ratio of exactly 1.

In addition to the A/R ratio, the Order also considers the A-R difference, which is the amount of nitrogen applied, expressed in pounds, minus the amount removed.[51] In some cases, a crop that requires a very high amount of nitrogen may have a relatively low A/R ratio, but the total amount applied is so high that the field causes significant nitrogen loading to groundwater. In the contrary case, a crop that requires very little nitrogen can afford to run a high A/R ratio without causing a significant risk to groundwater.[52]

Taken together, these two metrics form a potential basis for meaningful regulation of nitrogen application. But the State Board refuses to use them, or to set a timeline for adopting them later.

b. Reference Values

Another potential metric is to compare nitrogen applied not to nitrogen actually removed, but to a reference value established by the academic literature for crop uptake. For

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[50] ESJ Order at 39-45.

[51] ESJ Order at 42.

[52] Figure 4, above, illustrates the difference between the two metrics. The almond fields in Township Range 10S15E have an A/R ratio of only 1.2 but their A-R difference shows that they load an enormous 335,808 lbs. of nitrogen into the ground, or 36 lbs./ac. Meanwhile the tomato fields in Township Range 13S17E are much smaller and despite their 13.3 A/R ratio, load only 18043 lbs. into the ground, or 97 lbs./ac. Although the tomatoes are a greater offender on a per acre basis, the almonds may represent a richer opportunity to reduce loading because the amount of nitrogen at stake is so much greater.

instance, a recent study found that lettuce can take up 145 kg of nitrogen per hectare.[53] Applying more nitrogen had little effect on crop yield or quality. These figures exist for many of the crops grown in the Central Valley. Yet growers in the Central Coast, where total nitrogen data has been reported for several years, routinely apply nitrogen to lettuce fields at rates four to five times what the crops can take up.[54] A metric based on academic uptake values could easily eliminate these very high application rates.

For instance, in the Central Coast example above, staff estimated that lettuce can take up between 120 and 178 lbs. per acre of nitrogen.[55] If the Regional Board took the highest uptake value from the literature, 178 lbs. per acre, and added a 15% buffer to account for uncertainty, it could establish a regulatory limit of 201 lbs. per acre. This would have an enormous effect on nitrogen application to lettuce fields: more than half of growers applied more than 220 lbs. per acre, with a very significant portion applying more than 400. Even given uncertainty in the data, this rule would have the immediate effect of cutting nitrogen application significantly, and there is no evidence that it would hurt crop yields. In fact, there is evidence that it would not.

But the Order rejects the idea of reference value targets out of hand, arguing that because A/R is based on a "measurement," not an "estimate," it is inherently more accurate. It also states that reference values can vary by more than 40 percent.[56] This reasoning is flawed: as discussed above, evidence shows that growers are applying nitrogen at rates several times the highest reported uptake values from the literature. The State Board should not let the perfect be the enemy of the good.

c. The State Board Sets No Standard

Either a metric based on A/R or on academic reference values could be used, today, to eliminate the very highest nitrate applications. Target values could be established to give growers plenty of leeway at first and adjusted downwards as science continues to develop. But the State Board rejects both of these options. It states that it is "premature" to use the A/R ratio and A-R difference as the basis for limits on nitrogen application.[57] It then states that A/R and A-R will *only* be used as the basis for regulatory targets after convening an expert panel, but then sets no deadline for convening one.[58] In other words, the State Board

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[53] Thomas G. Bottoms, et al., Nitrogen Requirements and N Status Determination of Lettuce (2012), 47 HortScience p. 1768, at 1773-74, attached as Attachment 8.

[54] Presentation of Central Coast Regional Board Staff, March 7-8, 2017, ("Central Coast Presentation") at 14-21, attached as Attachment 9.

[55] This is consistent with the Bottoms study, which found that lettuce was capable of taking up 145 kg/ha, which is equal to 129.3 lbs./ac. (Attachment 7 at 1774.); See Central Coast Presentation (Attachment 8) at 19.

[56] ESJ Order at 41.

[57] ESJ Order at 79.

[58] *Id.*

is giving itself the discretion to *never* convene such an expert panel, and thus never adopt regulatory limits on nitrogen application.

The State Board has discretion to fashion a regulatory program. But it does not have discretion to approve a program that allows continued unchecked pollution in the face of clear evidence that such pollution is happening, clear evidence of the mechanism of such pollution, and clear evidence of a rational way to restrict such pollution. The time to act is now.[59] It is possible to set a regulatory level for nitrogen that accounts for uncertainty and changing conditions while cutting the most egregious overapplications. The evidence in the record shows that it is possible to do so today.

iii. The Order Has No Effective Enforcement Mechanisms

The Order's refusal to adopt an enforceable metric for nitrogen application renders the rest of the Order's mechanics toothless. With clear direction from the State Board not to use the A/R and A-R metrics or a metric based on reference values, there is no reason to expect that the GQMPs will adopt meaningful targets. And without meaningful targets, it is difficult to see how the GQMPs will reduce nitrogen loading. It is even difficult to see how a grower can "violate" this order. Without a numeric metric, a grower will never be in actual violation of a GQMP even if he or she is applying 10 times more nitrogen than the crops could possibly take up.[60]

The other mechanisms in the Order fail to replace an enforceable metric. The Order requires that the Coalition follow-up with "outliers."[61] The process for identifying outliers is ill defined; in fact, the Order refuses to define it all. But even the concept of outliers is flawed: it assumes that the average grower is applying nitrogen at acceptable rates. But data from the Central Coast and elsewhere shows that the median grower is applying nitrogen at rates much higher than the reference value. And there are no real consequences to being identified as an outlier. An outlier must attend trainings and, if identified as an outlier for three years in a row, loses his or her anonymity (anonymity which is unlawful in the first place).[62] Enforcement is not considered for long-time outliers.[63]

And the Order requires the Regional Board to act if the GQMPS and monitoring show that growers are not making "adequate progress" towards meeting management plan goals.[64]

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[59] Porter-Cologne was adopted in the late '60s. If strong, enforceable WDRs had been adopted in the early 70s, we could be well on the way to meeting groundwater WQOs by now.

[60] This situation highlights the need for transparency: with no meaningful enforceable standard, growers may not only continue to pollute at historic rates, they may do so in secret.

[61] ESJ Order at 55.

[62] *Id.*

[63] *Id.*

[64] E.g. Revised WDRs at 36 (Executive Officer may "review require changes to a management plan if the current management plan approach is not making adequate progress toward addressing the

But this is an empty requirement if there is no metric tying management practices to groundwater quality.

Lastly, the order directs the Coalition to "develop a project scope and timeline to further flesh out [a] proposal" to establish township-based A/R and A-R targets.[65] This direction does not constitute a commitment to adopting an enforceable target. And should this proposal move forward, we caution that township-based targets present a potential for a tragedy of the commons. Collective responsibility can allow bad actors to hide behind responsible growers, allowing the higher applications to be averaged against lower ones. This problem is particularly acute when all data is secret.

3. The ESJ Order's Well Testing Provisions Are Insufficient

We have serious concerns about the ESJ Order's domestic drinking water well testing provisions. The Order allows does not require testing with sufficient frequency, delays well testing for up to a year, allows growers 10 days to notify well users of exceedances, and it fails to require that notices to users be provided in languages spoken by well users.

The Order requires annual testing of on-farm drinking water wells for nitrate contamination beginning in 2019.[66] However, people throughout the region are currently drinking contaminated water. While it is laudable that the State Board is promoting a legislative solution that may result in a statewide well testing system, this effort should not come at the expense of peoples' health. Testing should begin in 2018.

The Order also does not require testing at any particular time of year. Nitrate concentrations in groundwater change seasonally. The Board should either require testing at the times of year with the highest concentrations or should require multiple tests per year.

The Order also allows a grower 10 days to notify well users after learning of an exceedance. This is too long. Drinking water with nitrate above the MCL is an acute health risk and users deserve to know immediately. The Board should revise the Order to require notification of users within 24 hours of learning of the exceedance.

Finally, the Board should require growers to provide notifications in the languages that well users speak. Many people using on-farm drinking water wells do not speak English or Spanish. The State Board should develop template notifications in the variety of languages that people speak and provide them to growers to ensure that the notifications are read and

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water quality problem."), MRP at 8 (Executive Officer shall make a finding of inadequate progress in management plan implementation if receiving water limitations are not being met.)

[65] *Id.* at 71.

[66] MRP at 14.

understood. The State Board should also consider developing a pictographic notification system that can convey to well users that the water is unsafe to drink where there might be low levels of literacy.

4. The ESJ Order Fails to Properly Consider the Human Right to Water, the Antidegradation Policy, the Public Trust Doctrine, and the Doctrine of Waste and Unreasonable Use

a. The ESJ Order Does Comply with the Human Right to Water Act

Water Code section 106.3 states that the State Board and each Regional Board must consider the impacts of its actions on the human right to safe, clean, affordable, and accessible drinking water. In addition, the Legislature declared that water used for domestic purposes is deemed the highest beneficial use. (Water Code § 106.) Moreover, the State and Regional Boards have both adopted resolutions affirming the human right to water.[67] Furthermore, Water Code sections 174 and 179 have been amended to ensure the State and Regional Boards' coordination of their functions pertaining to both water quality control and people's access to safe, clean, and affordable drinking water.

But this Order does not promote the human right to water. It fails to require an enforceable standard that will achieve water quality objectives. It does not require transparency so that the public can verify that the program is working and know who is contributing to the problem. And its well testing procedures are inadequate.

More fundamentally, the Order fails to consider, as required, its impact on low income communities and communities of color, the communities who have borne the greatest impact from nitrate pollution. For instance, the Order's discussion of whether the degradation of water quality resulting from the Order will be to the "maximum benefit to the people of the state" does not analyze the costs that lack of safe drinking water imposes on Californians.[68] It does not address the fact that some Californians spend up to 10% of their income drinking water, the cost of which is directly related to the nitrate pollution that this Order purports to regulate. It does not address the cost of replacement water that will be borne in some cases by growers but in other cases by the affected communities themselves or by taxpayers. It does not address the health risks posed by nitrate contamination, including "blue baby syndrome" and elevated cancer risk. The Human Right to Water Act requires consideration of these factors and this Order fails to do so.

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[67] See Attachments 4 and 5. See also State Water Resources Control Board, Resolution No. 2016-0010, Adopting the Human Right to Water as a Core Value and Directing Its Implementation in Water Board Programs and Activities, attached as Attachment 10.

[68] Information Sheet, Attachment A to Revised WDRs, at 36-37.

b. The Order Fails to Comply with the Antidegradation Policy.

The Antidegradation policy requires the State Board to take certain steps[69] It must set a baseline level of water quality and determine whether water quality will be degraded by proposed action. If the water is high quality and it will be degraded, the State Board must determine whether such degradation is (1) consistent with maximum benefit to people of the State, (2) will not unreasonably affect present and anticipated beneficial uses, and (3) will not result in water quality less than that in Basin Plan and other policies. And the State Board must require any discharge of waste into high quality waters to implement "best practicable treatment and control" ("BPTC") necessary to assure that pollution or nuisance will not occur and that the highest water quality consistent with maximum benefit to the people of the State will be maintained.[70]

It is difficult to comment on this Order's compliance with the Antidegradation Policy because the Order's analysis of its compliance is contained in the Information Sheet, which was not revised to account for the revisions directed by the State Board in the ESJ Order.[71] The ESJ Order itself does not contain a discussion of compliance with the Antidegradation Policy and does not update the existing analysis to account for the revisions.

Nonetheless, we stand by our comments made to the first draft of the Order in 2016, which we incorporate here by reference. The Order fails to comply with the Antidegradation Policy.

The Order fails to require BPTC because, as discussed above, there is no connection between the management practices required and water quality outcomes. Without either individual monitoring or an enforceable metric, the management measures listed in the Information Sheet are empty and conclusory.[72] There is no evidence that they will result in actual improvements to water quality. And because there is evidence before the board that enforceable metrics could be used to improve water quality without significant harm to yields, the Board cannot conclude that the current management measures are BPTC.

The Order fails to properly analyze the maximum benefit to the people of the state because, as discussed above, it fails to analyze all of the economic, health, and environmental costs and benefits of the authorized degradation, not just the costs to the discharger. The Board abuses its discretion by analyzing only the costs to industry and not the costs to drinking water users of the Board's failure to act.

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[69] See Statement of Policy with Respect to Maintaining High Quality Waters in California (Resolution 68-16). See also *AGUA*, *supra*, 210 Cal.App.4th 1255.

[70] Antidegradation Policy, (Ex. C) at 1.

[71] Information Sheet, Attachment A to Revised WDRs, at 1.

[72] *Id.* at 40-44.

c. The Order Fails to Comply with the Public Trust Doctrine and the Doctrine of Waste and Unreasonable Use

The "reasonable and beneficial use" doctrine is codified in the California Constitution, requiring that "the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare." (Cal Const., art. X § 2; see also *United States v. State Water Resources Control Bd.* (1986) 182 Cal.App.3d 82, 105 ("Superimposed on those basic principles defining water rights is the overriding constitutional limitation that the water be used as reasonably required for the beneficial use to be served.").)

Along the same lines, the "public trust" doctrine applies to the waters of the State, and states that "the state, as trustee, has a duty to preserve this trust property from harmful diversions by water rights holders" and that thus "no one has a vested right to use water in a manner harmful to the state's waters." (*State Water Resources Control Bd.*, *supra*, 182 Cal.App.3d at 106; *Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 426.)

This Order does not mention, let alone apply, either the "reasonable and beneficial use" or "public trust" doctrines. Further, if it had, the continued use of appropriated water to irrigate lands in such way that degrades high quality waters, violates WQOs, and causes nuisance and pollution would be inconsistent with those doctrines. As such, the Regional Board should not adopt the Order.

5. Conclusion

For the foregoing reasons, we oppose the ESJ Order in its current form. We request that the State Board rescind the Second Draft and reissue it only after it has been revised to:

- Make all data necessary to the operation of the order transparent and public
- Include enforceable standards that will achieve compliance with WQOs
- Revise the well testing requirements
- Comply with the Human Right to Water Act, the Antidegradation Policy, the waste and unreasonable use doctrine, and the public trust doctrine.

Sincerely,

Nathaniel Kane
Staff Attorney
Environmental Law Foundation

Attachments.

ATTACHMENT 1

SUPERIOR COURT OF CALIFORNIA

COUNTY OF SACRAMENTO

MONTEREY COASTKEEPER, et al. **v.** **CALIFORNIA STATE WATER RESOURCES CONTROL BOARD** --- **OCEAN MIST FARMS, et al.**	Case Number: 34-2012-80001324 **RULING ON SUBMITTED MATTER** Date: May 15, 2015 Time: 10:00 a.m. Dept.: 29 Judge: Timothy M. Frawley

I.

Introduction

On March 15, 2012, the Central Coast Regional Water Quality Control Board (Regional Board) adopted a Conditional Waiver of Waste Discharge Requirements (Order No. R3-2012-0011) and related Monitoring and Reporting Program (Order Nos. R3-2012-0011-01, R3-2012-0011-02, and R3-2012-0011-03) governing discharges from irrigated agricultural lands in the Central Coast region. The "Waiver" waives the requirement for dischargers to file a "Report of Waste Discharge" and obtain "Waste Discharge Requirements" (a permit) for surface and ground water discharges from irrigated lands, provided dischargers comply with certain specified conditions.

Respondent California State Water Resources Control Board (State Board) received five petitions for review of the waiver. One of the petitions was filed by Petitioners Monterey Coastkeeper and Santa Barbara Channelkeeper (among others). Petitioners are non-profit corporations seeking to protect and enhance the State's water resources. The other four petitions were filed by entities representing farmers or agricultural

interests, including the Respondent-Intervenors in this action. Together, the five petitions alleged over forty deficiencies in the Regional Board's proposed Waiver. The State Board accepted the petitions for review and elected to review the Regional Board's proposed Waiver.

On September 24, 2013, the State Board adopted an Order (Order WQ 2013-0101), resolving the petitions for review and making amendments to the Waiver. Regional Board staff subsequently incorporated the State Board's amendments into a final "Modified Waiver."

This action followed. Petitioners Monterey Coastkeeper, Antonia Manzo, Environmental Justice Coalition for Water, California Sportfishing Protection Alliance, Pacific Coast Federation of Fishermen's Association, and Santa Barbara Channelkeeper seek a peremptory writ of mandate finding that the Modified Waiver violates the California Water Code, the Regional Basin Plan, the State Antidegradation Policy, Government Code § 11513, and CEQA; and commanding the Board to set aside the Waiver and prepare a new waiver after supplemental environmental review under CEQA. The court shall grant the petition and issue a peremptory writ of mandate commanding Respondent State Board to reconsider the Waiver.

II.
Background Law

The Porter-Cologne Water Quality Control Act is the principal law governing water quality regulation in California. Enacted in 1969, the Porter-Cologne Act establishes as state policy that "the quality of all waters of the state will be protected for use and enjoyment by the people of the state." (Water Code § 13000.) The Act provides that "activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible." (*Ibid.*)

The Legislature designated the State Board and nine regional water quality control boards (regional water boards) as the agencies with primary responsibility for the regulation of water quality under the Porter-Cologne Act. (Water Code § 13001.) The State Board formulates and adopts state-wide policy for water quality control, allocates funds, and oversees the activities of the regional water boards. (Water Code §§ 13140, 13320.) Each regional water board is responsible for, among other things, water quality protection, permitting, inspection, and enforcement actions within its region. (Water Code § 13225(a).)

A. Central Coast Basin Plan

The Porter-Cologne Act requires each regional water board to adopt a "water quality control plan" (also called a "basin plan") for areas within its region. (Water Code § 13240.) In the basin plan, a regional water board is required to identify and designate the "beneficial uses" of each water body in the region. (Water Code §§ 13050(j), 13240.) Among the beneficial uses that can be designated for a water body are: municipal water supply, contact recreation, non-contact recreation, warm water habitat, cold water habitat, and agricultural supply.

Basin plans also are required to establish "water quality objectives" (aka, "water quality standards"). Water quality objectives are numeric or narrative standards that must be met in order to ensure water bodies will be suitable for their particular beneficial uses and will not constitute a nuisance. (Water Code § 13241.) Factors a regional water board must consider in establishing water quality objectives include, but are not limited to, the following:

(a) Past, present, and probable future beneficial uses of water.
(b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
(c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
(d) Economic considerations.
(e) The need for developing housing within the region.
(f) The need to develop and use recycled water. (Water Code § 13241.)

Basin plans also must contain an implementation plan that describes the actions necessary to achieve the relevant water quality objectives. (Water Code § 13242.) An implementation plan must include "a description of the nature of the actions which are necessary to achieve objectives," a time schedule for the actions to be action, and a description of monitoring activities that will be used to determine whether water quality objectives are being achieved. (*Ibid.*)

Basin plans distinguish between "point sources" of pollution, which are discharges that come from specifically identifiable sources such as waste water treatment facilities, industrial drain pipes, and municipal storm drains, and "nonpoint sources," which are discharges from diffuse, land-use driven sources such as agricultural runoff, road

construction, and logging. Nonpoint sources of water pollution are not as easily regulated or controlled as point sources.

The relevant basin plan is the Central Coast Water Quality Control Plan (the "Basin Plan"), which was adopted by the Regional Board in 1975. The Basin Plan has been amended many times over the years and is subject to regular review every three years. Consistent with the Porter-Cologne Act, the primary objective of the Basin Plan is to show how the quality of the surface and ground waters in the Central Coast should be managed to provide the highest water quality reasonably possible. (RB 9165.)

As required by the Porter-Cologne Act, the Basin Plan establishes beneficial uses for water bodies in the Central Coast region, identifies water quality objectives to protect the established beneficial uses, and includes a program of implementation that describes the actions necessary to achieve the objectives. (RB 9173-209.) The implementation program includes a description of the nature of actions necessary to achieve the objectives, a time schedule for the actions to be taken, and a description of monitoring to be undertaken to determine compliance with the objectives.

B. The Nonpoint Source (NPS) and Antidegradation Policies

Basin plans must be consistent with state water quality policies. (Water Code § 13146.) Two water quality policies are relevant to this case: the State Board's Policy for Implementation and Enforcement of Nonpoint Source Pollution Control Program, also known as the "NPS Policy", and the Statement of Policy with Respect to Maintaining High Quality of Water, Resolution No. 68-16, which is commonly referred to as the "Antidegradation Policy."

The State Board adopted the NPS Policy in 2004. The NPS Policy guides regional water boards regarding nonpoint sources of pollution, consistent with the legislative direction in Water Code § 13369. The NPS Policy has the force and effect of a regulation.

The NPS Policy requires that nonpoint source pollution control programs contain five "key elements." In particular, a nonpoint source pollution control program must (1) explicitly address nonpoint source pollution in a manner that achieves and maintains water quality objectives; (2) include a description of management practices and program elements expected to be implemented; (3) include a time schedule and quantifiable milestones designed to measure progress towards achieving water quality objectives; (4) include sufficient feedback mechanisms to ensure that the program is achieving its stated purpose, and ascertain whether additional or different actions are required; and

(5) state the potential consequences for failure to achieve the program's objectives. (RB 9417-20.)

The NPS Policy recognizes that nonpoint source pollution control is a complicated endeavor that addresses longstanding problems and that achieving objectives will take a significant amount of time. (RB 9422.) The NPS Policy recognizes that implementing management practices may be an effective way to control nonpoint source pollution. (RB 9413.)

The State Board adopted the Antidegradation Policy in 1968. The Antidegradation Policy applies whenever (a) there is high quality water, and (b) an activity which produces or may produce waste or an increased volume or concentration of waste that will discharge into such high quality water. The Antidegradation Policy provides, in relevant part:

> Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.
>
> Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained. (RB 9377.)

High quality waters are determined based on specific properties or characteristics. Because the determination is made on a constituent by constituent basis, waters can be considered high quality for some constituents, but not for others. (*Asociacion de Gente Unida por el Agua v. Central Valley Regional Water Quality Control Bd.* ["*AGUA*"] (2012) 210 Cal.App.4th 1255, 1271.)

By its terms, the Antidegradation Policy seems to require a comparison of existing water quality to water quality objectives as of the date on which those water quality objectives were established. Such an interpretation prevents the Policy from being triggered when

existing water quality is equal to or less than the water quality objectives as of the date those objectives took effect, even if historically water quality exceeded applicable objectives.

However, courts and the State Board have interpreted the phrase "existing quality of water" to mean "baseline water quality," which, in turn, is defined as the "best quality that has existed" since the Antidegradation Policy took effect in 1968, unless subsequent lowering was due to regulatory action consistent with state and federal antidegradation policies. (*Id.* at p.1270; see also Administrative Procedures Update 90-004, pp.4-5 [providing guidance in implementing the policy as part of the NPDES permitting process].)

Thus, when undertaking an antidegradation analysis, the regional water board must determine the baseline water quality, and compare that baseline water quality with current water quality objectives. If the baseline water quality is equal to or less than the objectives, the water is not "high quality" and the Antidegradation Policy is not triggered. The relevant water quality objectives govern the water quality that must be maintained or achieved. . (*AGUA, supra,* at p.1270.) But if the baseline water quality is better than the water quality objectives, the Policy is triggered and the baseline water quality must be "maintained" unless the water board makes the findings required to permit degradation.[1] (*AGUA, supra,* at p.1270.)

To permit a proposed discharge that will degrade "high quality" water, a regional water board must find that the discharge (1) will be consistent with maximum benefit to the people of the State; (2) will not unreasonably affect present and anticipated beneficial use of the water; and (3) will not result in water quality less than that prescribed in water quality plans and policies. In addition, the board must ensure the discharge is utilizing the "best practicable treatment or control (BPTC)" to ensure pollution or nuisance will not occur and that the highest quality consistent with the maximum benefit to the people of the State will be maintained. (RB 9377-78.)

Any actions that can adversely affect high quality surface waters are also subject to the federal antidegradation policy developed under the Clean Water Act. (40 C.F.R. § 131.12.) Where the federal antidegradation policy is applicable, the State Board has interpreted its Antidegradation Policy as incorporating the federal policy. (See State Water Board Order WQ 86-17, pp.16-19.)

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[1] Under this interpretation, use of the term "maintained" might be a misnomer because actual, current water quality will in some cases have degraded below applicable water quality objectives. In such instances, the water is considered "high quality" only in the sense that its quality was, at some point between 1968 and the present, better than current water quality objectives.

C. Waste Discharge Requirements

Under the Porter-Cologne Act, anyone discharging or proposing to discharge waste that could affect water quality must file a report (aka, a "Report of Waste Discharge") and obtain either a permit (aka, "Waste Discharge Requirements") or a waiver (aka, a "Conditional Waiver of Waste Discharge Requirements").[2]

Waste Discharge Requirements can be issued to an individual discharger who has filed a Report of Waste Discharge and requested the permit. (Water Code § 13260). Alternatively, a regional water board may issue Waste Discharge Requirements for a group of dischargers if the board determines that (i) the discharges are produced by the same or similar operations, (ii) the discharges involve the same or similar types of waste, (iii) the discharges require the same or similar treatment standards, and (iv) the discharges are more appropriately regulated under general discharge requirements than under individual discharge requirements. (Water Code § 13263(i).)

Waste Discharge Requirements must be consistent with any applicable state and regional water quality control plans (basin plans) and policies. When issuing Waste Discharge Requirements, regional water boards are required to consider a number of factors, including the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241.

Waste Discharge Requirements may contain any number of conditions, including effluent limitations, treatment standards, monitoring requirements, and a compliance schedule. (Water Code § 13263.) However, water boards generally may not specify the design, location, type of construction, or particular manner of compliance with the requirements. (Water Code §13360; *Tahoe-Sierra Pres. Council v. State Water Res. Control Bd.* (1989) 210 Cal.App.3d 1421, 1438 ["Section 13360 is a shield against unwarranted interference with the ingenuity of the party subject to a waste discharge requirement . . . . It preserves the freedom of persons who are subject to a discharge standard to elect between available strategies to comply with that standard."]

[2] The federal Clean Water Act also requires a permit to discharge pollutants from point sources to surface waters. These permits are known as National Pollutant Discharge Elimination System (NPDES) permits. Congress has delegated to states with approved water quality programs, like California, the authority to issue NPDES permits. (Water Code § 13374.) Hence, Waste Discharge Requirements issued by regional water boards ordinarily also serve as federal NPDES permits. (Water Code § 13374; *Waterkeepers Northern California v. State Water Resources Control Bd.* (2002) 102 Cal.App.4th 1448, 1452.) Nonpoint source discharges to surface waters, and discharges to groundwater, are exempt from the permitting provisions of the Clean Water Act.

D. Conditional Waivers of Waste Discharge Requirements

The Porter-Cologne Act authorizes a water board to waive Waste Discharge Requirements for a specific discharge or specific type of discharge if the board determines that a waiver is consistent with any applicable state or regional water quality control plan (basin plan) and is in the public interest. (Water Code § 13269.) Waivers must have conditions and persons subject to the waiver must comply with such conditions. (*Ibid.*) Thus, in practical terms, Conditional Waivers operate in the same manner as Waste Discharge Requirements: the discharger is permitted to discharge waste provided the discharger meets the conditions specified in the Waiver.

Such conditions generally "shall" include, but are not limited to, individual, group, or watershed-based monitoring requirements, unless the board determines that the discharges at issue do not pose a significant threat to water quality. When imposed, monitoring requirements must be designed to support the development and implementation of the Waiver program, including verifying the adequacy and effectiveness of the Waiver's conditions. In establishing monitoring requirements, the water board may consider the volume, duration, frequency, and constituents of the discharge; the extent and type of existing monitoring activities; the size of the project area; and other relevant factors. Monitoring results must be made available to the public. (*Ibid.*)

Conditional Waivers are limited to five-year terms, but subject to renewal. As with Waste Discharge Requirements, a water board may issue an individual or a group Waiver.

III.
Background Facts and Procedure

The Central Coast region has approximately 435,000 acres of irrigated land and approximately 3000 agricultural operations generating discharges of waste.[3] It also has more than 17,000 miles of surface waters and approximately 4000 square miles of groundwater basins that may be affected by discharges of waste from irrigated lands.

Because agricultural discharges are non-point source discharges, historically they have been subject to minimal regulation. Regulatory authorities instead focused on addressing point source discharges such as wastewater treatment plants and industrial dischargers. However, agricultural discharges have not been exempt from regulation.

[3] In 2004, the region had approximately 600,000 acres of irrigated crop land, but only about 2,500 agricultural operations. (See RB 60.)

The Regional Board first approved a "blanket" waiver of waste discharge requirements for irrigation return flows and stormwater runoff in 1983. The 1983 waiver was not especially demanding: the waiver did not require any monitoring or reporting of wastewater discharges.

At the time the 1983 waiver was adopted, the Water Code allowed water boards to approve a waiver provided it was "not against the public interest." (Former Water Code § 13269.) The Legislature subsequently amended the Water Code to require that waivers be consistent with applicable water quality control plans (basin plans), include monitoring provisions, and expire after a five-year term. The legislation also provided that waivers in effect on January 1, 2000, if not specifically renewed, would sunset on January 1, 2003.

In response to the change in the law, on July 9, 2004, the Regional Board adopted Order No. R3-2004-0117, a conditional waiver of waste discharge requirements for discharges from irrigated lands in the Central Coast region (the "2004 Waiver").[4] In adopting the 2004 Waiver, the Regional Board found that water quality in the Central Coast region "has been shown to be impaired by such constituents as pesticides and nutrients, lending . . . urgency to the need to adopt additional requirements for irrigated operations." (RB 9.)

The 2004 Waiver classified dischargers into one of two tiers, and imposed the following conditions: completion of 15 hours of farm water quality education; development of a farm water quality management plan (that addresses, at a minimum, erosion control, irrigation management, nutrient management, and pesticide management); implementation of management practices in accordance with the Farm Plan; surface receiving water quality monitoring (individual, group/cooperative, or watershed-based); and reporting. (RB 60 et seq.) The Waiver did not require any groundwater monitoring.

The Waiver included a time schedule and milestones to achieve compliance with the conditions of the Waiver, but the time schedule and milestones only covered reporting and monitoring.

The goal of the 2004 Waiver was to improve and protect water quality by providing a program to manage discharges from irrigated lands that cause or contribute to exceedances of water quality standards. The Waiver sought to achieve this goal through education and by requiring dischargers to prepare and implement farm water

[4] The 2004 Waiver also waived the requirement for a Report of Waste Discharge if dischargers submit a "Notice of Intent" to comply with the conditions of the 2004 Waiver.

quality management plans (Farm Plans). A Farm Plan is a document that, among other things, identifies practices that are or will be implemented to manage discharges of pesticides, nutrients, and other pollutants, to protect water quality. In adopting the 2004 Waiver, the Regional Board hoped to improve irrigation efficiency and minimize fertilizer applications, by ensuring that growers evaluate crop nutrient requirements and consider the nitrate content of their irrigation water and soil in making fertilizer decisions. (RB 73.)

Regional Board staff recognized that the goal of achieving water quality standards represents a "long-term" effort that "cannot be achieved" during the five-year waiver term. (RB 15, 62.) The intent of the program during the first five-year cycle was to enroll growers in the program, educate growers about management practices, improve management practices and recordkeeping, gather information, and improve water quality. Staff indicated that few, if any, enforcement actions would be initiated based on water quality data, unless there was clear evidence of a flagrant or deliberate attempts to degrade water quality. (RB 17.)

The 2004 Waiver took effect on July 9, 2004, and had a term a five years, meaning it was due to expire on July 9, 2009. In anticipation of the expiration of the 2004 Waiver, Regional Board staff initiated a stakeholder process in December 2008, and extended the 2004 Waiver for one additional year, until July 10, 2010, to afford the stakeholder process time to reach a consensus.

Unfortunately, the stakeholder process was not successful. Thus, in February 2010, the Regional Board released a preliminary draft waiver to replace the 2004 Waiver (the "2010 Draft Waiver"), along with a corresponding staff report. (RB 1194-1272.)

The staff report explains the rationale behind the recommendations contained in the 2010 Draft Waiver as follows:

> The intent of the 2004 Conditional Waiver was to regulate discharges from irrigated lands to ensure that such dischargers are not causing or contributing to exceedances of any Regional, State, or Federal numeric or narrative water quality standard. The requirements of the 2004 Conditional Waiver focused on enrollment, education and outreach, the development of Farm Water Quality Management Plans (Farm Plans), and receiving (watershed-scale) water quality monitoring. However, substantial evidence indicates discharges of waste are causing significant exceedances of numeric and narrative water quality standards resulting in negative impacts on beneficial uses. (RB 1131; see also RB 1140.)

The staff report indicates that agricultural discharges "continue to contribute to already significantly impaired water quality and impose certain risk and massive costs to public health, drinking water supplies, aquatic life, and valued water resources." (RB 1130.) It concludes that while the 2004 Waiver was a significant step, the 2004 Waiver "lacks clarity and focus on water quality requirements and does not include adequate compliance and verification monitoring." (RB 1141.) "At a minimum, agricultural discharges continue to severely impact water quality in most receiving waters." Thus, achievement of desired water quality outcomes is "uncertain and unmeasured." (*Ibid.*)

Building upon the 2004 Waiver, the 2010 Draft Waiver retained the requirement that dischargers prepare a Farm Plan (with corresponding management practices), and it retained the 2004 Waiver's surface receiving water monitoring requirements. However, to further reduce or eliminate waste discharges, the 2010 Draft Waiver proposed to impose new, more stringent monitoring and reporting requirements, with an emphasis on "high risk" dischargers in the most severely impaired areas. (RB 1142, 1246 et seq.)

Unlike the 2004 Waiver, the 2010 Draft Waiver proposed to require all farm operations to conduct individual surface water discharge monitoring of their farm operation. If discharge monitoring demonstrates the discharge is impairing or has the potential to impair surface waters, the Draft Waiver required that discharge to be eliminated or treated/controlled to meet water quality standards. (RB 1144-45.)

In addition, the Draft Waiver required all dischargers to conduct annual groundwater monitoring of all irrigation and drinking water wells, and develop a plan to monitor and characterize groundwater quality in the area.

The 2010 Draft Waiver required dischargers to identify, select, and implement management practices to meet water quality standards, maintain existing high quality water, and achieve compliance with the Waiver. (RB 1256.) It also required dischargers to update their Farm Plan at least annually, with monitoring and site evaluation results. (RB 1248, 1255.)

The 2010 Draft Waiver included new requirements for pesticide runoff, nutrient and salt management, sediment/erosion control, and aquatic habitat protection (including minimum riparian buffer widths for streams). (RB 1265.) And it prohibited application of fertilizer "in excess of crop needs." (RB 1251.)

The 2010 Draft Waiver included a time schedule for compliance. Under the Draft Waiver, irrigation runoff either must be eliminated within two years, or the following pollutants must be eliminated or treated/controlled to meet applicable water quality standards by the specified dates: toxicity (within two years); turbidity (within three years); nutrients (within four years), and salts (within four years). (RB 1147, 1267 et seq.) Additionally, the Draft Waiver required dischargers to implement management practices to reduce pollutant loading to groundwater. (*Ibid.*)

Staff acknowledged that to "fully control" all discharges and achieve compliance with water quality standards would take longer than the five-year period of the Waiver, but staff recommended adoption of the Draft Waiver as a reasonable starting point to improve water quality. (*Ibid.*)

After holding public workshops and receiving comments, Regional Board staff released further revised versions of the draft order in November 2010, March 2011, July 2011, and August 2011.[5] (RB 3766-4213, 4901-5700, 6388-6555; SB 7337.) Ultimately, on March 15, 2012, the Regional Board adopted Order No. R3-2012-0011, renewing and revising the 2004 Waiver. (RB 8465-628.) (For ease of reference, the court shall refer to the Regional Board's Order approving a Conditional Waiver of Waste Discharge Requirements and Report of Waste Discharge, and the related Monitoring and Reporting Programs, as the "2012 Waiver").

In adopting the 2012 Waiver, the Regional Board made a number of findings, including the following:

> 5. **Since the issuance of the [2004 Waiver], the Central Coast Water Board has compiled additional and substantial empirical data demonstrating that water quality conditions in agricultural areas of the region continue to be severely impaired or polluted by waste discharges from irrigated agricultural operations and activities that impair beneficial uses, including drinking water, and impact aquatic habitat on or near irrigated agricultural operations. The most serious water quality degradation is caused by fertilizer and pesticide use, which results in runoff of chemicals from agricultural fields** into surface waters and percolation into groundwater. . . . [¶]

[5] The Board also extended the 2004 Waiver, several times, through September 30, 2012, to allow further time to develop a new conditional waiver.

6. **Nitrate pollution of drinking water supplies is a critical problem throughout the Central Coast Region. Studies indicate that fertilizer from irrigated agriculture is the largest primary source of nitrate pollution** in drinking water wells and that significant loading of nitrate continues as a result of agricultural fertilizer practices. Studies indicate that irrigated agriculture contributes approximately 78 percent of the nitrate loading to groundwater in agricultural areas. Hundreds of drinking water wells serving thousands of people throughout the region have nitrate levels exceeding the drinking water standard. This presents a significant threat to human health as pollution gets substantially worse each year, and the actual numbers of polluted wells and people affected are unknown. Protecting public health and ensuring safe drinking water is among the highest priorities of this Order. This Order prioritizes conditions to control nitrate loading to groundwater and impacts to public water systems. . . . [¶]

7. **Agricultural use rates of pesticides in the Central Coast Region and associated toxicity are among the highest in the State. Agriculture-related toxicity studies conducted on the Central Coast since 1999 indicate that toxicity resulting from agricultural discharges of pesticides has severely impacted aquatic life in Central Coast streams**. Some agricultural drains have shown toxicity nearly every time the drains are sampled. Twenty-two sites in the region, 13 of which are located in the lower Salinas/Tembladero watershed area, and the remainder in the lower Santa Maria area, have been toxic in 95% (215) of the 227 samples evaluated. This Order prioritizes conditions to address pesticides that are known sources of toxicity and sources of a number of impairments on the 2010 List of Impaired Waterbodies, specifically chlorpyrifos and diazinon. . . . . [¶]

8. Existing and potential water quality impairment from agricultural waste discharges takes on added significance and urgency, given the impacts on public health, limited sources of drinking water supplies and proximity of the region's agricultural lands to critical habitat for species of concern.

10. This Order requires compliance with water quality standards. Dischargers must implement, and where appropriate update or improve, management practices, which may include local or regional control or treatment practices and changes in farming practices to effectively

control discharges, meet water quality standards and achieve compliance with this Order. **Consistent with the Water Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy, 2004), dischargers comply by implementing and improving management practices and complying with the other conditions, including monitoring and reporting requirements. This Order requires the discharger to address impacts to water quality by evaluating the effectiveness of management practices (e.g., waste discharge treatment and control measures), and taking action to improve management practices to reduce discharges**. If the discharger fails to address impacts to water quality by taking the actions required by this Order, including evaluating the effectiveness of their management practices and improving as needed, the discharger may then be subject to progressive enforcement and possible monetary liability.

14. Dischargers have the option of complying with surface receiving water quality monitoring conditions identified in MRP Order No. R3-2012-0011, either individually or through a cooperative monitoring program. **The Central Coast Water Board encourages Dischargers to participate in a cooperative monitoring program** to comply with surface receiving water quality monitoring conditions.

16. Many owners and operators of irrigated lands within the Central Coast Region have taken actions to protect water quality. In compliance with the 2004 Agricultural Order, most owners and operators enrolled in the 2004 Agricultural Order, implemented the Cooperative Monitoring Program (CMP), participated in farm water quality education, developed farm water quality management plans and implemented management practices as required in the 2004 Agricultural Order. The 2004 Agricultural Order did not include conditions that allowed for determining individual compliance with water quality standards or the level of effectiveness of actions taken to protect water quality, such as individual discharge monitoring or evaluation of water quality improvements. This Order includes new or revised conditions to allow for such evaluations. Many owners and operators of irrigated lands within the Central Coast Region have taken actions to protect water quality. In compliance with the 2004 Agricultural Order, most owners and operators enrolled in the 2004 Agricultural Order, implemented the Cooperative Monitoring Program (CMP), participated in farm water

> quality education, developed farm water quality management plans and implemented management practices as required in the 2004 Agricultural Order. **The 2004 Agricultural Order did not include conditions that allowed for determining individual compliance with water quality standards or the level of effectiveness of actions taken to protect water quality, such as individual discharge monitoring or evaluation of water quality improvements. This Order includes new or revised conditions to allow for such evaluations**. (See RB 8299-303 [emphasis added].)

The 2012 Waiver was similar to the 2004 Waiver in that it required farm water quality education and farm water quality management plans (or an approved alternative water quality improvement program), required dischargers to implement management practices, required surface receiving water quality monitoring and reporting, imposed time schedules and milestones, and required compliance reporting. Like the 2004 Waiver, the 2012 Waiver encouraged "cooperative" monitoring and reporting efforts.

The 2012 Waiver was more demanding than the 2004 Waiver. The 2012 Waiver (1) classified dischargers into three tiers based on criteria intended to assess a discharger's threat to water quality; (2) required groundwater monitoring and reporting; (3) required maintenance of riparian/vegetative cover in aquatic habitat areas; (4) required the installation of back flow prevention devices; and (5) imposed heightened requirements on the dischargers posing the biggest threats to water quality, including nitrogen balance ratios, irrigation and nutrient management plans, water quality buffer plans, individual surface discharge water quality monitoring and reporting, photo monitoring, total nitrogen reporting, and annual compliance forms.

But some provisions of the 2012 Waiver were less demanding than the 2010 Draft Waiver. For example, the 2010 Draft Waiver required all dischargers within 1000 feet of any surface waterbody to implement management practices sufficient to eliminate discharge of nutrients and salts within four years, and required all dischargers to meet this standard within six years. The 2010 Draft Waiver required the nutrient management element of the Farm Plan to include an estimation of the amount of fertilizer applied in excess of crop needs (if applicable) and an estimation of excess/residual fertilizer/nutrients in the root zone at the end of the growing season. (RB 1259-60.)

Under the 2012 Waiver, only "Tier 2 and 3" dischargers determined to have high nitrate loading risks were subject to additional nutrient management practices. Only Tier 3 dischargers were required to initiate individual surface water discharge monitoring and

reporting, and only Tier 3 dischargers with high nitrate loading risk farms were required to determine crop nitrogen uptake values and report progress toward nitrogen balance ratio targets. Only Tier 3 dischargers with farms adjacent to an impaired waterbody were required to prepare and implement a Water Quality Buffer Plan.

The 2012 Waiver required dischargers to comply with water quality standards and with the Regional Basin Plan, and to "effectively control" discharges of pesticides, toxic substances, sediment, turbidity, and nutrients, within specified time lines, but staff acknowledged that, in practice, staff would withhold enforcement if dischargers were meeting conditions of the Waiver regarding implementation, monitoring and reporting. (See SB 2345-46.)

To comply with CEQA, the Regional Board prepared a Subsequent Environmental Impact Report ("SEIR"). The SEIR originally was based on the 2010 Draft Waiver. On August 10, 2011, the Regional Board issued an Addendum to the SEIR to reflect the subsequent revisions to the Draft Waiver and the Board's conclusion that a new SEIR was not required. The Board ultimately concluded that the proposal to "renew" the 2004 Waiver, with "clarifications and new conditions," might have significant environmental effects on biological resources. Thus, the Board adopted a Statement of Overriding Considerations with respect to biological resources. In all other respects, the Board concluded that the 2012 Waiver would not have any new significant environmental effects that had not already been evaluated in the Negative Declaration for the 2004 Waiver.

Five parties petitioned the State Board for review of the Regional Board's 2012 Waiver. (SB 1-1646; see also SB 7164.) One of the five petitions was filed by Petitioners Monterey Coastkeeper and Santa Barbara Channelkeeper (as well as San Luis Obispo Coastkeeper). The other four petitions were filed by entities representing agricultural interests, including Respondent-Intervenors.

In their petition for administrative review, Petitioners argued that the Regional Board had "substantially weakened" staff's proposed controls on nitrate pollution, removing any "firm targets" for nitrate discharges. In the 2010 Draft Waiver proposed by staff, dischargers were required to calculate and "meet" nitrogen balance ratio targets. However, in the 2012 Waiver, the Regional Board revised this requirement to require only that dischargers "report progress towards" achieving nitrogen balance ratio "milestones." Petitioners argued that the revisions rendered the Waiver's controls on nitrate pollution "too weak" to achieve compliance with the Basin Plan, in violation of Water Code section 13269. Thus, Petitioners urged the State Board to reject the

Regional Board's revision "eliminating nitrate ratio balance targets" for Tier 3 dischargers.

The agricultural interests raised a variety of procedural and substantive challenges to the 2012 Waiver. Among other things, they argued that the Waiver's conditions are unreasonable and excessive and inconsistent with the Basin Plan and the Porter-Cologne Act. They also argued that the Board's SEIR is inadequate and that the Board failed to comply with CEQA by relying on the 2004 Negative Declaration and failing to adequately analyze and mitigate the adverse environmental effects of the new, 2012 Waiver.

The agricultural interests also requested the State Board stay certain provisions of the 2012 Waiver pending resolution of the petitions. The State Board granted the request and issued a stay order on September 19, 2012, staying Provisions 44(g), 68, 74, and 67 of the 2012 Waiver (and Part 3 of the related Tier 2 and Tier 3 Monitoring and Reporting Programs).

On September 17, 2012, the State Board initiated its review of the petitions by transmitting a "30-day letter" inviting the Regional Board and all interested persons to respond to the petitions. In response to the 30-day letter, the State Board received responses from several parties, including Petitioners and Respondent-Intervenors.

On June 6, 2013, the State Board released a first revised draft Waiver and received public comments. On August 20, 2013, the State Board released a second revised draft Waiver, followed by another public comment period. On September 9, 2013, the Board released a third revised draft Waiver, followed by yet another public comment period. A final draft Waiver was released on September 20, 2013, prior to the September 24, 2013, Board hearing.

On September 24, 2013, after receiving testimony from the public and interested parties, as well as Regional and State Board staff, the State Board adopted its final Order WQ 2013-0101. (See SB 7162-234 [redline version].) The State Board's Order upheld most of the provisions of the Regional Board's 2012 Waiver, but also amended several requirements. The most significant revision was to replace the Waiver's nitrogen balance ratio requirement with an expanded nitrogen reporting protocol.

In its Order, the State Board indicated that it was in the process of convening a panel of experts to assess existing agricultural nitrate control practices and propose new practices to protect groundwater in the Central Coast region. The State Board indicated that many of the groundwater issues contested in the petitions should be addressed by

the expert panel. Thus, the State Board emphasized that its Order constitutes only an interim determination as to how to move forward on the "difficult and complex questions presented in the petitions," pending the expert panel's "more thorough examination of the underlying issues." (SB 7165.)

The Regional Board staff modified Order No. R3-2012-0011 as directed by the State Board's Order WQ 2013-0101. (For ease of reference, the court shall refer to the Regional Board's modified Order, and the related Monitoring and Reporting Programs, as the "Modified Waiver").

This lawsuit followed. The Amended Petition alleges that the State Board abused its discretion in adopting Order No. WQ 2013-0101, modifying the 2012 Waiver, because the Order violates the California Water Code, the Basin Plan, and California's Antidegradation Policy, and because the Board improperly excluded highly-relevant scientific evidence that Petitioners submitted during the public review and comment period (namely, a report by Thomas Harder and Jay. R Lund entitled "Addressing Nitrate in California's Drinking Water," also known as the "U.C. Davis Report"). The Amended Petition also alleges that the State Board violated CEQA by failing to undertake additional environmental review before adopting its final Order.

The Amended Petition seeks a peremptory writ of mandate commanding Respondent State Board to set aside its Order No. WQ 2013-0101, remanding this matter for further proceedings consistent with this court's order, and reinstating the Regional Board's 2012 Waiver until the State Board complies with the writ. Petitioners also seek an award of reasonable attorney fees under California Civil Procedure Code section 1021.5.

Respondents oppose the petition. Respondent State Board also has filed a demurrer alleging that the Fifth Cause of Action (CEQA) fails to state facts sufficient to constitute a cause of action due to Petitioners' failure to exhaust administrative remedies. (Because the demurrer is duplicative of the State Board's arguments opposing the petition, the court need not, and does not, address it further in this ruling.)

IV.
Standard of Review

The challenges to the Board's actions are reviewed under Code of Civil Procedure section 1094.5. (Water Code § 13330(e).) The inquiry under section 1094.5 is whether the agency has (1) proceeded without, or in excess of, jurisdiction; (2) whether there was a fair trial; and (3) whether there was any prejudicial abuse of discretion. Abuse of

discretion is established if the agency has not proceeded in the manner required by law, the order or decision is not supported by the findings, or the findings are not supported by the evidence. (Civ. Proc. Code § 1094.5(b).)

Under Water Code section 13330(e), the Court is authorized to exercise its independent judgment on the evidence. In applying the independent judgment test, the trial court reweighs the evidence from the hearing and makes its own determination as to whether the administrative findings are supported by the weight (i.e., preponderance) of the evidence. (*Vaill v. Edmonds* (1991) 4 Cal.App.4th 247, 257.)

Even where the independent judgment test applies, the factual findings of the agency come before the court with a presumption of correctness. (*Fukuda v. City of Angels* (1999) 20 Cal.4th 805, 811-12, 817.) It is presumed that the agency regularly performed its official duty. (*Id.*; *Elizabeth D. v. Zolin* (1993) 21 Cal.App.4th 347, 354.) The burden falls on the petitioner attacking the administrative decision to convince the court that the administrative proceedings were unfair, were in excess of jurisdiction, or that the agency's findings are contrary to the weight of the evidence. (*Fukuda, supra*, at pp. 811-12.)

The amount of deference to be afforded to an agency's interpretation of a statute or regulation is "contextual," and must be considered in light of the agency's expertise and technical knowledge, its thorough analysis of the issues, and its consistency over time. (*California Society of Anesthesiologists v. Brown* (2012) 204 Cal.App.4th 390, 405; *McCormick v. County of Alameda* (2011) 193 Cal.App.4th 201, 207-08; see also *Yamaha Corp. of America v. State Bd. of Equalization* (1998) 19 Cal.4th 1, 7-8.) In general, where an agency is charged with enforcing a statute or regulation, its interpretation is entitled to considerable weight. (*Family Planning Associates Med. Group, Inc. v. Belshe* (1998) 62 Cal.App.4th 999, 1004.) However, the court itself is the ultimate arbiter of the interpretation of the law. (*C.E. Buggy, Inc. v. Occupational Safety & Health Appeals Bd.* (1989) 213 Cal.App.3d 1150, 1156.)

The court reviews the State Board's compliance with CEQA by evaluating whether there was a prejudicial abuse of discretion. (Pub. Res. Code § 21168.5.)

In a mandate proceeding to review an agency's decision for compliance with CEQA, the court reviews the administrative record to determine whether the agency abused its discretion. Abuse of discretion is shown if the agency has not proceeded in the manner required by law, or the determination is not supported by substantial evidence. (*Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1106.) Judicial review differs significantly depending on whether the claim is

predominantly one of improper procedure or a dispute over the facts. (*Clover Valley Foundation v. City of Rocklin* (2011) 197 Cal.App.4th 200, 211-12.)

Where the alleged defect is that the agency has failed to proceed in the manner required by law, the court's review is de novo. (*Ibid.*) Although CEQA does not mandate technical perfection, CEQA's information disclosure provisions are scrupulously enforced. (*Ibid.*) A failure to comply with the requirements of CEQA which results in an omission of information necessary to informed decision-making and informed public participation constitutes a prejudicial abuse of discretion, regardless whether a different outcome would have resulted if the agency had complied with the disclosure requirements. (*Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1198.)

Where the alleged defect is that the agency's factual conclusions are not supported by substantial evidence, the reviewing court must accord deference to the agency's factual conclusions. The reviewing court may not weigh conflicting evidence to determine who has the better argument and must resolve all reasonable doubts in favor of the administrative decision. The court may not set aside an agency's approval of an EIR on the ground that an opposite conclusion would have been equally or more reasonable. (*Ebbetts Pass Forest Watch v. California Dept. of Forestry & Fire Protection* (2008) 43 Cal. 4th 936, 945.)

Regardless of what is alleged, an EIR approved by a governmental agency is presumed legally adequate, and the party challenging the EIR has the burden of showing otherwise. (*Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (2007) 157 Cal.App.4th 149, 157-58.)

V.
Requests for Judicial Notice

The request for judicial notice filed by Respondent-Intervenors, although unopposed, is denied because Respondent-Intervenors have failed to furnish the court with sufficient information to enable it to take judicial notice of the matters listed.

VI.
Discussion

A. Did Petitioners exhaust their administrative remedies?

As a preliminary matter, Respondents contend that a number of the issues Petitioners raise in their Opening Brief were not presented to the State Board or were presented in contravention of a State Board rule restricting comments to revisions made since the prior draft.[6] The issues that Respondents contend were not properly presented to the State Board relate to provisions of the Modified Waiver addressing (i) pesticide controls [specifically, monitoring use of certain categories of pesticides], (ii) vegetation buffers, (iii) tile drains, (iv) tiering, (v) individual surface water discharge monitoring, (vi) compliance with the State's Antidegradation Policy, and (vii) compliance with CEQA. Because the State Board did not have the opportunity to fully consider those issues, Respondents contend that Petitioners failed to exhaust their administrative remedies.

Petitioners respond that all of the issues presented in this litigation were raised by Petitioners or other interested parties during the administrative process, and therefore are properly before this court.

In general, the court agrees with Petitioners that the purpose of exhaustion of administrative remedies is satisfied if the issue properly was raised during the administrative process, regardless of who raised it. (See *Evans v. City of San Jose* (2005) 128 Cal.App.4th 1123, 1137.)

On the other hand, as Petitioners concede, consideration of whether exhaustion has occurred depends upon the particular procedures applicable to the public agency in question. (See Reply Brief, p.4, lines 1-3 [citing *Citizens for Open Government v. City of Lodi* (2006) 144 Cal.App.4th 865, 876].) In this case, the applicable procedures include State Board regulations governing the administrative process.

Under State Board regulations, any petition for State Board review of an action by a regional board must be in writing and must include a full and complete statement of the reasons the regional board's action was inappropriate or improper. (See 23 C.C.R. § 2050.) Further, if the action that is the subject of the petition for review was taken by the regional board after notice and opportunity to comment, the petition to the State Board shall be limited to those substantive issues or objections that were raised before

[6] Under State Board regulations, where staff makes revisions to a proposed order, subsequent comments are limited to the revisions. (23 C.C.R. § 2067; see also SB 6673.)

the regional board. (*Ibid.*) In short, an "aggrieved person" cannot present issues for the first time to the State Board.

Upon receipt of a petition that complies with § 2050, the State Board may solicit responses to the petition. (23 C.C.R. § 2050.5.) After review of the regional board's records pertaining to the matter, the State Board may deny the petition, set aside or modify the regional board order, or direct the regional board to take appropriate action. (23 C.C.R. § 2052.)

Before taking final action, the state board may, in its discretion, hold a hearing for the purpose of oral argument, receipt of additional evidence, or both. (*Ibid.*) When a state board hearing is held, the decision of the State Board will be based on that evidence and testimony in the record of the hearing. When no hearing is held, the decision of the Board will be based on the record before the regional board, except that, in either case, the record may be supplemented by other evidence and testimony pursuant to section 2050.6. (23 C.C.R. § 2064.)

The State Board also has the authority to order review of a regional board's action on its own motion. (23 C.C.R. § 2050.5.) When review is undertaken on the Board's own motion, all affected persons known to the Board shall be notified and given an opportunity to submit information and comments, subject to such conditions as the Board may prescribe. (23 C.C.R. § 2055.)

Formal disposition of petitions occurs at board meetings. At such meetings, the Board may invite comments from interested persons. Comments must be based on evidence contained in the record or legal argument. No new evidence is submitted at the meeting. (23 C.C.R. § 2067.)

The regulations further provide that when the Board makes revisions to a proposed order, subsequent written comments are limited to those revisions. (23 C.C.R. § 2067.)

In this case, even though petitions challenging the Regional Board's Waiver were filed by Petitioners and by agricultural interests, the Board ultimately decided to review the Regional Board's actions on its own motion – apparently because the Board could not meet the time limits for deciding the petitions. (See 23 C.C.R. § 2050.5.)

The only issue raised in the petition filed by Petitioners was the Regional Board's decision to "eliminate" the nitrogen balance ratio targets – specifically, by replacing the requirement to "meet" nitrogen balance ratio targets with the requirement merely to "report progress" towards nitrogen balance ratio milestones. In contrast, the agricultural

interests raised numerous objections to the Waiver, challenging nearly every aspect of the Waiver as well as the Regional Board's compliance with CEQA.

Petitioners submitted a written response to the petitions filed by the agricultural interests. Rather than challenging the Regional Board's Waiver, Petitioners defended it. Petitioners argued that the petitions are "wholly without merit" and should be denied. Among other things, Petitioners argued that the Regional Board "acted properly and appropriately in issuing the 2012 Waiver" after an extensive public process, and that the Waiver is "consistent with the Basin Plan and squarely within the public interest." (See SB 5434.) Petitioners argued that the 2012 Waiver is a "proper and appropriate" application of the Regional Board's mandate. (SB 5434.) Petitioners specifically defended the Waiver's tiering system, vegatation buffer/filter strip requirements, and time schedules to achieve compliance over the "longer term," among other provisions. (See SB 5434-42.)

In addition, Petitioners defended the Regional Board's CEQA determinations, arguing that the Regional Board "adhered to CEQA requirements" when it incorporated the analysis from the 2004 Negative Declaration into an SEIR, and when it issued an addendum to that SEIR. (SB 5454-58.)

Petitioners continued to defend the Waiver through the State Board's first draft order. In their comments to that draft, Petitioners stated that their petition "likely would have been withdrawn" were it not for the efforts by agricultural interests to "overturn" the 2012 Waiver and revert to the 2004 Waiver. (SB 5726.) However, in the course of defending the Regional Board's Waiver, Petitioners expressed some dissatisfaction with a perceived weakening of the Waiver to "appease" growers. (SB 5727.)

Petitioners' main objection to the Waiver continued to be the elimination of the requirement to "meet" nitrogen balance ratio targets. Rather than restore the requirement to "meet" nitrogen balance ratios, the State Board proposed to eliminate nitrogen balance ratio targets entirely (and eliminate the requirement to report crop nitrogen uptake values), and instead require high-risk dischargers to report total nitrogen applied. Petitioners objected to this because it would give staff no estimate of the amount of nitrogen removed at harvest, and therefore no means to assess the amount of nitrogen being discharged as waste.

Petitioners also objected to other changes made by the State Board in its draft order, including the Board's proposal to reduce the requirements applicable to containment structures (Provision 33). Petitioners also expressed concerns about the Board's

proposal to convene an expert review panel, and the Regional Board's Cooperative Groundwater Monitoring Program. (See SB 5724 et seq.)

Agricultural interests, other environmental organizations, and the Regional Board also submitted comments. The comments submitted by the environmental groups and Regional Board discussed a range of issues, including that the Waiver fails to comply with the anti-degradation requirements; that the Board had inappropriately weakened Provision 11 (third party water quality projects), Provisions 44.d and 44g (Farm Plan effectiveness and compliance), Provisions 76 & 77 and Section B.1 of Part 6 of the Tier 3 MRP (nutrient reporting), Provision 78 (nitrogen balancing ratios), Provision 82 (control of pollutant discharges), Part 3A of the Tier 2 and 3 MRP (reporting of management practice effectiveness), and Part 5A of the Tier 3 MRP (individual surface water discharge monitoring), among other provisions.

In response to the State Board's second draft order, Petitioners objected that the changes had further weakened the Waiver, such that it bore little resemblance to the original February 2010 Draft Waiver. Petitioners argued that if the Waiver is going to provide meaningful water quality protection, the State Board must: (1) require growers to meet and report nutrient balancing ratios; (2) require Tier 3 growers participating in cooperative groundwater monitoring programs to monitor and report results annually; and (3) ensure that growers implement "effective" management practices, not just "modified" management practices.

In addition, Petitioners commented that the initial 2010 Draft Waiver included a "comprehensive list of pesticides," but the most recent draft only focuses on diazinon and chlorpyrifos. Petitioners argued this represented a "missed opportunity" for the Board to reduce discharges of toxic pesticides. (See SB 6301 *et seq.*)

Agricultural interests, other environmental organizations, and the Regional Board also submitted comments. The topics addressed in such comments included Provision 51 (groundwater monitoring), Provisions 76-77 (nutrient balance ratios), Provision 11 (third party water quality programs), Provision 33 (containment structures), Provisions 22-23, 84-87, and 87A (compliance), and Provision 72 (individual surface water discharge monitoring), among others.

By the time of the State Board's third draft order, Petitioners, exasperated with the perceived weakening of the Waiver, indicated that they no longer supported the Waiver and urged the Board to restore many of the provisions from the 2010 Draft Waiver, including (1) the pesticide/toxicity provisions; (2) the requirement for all Tier 2 and 3 growers to report crop nitrogen uptake values and nitrogen balance ratios; (3) the

requirement for all Tier 3 growers to "meet" nitrogen balance ratios; (4) sediment control requirements; and (5) aquatic habitat control requirements. Petitioners also urged the Board to admit the U.C. Davis report into evidence; to delete cooperative groundwater monitoring provisions allowing "statistical characterization" of water quality based on existing and collected data; and to delete language providing that iterative implementation of "modified management practices" would be sufficient to comply with the Waiver. (See SB 6730 *et seq.*)

Again, Petitioners were not the only ones to comment. Agricultural interests, other environmental organizations, and the Regional Board also submitted comments in response to the State Board's draft order. Topics covered by such comments included Provision 11; Provision 33; Provision 51; Part 2, Section A.6-7 of the Tier 1-3 MRPs; and provisions addressing nutrient management, among others.

The court is sympathetic to the Board's position that Petitioners should be limited to the issues specifically raised by Petitioners in their petition for review and during the course of administrative proceedings before the State Board. However, as described above, the purpose of the exhaustion doctrine is satisfied as long as the issue was raised during the administrative process, regardless who raised it. In light of the long and complicated history behind the Board's adoption of the Modified Waiver, the court is persuaded that the issues raised by Petitioners have been fully exhausted. Thus, the court shall proceed to decide the issues on their merits.[7]

B. Does the Modified Waiver violate Water Code section 13269?

The Porter-Cologne Act authorizes a waiver of waste discharge requirements only if the waiver is both consistent with the applicable basin plan and in the public interest. (Water Code § 13269.) In addition, Water Code section 13269 requires a waiver to include monitoring requirements "designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions." (*Ibid.*) Petitioners contend that the Modified Waiver violates Water Code section 13269 because it is not consistent with the Basin Plan, does not include adequate monitoring provisions, and is not in the public interest. The court agrees.

[7] In the course of reaching this decision, the court has not reviewed or considered Petitioners' Supplemental Brief on Administrative Exhaustion, which was filed without leave.

1. Is the Modified Waiver consistent with the Basin Plan?

Petitioners argue that the Modified Waiver is not consistent with the Basin Plan because it lacks specific, enforceable measures necessary to meet the Basin Plan's water quality objectives, and because it fails to comply with the NPS Policy and the Antidegradation Policy.

a. Compliance with Water Quality Objectives

The Central Coast Basin Plan establishes water quality objectives to protect beneficial uses of water, establishes a program of implementation to achieve water quality objectives, and incorporates state plans and policies, including the NPS Policy and the Antidegradation Policy. (RB 9165, 9193-94.)

As relevant here, the objectives for nitrates, toxicity, pesticides, and sediment provide, in relevant part:

> Nitrates: Water shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses. (RB 9195.) For municipal and domestic water supplies, the narrative standard has been converted into a numeric Maximum Contaminant Level (MCL) of 45 mg/L as Nitrate (NO3) or 10 mg/L as Nitrogen (N), which is equivalent to the State's drinking water standard. (RB 9197, 9199, 9357; see also RB 5450.) In addition, although not part of the Basin Plan, Regional Board staff has estimated that a standard of 1 mg/L as Nitrogen is necessary to protect aquatic life from biostimulation. (RB 5450.)
>
> Toxicity: All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. (RB 9196.)
>
> Pesticides: No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life. (RB 9196.)

> Sediment: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. (RB 9195.)

To achieve these objectives, the Basin Plan provides, among other things, that:

- The discharge of pollutants into surface fresh waters shall be discontinued. (RB 9353.)

- Waste discharges shall not contain materials in concentrations which are hazardous to human, plant, animal, or aquatic life. (RB 9355.)

- Wastewaters percolated into the ground waters shall be of such quality at the point where they enter the ground so as to assure the continued usability of all ground waters of the basin. (RB 9353.)

The Basin Plan includes a program of implementation to meet the objectives, a time schedule for actions to be taken, and enforcement mechanisms to ensure compliance with the objectives. The Basin Plan provides that control measures implemented by the Regional Board must provide for the attainment of the Basin Plan's beneficial uses and water quality objectives. (RB 9211.)

The Modified Waiver ostensibly requires compliance with the Basin Plan and its water quality objectives. (See SB 7238, 7253, 7347; see also SB 7347.) It does so by means of a "long term" approach that seeks to achieve compliance with water quality objectives over time through "iterative" implementation of management practices.

This iterative approach is described in Provision 83.5 of the Modified Waiver [or Provision 87.5 of the Order], which provides:

> To comply with Provisions 22, 23, 33, and 80 - 83 of this Order, Dischargers must (1) implement management practices that prevent or reduce discharges of waste that are causing or contributing to exceedances of water quality standards; and (2) to the extent practice effectiveness evaluation or reporting, monitoring data, or inspections indicate that the implemented management practices have not been effective in preventing the discharges from causing or contributing to exceedances of water quality standards, the Discharger must implement improved management practices. (SB 7362.)

Petitioners argue that the State Board's iterative approach is not sufficient to achieve compliance with the Basin Plan's water quality objectives because it lacks specific, enforceable standards against which to measure existing management practices; lacks meaningful deadlines/timeframes; lacks adequate feedback mechanisms to determine if management practices are effective.

Petitioners further complain that the Modified Waiver is less protective of water quality than the 2012 Waiver and previous draft waivers circulated by the Regional Board and its staff. Petitioners note that the Regional Board's 2010 Draft Waiver would have required Tier 3 dischargers to meet nitrogen balance ratio targets. Petitioners argue that, at growers' insistence, the Regional Board weakened this requirement so that, instead of requiring Tier 3 dischargers to "meet" nitrogen balance ratio targets, they merely had to "report progress towards" achieving nitrogen balance ratio "milestones." (RB 8327.) Then, in the Modified Waiver, the State Board eliminated the nitrogen balance ratio requirement altogether. (SB 7210-16, 7359-60.) Under the Modified Waiver, Tier 2 and 3 dischargers determined to have high nitrate loading risk merely are required to report total nitrogen applied. Petitioners contend that requiring dischargers to calculate and meet nitrogen balance ratio targets is essential to prevent excessive use of fertilizer and make progress toward achieving the Basin Plan's water objectives.

Petitioners contend that the State Board's elimination of nitrogen balancing and reporting might be acceptable if the Board adopted other enforceable standards to control nitrate pollution. However, Petitioners contend, as a result of the Board's modifications, there is not a single enforceable standard in the Modified Waiver that will require agricultural dischargers to use less nitrogen. Thus, Petitioners argue, nitrate contamination will continue to worsen and the Waiver will not achieve the Basin Plan's objectives.

Apart from the lack of enforceable standards, Petitioners contend the State Board also weakened other provisions that were critical to achieve compliance with the Basin Plan's water quality objectives. Petitioners cite several examples.

First, Petitioners contend the State Board eliminated the requirement of Farm Plans to describe and report the results of methods used to verify the effectiveness of management practices, treatment/control measures, and farming practices. Petitioners contend that the Regional Board already had watered down an earlier proposal to require dischargers to show that their discharges do not impair water quality. (RB 3786; see also RB 1129.) Petitioners contend that the State Board then further weakened the Waiver to require only a "description of the method and schedule" for assessing the effectiveness of each management practice, treatment, and control measure. (SB

7190.) Thus, Petitioners argue, the requirement went from dischargers having to show discharges do not impair water quality; to dischargers only having to describe their verification methods and results; to dischargers only having to describe their methods for evaluating effectiveness, with no need to demonstrate compliance or provide results.

Second, Petitioners contend the State Board weakened the Waiver's pesticide controls. In the 2010 Draft Waiver, Regional Board staff proposed to require that within two years dischargers within 1000 feet of a surface waterbody implement management practices sufficient to "eliminate toxicity in irrigation runoff or eliminate the discharge of irrigation runoff" or demonstrate that any irrigation runoff has been sufficiently treated or controlled that it will not cause or contribute to exceedances of any toxicity water quality standards. (RB 1258.) The Modified Waiver requires monitoring for certain pesticides and provides that Tier 3 dischargers must "effectively control" individual waste discharges of pesticides, but relies on the iterative management practices approach to achieve compliance. (SB 7361.) For the reasons describe above, Petitioners contend the iterative approach is not sufficient to attain water quality standards.

Third, Petitioners contend the State (and Regional) Board weakened the requirement for vegetation buffers. Petitioners argue that in the 2010 Draft Waiver, the Regional Board initially proposed to require all growers either to maintain vegetation buffers or develop and implement a Riparian Function Protection and Restoration Plan, as part of the discharger's Farm Plan. (RB 165-67.) However, in the 2012 Waiver, the Regional Board required only a small number of growers – a subset of Tier 3 dischargers – to comply with this requirement, and the State Board upheld this change. Petitioners contend this change stripped the Waiver of necessary buffer requirements.

Fourth, Petitioners contend that the Modified Waiver fails to adequately regulate the discharge of pollutants from "tile drains," merely requiring dischargers to describe tile drain discharges and management measures that dischargers have implemented or will implement to "minimize" impacts to water quality. (See SB 7351.)

Fifth, Petitioners contend the State Board reduced the number of growers subject to the Modified Waiver's most stringent requirements. As described above, the Modified Waiver assigns each discharger to one of three tiers, which determine the requirements applicable to the discharger. (SB 5659.)

The tier designations are based on criteria intended to capture the risk to water quality, including whether the discharger uses the pesticides chlorpyrifos or diazinon, proximity of the discharger's farm to an impaired surface waterbody, farm size, and whether the discharger grows crop types with high potential to discharge nitrogen to groundwater. A

discharger is classified as a Tier 3 discharger – the tier expected to pose the highest threat to water quality – if (a) the discharger grows crop types with high potential to discharge nitrogen to groundwater and the farm total irrigated acreage is 500 acres or more, or (b) the discharger applies chlorpyrifos or diazinon at the farm, and the farm discharges irrigation or stormwater runoff to a waterbody listed as impaired for toxicity or pesticides. (SB 7344-45.)

A discharger is classified as a Tier 1 discharger – the lowest threat tier – if the discharger is a certified sustainable agriculture program or if all of the following conditions are true: (a) the discharger does not use chlorpyrifos or diazinon; (b) the discharger is located more than 1,000 feet from a surface waterbody listed as impaired for toxicity, pesticides, nutrients, turbidity, or sediment; and (c) the discharger either does not grow crop types with high potential to discharge nitrogen to groundwater or, if the discharger does grow such crops, the farm has less than 50 acres of total irrigated area and is not within 1,000 feet of a well that is part of the public water system and that exceeds the maximum contaminant level (MCL) for nitrogen-related pollutants. (*Ibid.*)

Dischargers that do not meet the criteria for Tier 1 or Tier 3 are classified as Tier 2 dischargers. (*Ibid.*)

Tier 3 dischargers must comply with more stringent requirements than Tier 2 dischargers, and Tier 2 dischargers must meet more stringent requirements than Tier 1 dischargers. For example, dischargers in all three tiers must prepare Farm Plans, obtain water quality education, maintain riparian areas, and conduct groundwater and surface receiving water quality monitoring and reporting. However, only Tier 2 and Tier 3 dischargers are required to submit annual compliance forms and report nitrate loading risk levels. Only Tier 2 and Tier 3 dischargers with high nitrate loading risks are required to report total nitrogen applied in their annual compliance forms. Only Tier 2 and Tier 3 dischargers with farms adjacent to impaired waterbodies are required to conduct photo monitoring. Only Tier 3 dischargers are required to conduct and report individual surface water discharge monitoring. Only Tier 3 dischargers with high nitrate loading risks are required to develop and implement an Irrigation and Nutrient Management Plan (INMP). And only Tier 3 dischargers with farms adjacent to impaired waterbodies are required to develop and submit vegetation buffer plans.

Although the State Board concluded that the Modified Waiver is "more stringent" than the 2004 Waiver, (SB 7281), this conclusion was based primarily on the Tier 3 requirements. Regional Board staff found the 2012 Waiver imposed "fewer" requirements on Tier 1 dischargers, and "comparable" requirements on Tier 2 dischargers, as compared to the 2004 Waiver. (RB 7756; see also SB 487, 1978.)

The Regional Board's early proposals would have placed approximately 11% of farms and 54% of irrigated acreage in Tier 3. (RB 4863-64.) In contrast, the Modified Waiver placed only about 3% of farms and 14% of irrigated acreage into Tier 3. (RB 7779.) Under the Regional Board's early proposals, about 59% of farms and 79% of irrigated acreage would be in either Tier 2 or 3, whereas under the Modified Waiver, about 45% of farms and 61% of irrigated acreage would be in Tier 2 or 3.

Further, under the Modified Waiver, a discharger may request to be moved to a lower, less stringent tier. (See SB 7346.) Dischargers may qualify for a tier change by participating in an alternative third party water quality improvement project or program demonstrating a "reasonable chance of improving water quality and/or reducing pollutant loading." (SB 7343.)

Even if the Tier 3 requirements are more stringent than the 2004 Waiver, Petitioners argue that the number of growers subject to the "more stringent" Tier 3 requirements is too small to achieve the Basin Plan's water quality objectives. In sum, Petitioners argue the Modified Waiver is, at most, only marginally stronger than the 2004 Waiver, and it is not strong enough to comply with the Basin Plan. The Regional and State Boards have removed or weakened nearly every substantive standard, pollution control, and monitoring provision needed to protect water quality.

Respondents do not dispute that nitrate and pesticide pollution are problems in the Central Coast region. But Respondents contend it is irrelevant whether the final Waiver is more or less protective of water quality than previous drafts, especially drafts published by Regional Board staff. Respondents contend that only the portions of the 2012 Waiver actually issued by the Regional Board and timely challenged in the petitions to the State Board, and the limited amendments made by the State Board, are properly before this court.

Further, Respondents contend the Modified Waiver's approach to solving the water quality problems in the Central Coast region is consistent with the Basin Plan. While Petitioners may prefer a program that achieves immediate compliance with all water quality objectives, Respondents argue that the Basin Plan permits the State Board to adopt an iterative, long-term approach to address the long-term water quality issues. (See SB 7186.) Implementation of increasingly more effective management practices over time constitutes compliance with water quality requirements. In fact, Respondents contend, such an approach is the only realistic way to improve water quality in a watershed degraded by decades of past practices.

Respondents deny that the State Board's modifications gutted the Waiver's requirements, rendering it inadequate. Rather, they contend, the State Board made the Waiver clearer, more reliable, and easier to implement and enforce.

With regard to nitrogen balance ratios, Respondents argue that the State Board reasonably exercised its discretion in deciding to replace provisions that would have required dischargers to calculate data based on speculative and unreliable variables, with a more detailed nitrogen application reporting requirement.

In regard to farm plans, Respondents argue that the State Board reasonably responded to concerns expressed by agricultural interests and the Regional Board that the term "verify" implied the need for costly studies and statistical analyses, and modified the language to clarify that standard farming practices would be sufficient to evaluate practice effectiveness. (SB 5537, 7188-90, 7351.) Respondents contend this minor change does not change the nature of the Farm Plan requirement.

In regard to pesticide controls, vegetation buffers, tile drains, and the tiering criteria, Respondents argue that the State Board did not modify anything in the Waiver relating to these provisions. Thus, Respondents argue that Petitioners' arguments are not properly before the court. In any event, Respondents argue, they lack merit.

On balance, the court agrees with Petitioners that the Modified Waiver is not consistent with the Basin Plan because it lacks sufficiently specific, enforceable measures and feedback mechanisms needed to meet the Basin Plan's water quality objectives.

The court recognizes, as did the Regional Board, the State Board, and staff, that immediate compliance with water quality standards is not possible without complete cessation of agricultural activity – which is not a "viable or desirable" waste discharge control option. (SB 2362.) The NPS Policy recognizes that, where water already is degraded, it may take time to achieve water quality objectives. Even Petitioners do not contend that the Modified Waiver must achieve "instantaneous compliance" with the Basin Plan's water quality standards. Rather, Petitioners argue, the Modified Waiver must include requirements reasonably designed to show measurable progress toward improving water quality over the short-term and achieving water quality standards in a meaningful timeframe. The court agrees.

The problem with the Modified Waiver is that there is little to support a conclusion that the Waiver will lead to quantifiable improvements in water quality or even arrest the continued degradation of the region's waters.

For the most part, the Modified Waiver continues the approach adopted by the 2004 Waiver. This is problematic because the 2004 Waiver has failed to make meaningful progress in improving water quality or attaining water quality standards. The 2004 Waiver has been "successful" in getting growers to join cooperative monitoring groups, prepare Farm Plans, and provide reports. But it has failed to improve water quality or even halt the continued degradation of the region's water resources.

The focus of the 2004 Conditional Waiver was on enrollment, education, and assessing agricultural water quality. The 2004 Conditional Waiver did not emphasize compliance with water quality standards or follow the State Board's NPS Policy. (RB 2132, 2151.) The 2004 Waiver lacked clarity regarding water quality requirements, did not include time schedules or milestones to achieve compliance with water quality standards, and did not include compliance and verification monitoring to measure and assure progress towards restoration of water quality and protection of beneficial uses. (RB 1141, 2133, 2151.)

Since the adoption of the 2004 Waiver, the Regional Board has documented that agricultural discharges continue to load pollutants to already-severely-impaired water bodies, further degrading water quality and impairing beneficial uses. (RB 2133, 2145, 2149; see also RB 3767, 3897-98, 3974; SB 17, 61.)

The 2004 Waiver has not been successful because it lacks adequate standards and feedback mechanisms to assess the effectiveness of implemented management practices in reducing pollution and preventing further degradation of water quality. The Modified Waiver suffers from the same defect.

The Modified Waiver is based on an "iterative approach" to attain water quality standards, by which dischargers must implement "management practices" to prevent or reduce discharges of waste that are causing or contributing to exceedances of water quality standards. To the extent monitoring data shows implemented management practices have not been effective in preventing discharges from causing or contributing to exceedances, the Modified Waiver requires the discharger to implement "improved" management practices. (SB 7362.)

In theory, the Modified Waiver ensures that dischargers will, over time, implement "effective" management practices because it requires them to implement increasingly "improved" management practices until there are no more discharges causing or contributing to exceedances of water quality standards. Thus, if there is an exceedance at one of the 50 surface receiving water monitoring locations, all growers with

discharges that "contribute" to that exceedance must implement increasingly "improved" management practices until the exceedance is eliminated.[8]

In practice, this approach is highly unlikely to work because the receiving water monitoring data, submitted in most cases by a cooperative monitoring group, does not identify the individual discharges that are "causing or contributing" to the exceedance. As a result, neither the Board, nor the cooperative monitoring group, nor (in many cases) the grower, can identify where the pollution is coming from or whether the grower's management practices are effectively reducing pollution and degradation.

It is possible for an iterative management practice approach to meet statutory requirements without requiring individual surface discharge monitoring for all discharges. But there must be some means to verify that implemented management practices are effectively controlling the relevant discharge. If they are not, the Waiver must ensure that dischargers will implement effective management practices that will make measurable progress towards attaining water quality standards. The Modified Waiver does not do that.[9]

While the court agrees that implementation of management practices may be an acceptable means to achieve water quality standards, as the NPS Policy makes clear, implementing management practices is not a substitute for actual compliance with water quality standards. Management practices are merely a means to achieve water quality standards. Adherence to management practices does not ensure that standards are being met. The Modified Waiver recognizes this, but fails to do anything about it. Under the Modified Waiver, if monitoring or inspections indicate that implemented management practices are not effective, the discharger simply must make a "conscientious effort" to identify and implement "improved management practices."

The Modified Waiver does not define what constitutes "improved" management practices, or include any additional monitoring or standards by which to verify the "improved" management practices are effectively reducing pollution. Under the Modified Waiver, compliance is achieved as long as the discharger implements a new

[8] If monthly monitoring is required, as is the case with nitrates, growers would have to implement "improved" management practices every month until the exceedance is eliminated.
[9] The court is aware that Tier 3 dischargers with a high nitrate loading risk, must submit an INMP Effectiveness Report to evaluate reductions in nitrate loading to surface water and groundwater based on the implementation of irrigation and nutrient management practices. (See SB 7214.) However, this appears to be a one-time requirement that applies to only a small subset of growers. The Effectiveness Report does not "save" the Waiver.

management practice which the discharger *believes* will be an improvement.[10] In this court's view, this is inadequate to ensure any meaningful progress toward achieving quantifiable reductions in pollutant discharges. (See RB 5149 [Regional Board staff rejecting a similar proposal by agricultural interests because the proposal did not contain adequate verification monitoring or feedback mechanisms to determine if management practices were working or whether additional management practices should be taken].)

For Tier 3 dischargers required to conduct individual surface discharge monitoring, there is a mechanism at least to determine whether the grower's implemented management practices are reducing pollution.[11] But the Waiver does not set any benchmarks for defining how much "improvement" a grower must show to demonstrate compliance. The Waiver seems to assume that any perceived improvement is enough, as long as the improved management practice was implemented in good faith. It is difficult for the court to see how this is an enforceable standard. In effect, the Modified Waiver guarantees that the Regional Board will not take enforcement action against a discharger as long as the discharger believes it is implementing "improved" management practices, even if the "improved" management practices remain completely ineffective at controlling discharges of waste.

In addition, there is another, more fundamental problem with the Waiver, which is the small number of growers subject to the "more stringent" requirements of Tier 3. Tier 3 includes only about 3% of growers and only about 14% of the irrigated acreage in the region. In addition, Tier 3 growers can move to a lower tier by participating in an approved alternative third-party project/program (determined to have a "reasonable chance of improving water quality and/or reducing pollutant loading") or, some cases, simply by switching to pesticides other than diazinon or chlorpyrifos. Thus, at most, about 3% of growers will be subject to the "more stringent" requirements of the Modified Waiver. The vast majority of growers, 97% or more, will be subject to requirements equal to, or less stringent than, the 2004 Waiver. And for the vast majority of growers, the Waiver does not require any individual surface discharge monitoring or other focused monitoring to identify the sources of exceedances or assess the effectiveness of individual farm management practices. It is unreasonable for the Board to keep doing the same things it has been doing and expect different results.

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[10] This assumes, of course, that growers acknowledge their operations are "causing or contributing to" the exceedance. As a practical matter, growers may deny that their operations are responsible, and point the finger at other operations. It is not clear how the Regional Board would prove otherwise.

[11] The same is true of the groundwater monitoring program because even in the case of a cooperative groundwater monitoring program that relies on representative sampling, the Waiver requires direct sampling of the individual well level if there is a concern that nitrate concentration in the well may approach the Maximum Contaminant Level. (See SB 7193.)

The court is not persuaded that an adequate Waiver necessarily must include nitrogen balancing ratios,[12] broader farm plan reporting, more rigorous pesticide controls, mandatory vegetation/riparian buffers, and/or more comprehensive tile drain monitoring. The court simply concludes that the Modified Waiver, as currently structured, lacks sufficient measures to meet the Basin Plan's water quality objectives and, as a result, the Waiver is not consistent with the Basin Plan.

b. Compliance with the NPS and Antidegradation Policies

Petitioners also argue that the Modified Waiver does not comply with the Basin Plan because it does not comply with California's NPS and Antidegradation Policies.

i. The NPS Policy

The Basin Plan incorporates California's NPS Policy. (RB 9348.) As described above, the NPS Policy requires that nonpoint source pollution control programs include the following five "key elements:"

[12] Although the court does not find that nitrogen balance ratio targets are *required* to meet water quality standards, the court fails to understand why they were not included as reportable milestones. In eliminating the requirement, the Board bemoans the lack of reliable data on crop nitrogen uptake values. However, the Board retained the requirement for certain Tier 3 dischargers to identify crop nitrogen uptake values in their INMP for use in nutrient balance calculations. The Board stated that this information is "important" to both the discharger and the professional certifying the INMP in determining the appropriate amount of nitrogen to be applied at the farm. (SB 7209.) The Board also stated that the practice of recording and budgeting of nitrogen application is a relatively low-cost, standard industry practice that is widely recommended by agronomists and crop specialists and already utilized by many growers. (SB 7205.) Thus, the lack of reliable crop nitrogen uptake values does not appear to be an impediment to nitrogen balancing. Further, if the Board currently lacks reliable crop nitrogen uptake values, it presumably could obtain that information from growers under the Waiver. Yet the Board struck the requirement to have crop nitrogen uptake values reported to the Board. (SB 7210.)

Likewise, it is unclear why the Board deleted in Provision 44(g) the requirement for Farm Plans to describe the "results" of methods used to verify practice effectiveness. This is critical information that needs to be reported to the Board. Although it doesn't necessarily have to be reported as part of the Farm Plans, the NPS Policy requires sufficient feedback mechanisms to ensure that the Waiver is achieving its stated purpose, and/or determine whether additional or different actions are required. For Tier 2 and 3 dischargers, this change is arguably of little importance, because those dischargers are required to report the information in their Annual Compliance Form. (See SB 7219.) But the change could be important as to Tier 1 dischargers.

Nevertheless, the court realizes that these are issues that cannot be decided in a vacuum; they must be considered in the context of the Waiver as a whole. Here, for example, instead of requiring dischargers to report progress toward nitrogen balancing ratios, the Board imposed nitrogen application reporting requirements. The court refuses to tell the Board what elements must be included in the Waiver. Rather, the court shall review the Waiver as a whole and decide whether it meets legal requirements.

KEY ELEMENT 1: An NPS control implementation program's ultimate purpose shall be explicitly stated. Implementation programs must, at a minimum, address NPS pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements.

KEY ELEMENT 2: An NPS control implementation program shall include a description of the MPs [Management Practices] and other program elements that are expected to be implemented to ensure attainment of the implementation program's stated purpose(s), the process to be used to select or develop MPs, and the process to be used to ensure and verify proper MP implementation.

KEY ELEMENT 3: Where a RWQCB determines it is necessary to allow time to achieve water quality requirements, the NPS control implementation program shall include a specific time schedule, and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements.

KEY ELEMENT 4: An NPS control implementation program shall include sufficient feedback mechanisms so that the RWQCB, dischargers, and the public can determine whether the program is achieving its stated purpose(s), or whether additional or different MPs or other actions are required.

KEY ELEMENT 5: Each RWQCB shall make clear, in advance, the potential consequences for failure to achieve an NPS control implementation program's stated purposes. (RB 9417-20.)

Most nonpoint source management programs depend, at least in part, on implementation of management practices to control nonpoint sources of pollution. (RB 9413.) Successful implementation of management programs typically requires (i) adaptation to specific conditions, (ii) monitoring to assure practices are properly applied and are effective in attaining and maintaining water quality standards, (iii) immediate mitigation if practices are not effective, (iv) improvement of management practice implementation or additional management practices when needed to resolve a deficiency. (*Ibid.*)

Before approving a specific NPS pollution control program, the water board must determine there is a "high likelihood" that implementation of the program will be

successful and attain the applicable water quality objectives. (RB 9417.) This includes consideration of the management practices to be used and the process for ensuring their proper implementation, as well as assessment of their effectiveness. (*Ibid.*)

The NPS Policy recognizes that there are instances where it will take time to achieve water quality requirements. (RB 9419.) Where a water board determines it is necessary to allow time to achieve water quality requirements, the NPS Policy requires the program to include specific time schedules and quantifiable milestones designed to measure progress toward reaching the specified goals. (*Ibid.*) A time schedule may not be longer than that which is necessary to achieve an NPS implementation program's water quality objectives. (*Ibid.*)

Adherence to best management practices does not excuse compliance with water quality requirements. (RB 9413.) A nonpoint source pollution control program must include verification measures adequate to determine whether the program is meeting its objectives, and a description of the course of action to be taken if the verification/feedback mechanisms indicate or demonstrate the program is failing to achieve its stated objectives. (RB 9419-20.)

The Modified Waiver does not meet the requirements of the NPS Policy because it lacks adequate monitoring and reporting to verify compliance with requirements and measure progress over time; specific time schedules designed to measure progress toward reaching quantifiable milestones; and a description of the action(s) to be taken if verification/feedback mechanisms indicate or demonstrate management practices are failing to achieve the stated objectives. The Board has failed to show a "high likelihood" that implementation of the Modified Waiver will be successful in attaining the applicable water quality standards.

For these reasons, the court agrees with Petitioners that the Modified Waiver does not comply with the NPS Policy.

i. <u>The Antidegradation Policy</u>

The Basin Plan also incorporates California's Antidegradation Policy. (RB 9194, 9418, 9348.) The Antidegradation Policy is designed to protect water quality that is higher than necessary to protect designated beneficial uses. (RB 9418.) The Policy prohibits the degradation of "high quality" waters absent specific findings, and requires restoration of high quality waters that have been degraded below water quality standards. (RB 9377.)

To permit a proposed discharge that will degrade "high quality" water, a water board must find that the discharge (1) will be consistent with maximum benefit to the people of the State; (2) will not unreasonably affect present and anticipated beneficial use of the water; and (3) will not result in water quality less than that prescribed in water quality plans and policies. In addition, the board must ensure the discharge is utilizing the "best practicable treatment or control (BPTC)" to ensure pollution or nuisance will not occur and that the highest quality consistent with the maximum benefit to the people of the State will be maintained. (RB 9349, 9377-78; see also RB 8548.)

As described above, the first step in an antidegradation analysis is to determine whether there are "high quality" waters that may be affected by discharges. If the receiving water is high quality and an activity will discharge waste into the water, the Policy presumes that the quality of the water will be degraded by the discharge. (*AGUA, supra*, 210 Cal.App.4th at p.1272.)

To determine if water is "high quality," the Policy requires the water board to compare the "baseline water quality" to the water quality objectives established to protect designated beneficial uses. The baseline water quality is the "best quality of the receiving water that has existed since 1968 . . . unless subsequent lowering was due to regulatory action consistent with State and federal antidegradation policies." (*Id.* at p.1270.)

If the baseline water quality is equal to or less than the established water quality objectives, the water is not "high quality" and the objectives set forth the water quality that must be maintained or achieved. The Antidegradation Policy is not triggered. (*AGUA, supra,* at p.1270.) If the baseline water quality is better than the water quality objectives, the Policy is triggered and the baseline water quality must be "maintained" in the absence of the findings required by the Policy. (*Ibid.*)

The Regional Board found the Waiver to be consistent with the Antidegradation Policy because it will "improve" water quality. (RB 8509; see also SB 7229.) Petitioners contend that the Waiver violates the Antidegradation Policy because it allows continued degradation of high quality waters and the Board has not made the findings required to allow such degradation.

The court is unable to decide whether the Waiver violates the Antidegradation Policy because the Board has failed to apply the Policy in the manner directed by the Court in *AGUA*, including any consideration of whether the waters are "high quality" waters. On remand, the Board is directed to consider whether the Waiver is consistent with the Antidegradation Policy, as interpreted by the Court in *AGUA*.

2. Does the Modified Waiver have adequate monitoring provisions?

As described above, Water Code section 13269 requires a conditional waiver of waste discharge requirements to include monitoring requirements "designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions. (Cal. Water Code § 13269(a)(2).) Additionally, monitoring results must be made available to the public. (*Ibid.*) A water board may waive monitoring requirements only for discharges that "do not pose a significant threat to water quality." (Water Code § 13269(a)(3).) Petitioners argue that the Modified Waiver violates section 13269 because its monitoring program is inadequate to verify its effectiveness, and the Waiver fails to disclose adequate monitoring data to the public.

Petitioners contend that the Modified Waiver's surface water monitoring program suffers from two fatal flaws. First, it does not require surface discharge water quality monitoring and reporting from all dischargers. (It only requires surface discharge monitoring from Tier 3 dischargers, and then only for some discharges -- "outfalls," but not sheet flows.) In all other cases, the Waiver measures receiving water pollution concentrations, rather than actual discharges. Second, the Waiver allows dischargers to join cooperative monitoring groups in lieu of individual monitoring.

Petitioners contend the Modified Waiver's groundwater monitoring program is equally flawed. First, the Waiver only requires dischargers to monitor the primary irrigation well and wells used for drinking water purposes. Growers can simply avoid identifying their wells as "drinking water wells" to avoid having to do any monitoring. Second, the Waiver does not require growers to sample their primary irrigation well. Instead, Tier 1 and 2 growers and growers who join cooperative groups can use existing data or studies to estimate pollution levels. Third, the frequency of monitoring – twice the first year and once every five years for Tier 1 and 2, once every year for Tier 3 – is inadequate.

Respondents contend the State Board did not materially change the monitoring standards for surface water and groundwater quality, except to make some clarifying revisions to the cooperative groundwater monitoring provisions. Thus, Respondents argue that Petitioners' arguments are not properly before the court. Regardless, Respondents contend the Waiver's monitoring provisions comply with the requirements of the Water Code.

Petitioners have failed to persuade the court that surface discharge monitoring of all discharges is required – or even possible given that there are approximately 435,000 acres of irrigated land and approximately 3000 agricultural operations generating discharges of waste. The Board struck an appropriate balance in requiring individual surface discharge water monitoring for "high risk" dischargers, while retaining surface receiving water monitoring for other dischargers.

Likewise, both the Water Code and the NPS Policy expressly allow the use of cooperative or watershed-based monitoring. (RB 9414-16; Wat. Code § 13269.) While individual monitoring might provide more information, it would be complicated, costly, and would threaten to overwhelm Regional Board staff. The Board acted within its discretion in generally supporting the use of cooperative or watershed-based monitoring, and limiting individual surface discharge reporting to "high-risk" dischargers.

Petitioners have failed to show that the frequency of groundwater sampling is insufficient, that the proposed statistical monitoring is impermissible,[13] or that the Waiver fails to disclose adequate monitoring data to the public.[14]

The court agrees with Petitioners, however, that the Waiver's compliance/verification monitoring is inadequate. Because the Waiver relies on implementation of management practices to achieve water quality standards, monitoring must be sufficient to verify the effectiveness of the management practices that are implemented. Problems arise when the implemented management practices are not effectively controlling discharges of pollution. The limitations of the cooperative surface receiving water monitoring in identifying the source of exceedances was the impetus behind the inclusion of the individual surface water discharge monitoring for Tier 3 dischargers in this Waiver.

The Board acknowledged the limitations of the representative monitoring approach, and even suggested possible solutions, but failed to include the necessary changes in its Waiver. (See SB 7198-99.) As a result, the Waiver continues to be inadequate to identify and resolve exceedances for all but the small class of dischargers subject to individual surface discharge monitoring.[15] The Waiver does not contain adequate

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[13] The Board's Waiver required direct sampling where the statistical method projected nitrate at half the safe level, and repeat sampling if the statistical method projected nitrate at 80% of the safe level. The court agrees with Petitioners, however, that the Waiver should define what it means to be "statistically valid."

[14] As discussed above, the court is troubled by the amendments to Provision 44(g) alleviating Tier 1 dischargers of the requirement to report results of methods used to verify practice effectiveness in their Farm Plans.

[15] It is noteworthy that the Board admitted that compliance monitoring was not a "primary" focus of the Waiver's groundwater monitoring provisions. (See SB 7191.) Rather, the monitoring was focused on

monitoring provisions to verify that management practices are effectively controlling pollution.

3. Is the Modified Waiver in the public interest?

As described above, the Porter-Cologne Act prohibits waivers unless they are "in the public interest." (Cal. Water Code § 13269(a)(1).) Petitioners argue that the Modified Waiver is not in the public interest because there is no evidence it will lead to quantifiable improvements in water quality or arrest the continued degradation of the Central Coast Region's waters. The court agrees, for the reasons stated above.

C. Did the Board abuse its discretion by excluding the U.C. Davis report?

Recognizing a need to protect the public health by preventing or reducing the contamination of groundwater, the California Legislature appropriated about fifty million dollars for grants for projects to protect public health by preventing or reducing the contamination of groundwater that serves as a major source of drinking water for a community. (Water Code § 83002(b)(2)(D).)

Of this amount, two million dollars was appropriated for pilot projects in the Tulare Lake Basin and the Salinas Valley focusing on nitrate contamination. The stated purpose of the pilot projects was to identify sources of groundwater nitrate contamination; estimate the proportionate contributions to such contamination by source and category of discharger; identify and analyze options to reduce nitrate levels and prevent continuing nitrate contamination and the estimated costs associated with such options; identify methods and costs to treat nitrate contaminated groundwater for use as drinking water; identify methods and costs to provide an alternative water supply to affected communities; and identify potential funding sources to pay for treatment or alternative drinking water supplies. (Water Code § 83002.5.)

In June 2010, the State Board selected experts at the University of California, Davis, to study the causes of, and solutions for, nitrate contamination in the Salinas Valley. The final U.C. Davis Report was published on March 13, 2012.

On March 15, 2012, Petitioner Monterey Coastkeeper attempted to introduce the Report during the public hearing on the 2012 Waiver. The Regional Board declined, stating

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monitoring drinking water quality. This is telling. The monitoring required by the Waiver may be adequate for the purpose of monitoring drinking water quality, but it is not sufficient for the purpose of verifying the effectiveness of implemented management practices.

that the Report was submitted too late to be included in the administrative record. (RB 8130-32.)

After Petitioners and the agricultural interests filed their petitions for administrative review with the State Board, however, the Regional Board requested the State Board to take official notice of the U.C. Davis Report. (SB 7163.) The State Board recognized the "significance of the information and analysis contained in the Report," but declined to take official notice of it, stating:

> [F]or the short-term purposes of resolving the Petitions, we find that the administrative record already before us contains sufficient evidence of the impact of agricultural practices on drinking water in the Central Coast region as well as practices that may ameliorate the problem. (*Ibid.*)

The State Board committed to convene an expert panel to consider the findings of the Report and assess agricultural nitrate control practices. (*Ibid.*)

While Petitioners recognize the Board has discretion to decide whether to accept additional evidence, Petitioners contend that the Board abused its discretion in refusing to consider the U.C. Davis Report because it is unique, highly relevant, and the most current scientific information available addressing groundwater contamination in the Salinas Valley.

Respondents contend the Board appropriately declined to consider the U.C. Davis Report because it was not published until the day before the Regional Board adopted the 2012 Waiver, was not part of the administrative record, and was cumulative of other evidence already in the record (including a PowerPoint presentation of the draft U.C. Davis Report itself). Instead, the State Board appropriately committed to convene an expert panel to consider fully the findings of the U.C. Davis Report.

The court is not persuaded that the Board abused its discretion in refusing to admit the U.C. Davis Report. However, on remand the Board is directed to reconsider whether the Report should be admitted into the record.

D. Did the Board violate CEQA by failing to undertake additional environmental review before adopting its final Order?

Petitioners' final contention is that the State Board violated CEQA by making substantial changes to the 2012 Waiver without conducting supplemental environmental review.

Respondents contend the Modified Waiver did not constitute a substantial change to the 2012 Waiver such that it required additional environmental review.

While the court is not persuaded that the Board's incremental changes to the Waiver necessarily required a Subsequent EIR, it is possible that some additional environmental review was required to address the changes to the Waiver since preparation of the Regional Board's SEIR, which was based on the 2010 Draft Waiver. On remand, the Board is directed to consider what, if any, supplemental review may be required to comply with CEQA in connection with the Waiver.

VII.
Disposition

For the reasons described above, the court shall grant the petition and issue a peremptory writ of mandate compelling Respondent State Board to set aside its Order No. WQ 2013-0101 and reconsider the Conditional Waiver of Waste Discharge Requirements (Order No. R3-2012-0011) and related Monitoring and Reporting Program (Order Nos. R3-2012-0011-01, R3-2012-0011-02, and R3-2012-0011-03). The State Board may choose to allow the Modified Waiver to remain in effect on an interim basis while the State Board takes action to formulate a new waiver consistent with this ruling.

Counsel for Petitioners is directed to prepare a formal judgment and writ (consistent with this ruling); submit them to opposing counsel for approval as to form; and thereafter submit them to the court for signature and entry of judgment in accordance with Rule of Court 3.1312.

Dated: August 10, 2015

Hon. Timothy M. Frawley
California Superior Court Judge
County of Sacramento

CASE NUMBER: 34-2012-80001324 DEPARTMENT: 29
CASE TITLE: Monterey Coastkeeper v. CSWRCB/Ocean Mist Farms

CERTIFICATE OF SERVICE BY MAILING
(C.C.P. Sec. 1013a(4))

I, the undersigned deputy clerk of the Superior Court of California, County of Sacramento, do declare under penalty of perjury that I did this date place a copy of the above entitled RULING in envelopes addressed to each of the parties, or their counsel of record as stated below, with sufficient postage affixed thereto and deposited the same in the United States Post Office at Sacramento, California.

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Dated: August 10, 2015

By: F. Temmerman
Deputy Clerk, Department 29
Superior Court of California,
County of Sacramento

ATTACHMENT 2

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF SAN LUIS OBISPO

CARMEN ZAMORA, an individual, and ENVIRONMENTAL LAW FOUNDATION, a California nonprofit organization,

Petitioners,

vs.

CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD, a California state agency,

Respondent.

CENTRAL COAST GROUNDWATER COALITION, INC., a California nonprofit organization,

Real Party in Interest.

CASE NO. 15CV-0247

RULING AND ORDER GRANTING DECLARATORY RELIEF AND PETITION FOR WRIT OF PEREMPTORY MANDATE AND ORDERING DISCLOSURE OF DOCUMENTS UNDER THE PUBLIC RECORDS ACT

I. INTRODUCTION

Percolation of fertilizers and pesticides into groundwater from more than 3,000 irrigated agriculture operations is a vast source of nitrate pollution, now widely recognized as a critical threat to the Central Coast's public water supply. The Porter-Cologne Water Quality Control Act (Water Code §13000, et seq.; "Water Quality Act")[1] mandates public access to all "monitoring results" related to discharges of pollution from agricultural operations.

Petitioners Carmen Zamora and Environmental Law Foundation seek a writ of mandate setting aside two actions taken in December 2014 by the Central Coast Regional Water Quality Control Board ("Regional Board") that restricted public access to the results of groundwater monitoring being conducted on agricultural lands in the Central Coast Region of California.

While individual farms provide their test results for public scrutiny, real-party-in-interest Central Coast Groundwater Coalition ("Coalition"), which performs monitoring services for large groups of farms on the Central Coast, does not. The Regional Board and Coalition take the position that letters from the Coalition informing dischargers (i.e., farmers) about the polluted level of their well water, letters from dischargers informing well users about the results, and letters from dischargers to the Coalition confirming they have informed well users of the high pollution levels, are not "monitoring results" and, therefore, need not be made public.

Two pillars of the Water Quality Act are to protect the *quality* of community water supplies and to promote public access. Giving a plain and commonsense meaning to the words of the statute, the written notification letters must be considered "monitoring results" because they summarize the numeric results of extensive nitrate pollution in well water and help verify whether farmers are doing enough to control agricultural runoff into groundwater aquifers. The public is entitled to know whether the Regional Board is doing enough to enforce the law and protect the public's water supplies.

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[1] All statutory references are to the Water Code unless indicated otherwise.

Instead of simply making these notification and confirmation letters available to the public, the Coalition generates three technical documents that intentionally make it difficult for all but the most sophisticated user to figure out the owners and locations of polluted well water. There is no justification for such obfuscation: the strong interest in public accountability cannot be overcome by vague notions of privacy or unsupported allegations of terrorist threats to polluted groundwater supplies.

The argument that Petitioners waited too long to file their Petition is meritless. During 2014, Petitioners were specifically authorized by the Regional Board, in accordance with newly-adopted procedures, to participate in administrative proceedings designed to address the exact issues now being raised in this lawsuit. The lawsuit is timely and the Regional Board is estopped from arguing otherwise.

The Coalition notification and confirmation letters are also subject to production under the Public Records Act because these documents relate to the conduct of the public's business and are "used" by the Regional Board in assuring compliance with on-farm best management practices.

Accordingly, for the reasons discussed more fully below, the Court grants the Petition.

II. STATEMENT OF FACTS AND PROCEDURAL HISTORY

The State Water Resources Control Board ("State Board"), together with the nine Regional Water Quality Control Boards (§13200), are primarily responsible for maintaining beneficial water quality in California. (§13001.) Anyone who discharges waste (i.e., pollution) into State waters must obtain a permit for doing so that contains waste discharge requirements ("WDRs"), unless the permit requirement is "waived" by a regional board. (§§13260, 13263, 13269.) Waivers are limited to five-year increments, must be in the public interest, and must contain a monitoring program to verify effectiveness. (§13269, subd. (a)(1) and (2).)

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Since 2004, the Regional Board has adopted several resolutions establishing, and then continuing in effect, conditional waivers for agricultural lands in the Central Coast Region.[2] A "conditional waiver" is subject to revocation by either the State or Regional Board for good cause. Eligible participants must "opt in" and agree to comply with a Monitoring and Reporting Program ("Monitoring Program"). Instead of doing their own monitoring, dischargers can participate in a "cooperative groundwater monitoring program" in order to lower costs. The Central Coast Groundwater Coalition ("Coalition"), the real-party-in-interest, is one such cooperative.

On September 24, 2013, the State Board issued an order that, for the first time, required participants in the agriculture waiver program to notify the Regional Board and drinking water well users of excess nitrate levels in the regional well-water supplies ("2013 State Board Order"). This new requirement prompted a dialogue among the Coalition, the Regional Board, and certain members of the public, over how best to implement the new requirements. The dialogue surrounded modifications to the Coalition's "Workplan," a written agreement between the Regional Board and Coalition containing details regarding monitoring, reporting, and related requirements designed to ensure compliance with the conditional waiver.

In December 2013, the Executive Officer approved modifications to the Coalition's Workplan by adding and revising certain time frames for: (a) notifying the Regional Board about exceedances of drinking water standards; (b) notifying Coalition members of their obligation to alert landowners and well users of exceedances (i.e., high pollution levels); (c) providing copies of notification letters to the Regional Board if requested to do so; and, (d) providing a summary of any follow-up actions undertaken.[3]

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[2] The 2004 resolution, Resolution No. R3-2004-0117, established a Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (2004 Agricultural Order). The 2012 Order, Order No. R3-2012-0011, refined and expanded the 2004 requirements in several respects.

[3] A regional board may delegate many of its powers and duties to its Executive Officer. (§13223, subd. (a).)

Six weeks after approving these changes, the Regional Board directed its staff to revise the Coalition's brand-new Workplan to bring it into alignment with the notification and exceedance reporting process for individual farms. Year-long negotiations then ensued over how this could best be accomplished.

In June 2014, in the midst of these negotiations, the Regional Board notified the public that, pursuant to the 2013 State Board Order, "interested parties" could seek discretionary review of the Executive Officer's approval of the Coalition's Workplan. "Interested parties" had 30 days from the date of the notice to seek discretionary review.

On July 3, 2014, accepting the invitation, CRLA requested discretionary review of the notification process for agricultural wells containing excessive nitrates.

On December 8, 2014, the Regional Board's Executive Officer approved a revised Drinking Water Notification process in the Workplan requiring the Coalition to: (a) provide a "relational key" so that the Regional Board could identify specific well locations; (b) submit reports identifying any drinking water wells containing excessive nitrates; (c) provide written notification to users of wells that exceed safe drinking water nitrate standards; and, (d) bring copies of all notification letters to quarterly meetings for inspection by Regional Board staff.

On December 11, 2014, CRLA submitted a California Public Records Act ("PRA") request for the discharger notification and confirmation letters sent and received by the Coalition.

On December 18, 2014, the Regional Board denied CRLA's request for discretionary review on the basis that the procedures adopted on December 8, 2014, would bring the Coalition's notification process in line with the notification process required for individual farmers.

On December 19, 2014, responding to the Public Records Act request, the Regional Board denied that it possessed discharger notification and confirmation letters but it confirmed that these documents were available to the Regional Board if it requested them from the Coalition.

On January 7, 2015, Petitioners petitioned the State Board for review of both the Executive Officer's (a) December 8, 2014 approval of the Coalition's revised Drinking Water Notification process; and, (b) December 18, 2014 denial of the CRLA's petition for discretionary review.

On April 8, 2015, the State Board having taken no action, the petition was denied by operation of law. (23 CCR §2050.5, subd. (e).)

On April 22, 2015, ELF joined CRLA in reiterating its request for the discharger notification and confirmation letters issued and received by the Coalition. That same day, CRLA and ELF sent a PRA request to the Coalition seeking the same notification and confirmation letters.

On April 27, 2015, the Coalition refused the PRA request on the basis that it had no legal obligation to respond.

On May 1, 2015, the Regional Board responded to both CRLA and ELF, stating that: (1) the letter superseded an April 30, 2015 response from the Regional Board; (2) it understood the CRLA and ELF were "re-requesting" the documents; (3) it did not have control or ownership over the Coalitions records; and, (4) a further response would be forthcoming.

On May 7, 2015, the Regional Board sent its further response containing a lengthier discussion of the reasons for its denial. (Kane Declaration, ¶7 and Exhibit 5.) That same day, the Regional Board asked the Coalition to provide the requested documents directly to ELF.

On May 8, 2015, Petitioners filed this litigation seeking a declaration of their rights to the monitoring results under the Water Code, as well as production of the discharger notification and confirmation letters under the Public Records Act.

III. DISCUSSION

A. Exhaustion of Administrative Remedies

The Regional Board and the Coalition argue that Petitioners cannot obtain a ruling on the merits of their Petition because they did not exhaust their administrative remedies and the

Petition is untimely. Had Petitioners sought to contest the terms of the monitoring and notification process, so the argument goes, they should have petitioned the State Board to review the Coalition's Workplan within 30 days of its approval by the Regional Board Executive Officer on December 17, 2013. (§13320.)

The exhaustion doctrine is designed to let administrative agencies wrestle with an issue until a final decision has been reached. (*Farmers Ins. Exch. v. Superior Court* (1992) 2 Cal.4th 377, 391.) "[W]hether exhaustion of administrative remedies has occurred depends upon the procedures applicable to the public agency in question." (See, e.g., *Citizens for Open Gov't. v. City of Lodi* (2006) 144 Cal.App.4th 865, 876.) There are three independent but equally compelling reasons why the exhaustion requirement has been satisfied in this case.

First, how to treat the Coalition's notification and confirmation letters was a controversial topic that was not resolved in December 2013. During the next year, Regional Board staff pressed for the submission of those letters so that it could ensure compliance with the agricultural waiver. (AR 156:022518-022519.)

On January 30, 2014, at the instigation of its staff, the Regional Board re-initiated its review of the Coalition's drinking water notification procedures in order to bring them into line with the public reporting process that existed for individual farmers. (AR 69:012771; 96:014332).

It was not until December 8, 2014, that the Regional Board reached a final decision as to how the Coalition needed to treat the notification and confirmation letters. Only then did Petitioners need to exhaust their administrative remedies. (*Farmers Ins. Exch.*, 2 Cal.4th at 391.)

Second, the September 2013 State Board order set up a new administrative review procedure. Section A.6 of Part 2 of the Monitoring Program was modified to allow "an interested person" to *first apply* to the Regional Board for discretionary review of the

Executive Officer's approval or denial of any cooperative groundwater monitoring program. (AR 41:001518 [emphasis added].)[4]

In June 2014, the Regional Board invited review of the Executive Officer's December 2013 order under Section A.6 of Part 2 of the Monitoring Program. CRLA requested discretionary review. (AR 117:014882; AR 134:015097.) The Regional Board *accepted* discretionary review and considered it as a parallel agenda item with its own review of the reporting procedures during the remainder of 2014.

The two items were placed on the agenda together because CRLA and the Regional Board were seeking the same thing: to bring the Coalition's "notification process into alignment with the individual monitoring program." (AR 134:015098; 140:015175; 174:022756 ["[I]t is appropriate for staff to also respond to the CRLA's request for discretionary review of the [Coalition's] drinking water notification process as part of this Board item" (i.e., staff's evaluation of the Coalition's October 2014 proposal)].)

The Regional Board did not deny CRLA's request for discretionary review until December 18, 2014, concluding that the CRLA's concerns had been addressed by adoption of the Coalition's October 2014 proposal. (AR 187: 022972-022973.)

Petitioners then petitioned the State Board under section 13320 to review the Regional Board's December 2014 denial of review. (AR 188:022976-023014; §13320.) When the State Board took no action on the petition, it was denied by operation of law on April 8, 2015. (23 CCR §2050.5, subd. (e); AR 190:023504.)

This lawsuit was timely filed 30 days after the State Water Board's denial of review. Requiring Petitioners to have pursued a piecemeal review of the Coalition's notification process, once in December 2013 and again in December 2014, would be inefficient and wasteful. (*Farmers Ins. Exch.*, 2 Cal.4th at 391.)

Third, having affirmatively authorized Petitioners' participation in its 2014 administrative review of the Coalition's notification process, the Regional Board cannot now

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[4] Section 13320 of the Water Quality Act ordinarily requires petitioning the State Board to review any action by the Regional Board, or its Executive Officer.

contend that Petitioners should have challenged its decision before the review process was completed. The estoppel doctrine has been applied in analogous situations and it prohibits the Regional Board from making such an argument. (See, e.g., *Shuer v. County of San Diego* (2004) 117 Cal.App.4th 476, 486-487 [County equitably estopped from asserting need for administrative exhaustion in retaliation lawsuit]; *J. H. McKnight Ranch, Inc. v. Franchise Tax Bd.* (2003) 110 Cal.App.4th 978, 991-993 [Franchise Tax Board estopped from asserting administrative exhaustion after misleading Taxpayer]; *Farahani v. San Diego Community College Dist.* (2009) 175 Cal.App.4th 1486, 1496-1497.)

Petitioners took advantage of the September 2013 discretionary review procedures explicitly set forth by the State Board in section A.6 of Part 2 of the Monitoring Program. Their request to participate in the 2014 administrative proceedings to bring the Coalition's notification process into alignment with the individual monitoring program, the exact issue raised in this lawsuit, was endorsed by the Regional Board.

By petitioning the State Board for review of the two pertinent Regional Board orders (i.e., the December 8, 2014 approval of the Coalition's revised Drinking Water Notification process, and the December 18, 2014 denial of CRLA's petition for discretionary review), Petitioners sufficiently exhausted their administrative remedies. (*Farmers Ins. Exch.*, 2 Cal.4th at 391.) The Regional Board is estopped from arguing otherwise. (*Shuer,* 117 Cal.App.4th at 486-487; *J. H. McKnight Ranch, Inc.,* 110 Cal.App.4th at 991-993; *Farahani,* 175 Cal.App.4th at 1496-1497.)

B. Public Availability of "Monitoring Results" Under Section 13269

The parties dispute whether the notification letters sent to dischargers by the Coalition (informing them that their water wells contain excessive nitrates), and from dischargers to well users, and the confirmation letters from the dischargers back to the Coalition (confirming they have informed well users of the exceedance), are "monitoring results" that must be made available to the public under section 13269.

The Regional Board and Coalition argue that the Regional Board did not interpret "monitoring results" to include these items and that the Regional Board's interpretation is

entitled to deference. They claim the definition of "monitoring results" is highly technical and entwined with policy issues and that Petitioners' interpretation is in conflict with the plain understanding of the phrase.

Petitioners counter that the notification letters and confirmations are a consequence and outcome of the monitoring and reporting program, that a plain reading of the statute supports a broad interpretation of the phrase "monitoring results," and that the Regional Board's interpretation is cramped and at odds with the statute.

Statutory construction is a question of law on which a court exercises independent judgment. (*Friends of Oceano Dunes, Inc. v. San Luis Obispo County Air Pollution Control District* (2015) 235 Cal.App.4th 957, 963.) "Whether judicial deference to an agency's interpretation is appropriate and, if so, its extent – the 'weight' it should be given – is [] fundamentally situational." (*Yamaha Corp. of America v. State Bd. of Equalization* (1998) 19 Cal.4th 1, 12.)

> ... greater weight may be appropriate when an agency has a "comparative interpretive advantage over the courts," as when "the legal text to be interpreted is technical, obscure, complex, open-ended, or entwined with issues of fact, policy, and discretion." [Citation.] "Nevertheless, the proper interpretation of a statute is ultimately the court's responsibility." [Citation.] (*Friends of Oceano Dunes,* 235 Cal.App.4th at 963, quoting *Western States Petroleum Assn. v. Board of Equalization* (2013) 57 Cal.4th 401, 415–416.)

When construing a statute, courts "first examine the statutory language, giving it a plain and commonsense meaning." (*Coalition of Concerned Communities, Inc. v. City of Los Angeles* (2004) 34 Cal.4th 733, 737.) Courts do not examine the language "in isolation, but in the context of the statutory framework as a whole in order to determine its scope and purpose and to harmonize the various parts of the enactment. ... If the statutory language permits more than one reasonable interpretation, courts may consider other aids, such as the statute's purpose, legislative history, and public policy. [Citations.]" (*Ibid.*)

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As in *Friends of Oceano Dunes*, the issues of statutory construction in this case are not highly technical, scientific, obscure, or complex. (*Friends of Oceano Dunes, Inc.*, 235 Cal.App.4th at 963.) The term "monitoring requirements" and "monitoring results" are discussed in the waiver provision of the Water Quality Act, section 13269, subd. (a)(2):

> ... The conditions of the waiver shall include, but need not be limited to, the performance of individual, group, or watershed-based monitoring . . . **Monitoring requirements** shall be designed to support the development and implementation of the waiver program, including, but not limited to, **verifying the adequacy and effectiveness of the waiver's conditions.** In establishing monitoring requirements, the regional board may consider the volume, duration, frequency, and constituents discharge; the extent and type of existing monitoring activities, including, but not limited to, existing watershed-based, compliance, and effectiveness monitoring efforts; the size of the project area; and other relevant factors. **Monitoring results shall be made available to the public.** ([emphasis added].)

Attachment A of the 2012 Agricultural Order broadly defines "monitoring" as:

> Sampling and analysis of receiving water quality conditions ... **Monitoring includes** but is not limited to: **surface water or groundwater sampling, on-farm water quality monitoring undertaken in connection with agricultural activities** ... and **effectiveness monitoring, maintenance of on-site records** and management practice reporting. (AR 63:012671 [emphasis added].)

The term "monitoring" is defined in Webster's Online Dictionary as "to watch, observe, listen to, or check (something) for a special purpose over a period of time." Webster's New World Dictionary defines a "result" as "anything that comes about as a consequence or outcome of some action, process, etc." (5th College edition, 2014, at 1239.)

The letters informing dischargers that their well water exceeds maximum contaminant levels for nitrates come about as a consequence of "observing" and "checking" their well water over time. These letters provide "sampling and analysis" results of "groundwater sampling" regarding "on-farm water quality monitoring undertaken in connection with agricultural activities" and they help verify "the adequacy and effectiveness of the waiver's conditions."

The confirmation letters from the dischargers back to the Coalition also "come about as a consequence" of "observing" and "checking" their well water over time, and they are "designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions."

The same is true of the notification letters from dischargers to well users informing them of the exceedance.

The policies of the Water Quality Act and the governing waiver orders support a broad interpretation of the phrase "monitoring results." One of the "highest priorities" of the 2012 Agricultural Order is "[p]rotecting public health and ensuring safe drinking water." (AR 6:000135.) Both the State Board and Regional Board have repeatedly acknowledged that that the serious pollution of central coast groundwater supplies "presents a significant threat to human health as pollution gets substantially worse each year, and the actual numbers of polluted wells and people affected are unknown." (AR 6:000135.)[5]

In issuing the 2012 Agricultural Order, the Regional Board reported that:

> Since the issuance of the 2004 Agricultural Order, the Central Coast Water Board has compiled additional and substantial empirical data demonstrating that water quality conditions in agricultural areas of the region continue to be severely impaired or polluted by waste discharges from irrigated agricultural operations and activities that impair beneficial uses, including drinking water.... The most serious water quality degradation is caused by fertilizer and pesticide use, which results in runoff of chemicals from agricultural fields into surface waters and percolation into groundwater. ...
>
> Nitrate pollution of drinking water supplies is a critical problem throughout the Central Coast Region. Studies indicate that fertilizer from irrigated agriculture is the largest primary source of nitrate pollution in drinking water wells and that significant loading of nitrate continues as a result of agricultural fertilizer practices. (AR 6:000134.)

In issuing the 2013 State Board Order, the State Board recognized "the potential severity and urgency of the health issues associated with drinking groundwater with high concentrations of nitrates...." (AR 41:001517-001518). That is an important reason why the

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[5] See also AR 6:000134-000135, fns. 1-7.

State Board strengthened section A.7 of Part 2 of the Monitoring and Reporting Program as follows:

> If a discharger conducting individual groundwater monitoring or a third party conducting cooperative groundwater monitoring determines that water in any well that is used or may be used for drinking water exceeds or is projected to exceed [the MCL for nitrate], the discharger or third party must provide notice to the Central Coast Water Board within 24 hours of learning of the exceedance or projected exceedance. For wells on a Discharger's farm/ranch, the Central Coast Water Board will require that the Discharger notify the users promptly. (AR 41:001519.)[6]

Critical to the effectiveness of groundwater monitoring programs in general, and the Central Coast agricultural program in particular, is *transparency*, a strong public policy of public disclosure expressed in the Water Quality Act and acknowledged by the State Board. (See, e.g., §13269, subd. (a)(2) ('[m]onitoring requirements [must be designed to verify] the adequacy and effectiveness of the waiver's conditions [and that] [m]onitoring results shall be made available to the public.')) Public accountability of administrative agencies is an important tenet of American jurisprudence. (See *International Federation of Professional and Technical Engineers, Local 21, AFL-CIO v. Superior Court* (2007) 42 Cal.4th 319, 328-329 ["Openess in government is essential to the functioning of a democracy. 'Implicit in the democratic process is the notion that government should be accountable for its actions.' [Citation.]" (addressing PRA request)].)

The State Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program ("NPS Policy") (§13369; AR 3:000062) emphasizes that monitoring programs must include "sufficient feedback mechanism so that the [Regional Board], dischargers, and *the public* can determine whether the program is achieving its stated

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[6] The State Water Board expected the Regional Board to "reevaluate any previously approved cooperative groundwater monitoring programs to ensure that they are consistent with this Order." (AR 41:001517, fn. 82.) The Regional Board subsequently modified the 2012 Agricultural Order and related Monitoring Program as directed. (AR 63:012583; 118:14885; 119:014904; 125:014956.)

purpose(s), or whether additional or different [management practices] or other actions are required." (AR 3:000076 [emphasis added].)

While acknowledging that monitoring groups such as the Coalition provide valuable expertise, technical assistance and training to growers, thereby saving precious staff resources (AR 41:001498), the State Board's 2013 Order went on to emphasize "the need to be wary of third party programs that report compliance at too high a level of generality." (AR 41:001498-001499.) In the face of efforts by the regulated community to obfuscate groundwater monitoring data, the State Board's 2013 Order recognizes that monitoring programs "may be equally concerning to interested persons" "because a proposed project may not be sufficiently protective of water quality or a third party monitoring program may be designed to obscure accountability" (AR 41:001498); and "[b]ecause the data to be generated through groundwater monitoring is of significant public interest and value ...." (AR 41:001517.)

It must be plainly stated that the monitoring and reporting data of *individual farms* participating in the agricultural waiver are readily available to the public. Members of the public need only ask, and the monitoring results are provided by the Regional Board as a matter of course.

The Coalition monitoring program, on the other hand, essentially buries the monitoring results by necessitating "manipulation" of three different documents: (1) an Exceedance Report, which identifies dischargers by "Field Point Name";[7] (2) the Coalition's membership list, which identifies members' contact information and includes each member's ranch-specific "Global ID";[8] and (3) a relational key, which links the Field Point Name of all wells monitored under the Coalition's Workplan with the members' ranch-specific Global ID. (AR 155:022515; see also AR 185:022957 [Relational Key].)

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[7] "Field Point Name" is a well identifier used on GeoTracker. (AR 155:022515.) GeoTracker is the State Water Board's online data management system for sites that impact groundwater or have the potential to impact groundwater.

[8] The Exceedance Report also included a Global ID but that ID was "a Coalition ID (AGL100000001) as opposed to the ranch specific Global ID ...." (AR 156:022517, fn. 2.)

All along, "one of the central tenants of [the Coalition's] program includes not providing individual member information that specifically ties domestic well exceedances with individual growers, companies, or landowners in a manner that would then be public." (AR 120:014937.) Its approach is specifically designed to "protect well location and grower identity," because a member of the public "would need to request all three documents and manipulate the data in order to match up a nitrate value with an individual's name." (AR 155:022514; 155:022515.)

The justification for such legerdemain rests upon the privacy rights of farmers, as well as the potential threat of terrorism to individual drinking water wells. Yet neither the Regional Board nor the Coalition has provided this Court any authority endorsing the privacy rights of dischargers as a counterweight to the public's interest in obtaining monitoring results. (Coalition Opp., pp. 6 and 21-23.) Regional Board staff accurately assessed the situation: "This is a sensitive issue for growers, [but] the real public health risk component of this issue outweighs the desire for privacy." (AR 96:014332.) Nor has either party provided evidence of a realistic threat of terrorism directed toward (already polluted) individual drinking water wells on the Central Coast of California.

The Regional Board and Coalition strenuously contend that "[t]he Workplans as approved by the Executive Officer contain sufficient mechanisms to ensure that the Regional Board is informed that notification letters were sent by the Coalition and farmers, has sufficient means to verify that such representations are true, and all the enforcement tools necessary to deter and punish for noncompliance." (Resp. Opp., pp. 17-18.)

Whatever may be the efficacy of the Workplan mechanisms vis-à-vis the Regional Board, the *public* is entitled to know whether the Regional Board is doing enough in the way of on-farm best management practices to protect the public's water supplies. Given the heavily polluted condition of Central Coast groundwater supplies, it is debatable whether the Regional Board is doing an adequate job of achieving the important goals of the Water Quality Act.

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Reasonably construed, both the notification and confirmation letters constitute "monitoring results" that must be made available to the public under section 13269. They are a direct consequence of monitoring well-water pollution levels over time. They verify whether the best management practices of farmers are effective in reducing groundwater pollution and they are designed to support the development and implementation of the waiver program.

The Coalition's Drinking Water Notification process, as modified by the Regional Board in December 2014, does not meet the requirements of law and is therefore arbitrary and capricious.

C. Petitioners' Public Records Act Request[9]

Aside from claiming that the discharger notification or confirmation letters are "monitoring results" that must be made available under the Water Quality Act, Petitioner ELF alternatively requests their production under the Public Records Act because these documents relate to the conduct of the public's business and are "used" by the Regional Board in assuring compliance with on-farm best management practices.

Between December 11, 2014 and May 7, 2015, the Regional Board, CRLA, and ELF engaged in back-and-forth correspondence regarding their legal positions. The Regional Board eventually declined to produce the notification or confirmation letters because it claimed not to have control or ownership of them. Instead, it asked the Coalition to produce the documents directly to ELF, which the Coalition declined to do.

The Regional Board and Coalition urge that ELF lacks standing to challenge the adequacy of the Regional Board's PRA responses because neither ELF nor Petitioner Zamora was the author of the December 11, 2014 PRA request. (Resp. Opp., pp. 25-26.) ELF responds that its latter joinder in the original request is sufficient for standing purposes. (Reply, pp. 18-20.)

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[9] Petitioner Zamora did not participate at all in the requests for documents under the Public Records Act. She is therefore not entitled to relief under this cause of action.

Whether considered a new request or a joinder in an existing request, ELF's April 22, 2015 letter was a specific demand on behalf of one of the Petitioners that the Regional Board produce the discharger notification and confirmation letters sent and received by the Coalition. (Kane Declaration, ¶¶ 2, 4, 5-6, and 8, Exh. 1, Attachment A, Attachment B, Exh. 3, Exh. 4 and Exh. 6 [showing history of correspondence].)

The Regional Board's May 1, 2015 response, both to ELF and CRLA, did not express any confusion as to who was making the request. (*Id.*) It acknowledged that those two entities were requesting information pursuant to the PRA and it recognized that the new letter constituted a follow-up to the previous PRA request. (*Id.*) The Regional Board also stated that it understood the new request was a "re-request" of the same documents. (*Id.*)

ELF's name appears on more than one of the PRA requests, and ELF engaged in negotiations with both the Regional Board and Coalition prior to filing suit. While it is true that a request under the PRA must be personally made by the individual or group that subsequently seeks judicial review (*McDonnell v. U.S.* (3d Cir. 1993) 4 F.3d 1227, 1236–37), such requirement is satisfied here. ELF plainly has standing to file suit under the PRA. (*McDonnell v. U.S.*, 4 F.3d 1227 at 1238 [individual who pursues administrative appeals and exhausts remedies has standing for purposes of the federal Freedom of Information Act ("FOIA")].)[10] To rule otherwise would promote form over substance.

Interpretation of the Public Records Act is a question of law that rests with the court. (*Regents of University of California v. Superior Court* (2013) 222 Cal.App.4th 383, 397 ("*Regents*").) Each word and phrase in the statute should be given meaning. (*Id.*) The California Constitution provides that the PRA be broadly construed if it furthers the people's right of access, and narrowly construed if it limits the right of access. (Cal. Const., Art. I, §3.)

The critical issue facing the Court under the Public Records Act is whether the notification and confirmation letters maintained by the Coalition must nevertheless be

[10] Courts may look to federal case law interpreting the FOIA to interpret the PRA because the latter was modeled on the FOIA. (*Times Mirror Co. v. Superior Court* (1991) 53 Cal.3d 1325, 1338.)

produced as public records either due to their status under the Water Quality Act and/or their treatment or use by the Regional Board.

The most closely analogous case is *Regents*, *supra*, wherein the Court of Appeal was asked to decide whether certain documents held by a venture capital fund in which the Regents had invested millions of dollars were public records. The court started from the premise that, to satisfy the definition of public record, a document must: (1) relate to the conduct of the public's business; and (2) "be prepared, owned, used or retained" by a public agency. (222 Cal.App.4th at 400.)

While conceding the first prong, i.e., that the requested documents relate to the conduct of the public's business, the Regional Board and Coalition contend that, since the discharger notification and confirmation letters are maintained by the Coalition and are not in the Regional Board's actual possession, they do not satisfy the second prong of the test.

The Court of Appeal in *Regents* had the following to say about the second prong of the test:

> To qualify as an "agency record" subject to FOIA disclosure rules, "an agency must 'either create or obtain' the requested materials...," and "the agency must be in control of [them] at the time the FOIA request is made." The fact that an agency has access to data produced by its grantee does not mean that production of the data is required under the FOIA. Similarly to the FOIA, no language in the CPRA creates an obligation to create or obtain a particular record when the document is not prepared, owned, used, or retained by the public agency. (222 Cal.App.4th at 400)

The Regional Board and Coalition point out that notification and confirmation letters are not "prepared" or "owned" by the Regional Board, and that the agency has not "retained" any of them. Nor has the Regional Board "used" such documents except on occasions when it conducts an audit.

While recognizing that discharger notification and confirmation letters are not "prepared" or "owned" by the Regional Board, ELF focuses on the argument that these documents are in the "constructive possession" of the Regional Board as discussed in

Consolidated Irr. Dist. v. Superior Court (2012) 205 Cal.App.4th 697, which involved a dispute under the California Environmental Quality Act ("CEQA") over the definition of documents that should be "included in the ... public agency's files on the project" (Public Resources Code §21167.6, subd. (e)(10).)

Because the terms of a written contract stated that the agency "owned" all the consultants' work product, the court in *Consolidated Irr. Dist.* concluded that all of the consultants' documents were therefore "constructively possessed" by the agency and needed to be included in the administrative record.

For several reasons, ELF's reliance upon the decision in *Consolidated Irr. Dist.* is misplaced. First, the *Consolidated Irrigation District* court was directly addressing an issue under CEQA, rather than the PRA. Second, the court never analyzed the PRA's use of the words "prepared, owned, used, or retained." Third, the *Regents* court limited the importance of *Consolidated Irrigation District* and seriously questioned its rationale. (222 Cal.App.4th at 401 and fn. 15.)

At oral argument, counsel for the Regional Board conceded that the agency had indeed reviewed all of the then-existing Coalition notification and confirmation letters during compliance meetings with the Coalition on February 10, 2015, and March 18, 2015. (August 3, 2016 Transcript at pp. 19-20.)[11] While it is urged that merely reviewing these letters does not equate with "using" them, it is unclear to the Court what other use *could be made* of such documents other than reviewing them during an audit or compliance meeting.

To review a notification or confirmation letter is to "use" it, particularly when the point of reviewing it is to confirm compliance with the law. Since these documents have been

[11] Counsel for the Regional Board claimed that his concession in response to the Court's questions was inadmissible hearsay and that Petitioners had not met their burden of establishing a "prima facie" case. As an officer of the court, Regional Board's counsel has a duty of candor (Bus. & Prof. Code, § 6068(e).) Public agencies have an affirmative duty to assist members of the public in making an effective PRA request (Gov't. Code, § 6253.1). The burden of proof rests on the agency, "the only party able to explain" why materials sought are not agency records or have been properly withheld. (222 Cal. App.4th at 398, fn. 10, quoting *United States Dept. of Justice v. Tax Analysts* (1989) 492 U.S. 136, 142, fn. 3.)

"used" by the Regional Board, they must be considered subject to production under the Public Records Act.

Based upon the pertinent legal authorities, ELF is entitled to any discharger notification and confirmation letters that were reviewed, i.e., "used," or retained by the Regional Board on or before April 22, 2015 (the date of the amended PRA request by CRLA and ELF). Unlike discovery in a civil case, there is no ongoing or "rolling" duty to produce such records. (*United States Dept. of Justice v. Tax Analysts* (1989) 492 U.S. 136, 144–145 [agency need only produce documents as of the date a FOIA request is made].) Similarly to the FOIA, no language in the CPRA creates an obligation to create or obtain a particular record when the document is not prepared, owned, used, or retained by the public agency." (*Regents,* 222 Cal.App.4th at 400 [emphasis added].)

IV. CONCLUSION

The Petition for a peremptory writ of mandate is GRANTED. Accordingly, a writ of mandate will be issued declaring that any discharger notification and confirmation letters reviewed by the Regional Board on or before April 22, 2015, are public records, and directing the Regional Board to: 1) set aside its December 8, 2014 approval of the Coalition's revised Drinking Water Notification process; 2) set aside its December 18, 2014 denial of CRLA's petition for discretionary review; 3) take such action as to bring the Coalition's Drinking Water Notification process into compliance with section 13269 of the Water Quality Act; 4) produce all discharger notification and confirmation letters that were reviewed, i.e., "used," or retained by the Regional Board on or before April 22, 2015; and, 5) undertake any further proceedings in a manner consistent with this Ruling and Order.

The Court encourages the parties to reach agreement on the form of the Writ of Mandate and Judgment and to submit them for signature as soon as possible.

If agreement cannot be reached on or before November 14, 2016, counsel for Petitioners shall file and serve the proposed Writ of Mandate and Proposed Judgment. Any objections (as to form only) shall be filed and served on or before November 28, 2016. If

disagreements remain, they will be considered at a Case Management Conference on December 5, 2016, at 2:00 p.m. No other pleadings are authorized.

IT IS SO ORDERED.

Dated: October 28, 2016

CHARLES S. CRANDALL
Judge of the Superior Court

ATTACHMENT 3

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Exempt from Filing Fees Pursuant to Gov. Code § 6103

FILED
12/15/2016

TERESA A. RISI
CLERK OF THE SUPERIOR COURT
Carmen B. Orozco DEPUTY
Orozco, Carmen B.

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF MONTEREY

RAVA RANCHES, INC., FRESH FOODS, INC., and SOUTH COUNTY PACKING COMPANY CORP., Petitioners, v. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL COAST REGION, and DOES 1-50, inclusive, Respondent.	Case No. 16CV000255 ~~[PROPOSED]~~ **ORDER DENYING PETITION FOR WRIT OF MANDATE** Judge: Hon. Lydia M. Villarreal Dept: 1 Hearing: August 19, 2016 Action Filed: January 26, 2016

This matter came on regularly for hearing before this Court on August 19, 2016, at 9:00 a.m. in Department 1, the Honorable Lydia M. Villarreal presiding.

Scott Allen appeared as attorney for Petitioners Rava Ranches, Inc., Fresh Foods, Inc., and South County Packing Company Corp. Gary Alexander appeared as attorney for Respondent California Regional Water Quality Control Board. Cherokee Melton appeared as attorney for Intervenor Environmental Law Foundation.

Having considered the record, evidence, and briefs submitted by each party; having heard the argument of counsel; and having considered supplemental briefing by the parties, the Court

issued a Statement of Decision denying the petition for writ of mandate. This Statement of Decision was signed and filed on November 17, 2016. A true and correct copy of that Statement of Decision is attached hereto as Exhibit 1, and it is incorporated by this reference as though fully set forth herein.

For the reasons stated in the Statement of Decision, it is hereby ordered that:

1. The petition for writ of mandate filed in this action is denied; and

2. The preliminary injunction order issued in this action is dissolved as of the filing of the Notice of Entry of Judgment in this matter.

IT IS SO ORDERED.

Date: Dec. 15, 2016

Hon. Lydia M. Villarreal

Approved as to form:

Date: 12/6/16

Scott J. Allen
Attorney for Petitioners

Date: December 2, 2016

Nathaniel Kane
Attorney for Intervenor

EXHIBIT 1

SUPERIOR COURT OF CALIFORNIA

COUNTY OF MONTEREY

FILED
NOV 17 2016
TERESA A. RISI
CLERK OF THE SUPERIOR COURT
DEPUTY
R. Inofuentes

RAVA RANCHES, INC., FRESH FOODS, INC., and SOUTH COUNTY PACKING COMPANY CORP., Petitioners, vs. CALIFORNIA WATER QUALITY CONTROL BOARD, CENTRAL COAST REGION, Respondent, ENVIRONMENTAL LAW FOUNDATION, Intervenor.	Case No.: 16CV000255 Statement of Decision

The Petition for Writ of Mandate by Petitioner Petitioners Rava Ranches, Inc., Fresh Foods, Inc. and South County Packing Company Corp. (collectively, "Petitioner") came on for hearing before the Honorable Lydia M. Villarreal on August 19, 2016, at 9:00 a.m., in Department 1.[1] Petitioner, Respondent California Regional Water Quality Control Board, Central Coast Region ("Respondent"), and Intervenor Environmental Law Foundation ("Intervenor") were represented by their respective attorneys. The parties filed supplemental briefs after the hearing. The matter was submitted on September 2, 2016, and the court has fully considered all of the evidence, arguments, and authorities submitted by each party. This Statement of Decision resolves factual and legal disputes as to all matters contained herein.

[1] The court has issued a separate statement of decision for the case tried concurrently with this matter, *Triangle Farms, Inc.. v. California Water Quality Board* (16CV000257) ("*Triangle Farms*").

Background

Pursuant to Code of Civil Procedure ("CCP") section 1085, Petitioner seeks issuance of a writ of traditional mandamus against Respondent to compel performance of its duty under Water Code section 13267(b)(2). Specifically, Petitioner seeks a writ of mandate to compel Respondent to *refrain from making un-redacted versions of the "TNA Reports" available for inspection* by the public. (Petitioner's Opening Brief, p. 2:2-7.) Petitioner argues the TNA Reports – reports that disclose the Total Nitrogen Applied (TNA) to crops - might disclose trade secrets or secret processes. Intervenor has made a request for public disclosure of the un-redacted TNA Reports pursuant to the California Public Records Act ("CPRA").

Petitioner commenced this action by filing the complaint/petition ("Petition") on January 26, 2016.[2] Pursuant to a stipulation and order, Intervenor filed its petition in intervention on February 9, 2016. Respondent filed its answer on April 27, 2016.

On January 26, 2016, concurrently with the filing of the Petition, Petitioner filed an ex parte application for a temporary restraining order ("TRO"), declarations by general manager Peter Anecito ("Anecito") and its counsel in support of the TRO application, and a request to file documents under seal.[3] The court (Hon. Thomas W. Wills) granted the request to file documents under seal and advised that the parties stipulated that no information/documents would be released until after the hearing on the preliminary injunction. Petitioner filed a motion for a preliminary injunction on January 28, 2016. The court (Hon. Susan J. Matcham) granted Petitioner's motion in an order filed on April 1, 2016.

On May 13, 2016, Petitioner filed an opening brief in support of its Petition for Writ of Mandate. On June 10, 2016, Respondent filed its opposing brief, supporting evidence, and a request for judicial notice in support thereof. Intervenor also filed its opposing brief and supporting evidence. Petitioner filed a reply brief on July 1, 2016. At the hearing on August 19, 2016, the parties proffered oral arguments, and Petitioner submitted slides as an

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[2] The petitioner in *Triangle Farms* filed its substantially similar petition on the same date.

[3] Petitioner filed a redacted version and lodged an un-redacted version of Anecito's declaration on that date.

exhibit. The court directed the parties to submit supplemental briefs, and advised that the matter would be taken under submission once all filings were received. On August 26, 2016, Petitioner filed a supplemental brief with two exhibits. Respondent and Intervenor filed their respective responsive supplemental briefs on September 2, 2016.

Evidence Submitted

Petitioner relies on the following evidence: (1) Anecito's declaration filed in support of the application for TRO; (2) Petitioner's TNA Reports (Anecito decl., Exs. A & B); (3) Order No. R3-2012-0011 issued by Respondent (*id.*, Ex. C); (4) Petitioner's letters dated November 30, 2015 (*id.*, Ex. D); (5) Respondent's letter dated December 28, 2015 (*id.*, Ex. F); (6) Respondent's letter dated January 5, 2016 ("Respondent's January 5, 2016 Letter") (*id.*, Ex. G); (7) Petitioners' letter dated January 8, 2016 (*id.*, Ex. H); (8) Respondent's letter dated January 20, 2016 ("Respondent's January 20, 2016 Letter") (*id.*, Ex. I); (9) the Petition; (10) Intervenor's Petition in Intervention; (11) Respondent's answer; (12) slides submitted at the hearing; (13) a table listing statutes and portions of the California Constitution that use the phrase "may not" (Petitioner's Supp. Brief, Ex. A); and (14) Assembly Bill 1664 (Stats. 2001, ch. 869) ("AB-1664") (*id.*, Ex. B).[4]

Respondent submits the following evidence: (1) declaration by its water resources control engineer, Monica Barricarte ("Barricarte"); (2) declaration by the senior staff counsel for the State Water Resources Control Board ("State Board"), Jessica Jahr ("Jahr"); (3) declaration by its attorney, Myung J. Park ("Park")[5]; (4) Order WQ 2013-0101, 2013 WL 5958786 ("2013 Order") issued by the State Board (Park decl., Ex. 1); (5) Order No. R3-2012-0011 issued by Respondent, as modified by the 2013 Order ("the Agricultural Order") (*id.*, Ex. 2); (6) a blank Total Nitrogen Applied Report form ("TNA Form") for 2015 (*id.*, Ex. 3); (7) TNA Form for

[4] Petitioner did not submit evidence with the opening brief or reply brief. Rather, it states that the brief is supported by: (a) Anecito's declaration in support of the TRO application; (b) the Petition; (c) "the other pleadings on file in this case"; and (d) "such other and further matters as may be presented" in the reply brief or during the hearing. (Petitioner's Opening Brief, at p. 2:7-11.) The other pleadings on file in this case are the Petition in intervention and the answer. Petitioner submitted slides as an exhibit at the hearing and two exhibits attached to the supplemental brief.

[5] One document contains Respondent's request for judicial notice and Park's declaration.

2014 (*id.*, Ex. 4); (8) Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (Cal. Code Regs., tit. 23, § 2915) issued by the State Board (*id.*, Ex. 5); (9) Resources for Growers, Protection of Trade Secrets, Secret Processes, and Private Information issued by Respondent on January 28, 2013 (*id.*, Ex. 6); (10) instructions for reporting information in the TNA Form ("TNA Form Instructions") issued by Respondent, December 10, 2015 version (*id.*, Ex. 7); and (11) TNA Form Instructions issued by Respondent, May 29, 2014 version (*id.*, Ex. 8).[6]

Intervenor proffers the following evidence: (1) declaration by its attorney, Nathanial Kane ("Kane"); (2) the Agricultural Order (Kane's decl., Ex. A); (3) TNA Forms for 2014 and 2015 (*id.*, Ex. B); (3) Intervenor's CPRA request for all TNA Reports for all Tier 2 and Tier 3 dischargers for the reporting periods ending in 2014 and 2015, dated November 2, 2015 (*id.*, Ex. C); (4) Respondents' letter (dated 11/12/15) to Intervenor advising that all requested reports that did not involve an assertion of trade secrets were attached; it was reviewing the reports that involved an asserted trade secret; and it would later disclose all reports that were not exempt under CPRA (*id.*, Ex. D); (5) Respondent's letter (dated 1/5/16) to all reporting entities inviting them to submit additional justifications against disclosure (*id.*, Ex. E); (6) Respondent's letter (dated 1/20/16) to all reporting entities advising that their TNA Reports did not contain trade secrets, were not otherwise exempt from disclosure, and would be released in response to the CPRA request (*id.*, Ex. F); (7) Respondent's final letter (dated 1/29/16) to Intervenor in response to the CPRA request, advising that all TNA Reports would be delivered to Intervenor with the exception of the two operations that sought TROs/preliminary injunctions to prevent the release of said reports (*id.*, Ex. G).

No objections have been submitted.

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[6] Respondent's unopposed request for judicial notice of all 8 exhibits is GRANTED. (See Evid. Code, § 452, subds. (c) & (h); see also Evid. Code, § 453; see also *Rodas v. Spiegel* (2001) 87 Cal.App.4th 513, 518; see also *Hogen v. Valley Hospital* (1983) 147 Cal.App.3d 119, 125; see also *Souza v. Westlands Water Dist.* (2006) 135 Cal.App.4th 879, 886, fn. 1.)

Legal Standard

"A writ of mandate may be issued by any court to any . . . board, or person, to compel the performance of an act which the law specially enjoins, as a duty resulting from an office, trust, or station . . ." (CCP, § 1085, subd. (a)) where there is no plain, speedy, and adequate remedy at law (CCP, § 1086). To obtain relief, a petitioner must demonstrate (1) no plain, speedy, and adequate alternative remedy exists; (2) a clear, present, ministerial duty on the part of the respondent; and (3) a correlative clear, present, and beneficial right in the petitioner to the performance of that duty. (*People v. Picklesimer* (2010) 48 Cal.4th 330, 339-340.) It is "well settled that where a statute requires an officer to do a prescribed act upon a prescribed contingency, his functions are ministerial, and upon the happening of the contingency the writ may be issued to control his action." (*Drummey v. State Board of Funeral Directors and Embalmers* (1939) 13 Cal.2d 75, 83.)

The court will address whether

1. Petitioner has shown that there is no plain, speedy and adequate remedy in the ordinary course of law;
2. There is a clear, present ministerial duty on the part of Respondent;
3. Petitioner has shown a clear, present corresponding right to compel performance of that duty, including the occurrence of any contingency required to trigger Respondent's duty.

No Plain, Speedy, and Adequate Legal Remedy

The petitioner must show that there is no plain, speedy and adequate remedy in the ordinary course of law. (See *Flores v. California Department of Corrections and Rehabilitation* (2014) 224 Cal.App.4th 199, 206.) The determination is largely within the trial court's discretion and depends upon the circumstances of the case. (*Ibid.*)

Petitioner alleges that it has no adequate remedy available in the course of law. (Petition, ¶ 13.) Respondent and Intervenor do not dispute this allegation. The court therefore finds that Petitioner has shown that there is no plain, speedy and adequate legal remedy.

Ministerial Duty

The petitioner must show a clear, present ministerial duty on the part of the respondent. (*People v. Picklesimer*, *supra*, 48 Cal.4th, at pp. 339-340.) "A ministerial duty is an obligation to perform a specific act in a manner prescribed by law whenever a given state of facts exists, without regard to any personal judgment as to the propriety of the act. (*Kavanaugh v. West Sonoma County Union High School Dist.* (2003) 29 Cal.4th 911, 916, 129 Cal.Rptr.2d 811, 62 P.3d 54.)" (*People v Picklesimer* (2010) 48 Cal.4th 330, 340.) Generally, mandamus may only be employed to compel the performance of a duty that is purely ministerial in character. (*Mooney v. Garcia* (2012) 207 Cal.App.4th 229, 232-233.) Whether a statute imposes a ministerial duty, for which mandamus will lie, or a mere obligation to perform a discretionary function is a question of statutory interpretation. (*Id.*, at p. 233.)

"In interpreting a statutory provision, 'our task is to select the construction that comports most closely with the Legislature's apparent intent, with a view to promoting rather than defeating the statutes' general purpose, and to avoid a construction that would lead to unreasonable, impractical, or arbitrary results.' (*Copley Press, Inc. v. Superior Court* (2006) 39 Cal.4th 1272, 1291, 48 Cal.Rptr.3d 183, 141 P.3d 288.)" (*Poole v. Orange County Fire Authority* (2015) 61 Cal.4th 1378, 1385.) "Words must be construed in context, and statutes must be harmonized, both internally and with each other, to the extent possible." (*Tuolumne Jobs & Small Business Alliance v. Superior Court* (2014) 59 Cal.4th 1029, 1037.)

Under the rules of statutory interpretation, the court first consults the statutory language, giving words "their usual and ordinary meaning." (*DaFonte v. Up-Right, Inc.* (1992) 2 Cal.4th 593, 601.) If the language is unambiguous, then no statutory construction is necessary. (*Ibid.*) If the statutory language is ambiguous, then the court may also consider extrinsic evidence, such as the ostensible objects to be achieved, the legislative history, public policy, contemporaneous administrative construction, and the statutory scheme. (*People v. Zambia* (2011) 51 Cal.4th 965, 972; see also *County of Santa Clara v. Perry* (1998) 18 Cal.4th 435, 442.)

In a traditional mandamus proceeding, even if mandatory language appears in the statute, the duty is discretionary if the entity must exercise significant discretion to perform the duty.

(*Mooney v. Garcia*, *supra*, 207 Cal.App.4th, at p. 233; *AIDS Healthcare Foundation v. Los Angeles County Dept. of Public Health* (2011) 197 Cal.App.4th 693, 701.) Thus, in addition to examining the statutory language, the court must examine the entire statutory scheme to determine whether the entity has discretion to perform a mandatory duty. (*Mooney v. Garcia*, *supra*, 207 Cal.App.4th, at p. 233; *Weinstein v. County of Los Angeles* (2015) 237 Cal.App.4th 944, 965.)

I. Does Water Code Section 13267 (b)(2) Impose a Mandatory Duty to Keep TNA Reports Confidential?

According to Petitioner, the issue presented is whether Water Code section 13267(b)(2) imposes a mandatory duty on Respondent to refrain from disclosing Petitioner's un-redacted TNA Reports. Water Code section 13267(b)(2) provides, in relevant part: "*When requested by the person furnishing a report*, the portions of a report that might disclose trade secrets or secret processes *may not be made available* for inspection by the public . . . ." (Wat. Code, § 13267, subd. (b)(2).) Emphasis added.

Petitioner argues Water Code section 13267(b)(2): (1) denotes a mandatory duty by the use of the phrase "may not"; and (2) provides an absolute exemption under the CPRA for reports "when requested by the person furnishing a report" (such as Petitioner) asserts that the documents might disclose trade secrets.

A. Is "May Not" Mandatory or Permissive?

Respondent's arguments focus on the statutory language that arguably forbids release of the records: "the portions of a report that might disclose trade secrets or secret processes *may not* be made available for inspection by the public . . . ." (Wat. Code, § 13267, subd. (b)(2).). The pertinent language is "may not." Petitioner persuasively argues that the usual and ordinary meaning of "may not" imposes a mandatory prohibition, as demonstrated in *Woolls v. Superior Court* (2005) 127 Cal.App.4th 197 ("*Woolls*").[7] In *Woolls*, the court acknowledged that,

[7] Petitioner's reliance on other statutes, constitutional provisions, literary references, and a hypothetical involving schoolchildren as examples of "may not" being used to denote a mandatory prohibition is misguided. Aside from *Woolls*, Petitioner proffers no legal authority or analysis to support its contention that the phrase "may not," as used in those examples, may be properly construed as a mandatory prohibition.

generally speaking, the word "may" is permissive and the word "shall" is mandatory. (*Woolls, supra*, 127 Cal.App.4th, at p. 208.) In that case, however, "the pertinent language is 'may not,' rather than 'may' . . . ." (*Id.*, at pp. 208-209.) "'May not' is prohibitory, as opposed to permissive." (*Id.*, at p. 209.) Thus, Petitioner has shown that the usual and ordinary meaning of the phrase "may not" is an unambiguous mandatory prohibition.

Assuming *arguendo* that "may not" is ambiguous, the court may rely on extrinsic evidence, such as legislative history information, to interpret the statute. (See, e.g., *County of Santa Clara v. Perry* (1998) 18 Cal.4th 435, 442.) In 2001, the Legislature passed AB-1664 to amend various provisions in the Water Code, including Water Code section 13267(b)(2). Before the amendments came into effect, Water Code section 13237(b)(2) stated, in relevant part, that "portions of a report *which* might disclose trade secrets or secret process *shall not* be made available for inspection by the public." (Former Water Code, § 13267, subd. (b)(2), as amended by Stats. 1992, ch. 729, emphasis added.) AB-1664 changed "which" to "that," and "shall not" to "may not," such that this aspect of the statute now states that "portions of a report *that* might disclose trade secrets or secret process *may not* be made available for inspection by the public." (Water Code, § 13267, subd. (b)(2), as amended by Stats. 2001, ch. 869, § 3, emphasis added.) Analyses for AB-1664 refer to the changes as "technical and clarifying amendments." [See Assem. Com. on Environmental Safety and Toxic Materials, Analysis of Assem. Bill 1664 (2001-2002 Reg. Sess.) April 3, 2001; see also Assem. Floor, Analysis of Assem. Bill 1664 (2001-2002 Reg. Sess.) June 5, 2001, as amended June 5, 2001.] The legislative history therefore shows that the Legislature merely intended for this change to be a technical update, as opposed to a change in the protection afforded by the statute.

Lastly, the court must examine the entire statutory scheme to determine whether the entity has discretion to perform a mandatory duty. (See *Mooney v. Garcia*, *supra*, 207 Cal.App.4th, at p. 233; see also *Weinstein v. County of Los Angeles*, *supra*, 237 Cal.App.4th, at p. 965.) Water Code section 13267 (b)(2) is a provision in the Porter-Cologne Water Quality Control Act (Wat. Code, Div. 7, § 13000 et seq.) ("Porter-Cologne Act"). The Porter-Cologne Act does not define "may not." However, many other provisions in the Porter-Cologne Act that

use "may not" were amended by AB-1668 to state "may not" instead of "shall not" in 2001. (See, e.g., Wat. Code, §§ 13261, 13350, & 13385, as amended by Stats. 2001, ch. 869, §§ 1, 5, & 7.) Legislative history materials suggest that these were merely technical and clarifying amendments, and the Legislature did not intend to substantively change the law. (See, e.g., Assem. Floor, Analysis of Assem. Bill 1664 (2001-2002 Reg. Sess.) June 5, 2001, as amended June 5, 2001.) Simply put, nothing in the larger statutory scheme suggests that the phrase "may not" imposes a discretionary duty.

Accordingly, the use of the phrase "may not" in Water Code section 13267, subdivision (b)(2) denotes a mandatory duty, so long as the facts triggering the duty are present.

B. Does Water Code Section 13267(b)(2) Mandate Non-Disclosure Whenever Requested by the Person Furnishing the Report?

According to Petitioner, if Petitioner requests nondisclosure based on an assertion of trade secrets, Respondent cannot release the documents. It is undisputed that when no California Public Record Act (CPRA) request for records has been made, Water Code section 13267 (b)(2) provides that the regional board cannot make available for public inspection the portion of any report that might disclose trade secrets or secret processes.

Here, however, the question presented is whether and to what extent Water Code section 13267 (b)(2) provides protection when a CPRA request for records has been made. Intervenor and Respondent argue that to determine whether Water Code section 13267 (b)(2) mandates non-disclosure, the court must look to a different statute – the California Public Records Act (CPRA). This necessarily requires Water Code section 13267 (b)(2) to be construed in context of both the Porter-Cologne Act (Water Code, Div. 7 section 13000, et seq.) and the CPRA.

As an initial matter, the reports referenced in Water Code section 13267 (b)(2) will only be subject to the CPRA's general rule requiring disclosure if the reports fall within the CPRA's definition of "public records." (See Gov. Code, § 6263, subd. (a).) The CPRA defines "public records" to include "any writing containing information relating to the conduct of the public's business prepared, owned, used, or retained by any state or local agency regardless of physical form or characteristics." (Gov. Code, § 6252, subd. (e).) Local agency includes any board. (*Id.*,

subd. (a).) The reports at issue in Water Code section 13267 (b)(2) are monitoring reports required by, submitted to, and maintained by regional water boards, and such reports are relevant to the regional boards' business. (See Wat. Code, § 13267, subds. (a)-(b).) Accordingly, the reports at issue in Water Code section 13267 (b)(2) are public records under the CPRA.

Both the Porter-Cologne Act and the CPRA provide that, as a general rule, such reports/records are to be made available for public inspection. (See Wat. Code, § 13267 (b)(2); see also Wat. Code, § 13269 (a)(2); see also Gov. Code, § 6263 (a).) The Porter-Cologne Act does not contain any procedure applicable to determine whether reports/records should be disclosed, or if they are protected from disclosure, in response to a CPRA request.

According to Intervenor and Respondent, once a CPRA request has been made and the requested record qualifies as a public record (see Gov. Code, § 6252, subd. (e)), *CPRA requires public disclosure unless a CPRA exemption applies*. (See Gov. Code, § 6253.) To determine whether a CPRA exemption exists the court must first consult the statutory language. (See *DaFonte v. Up-Right, Inc.*, *supra*, 2 Cal.4th, at p. 601.) If the statutory language is ambiguous, then the court may rely on extrinsic evidence, such as the ostensible objectives to be achieved, the legislative history, public policy, and contemporaneous administrative construction. (*People v. Zambia*, *supra*, 51 Cal.4th, at p. 972; see also *County of Santa Clara v. Perry*, *supra*, 18 Cal.4th, at p. 442.) The court must also examine the entire statutory scheme. (See *Mooney v. Garcia*, *supra*, 207 Cal.App.4th, at p. 233; see also *Weinstein v. County of Los Angeles*, *supra*, 237 Cal.App.4th, at p. 965.) "Words must be construed in context, and statutes must be harmonized, both internally and with each other, to the extent possible." (*Tuolumne Jobs & Small Business Alliance v. Superior Court*, *supra*, 59 Cal.4th, at p. 1037.) The court seeks to avoid a construction that would lead to unreasonable, impractical, or arbitrary results. (*See Poole v. Orange County Fire Authority*, *supra*, 61 Cal.4th, at p. 1385.)

In contrast to the Porter-Cologne Act, the CPRA sets forth a mandatory duty to disclose public records in response to a request for public records by a member of the public. The CPRA also sets forth exemptions to the disclosure requirement. Specifically, the CPRA's statutory language unambiguously imposes a separate ministerial duty in response to a CPRA request for

public records: "Except with respect to records exempt from disclosure by *express provisions of law, each state or local agency, upon a request for a copy of records . . . , shall make the records promptly available to any person . . .*" by providing copies of said records to the person. (Gov. Code, § 6263, subd. (b).) The CPRA enumerates various statutory exemptions, including (a) the exemption for *air pollution* data discussed in *Masonite Corp. v. County of Mendocino Air Quality Management Dist.* (1996) 42 Cal.App.4th 436 ("*Masonite*"). (See Gov. Code, § 6254.7 and the qualified *trade secret* exemption discussed in *Uribe v. Howie* (1971) 19 Cal.App.3d 194 ("*Uribe*"). (See Gov. Code, § 6254, subd. (k); see also Evid. Code, § 1060).

Under CPRA, the only exemption that could prevent public disclosure of TNA monitoring reports in response to a CPRA request is Government Code section 6254, subdivision (k).[8] That provision incorporates exemptions allowed under state and federal law, including provisions in the Evidence Code relating to privilege. (See Gov. Code, § 6264, subd. (k).) The Evidence Code provides a qualified trade secret privilege (see Evid. Code, § 1060) for information that falls within the definition of a trade secret under the California Uniform Trade Secrets Act ("CUTSA") (see Evid. Code, § 1061, subd. (a)(1)).

It is Petitioner's position that Water Code section 13267 (b)(2) is an absolute exemption to Intervenor's CPRA request for monitoring reports that might contain trade secrets. It insists that this protection applies after a CPRA request for the reports has been made, and is distinct from CPRA's qualified trade secret exemption.[9]

Strong policy considerations militate in favor of interpreting Water Code section 13267(b)(2) as providing a qualified trade secret exemption – thus requiring a balancing of interests if the information qualifies as trade secrets. (See *Uribe*, *supra*, at p. 206.) Petitioner cites the 2013 Order (Petitioner's Reply, at p. 6:16-17, fn. 2) proffered by Respondent (Park

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[8] The exemption for air pollution data (see Gov. Code, § 6254.7) does not apply to the monitoring reports authorized under the Porter-Cologne Act (see Wat. Code, § 13267, subds. (a)-(b)), and Petitioner's reliance on *Masonite* is misplaced.

[9] Petitioner's reliance on OSHA is misplaced because the cited provisions do not provide absolute protection from public disclosure in response to a CPRA request. (See 29 U.S.C. § 664; see also 29 C.F.R. § 1903.9.)

decl., Ex. 1). In the 2013 Order, the State Board advised that trade secrets in TNA Reports could be released in response to a CPRA request, depending on the outcome of a balancing test, pursuant to Water Code section 13267 (b)(2) and Government Code section 6254 (k). (Park decl., Ex. 1.) This buttresses the interpretation that Water Code section 13267 (b)(2) should be construed to provide the same qualified trade secret protection as the CPRA exemption and is subject to a balancing test. In contrast, nothing in the Porter-Cologne Act or the CPRA suggests that monitoring reports are subject to any special exemption from disclosure in response to a CPRA request. No legal authority or extrinsic evidence has been provided to support Petitioner's interpretation.

Therefore, Petitioner has failed to show that Water Code section 13267(b)(2) imposes a mandatory duty on Respondent to *refrain* from providing copies of reports that might contain trade secrets to members of the public in response to a CPRA request.

In light of the foregoing, Water Code section 13267, subdivision (b)(2) imposes a different duty on a regional board depending on whether a CPRA request has been made:

1. If no CPRA request has been made, then Water Code section 13267 (b)(2) imposes a mandatory duty on Respondent to refrain from making portions of a report available for public inspection when (1) requested by the person furnishing a report, and (2) the portions of the report might disclose trade secrets.
2. If a CPRA request for the records has been made, then Water Code section 13267(b)(2) imposes a mandatory duty on Respondent to refrain from releasing portions of a report to the public when
    a. requested by the person furnishing a report,
    b. the report *contains trade secrets* as defined by CUTSA; and
    c. *the interest* in maintaining the confidentiality of the trade secrets *outweighs* the public interest in disclosure. (See Wat. Code, § 13267, subd. (b)(2); see also Gov. Code, § 6254, subd. (k); see also Evid. Code, §§ 1060 & 1061, subd. (a)(1); see also *Uribe*, *supra*, at p. 206.)

Therefore, the court must now examine each of these elements.

The evidence shows that a CPRA request for public disclosure of the un-redacted TNA Reports has been made (Petition, ¶¶ 6-7) and these reports are public records as defined by CPRA. (Petition, ¶¶ 2-5 & 8; Petition in Intervention, ¶ 7; Kane decl., Ex. G; Anecito decl., Exs. A & B; see also Gov. Code, § 6252, subds. (e) & (f)(1).)

The court must examine whether the TNA reports contain trade secrets and, if so, does the interest in maintaining confidentiality of the trade secrets outweigh the public interest in disclosure. (See Wat. Code, § 13267, subd. (b)(2); see also Gov. Code, § 6254, subd. (k); see also Evid. Code, §§ 1060 & 1061, subd. (a)(1); see also *Uribe*, *supra*, at p. 206.)

II. Do the TNA Reports Contain Trade Secrets Thereby Prohibiting Public Disclosure?

California Uniform Trade Secrets Act's ("CUTSA") definition of a trade secret applies. Under CUTSA, "trade secret" means "means information, including a formula, pattern, compilation, program, device, method, technique, or process, that: [¶] (1) Derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use; and [¶] (2) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy." (Civ. Code, § 3426.1, subd. (d).)

A. Do the TNA Reports Contain Information From Which Others Can Obtain Economic Value?

Petitioner asserts that the TNA Reports contain proprietary formulas and methods. However, the evidence submitted in support of its petition does not support its claim. Petitioner's evidence shows that the information at issue in the TNA Reports consists of data showing the types of crops it plants, acreage, annual aggregate totals of nitrate levels, and average nitrate concentrations.[10] (Anecito decl., Exs. A & B.) Anecito declares that information

[10] Contrary to Anecito's declaration, the TNA Reports do not disclose the total farmable acres, acres per crop type during the growing season, or total nitrogen fertilizer and other amendments applied to each crop. (See Anecito decl., ¶ 17(a)-(d), & Exs. A & B.) Instead, they disclose total "At Risk/Ranch Acres" or "Physical Acres Reporting" for each property, crop type(s) "Grown and Harvested During Reporting Period," and total nitrogen "Applied in Fertilizers & Amendments" per crop type during the reporting period. (*Id.*, Exs. A & B.)

disclosed in the TNA Reports is confidential and should be protected from disclosure for two reasons. (*Id.* decl., ¶ 17.) First, he states that the data qualifies as a trade secret because, if disclosed, it could be used by competitors to learn Petitioner's proprietary and confidential formulas and methods—specifically, its (1) crop mix/rotation patterns; (2) irrigation water blending practices; and (3) fertilizer recipe/mix—that Petitioner developed over "many years of farming" by "trial and error" that give it a competitive advantage by increasing its crop yields at a reduced cost. (*Id.*, ¶¶ 15 & 17(a)-(c).) Second, Anecito declares that data qualifies as a trade secret because, if disclosed, Petitioner's customers might learn its crop yields (pounds per acre) and production costs— closely-guarded information that affects the prices customers are willing to pay and, if disclosed, could undermine Petitioner's ability to negotiate favorable contracts and allow competitors to attract its customers—by combining data in the TNA Reports with (1) crop volume/weight information obtained through the customers' prior purchases to calculate crop yield; and (2) the "relatively narrow range of costs" for nitrogen/nitrate fertilizers to ascertain production cost data "with a good degree of accuracy." (*Id.*, ¶ 17(d).)

Petitioner cites *U.S. v. Chung* (9th Cir. 2011) 659 F.3d 815, 824, for the proposition that "[i]n assessing whether information derives value from not being generally known, courts look chiefly to whether the information provides a competitive economic advantage."[11] Petitioner contends that it derives economic/competitive benefits from maintaining its formulas, methods, crop yield data, and production costs in confidence.

Respondent and Intervenor assert that the TNA Reports omit most of the underlying data that competitors, customers, and others would need to know in order to learn its proprietary formulas/methods and crop yield and production cost data.

Petitioner's Formulas and Practices: Anecito declares that Petitioner's proprietary crop mix/rotation pattern involves multiple variables, including the timing/scheduling of planting, watering, fertilization, and harvesting of each crop. (Anecito decl., ¶ 17(a).) He further declares

[11] Petitioner's reliance on *Lion Raisins v. U.S. Dept. of Agriculture* (9th Cir. 2004) 354 F.3d 1072 is misplaced because that decision does not discuss CUTSA or CPRA; rather, it discusses the distinct definition of trade secret under the Freedom of Information Act.

that Petitioner's nitrogen fertilizer formula is based on the number of growth/harvest cycles per crop, and each crop's growth/harvest cycle varies in duration (e.g., spinach is as short as 23 to 26 days). (*Id.* decl., ¶ 17(c).) The TNA Reports, however, do not disclose information about the length or number of growing/harvesting cycles per crop, crop rotations, or the timing and frequency of fertilizer and water applications. (*Id.*, Exs. A & B; Barricarte decl.) The State Board does not consider the data sought by the TNA Form to be sensitive proprietary information; rather, it "see[s] the timing and frequency of applications, which are not required to be reported, rather than data regarding total amount, as more relevant to competitive business practices." (Park decl., Ex. A, at pp. *20 & *33, fn. 104.) Additionally, variables that are disclosed in the TNA Reports—such as acreage and amount of nitrate applied to a particular crop on a particular property—would be affected by transitory conditions that are not disclosed in the TNA Reports. (Anecito decl., Exs. A & B.) Therefore, competitors would not be able to apply information derived from the TNA Reports to their own farming practices, and Petitioner would not sustain any economic or competitive injury from disclosure of the TNA Reports. (See *Uribe*, *supra*, at pp. 208-209.) Anecito also declares that Petitioner's proprietary water blending practice involves testing water from its wells and combining water from multiple wells to achieve a particular nitrogen/nitrate concentration. (Anecito decl., ¶ 17(b).) The TNA Reports do not contain data about any particular well, water blending method, or other information that might allow others to discover Petitioner's water blending practices. (*Id.*, at Exs. A & B.) In sum, Petitioner has failed to show that the TNA Reports contain data from which its customers could ascertain its confidential and proprietary crop mix/rotation patterns, irrigation blending practices, and fertilizer formula.

Petitioner's Crop Yields & Production Costs: Anecito declares that customers could combine their prior knowledge of crop weight with total crop acreage data in the TNA Reports to learn Petitioner's crop yield. (Anecitor decl., ¶ 17(d).) To the contrary, to determine crop yield, customers would also need to know the number of planting/harvest cycles per crop, but the TNA Reports do not disclose such data. (*Id.*, Exs. A & B.) Finally, with respect to production costs, Anecito states that customers and competitors could combine their knowledge of the "relatively

narrow range of costs" for nitrogen/nitrate fertilizers with total nitrogen application data in the TNA Reports to ascertain Petitioners' "cost of nitrogen input . . . with a good degree of accuracy." (*Id.*, ¶ 17(d).) However, the TNA Reports do not disclose the price of any nitrogen/nitrate fertilizer or the particular type of fertilizer applied. (*Id.*, Exs. A & B.) Therefore, customers and competitors cannot ascertain Petitioner's nitrogen input costs from the data in the TNA Reports. In any event, Petitioner and Respondent each submit evidence to show that Petitioner's production costs include other variables—such as land, labor, equipment/machinery, and fertilizers other than nitrogen—that are not disclosed in the TNA Reports. (Anecito decl., ¶ 17(a)-(c), & Exs. A & B; Barricarte decl., ¶¶ 16-18.) Simply put, the data in the TNA Reports is insufficient to allow others to ascertain Petitioners' crop yields or production costs.

Even though Petitioner might derive some value from maintaining its formulas, methods, and procedures in confidence, it has not shown that the TNA Reports actually contain trade secrets – that is - information from which it derives economic value from not being generally known to others trade secrets. In other words, Petitioner has not met its burden in showing the TNA Reports disclose trade secret formulas/methods, or sufficient underlying data from which such trade secrets may be derived.

B. Has Petitioner Shown It Has Made Efforts to Maintain Confidentiality?

With respect to the efforts to maintain confidentiality, Petitioner contends that it made reasonable efforts to maintain its formulas/methods in confidence. (Anecito decl., ¶¶ 16-17.) However, the only evidence Petitioner submits to show efforts to maintain the underlying data disclosed in the TNA Reports in confidence is (1) the form itself and (2) this Petition. The court concludes that more evidence is needed for Petitioner to meet its burden to show reasonable efforts to maintain information disclosed in the TNA Reports in confidence.

Accordingly, Petitioner has not met its burden to show that the TNA Reports contain information that falls within CUTSA's definition of a trade secret. It follows that Petitioner has not shown that it is entitled to compel Respondent to perform its mandatory statutory duty to refrain from disclosing the TNA Reports.

III. Does the Interest in Maintaining Confidentiality Outweigh the Public Interest in Disclosure?

Assuming arguendo, Petitioner is able to show that the TNA Reports contain trade secrets as defined by CUTSA, Respondent may nevertheless release the reports to Intervenor in response to the CPRA request if the public interest in favor of disclosure outweighs the interest in confidentiality. (See Gov. Code, § 6254, subd. (k); see also Evid. Code, § 1060; see also *Uribe*, *supra*, at pp. 209-210.) The court must balance the maintenance of trade secrets in confidence against the public interest in disclosure to determine whether the exemption will be allowed under Evidence Code section 1060 and Government Code section 6254, subdivision (k). (See *Uribe*, *supra*, at p. 206.)

As Intervenor correctly notes, Petitioner does not argue that the balancing test weighs against disclosure. In evaluating the balancing test, the court considers Petitioner's evidence pertaining to the underlying information disclosed in the TNA Reports and its asserted trade secret formulas, methods, and procedures. (Anecito decl., ¶¶ 15-17, & Exs. A & B.) As discussed above, Petitioner's evidence is insufficient to show that the information disclosed in the TNA Reports constitutes a trade secret under CUTSA. To the extent Petitioner has an interest in maintaining the confidentiality of the data disclosed in the TNA Reports, that interest is minimal. In contrast, Intervenor and Respondent submit evidence showing the comparatively strong public interest in obtaining the information disclosed in the TNA Reports. (Park decl., Exs. 1 & 2; Kane decl., ¶¶ 3-5; Barricarte decl.) The court finds that Petitioner's interest in maintaining the TNA Reports in confidence is outweighed by the public interest in favor of disclosure.

Disposition

To obtain a writ of traditional mandamus, the Petitioner must demonstrate that the Respondent has a present ministerial duty, and the Petitioner has a present correlative beneficial right to performance. (See *People v. Picklesimer*, *supra*, 48 Cal.4th, at pp. 339-340.) A ministerial duty arises whenever a given state of facts exists. (See *id.*, at p. 340, citing *Kavanaugh v. West Sonoma County Union High School Dist.* (2003) 29 Cal.4th 911, 916.) If a

statute requires a prescribed act upon a contingency, then the court may issue a writ to compel performance upon the happening of the contingency. (See *Drummey v. State Board of Funeral Directors and Embalmers* (1939) 13 Cal.2d 75, 83.) Thus, to obtain a writ of mandate, Petitioner must show that all of the factual prerequisites that trigger the duty have occurred.

Petitioner has not shown that it is entitled to compel performance of Respondent's duty to refrain from disclosing the un-redacted TNA Reports in response to Intervenor's CPRA request. The petition for writ of traditional mandamus is respectfully DENIED.

The court directs Respondent to prepare an order consistent with this ruling, present it to Petitioner's counsel and Intervenor's counsel for approval as to form, and return it to this court for signature.

Dated: 11/17/16

Hon. Lydia M. Villarreal
Judge of the Superior Court

16CV000255

CERTIFICATE OF MAILING
(Code of Civil Procedure Section 1013a)

I do hereby certify that I am employed in the County of Monterey. I am over the age of eighteen years and not a party to the within stated cause. I placed true and correct copies of the **Statement of Decision Filed November 17, 2016**, for collection and mailing this date following our ordinary business practices. I am readily familiar with the Court's practices for collection and processing correspondence for mailing. On the same day that correspondence is placed for collection and mailing, it is deposited in the ordinary course of business with the United States Postal Services in Salinas, California, in a sealed envelope with postage fully prepaid. The names and addresses of each person to whom notice was mailed is as follows:

Scott Jeffrey Allen
2511 Garden Road Suite A-225
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Cherokee Dawn-Marie Melton
1736 Franklin St 9th Floor
Oakland CA 94612

Myung J Park
455 Golden Gate Ave
San Francisco CA 94102

Date: 11/17/2016

Teresa A. Risi, Clerk of the Court

By: _____
Maria InofuentesDeputy Clerk

DECLARATION OF SERVICE BY E-MAIL

Case Name: **Rava Ranches, Inc. et al. v. CA Regional Water Quality Control Board, Central Coast Region**

Case No.: **16-CV-000255**

I declare:

I am employed in the Office of the Attorney General, which is the office of a member of the California State Bar, at which member's direction this service is made. I am 18 years of age or older and not a party to this matter. I am familiar with the business practice at the Office of the Attorney General in the ordinary course of business.

On December 7, 2016, I served the attached **[PROPOSED] ORDER DENYING PETITION FOR WRIT OF MANDATE; [PROPOSED] JUDGMENT DENYING PETITION FOR WRIT OF MANDATE** by transmitting a true copy via electronic mail. In addition, I placed a true copy thereof enclosed in a sealed envelope, in the internal mail system of the Office of the Attorney General, addressed as follows:

Cherokee Melton
E-mail: cmelton@thefirstamendment.org

Environmental Law Foundation
E-mail: mailto:ELFservice@envirolaw.org

Scott J. Allen
E-mail: scott@sjallenlaw.com

I declare under penalty of perjury under the laws of the State of California the foregoing is true and correct and that this declaration was executed on December 7, 2016, at San Francisco, California.

L. Rodriguez
Declarant

Signature

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41652195.doc

ATTACHMENT 4

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Exempt from Filing Fees Pursuant to Gov. Code § 6103

FILED
12/29/2016
TERESA A. RISI
CLERK OF THE SUPERIOR COURT
Lisa Dalia DEPUTY
Lisa Dalia

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF MONTEREY

TRIANGLE FARMS, INC., Petitioner, v. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL COAST REGION, and DOES 1-50, inclusive, Respondent.	Case No. 16CV000257 ~~[PROPOSED]~~ **ORDER DENYING PETITION FOR WRIT OF MANDATE** Judge: Hon. Lydia M. Villarreal Dept: 1 Hearing: August 19, 2016 Action Filed: January 26, 2016

This matter came on regularly for hearing before this Court on August 19, 2016, at 9:00 a.m. in Department 1, the Honorable Lydia M. Villarreal presiding.

Scott Allen appeared as attorney for Petitioner Triangle Farms, Inc. Gary Alexander appeared as attorney for Respondent California Regional Water Quality Control Board. Cherokee Melton appeared as attorney for Intervenor Environmental Law Foundation.

Having considered the record, evidence, and briefs submitted by each party; having heard the argument of counsel; and having considered supplemental briefing by the parties, the Court issued a Statement of Decision denying the petition for writ of mandate. This Statement of

Decision was signed and filed on November 15, 2016. A true and correct copy of that Statement of Decision is attached hereto as Exhibit 1, and it is incorporated by this reference as though fully set forth herein.

For the reasons stated in the Statement of Decision, it is hereby ordered that:

1. The petition for writ of mandate filed in this action is denied; and

2. The preliminary injunction order issued in this action is dissolved as of the filing of the Notice of Entry of Judgment in this matter.

IT IS SO ORDERED.

Date: Dec. 29, 2016

Hon. Lydia M. Villarreal

Approved as to form:

Date: 12/6/16

Scott J. Allen
Attorney for Petitioners

Date: December 2, 2016

Nathaniel Kane
Attorney for Intervenor

EXHIBIT 1

SUPERIOR COURT OF CALIFORNIA

COUNTY OF MONTEREY

TRIANGLE FARMS, INC., Petitioner, vs. CALIFORNIA WATER QUALITY CONTROL BOARD, CENTRAL COAST REGION, Respondent, ENVIRONMENTAL LAW FOUNDATION, Intervenor.	Case No.: 16CV000257 Statement of Decision

The Petition for Writ of Mandate by Petitioner Triangle Farms, Inc. ("Petitioner") came on for hearing before the Honorable Lydia M. Villarreal on August 19, 2016, at 9:00 a.m., in Department 1.[1] Petitioner, Respondent California Regional Water Quality Control Board, Central Coast Region ("Respondent"), and Intervenor Environmental Law Foundation ("Intervenor") were represented by their respective attorneys. The parties filed supplemental briefs after the hearing. The matter was submitted on September 2, 2016, and the court has fully considered all of the evidence, arguments, and authorities submitted by each party. This Statement of Decision resolves factual and legal disputes as to all matters contained herein.

[1] The Court has issued a separate statement of decision for the case tried concurrently with this matter, *Rava Ranches, Inc., et al. v. California Water Quality Board* (16CV000255) ("*Rava*").

Background

Pursuant to Code of Civil Procedure ("CCP") section 1085, Petitioner seeks issuance of a writ of traditional mandamus against Respondent to compel performance of its duty under Water Code section 13267(b)(2). Specifically, Petitioner seeks a writ of mandate to compel Respondent to *refrain from making un-redacted versions of the "TNA Reports" available for inspection* by the public. (Petitioner's Opening Brief, p. 2:2-6.) Petitioner argues the TNA Reports – reports that disclose the Total Nitrogen Applied (TNA) to crops - might disclose trade secrets or secret processes. Intervenor has made a request for public disclosure of the un-redacted TNA Reports pursuant to the California Public Records Act ("CPRA").

Petitioner commenced this action by filing the complaint/petition ("Petition") on January 26, 2016.[2] Pursuant to a stipulation and order, Intervenor filed its petition in intervention on February 9, 2016. Respondent filed its answer on April 27, 2016.

On January 26, 2016, concurrently with the filing of the Petition, Petitioner filed an ex parte application for a temporary restraining order ("TRO"), declarations by President William Tarp and its counsel in support of the TRO application, and a request to file documents under seal.[3] The court (Hon. Thomas W. Wills) granted the request to file documents under seal and advised that the parties stipulated that no information/documents would be released until after the hearing on the preliminary injunction. Petitioner filed a motion for a preliminary injunction on January 28, 2016. The court (Hon. Susan J. Matcham) granted Petitioner's motion in an order filed on April 1, 2016.

On May 13, 2016, Petitioner filed an opening brief in support of its Petition for Writ of Mandate. On June 10, 2016, Respondent filed its opposing brief, supporting evidence, and a request for judicial notice in support thereof. Intervenor also filed its opposing brief and supporting evidence. Petitioner filed a reply brief on July 1, 2016. At the hearing on August 19, 2016, the parties proffered oral arguments, and Petitioner submitted slides as an

[2] The petitioners in *Rava* ("*Rava* Petitioners") filed their substantially similar petition on the same date.

[3] Petitioner filed a redacted version of Tarp's declaration on January 26, 2016, and an un-redacted version on January 27, 2016.

exhibit. The Court directed the parties to submit supplemental briefs, and advised that the matter would be taken under submission once all filings were received. On August 26, 2016, Petitioner filed a supplemental brief with two exhibits.[4] Respondent and Intervenor filed their respective responsive supplemental briefs on September 2, 2016.

Evidence Submitted

Petitioner relies on the following evidence: (1) a declaration by Petitioner's president, William Tarp ("Tarp"), filed in support of the application for TRO; (2) Petitioner's TNA Reports (Tarp decl., Ex. A); (3) the Petition; (4) Intervenor's Petition in Intervention; (5) Respondent's answer; (6) slides submitted at the hearing; (7) a table listing statutes and portions of the California Constitution that use the phrase "may not" (Petitioner's Supp. Brief, Ex. A); and (8) Assembly Bill 1664 (Stats. 2001, ch. 869) ("AB-1664") (*id.*, Ex. B).[5]

Respondent submits the following evidence: (1) declaration by its water resources control engineer, Monica Barricarte ("Barricarte"); (2) declaration by the senior staff counsel for the State Water Resources Control Board ("State Board"), Jessica Jahr ("Jahr"); (3) declaration by its attorney, Myung J. Park ("Park")[6]; (4) Order WQ 2013-0101, 2013 WL 5958786 ("2013 Order") issued by the State Board (Park decl., Ex. 1); (5) Order No. R3-2012-0011 issued by Respondent, as modified by the 2013 Order ("the Agricultural Order") (*id.*, Ex. 2); (6) a blank Total Nitrogen Applied Report form ("TNA Form") for 2015 (*id.*, Ex. 3); (7) TNA Form for 2014 (*id.*, Ex. 4); (8) Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (Cal. Code Regs., tit. 23, § 2915) issued by the State Board (*id.*, Ex.

[4] The *Rava* Petitioners filed a supplemental brief with a footnote stating that Petitioner in this case joins in its submission in lieu of filing its own separate brief. No supplemental brief or motion for joinder has been filed with the Court under the case number for Petitioner's case. That being said, since neither Respondent nor Intervenor has objected to this procedure, the Court will construe the *Rava* Petitioners' supplemental brief as a supplemental brief filed by Petitioner.

[5] Petitioner did not submit evidence with the opening brief or reply brief. Rather, it states that the brief is supported by: (a) Tarp's declaration in support of the TRO application; (b) the Petition; (c) "the other pleadings on file in this case"; and (d) "such other and further matters as may be presented to the Court in Petitioner's reply brief or during the hearing on the petition." (Petitioner's Opening Brief, at p. 2:6-10.) The other pleadings on file in this case are the Petition in intervention and the answer. Petitioner submitted slides as an exhibit at the hearing and two exhibits attached to the supplemental brief.

[6] One document contains Respondent's request for judicial notice and Park's declaration.

5); (9) Resources for Growers, Protection of Trade Secrets, Secret Processes, and Private Information issued by Respondent on January 28, 2013 (*id.*, Ex. 6); (10) instructions for reporting information in the TNA Form ("TNA Form Instructions") issued by Respondent, December 10, 2015 version (*id.*, Ex. 7); and (11) TNA Form Instructions issued by Respondent, May 29, 2014 version (*id.*, Ex. 8).[7]

Intervenor proffers the following evidence: (1) declaration by its attorney, Nathanial Kane ("Kane"); (2) the Agricultural Order (Kane's decl., Ex. A); (3) TNA Forms for 2014 and 2015 (*id.*, Ex. B); (3) Intervenor's CPRA request for all TNA Reports for all Tier 2 and Tier 3 dischargers for the reporting periods ending in 2014 and 2015, dated November 2, 2015 (*id.*, Ex. C); (4) Respondents' letter (dated 11/12/15) to Intervenor advising that all requested reports that did not involve an assertion of trade secrets were attached; it was reviewing the reports that involved an asserted trade secret; and it would later disclose all reports that were not exempt under CPRA (*id.*, Ex. D); (5) Respondent's letter (dated 1/5/16) to all reporting entities inviting them to submit additional justifications against disclosure (*id.*, Ex. E); (6) Respondent's letter (dated 1/20/16) to all reporting entities advising that their TNA Reports did not contain trade secrets, were not otherwise exempt from disclosure, and would be released in response to the CPRA request (*id.*, Ex. F); (7) Respondent's final letter (dated 1/29/16) to Intervenor in response to the CPRA request, advising that all TNA Reports would be delivered to Intervenor with the exception of the two operations that sought TROs/preliminary injunctions to prevent the release of said reports (*id.*, Ex. G).

No objections have been submitted.

Legal Standard

"A writ of mandate may be issued by any court to any . . . board, or person, to compel the performance of an act which the law specially enjoins, as a duty resulting from an office, trust, or station . . ." (CCP, § 1085, subd. (a)) where there is no plain, speedy, and adequate remedy at law

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[7] Respondent's unopposed request for judicial notice of all 8 exhibits is GRANTED. (See Evid. Code, § 452, subds. (c) & (h); see also Evid. Code, § 453; see also *Rodas v. Spiegel* (2001) 87 Cal.App.4th 513, 518; see also *Hogen v. Valley Hospital* (1983) 147 Cal.App.3d 119, 125; see also *Souza v. Westlands Water Dist.* (2006) 135 Cal.App.4th 879, 886, fn. 1.)

(CCP, § 1086). To obtain relief, a petitioner must demonstrate (1) no plain, speedy, and adequate alternative remedy exists; (2) a clear, present, ministerial duty on the part of the respondent; and (3) a correlative clear, present, and beneficial right in the petitioner to the performance of that duty. (*People v. Picklesimer* (2010) 48 Cal.4th 330, 339-340.) It is "well settled that where a statute requires an officer to do a prescribed act upon a prescribed contingency, his functions are ministerial, and upon the happening of the contingency the writ may be issued to control his action." (*Drummey v. State Board of Funeral Directors and Embalmers* (1939) 13 Cal.2d 75, 83.)

The court will address whether

1. Petitioner has shown that there is no plain, speedy and adequate remedy in the ordinary course of law;
2. There is a clear, present ministerial duty on the part of Respondent;
3. Petitioner has shown a clear, present corresponding right to compel performance of that duty, including the occurrence of any contingency required to trigger Respondent's duty.

No Plain, Speedy, and Adequate Legal Remedy

The petitioner must show that there is no plain, speedy and adequate remedy in the ordinary course of law. (See *Flores v. California Department of Corrections and Rehabilitation* (2014) 224 Cal.App.4th 199, 206.) The determination is largely within the trial court's discretion and depends upon the circumstances of the case. (*Ibid.*)

Petitioner alleges that it has no adequate remedy available in the course of law. (Compl., ¶ 13.) Respondent and Intervenor do not dispute this allegation. The Court therefore finds that Petitioner has shown that there is no plain, speedy and adequate legal remedy.

Ministerial Duty

The petitioner must show a clear, present ministerial duty on the part of the respondent. (*People v. Picklesimer*, *supra*, 48 Cal.4th, at pp. 339-340.) "A ministerial duty is an obligation to perform a specific act in a manner prescribed by law whenever a given state of facts exists, without regard to any personal judgment as to the propriety of the act. (*Kavanaugh v. West*

Sonoma County Union High School Dist. (2003) 29 Cal.4th 911, 916, 129 Cal.Rptr.2d 811, 62 P.3d 54.)" (*People v. Picklesimer* (2010) 48 Cal.4th 330, 340.) Generally, mandamus may only be employed to compel the performance of a duty that is purely ministerial in character. (*Mooney v. Garcia* (2012) 207 Cal.App.4th 229, 232-233.) Whether a statute imposes a ministerial duty, for which mandamus will lie, or a mere obligation to perform a discretionary function is a question of statutory interpretation. (*Id.*, at p. 233.)

"In interpreting a statutory provision, 'our task is to select the construction that comports most closely with the Legislature's apparent intent, with a view to promoting rather than defeating the statutes' general purpose, and to avoid a construction that would lead to unreasonable, impractical, or arbitrary results.' (*Copley Press, Inc. v. Superior Court* (2006) 39 Cal.4th 1272, 1291, 48 Cal.Rptr.3d 183, 141 P.3d 288.)" (*Poole v. Orange County Fire Authority* (2015) 61 Cal.4th 1378, 1385.) "Words must be construed in context, and statutes must be harmonized, both internally and with each other, to the extent possible." (*Tuolumne Jobs & Small Business Alliance v. Superior Court* (2014) 59 Cal.4th 1029, 1037.)

Under the rules of statutory interpretation, the court first consults the statutory language, giving words "their usual and ordinary meaning." (*DaFonte v. Up-Right, Inc.* (1992) 2 Cal.4th 593, 601.) If the language is unambiguous, then no statutory construction is necessary. (*Ibid.*) If the statutory language is ambiguous, then the court may also consider extrinsic evidence, such as the ostensible objects to be achieved, the legislative history, public policy, contemporaneous administrative construction, and the statutory scheme. (*People v. Zambia* (2011) 51 Cal.4th 965, 972; see also *County of Santa Clara v. Perry* (1998) 18 Cal.4th 435, 442.)

In a traditional mandamus proceeding, even if mandatory language appears in the statute, the duty is discretionary if the entity must exercise significant discretion to perform the duty. (*Mooney v. Garcia*, *supra*, 207 Cal.App.4th, at p. 233; *AIDS Healthcare Foundation v. Los Angeles County Dept. of Public Health* (2011) 197 Cal.App.4th 693, 701.) Thus, in addition to examining the statutory language, the court must examine the entire statutory scheme to determine whether the entity has discretion to perform a mandatory duty. (*Mooney v. Garcia*,

supra, 207 Cal.App.4th, at p. 233; *Weinstein v. County of Los Angeles* (2015) 237 Cal.App.4th 944, 965.)

I. Does Water Code section 13267 (b)(2) Impose a Mandatory Duty to keep TNA Reports Confidential?

According to Petitioner, the issue presented is whether Water Code section 13267(b)(2) imposes a mandatory duty on Respondent to refrain from disclosing Petitioner's un-redacted TNA Reports. Water Code section 13267(b)(2) provides, in relevant part: "*When requested by the person furnishing a report*, the portions of a report that might disclose trade secrets or secret processes *may not be made available* for inspection by the public . . . ." (Wat. Code, § 13267, subd. (b)(2).) Emphasis added.

Petitioner argues Water Code section 13267(b)(2): (1) denotes a mandatory duty by the use of the phrase "may not"; and (2) provides an absolute exemption under the CPRA for reports "when requested by the person furnishing a report" (such as Petitioner) asserts that the documents might disclose trade secrets.

A. Is "May Not" Mandatory or Permissive?

Respondent's arguments focus on the statutory language that arguably forbids release of the records: "the portions of a report that might disclose trade secrets or secret processes *may not* be made available for inspection by the public . . . ." (Wat. Code, § 13267, subd. (b)(2).). The pertinent language is "may not." Petitioner persuasively argues that the usual and ordinary meaning of "may not" imposes a mandatory prohibition, as demonstrated in *Woolls v. Superior Court* (2005) 127 Cal.App.4th 197 ("*Woolls*").[8] In *Woolls*, the court acknowledged that, generally speaking, the word "may" is permissive and the word "shall" is mandatory. (*Woolls*, *supra*, 127 Cal.App.4th, at p. 208.) In that case, however, "the pertinent language is 'may not,' rather than 'may' . . . ." (*Id.*, at pp. 208-209.) "'May not' is prohibitory, as opposed to

[8] Petitioner's reliance on other statutes, constitutional provisions, literary references, and a hypothetical involving schoolchildren as examples of "may not" being used to denote a mandatory prohibition is misguided. Aside from *Woolls*, Petitioner proffers no legal authority or analysis to support its contention that the phrase "may not," as used in those examples, may be properly construed as a mandatory prohibition.

permissive." (*Id.*, at p. 209.) Thus, Petitioner has shown that the usual and ordinary meaning of the phrase "may not" is an unambiguous mandatory prohibition.

Assuming *arguendo* that "may not" is ambiguous, the court may rely on extrinsic evidence, such as legislative history information, to interpret the statute. (See, e.g., *County of Santa Clara v. Perry* (1998) 18 Cal.4th 435, 442.) In 2001, the Legislature passed AB-1664 to amend various provisions in the Water Code, including Water Code section 13267(b)(2). Before the amendments came into effect, Water Code section 13237(b)(2) stated, in relevant part, that "portions of a report *which* might disclose trade secrets or secret process *shall not* be made available for inspection by the public." (Former Water Code, § 13267, subd. (b)(2), as amended by Stats. 1992, ch. 729, emphasis added.) AB-1664 changed "which" to "that," and "shall not" to "may not," such that this aspect of the statute now states that "portions of a report *that* might disclose trade secrets or secret process *may not* be made available for inspection by the public." (Water Code, § 13267, subd. (b)(2), as amended by Stats. 2001, ch. 869, § 3, emphasis added.) Analyses for AB-1664 refer to the changes as "technical and clarifying amendments." [See Assem. Com. on Environmental Safety and Toxic Materials, Analysis of Assem. Bill 1664 (2001-2002 Reg. Sess.) April 3, 2001; see also Assem. Floor, Analysis of Assem. Bill 1664 (2001-2002 Reg. Sess.) June 5, 2001, as amended June 5, 2001.] The legislative history therefore shows that the Legislature merely intended for this change to be a technical update, as opposed to a change in the protection afforded by the statute.

Lastly, the court must examine the entire statutory scheme to determine whether the entity has discretion to perform a mandatory duty. (See *Mooney v. Garcia*, *supra*, 207 Cal.App.4th, at p. 233; see also *Weinstein v. County of Los Angeles*, *supra*, 237 Cal.App.4th, at p. 965.) Water Code section 13267 (b)(2) is a provision in the Porter-Cologne Water Quality Control Act (Wat. Code, Div. 7, § 13000 et seq.) ("Porter-Cologne Act"). The Porter-Cologne Act does not define "may not." However, many other provisions in the Porter-Cologne Act that use "may not" were amended by AB-1668 to state "may not" instead of "shall not" in 2001. (See, e.g., Wat. Code, §§ 13261, 13350, & 13385, as amended by Stats. 2001, ch. 869, §§ 1, 5, & 7.) Legislative history materials suggest that these were merely technical and clarifying

amendments, and the Legislature did not intend to substantively change the law. [See, e.g., Assem. Floor, Analysis of Assem. Bill 1664 (2001-2002 Reg. Sess.) June 5, 2001, as amended June 5, 2001.] Simply put, nothing in the larger statutory scheme suggests that the phrase "may not" imposes a discretionary duty.

Accordingly, the use of the phrase "may not" in Water Code section 13267, subdivision (b)(2) denotes a mandatory duty, so long as the facts triggering the duty are present.

B. Does Water Code section 13267(b)(2) Mandate Non-Disclosure Whenever Requested by the Person Furnishing the Report?

According to Petitioner, if Petitioner requests nondisclosure based on an assertion of trade secrets, Respondent cannot release the documents. It is undisputed that when no California Public Record Act (CPRA) request for records has been made, Water Code section 13267 (b)(2) provides that the regional board cannot make available for public inspection the portion of any report that might disclose trade secrets or secret processes.

Here, however, the question presented is whether and to what extent Water Code section 13267 (b)(2) provides protection when a CPRA request for records has been made. Intervenor and Respondent argue that to determine whether Water Code section 13267 (b)(2) mandates non-disclosure, the court must look to a different statute – the California Public Records Act (CPRA). This necessarily requires Water Code section 13267 (b)(2) to be construed in context of both the Porter-Cologne Act (Water Code, Div. 7 section 13000, et seq.) and the CPRA.

As an initial matter, the reports referenced in Water Code section 13267 (b)(2) will only be subject to the CPRA's general rule requiring disclosure if the reports fall within the CPRA's definition of "public records." (See Gov. Code, § 6263, subd. (a).) The CPRA defines "public records" to include "any writing containing information relating to the conduct of the public's business prepared, owned, used, or retained by any state or local agency regardless of physical form or characteristics." (Gov. Code, § 6252, subd. (e).) Local agency includes any board. (*Id.*, subd. (a).) The reports at issue in Water Code section 13267 (b)(2) are monitoring reports required by, submitted to, and maintained by regional water boards, and such reports are relevant

to the regional boards' business. (See Wat. Code, § 13267, subds. (a)-(b).) Accordingly, the reports at issue in Water Code section 13267 (b)(2) are public records under the CPRA.

Both the Porter-Cologne Act and the CPRA provide that, as a general rule, such reports/records are to be made available for public inspection. (See Wat. Code, § 13267 (b)(2); see also Wat. Code, § 13269 (a)(2); see also Gov. Code, § 6263 (a).) The Porter-Cologne Act does not contain any procedure applicable to determine whether reports/records should be disclosed, or if they are protected from disclosure, in response to a CPRA request.

According to Intervenor and Respondent, once a CPRA request has been made and the requested record qualifies as a public record (see Gov. Code, § 6252, subd. (e)), *CPRA requires public disclosure unless a CPRA exemption applies*. (See Gov. Code, § 6253.) To determine whether a CPRA exemption exists the court must first consult the statutory language. (See *DaFonte v. Up-Right, Inc.*, *supra*, 2 Cal.4th, at p. 601.) If the statutory language is ambiguous, then the court may rely on extrinsic evidence, such as the ostensible objectives to be achieved, the legislative history, public policy, and contemporaneous administrative construction. (*People v. Zambia*, *supra*, 51 Cal.4th, at p. 972; see also *County of Santa Clara v. Perry*, *supra*, 18 Cal.4th, at p. 442.) The court must also examine the entire statutory scheme. (See *Mooney v. Garcia*, *supra*, 207 Cal.App.4th, at p. 233; see also *Weinstein v. County of Los Angeles*, *supra*, 237 Cal.App.4th, at p. 965.) "Words must be construed in context, and statutes must be harmonized, both internally and with each other, to the extent possible." (*Tuolumne Jobs & Small Business Alliance v. Superior Court*, *supra*, 59 Cal.4th, at p. 1037.) The court seeks to avoid a construction that would lead to unreasonable, impractical, or arbitrary results. (*See Poole v. Orange County Fire Authority*, *supra*, 61 Cal.4th, at p. 1385.)

In contrast to the Porter-Cologne Act, the CPRA sets forth a mandatory duty to disclose public records in response to a request for public records by a member of the public. The CPRA also sets forth exemptions to the disclosure requirement. Specifically, the CPRA's statutory language unambiguously imposes a separate ministerial duty in response to a CPRA request for public records: "Except with respect to records exempt from disclosure by *express provisions of law, each state or local agency, upon a request for a copy of records . . . , shall make the records*

promptly available to any person . . ." by providing copies of said records to the person. (Gov. Code, § 6263, subd. (b).) The CPRA enumerates various statutory exemptions, including (a) the exemption for *air pollution* data discussed in *Masonite Corp. v. County of Mendocino Air Quality Management Dist.* (1996) 42 Cal.App.4th 436 ("*Masonite*"). (See Gov. Code, § 6254.7 and the qualified *trade secret* exemption discussed in *Uribe v. Howie* (1971) 19 Cal.App.3d 194 ("*Uribe*"). (See Gov. Code, § 6254, subd. (k); see also Evid. Code, § 1060).

Under CPRA, the only exemption that could prevent public disclosure of TNA monitoring reports in response to a CPRA request is Government Code section 6254, subdivision (k).[9] That provision incorporates exemptions allowed under state and federal law, including provisions in the Evidence Code relating to privilege. (See Gov. Code, § 6264, subd. (k).) The Evidence Code provides a qualified trade secret privilege (see Evid. Code, § 1060) for information that falls within the definition of a trade secret under the California Uniform Trade Secrets Act ("CUTSA") (see Evid. Code, § 1061, subd. (a)(1)).

It is Petitioner's position that Water Code section 13267 (b)(2) is an absolute exemption to Intervenor's CPRA request for monitoring reports that might contain trade secrets. It insists that this protection applies after a CPRA request for the reports has been made, and is distinct from CPRA's qualified trade secret exemption.[10]

Strong policy considerations militate in favor of interpreting Water Code section 13267(b)(2) as providing a qualified trade secret exemption – thus requiring a balancing of interests if the information qualifies as trade secrets. (See *Uribe*, *supra*, at p. 206.) Petitioner cites the 2013 Order (Petitioner's Reply, at p. 6:16-17, fn. 2) proffered by Respondent (Park decl., Ex. 1). In the 2013 Order, the State Board advised that trade secrets in TNA Reports could be released in response to a CPRA request, depending on the outcome of a balancing test,

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[9] The exemption for air pollution data (see Gov. Code, § 6254.7) does not apply to the monitoring reports authorized under the Porter-Cologne Act (see Wat. Code, § 13267, subds. (a)-(b)), and Petitioner's reliance on *Masonite* is misplaced.

[10] Petitioner's reliance on OSHA is misplaced because the cited provisions do not provide absolute protection from public disclosure in response to a CPRA request. (See 29 U.S.C. § 664; see also 29 C.F.R. § 1903.9.)

pursuant to Water Code section 13267 (b)(2) and Government Code section 6254 (k). (Park decl., Ex. 1.) This buttresses the interpretation that Water Code section 13267 (b)(2) should be construed to provide the same qualified trade secret protection as the CPRA exemption and is subject to a balancing test. In contrast, nothing in the Porter-Cologne Act or the CPRA suggests that monitoring reports are subject to any special exemption from disclosure in response to a CPRA request. No legal authority or extrinsic evidence has been provided to support Petitioner's interpretation.

Therefore, Petitioner has failed to show that Water Code section 13267(b)(2) imposes a mandatory duty on Respondent to *refrain* from providing copies of reports that might contain trade secrets to members of the public in response to a CPRA request.

In light of the foregoing, Water Code section 13267, subdivision (b)(2) imposes a different duty on a regional board depending on whether a CPRA request has been made:

1. If no CPRA request has been made, then Water Code section 13267 (b)(2) imposes a mandatory duty on Respondent to refrain from making portions of a report available for public inspection when (1) requested by the person furnishing a report, and (2) the portions of the report might disclose trade secrets.
2. If a CPRA request for the records has been made, then Water Code section 13267(b)(2) imposes a mandatory duty on Respondent to refrain from releasing portions of a report to the public when
    a. requested by the person furnishing a report,
    b. the report *contains trade secrets* as defined by CUTSA; and
    c. *the interest* in maintaining the confidentiality of the trade secrets *outweighs* the public interest in disclosure. (See Wat. Code, § 13267, subd. (b)(2); see also Gov. Code, § 6254, subd. (k); see also Evid. Code, §§ 1060 & 1061, subd. (a)(1); see also *Uribe*, *supra*, at p. 206.)

Therefore, the court must now examine each of these elements.

The evidence shows that a CPRA request for public disclosure of the un-redacted TNA Reports has been made (Petition, ¶¶ 6-7) and these reports are public records as defined by CPRA. (Petition, ¶¶ 2-5 & 8; Petition in Intervention, ¶ 7; Kane decl., Ex. G; Tarp decl., Ex. A; see also Gov. Code, § 6252, subds. (e) & (f)(1).)

The court must examine whether the TNA reports contain trade secrets and, if so, does the interest in maintaining confidentiality of the trade secrets outweigh the public interest in disclosure. (See Wat. Code, § 13267, subd. (b)(2); see also Gov. Code, § 6254, subd. (k); see also Evid. Code, §§ 1060 & 1061, subd. (a)(1); see also *Uribe*, *supra*, at p. 206.)

II. Do the TNA Reports Contain Trade Secrets Thereby Prohibiting Public Disclosure?

California Uniform Trade Secrets Act's ("CUTSA") definition of a trade secret applies. Under CUTSA, "trade secret" means "means information, including a formula, pattern, compilation, program, device, method, technique, or process, that: [¶] (1) Derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use; and [¶] (2) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy." (Civ. Code, § 3426.1, subd. (d).)

A. Do the TNA Reports Contain Information from which Others Can Obtain Economic Value?

Petitioner asserts that the TNA Reports contain proprietary formulas and methods. However, the evidence submitted in support of its petition does not support its claim. Petitioner's evidence shows that the information at issue in the TNA Reports consists of data showing the types of crops it plants, acreage, annual aggregate totals of nitrate levels, and average nitrate concentrations. (Tarp decl., Ex. A.) Tarp declares that the TNA Reports disclose the level of nitrogen in the soil, the level of nitrogen in the water, and the total amount of nitrogen applied to each crop for the yearlong reporting period. (Tarp decl., ¶ 12.) He further declares that Petitioner "firmly believes" that such data, "if made public, would reveal its proprietary trade secrets and/or secret processes." (*Ibid.*) Tarp describes the formulas/methods at issue and the effort and expense

incurred to develop said formulas/methods, and states that the data in the TNA Reports disclose several of the variables that Petitioner inputs into its proprietary formula to create its unique proprietary fertilizer blend. (*Id.*, ¶¶ 3-4, 6, 8-9, & 11.) According to Tarp, the data in the TNA Reports may be used by its competitors to learn its confidential and proprietary formulas and methods related to fertilizer and irrigation mixing and application. (*Id.* ¶¶ 2, 4, 6, & 15.)

Petitioner cites *U.S. v. Chung* (9th Cir. 2011) 659 F.3d 815, 824, for the proposition that "[i]n assessing whether information derives value from not being generally known, courts look chiefly to whether the information provides a competitive economic advantage."[11] Petitioner contends that it derives economic/competitive benefits from maintaining its formulas and methods in confidence.

Respondent and Intervenor assert that the TNA Reports omit most of the underlying data that Petitioner's competitors and others would need to know in order to learn its proprietary formulas/methods. For example, the TNA Reports do not disclose information about the length of growing/harvesting cycles per crop, the number of cycles per year, crop rotations, or the timing and frequency of fertilizer application. (Tarp decl., Ex. A; Barricarte decl.) The State Board "see[s] the timing and frequency of applications, which are not required to be reported, rather than data regarding total amount, as more relevant to competitive business practices." (Park decl., Ex. A, at p. *33, fn. 104.) The State Board does not consider the data sought by the TNA Form to be sensitive proprietary information. (*Id.*, Ex. A, at pp. *20, & *33, fn. 104.) Additionally, in his declaration, Tarp states that Petitioner's nitrate fertilizer formula is based on several transitory variables, such as weather and the age of the crop. (Tarp decl., ¶¶ 6, 8-9, & 11.) Such transitory data is not disclosed in the TNA Reports, and the variables that are disclosed—such as acreage and amount of nitrate applied to a particular crop on a particular property—would be affected by transitory conditions. (*Id.*, Ex. A.) Therefore, competitors would not be able to apply information derived from the TNA Reports to their own farming practices, and

[11] Petitioner's reliance on *Lion Raisins v. U.S. Dept. of Agriculture* (9th Cir. 2004) 354 F.3d 1072 is misplaced because that decision does not discuss CUTSA or CPRA; rather, it discusses the distinct definition of trade secret under the Freedom of Information Act.

Petitioner would not sustain any economic or competitive injury from disclosure of the TNA Reports. (See *Uribe*, *supra*, at pp. 208-209.)

Even though Petitioner might derive some value from maintaining its formulas, methods, and procedures in confidence, it has not shown that the TNA Reports actually contain trade secrets – that is - information from which it derives economic value from not being generally known to others trade secrets. In other words, Petitioner has not met its burden in showing the TNA Reports disclose trade secret formulas/methods, or sufficient underlying data from which such trade secrets may be derived.

B. Has Petitioner Shown It Has Made efforts to Maintain Confidentiality?

With respect to the efforts to maintain confidentiality, Petitioner contends that it made reasonable efforts to maintain its formulas/methods in confidence. (Tarp decl., ¶¶ 3-4, 7, & 10.) However, the only evidence Petitioner submits to show efforts to maintain the underlying data disclosed in the TNA Reports in confidence is (1) the form itself and (2) this Petition. The court concludes that more evidence is needed for Petitioner to meet its burden to show reasonable efforts to maintain information disclosed in the TNA Reports in confidence.

Accordingly, Petitioner has not met its burden to show that the TNA Reports contain information that falls within CUTSA's definition of a trade secret. It follows that Petitioner has not shown that it is entitled to compel Respondent to perform its mandatory statutory duty to refrain from disclosing the TNA Reports.

III. Does the Interest in Maintaining Confidentiality Outweigh the Public Interest in Disclosure?

Assuming arguendo, Petitioner is able to show that the TNA Reports contain trade secrets as defined by CUTSA, Respondent may nevertheless release the reports to Intervenor in response to the CPRA request if the public interest in favor of disclosure outweighs the interest in confidentiality. (See Gov. Code, § 6254, subd. (k); see also Evid. Code, § 1060; see also *Uribe*, *supra*, at pp. 209-210.) The court must balance the maintenance of trade secrets in confidence against the public interest in disclosure to determine whether the exemption will be allowed

under Evidence Code section 1060 and Government Code section 6254, subdivision (k). (See *Uribe*, *supra*, at p. 206.)

As Intervenor correctly notes, Petitioner does not argue that the balancing test weighs against disclosure. In evaluating the balancing test, the court considers Petitioner's evidence pertaining to the underlying information disclosed in the TNA Reports and its asserted trade secret formulas, methods, and procedures. (Tarp decl., ¶¶ 3-12 & 15, & Ex. A.) As discussed above, Petitioner's evidence is insufficient to show that the information disclosed in the TNA Reports constitutes a trade secret under CUTSA. To the extent Petitioner has an interest in maintaining the confidentiality of the data disclosed in the TNA Reports, that interest is minimal. In contrast, Intervenor and Respondent submit evidence showing the comparatively strong public interest in obtaining the information disclosed in the TNA Reports. (Park decl., Exs. 1 & 2; Kane decl., ¶¶ 3-5; Barricarte decl.) The court finds that Petitioner's interest in maintaining the TNA Reports in confidence is outweighed by the public interest in favor of disclosure.

Disposition

To obtain a writ of traditional mandamus, the Petitioner must demonstrate that the Respondent has a present ministerial duty, and the Petitioner has a present correlative beneficial right to performance. (See *People v. Picklesimer*, *supra*, 48 Cal.4th, at pp. 339-340.) A ministerial duty arises whenever a given state of facts exists. (See *id.*, at p. 340, citing *Kavanaugh v. West Sonoma County Union High School Dist.* (2003) 29 Cal.4th 911, 916.) If a statute requires a prescribed act upon a contingency, then the court may issue a writ to compel performance upon the happening of the contingency. (See *Drummey v. State Board of Funeral Directors and Embalmers* (1939) 13 Cal.2d 75, 83.) Thus, to obtain a writ of mandate, Petitioner must show that all of the factual prerequisites that trigger the duty have occurred.

Petitioner has not shown that it is entitled to compel performance of Respondent's duty to refrain from disclosing the un-redacted TNA Reports in response to Intervenor's CPRA request. The petition for writ of traditional mandamus is respectfully DENIED.

The Court directs Respondent to prepare an order consistent with this ruling, present it to Petitioner's counsel and Intervenor's counsel for approval as to form, and return it to this Court for signature.

Dated: NOV 15 2016

Lydia M. Villarreal

Hon. Lydia M. Villarreal
Judge of the Superior Court

CERTIFICATE OF MAILING

(Code of Civil Procedure Section 1013a)

I do hereby certify that I am employed in the County of Monterey. I am over the age of eighteen years and not a party to the within stated cause. I placed true and correct copies of the STATEMENT OF DECISION for collection and mailing this date following our ordinary business practices. I am readily familiar with the Court's practices for collection and processing correspondence for mailing. On the same day that correspondence is placed for collection and mailing, it is deposited in the ordinary course of business with the United States Postal Services in Salinas, California, in a sealed envelope with postage fully prepaid. The names and addresses of each person to whom notice was mailed is as follows:

Scott J. Allen
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2511 Garden Road Suite A-225
Monterey, CA 93940

Gary Scott Alexander
Deputy Attorney General
455 Golden Gate Avenue
San Francisco, CA 94102-7004

Cherokee D.M. Melton
Staff Attorney
FIRST AMENDMENT PROJECT
1736 Franklin Street, 9th Floor
Oakland, CA 94612

Dated: NOV 15 2016

Teresa A. Risi, Clerk of the Superior Court,

Sally Lopez, Deputy Clerk

Sally Lopez

DECLARATION OF SERVICE BY E-MAIL

Case Name: **Triangle Farms, Inc. v. CA Regional Water Quality Control Board, Central Coast Region**

Case No.: **16-CV-000257**

I declare:

I am employed in the Office of the Attorney General, which is the office of a member of the California State Bar, at which member's direction this service is made. I am 18 years of age or older and not a party to this matter. I am familiar with the business practice at the Office of the Attorney General in the ordinary course of business.

On December 7, 2016, I served the attached **[PROPOSED] ORDER DENYING PETITION FOR WRIT OF MANDATE; [PROPOSED] JUDGMENT DENYING PETITION FOR WRIT OF MANDATE** by transmitting a true copy via electronic mail. In addition, I placed a true copy thereof enclosed in a sealed envelope, in the internal mail system of the Office of the Attorney General, addressed as follows:

Cherokee Melton
E-mail: cmelton@thefirstamendment.org

Environmental Law Foundation
E-mail: mailto:ELFservice@envirolaw.org

Scott J. Allen
E-mail: scott@sjallenlaw.com

I declare under penalty of perjury under the laws of the State of California the foregoing is true and correct and that this declaration was executed on December 7, 2016, at San Francisco, California.

L. Rodriguez
Declarant

Signature

SF2016400164
41652222.doc

ATTACHMENT 5

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401-7906

RESOLUTION NO. R3-2017-0004

Adopting the Human Right to Water as a Core Value and Directing Its Implementation in Central Coast Water Board Programs and Activities

WHEREAS, the California Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board) finds that:

1. With the enactment of Water Code section 106.3, on September 25, 2012, California became the first state in the nation to recognize legislatively the human right to water, following two other state's recognition of the right in their respective constitutions.

2. On February 16, 2016, the State Water Resources Control Board (State Water Board) adopted a resolution that identified the human right to water as a top priority and core value of the state and regional Water Boards, and affirmed the State Water Board's commitment to consider how its activities impact and advance the human right to safe, affordable and clean water to support basic human needs. (Resolution No. 2016-0010.)

3. Water Code section 106.3 provides, in full:

   (a) It is hereby declared to be the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.

   (b) All relevant state agencies, including the [D]epartment [of Water Resources], the state board, and the State Department of Public Health, shall consider this state policy when revising, adopting, or establishing policies, regulations, and grant criteria when those policies, regulations, and criteria are pertinent to the uses of water described in this section.

   (c) This section does not expand any obligation of the state to provide water or to require the expenditure of additional resources to develop water infrastructure beyond the obligations that may exist pursuant to subdivision (b).

   (d) This section shall not apply to water supplies for new development.

   (e) The implementation of this section shall not infringe on the rights or responsibilities of any public water system.

4. Effective July 1, 2014, the State's Drinking Water Program was transferred from the California Department of Public Health to the State Water Board.

5. To reflect the expanded scope of the State Water Board's public health responsibility, on February 3, 2015, the State Water Board clarified and revised its mission statement as follows: "To preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment,

public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations."

6. The Central Coast Water Board recognizes that a wide range of its activities and projects may involve the human right to water, as defined in Water Code section 106.3, subdivision (a).

7. Preventing and/or addressing discharges that could threaten human health by causing or contributing to pollution or contamination of drinking water sources of waters of the state, are the Central Coast Water Board's highest priorities. Such discharges should be regulated to attain the highest water quality which is reasonable, considering all demands being made on those waters and the total values involved. (Wat. Code, §§ 13000, 13050, subds. (i)-(m), 13240, 13241, 13263.)

8. The Federal Water Pollution Control Act Amendments of 1972, as amended (33 U.S.C. § 1251 et seq. (Clean Water Act)), and the Porter-Cologne Water Quality Control Act (Wat. Code, Div. 7, § 13000 et seq.) require the Central Coast Water Board to protect all beneficial uses of water, including municipal or domestic water sources (MUN) to ensure their suitability for those uses in water quality control planning and permitting actions. (Wat. Code, §§ 13241, 13263, subd. (a), 13050, subds. (f) and (h).)

9. The State Water Board's Sources of Drinking Water Policy (Resolution No. 88-63) as incorporated into the Central Coast Water Board's water quality control plan, establishes a presumption that all surface and groundwaters of the state are "suitable, or potentially suitable, for municipal or domestic water supply."

10. The Central Coast Water Board administers the Sources of Drinking Water Policy through its water quality control plan by designating water bodies as suitable, or potentially suitable, for municipal or domestic water supply (MUN).

11. The State Water Board's Anti-Degradation Policy (Resolution No. 68-16), establishes the policy of the state to regulate disposal of wastes into surface and groundwaters "to achieve the highest water quality consistent with maximum benefit to the people of the State."

12. Considerations relevant to the affordability of water for human consumption, cooking, and sanitary purposes include economic and cost factors, water supply operation and maintenance expenses, and household incomes.

13. Central Coast Water Board staff routinely provide status reports to the Central Coast Water Board on environmental justice activities, including implementation of the human right to water in disadvantaged communities with impacted groundwater. On February 27, 2015 and March 7, 2016, Central Coast Water Board Members participated in environmental justice tours to meet with community members to discuss their successes and challenges associated with drinking water contamination.

14. In consideration of the legislative enactment of the human right to water and the Water Board's ongoing efforts to consider or promote attainment of that right, it is appropriate for the Central Coast Water Board to provide clear guidance to staff in administering programs that affect the human right to water.

THEREFORE BE IT RESOLVED THAT:

The Central Coast Water Board:

1. Adopts the human right to water as a core value and adopts the realization of the human right to water and protecting human health as the top priorities.

2. Will promote achievement of the human right to water through effective prioritization, implementation, outreach and participation, performance monitoring and reporting, and partnership.

3. Will continue to consider the human right to water in all activities that could affect existing or potential sources of drinking water, including, but not limited to, revising or establishing water quality control plans, policies, non-point source programs, permitting, site remediation, monitoring, and enforcement. However, this resolution does not expand the legal scope of the human right to water as described in Water Code section 106.3, alter the Central Coast Water Board's authority and obligations under applicable law, or impose new requirements on the regulated community.

4. Will promote policies that advance the human right to water and discourage actions that delay or impede opportunities for communities to secure safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.

PRIORITIZATION

5. Directs Central Coast Water Board staff to assist the State Water Board and relevant stakeholders to, as resources allow, develop new or enhance existing systems to collect the data needed to identify and track communities that do not have, or are at risk of not having, safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.

6. Directs Central Coast Water Board staff to prioritize regulatory programs and activities to prevent and/or address discharges that could threaten human health by causing or contributing to pollution or contamination of drinking water sources of waters of the state.

IMPLEMENTATION

7. Directs Central Coast Water Board staff to regulate discharges to minimize loading to attain the highest water quality which is reasonable, considering all demands being made on those waters and the total values involved. (Wat. Code, §§ 13000, 13050, subds. (i)-(m), 13240, 13241, 13263; State Water Board Resolution No. 68-16.)

8. Directs Central Coast Water Board staff to consider affordability and avoid transfer of costs to communities affected by drinking water contamination, when implementing regulatory programs and conducting enforcement activities.

9. Directs Central Coast Water Board staff to provide, when feasible and as resources allow, technical and compliance assistance to disadvantaged communities to develop the capacity

of the recipient community to evaluate solution(s) and select a sustainable approach that supports the human right to water.

10. Directs Central Coast Water Board staff to consider existing law and policies that may be relevant to assessing water safety, cleanliness, affordability, accessibility, adequacy, and sustainability, such as those referred to in recitals 7-10, when considering the human right to water.

11. Directs Central Coast Water Board staff to consider policies that allow for and incentivize local and regional efforts for protecting drinking water and providing replacement water where appropriate while long-term water quality and quantity solutions are developed and implemented, including related to the Sustainable Groundwater Management Act.

12. Directs Central Coast Water Board staff to prepare, implement, and regularly update a work plan that includes specific actions and time schedules to ensure the human right to water is achieved throughout the Central Coast Region.

OUTREACH AND PARTICIPATION

13. Directs Central Coast Water Board staff, as resources allow, to engage meaningfully with communities that lack adequate, affordable, or safe drinking water, including providing community outreach.

14. Directs Central Coast Water Board staff to provide opportunities for communities that lack adequate, affordable, or safe drinking water to engage in Water Board activities and provide meaningful input to Water Board decisions that affect their communities.

15. Directs Central Coast Water Board staff to evaluate the extent to which a proposed project, plan, decision, or action, pertinent to the human right to water, has been developed with meaningful engagement of impacted communities.

16. Directs Central Coast Water Board staff to minimize impediments to data access, and work with the State Water Board and other appropriate agencies to maximize the availability and accessibility of data and information regarding drinking water quality to support the development of solutions and inform all stakeholders, including communities that lack adequate, affordable, or safe drinking water.

PERFORMANCE MONITORING AND REPORTING

17. Directs Central Coast Water Board staff to describe how the right was considered, when submitting a recommendation to the Water Board pertinent to the human right to water.

18. Directs Central Coast Water Board staff to assist the State Water Board and relevant stakeholders in the development of performance measures for the evaluation of the Water Board's progress towards the realization of the human right to water, evaluate that progress, and explore ways to make that information more readily available to the public.

19. Directs Central Coast Water Board staff to provide regular progress reports to the Water Board regarding implementation of the human right to water, and incorporate that information into the Executive Officer's annual report. The report will provide the status of

work plans and their implementation, performance measures and outcomes, and successful strategies that achieved progress in attaining the human right to water and opportunities to address continuing challenges.

PARTNERSHIP

20. Directs Central Coast Water Board staff to explore opportunities, and when practical, in partnership with other governmental agencies or organizations, non-profit organizations, impacted communities, and private businesses, to work toward realizing the human right to water within the Central Coast Water Board's programs and projects.

I, JOHN M. ROBERTSON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Coast Region on 26 January 2017.

John M. Robertson Digitally signed by John M. Robertson
Date: 2017.02.03 11:35:54 -08'00'

JOHN M. ROBERTSON, Executive Officer

ATTACHMENT 6

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
RESOLUTION R5-2016-0018

ADOPTING THE HUMAN RIGHT TO WATER AS A CORE VALUE IN CENTRAL VALLEY WATER BOARD PROGRAMS AND ACTIVITIES

WHEREAS, the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) finds that:

1. With the enactment of Water Code section 106.3, on September 25, 2012, California became the first state in the nation to recognize legislatively the human right to water, following two other state's recognition of the right in their respective constitutions.

2. On February 16, 2016, the State Water Resources Control Board (State Water Board) adopted a resolution that identified the human right to water as a top priority and core value of the state and regional Water Boards, and affirmed the State Water Board's commitment to consider how its activities impact and advance the human right to safe, affordable and clean water to support basic human needs. (Resolution No. 2016-0010.)

3. Water Code section 106.3 provides, in full:

   (a) It is hereby declared to be the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.

   (b) All relevant state agencies, including the department, the state board, and the State Department of Public Health, shall consider this state policy when revising, adopting, or establishing policies, regulations, and grant criteria when those policies, regulations, and criteria are pertinent to the uses of water described in this section.

   (c) This section does not expand any obligation of the state to provide water or to require the expenditure of additional resources to develop water infrastructure beyond the obligations that may exist pursuant to subdivision (b).

   (d) This section shall not apply to water supplies for new development.

   (e) The implementation of this section shall not infringe on the rights or responsibilities of any public water system.

4. Effective July 1, 2014, the State's Drinking Water Program was transferred from the California Department of Public Health to the State Water Board.

5. To reflect the expanded scope of the State Water Board's public health responsibility, on February 3, 2015, the State Water Board clarified and revised its mission statement as follows: "To preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations."

6. The Central Valley Water Board recognizes that a wide range of its activities and projects may involve the human right to water, as established by Water Code section 106.3, subdivision (a).

7. Preventing and/or addressing discharges that could threaten human health by causing or contributing to pollution or contamination of drinking water sources of waters of the state, are among the Central Valley Water Board's highest priorities, and such discharges should be regulated to attain the highest water quality which is reasonable, considering all demands being made on those waters and the total values involved. (Wat. Code, §§ 13000, 13050, subds. (i)-(m), 13240, 13241, 13263.)

8. The Federal Water Pollution Control Act Amendments of 1972, as amended (33 U.S.C. § 1251 et seq. (Clean Water Act)), and the Porter-Cologne Water Quality Control Act (Wat. Code, Div. 7, § 13000 et seq.) require the Central Valley Water Board to protect all beneficial uses of water, including municipal or domestic water sources (MUN) to ensure their suitability for those uses in water quality control planning and permitting actions. (Wat. Code, §§ 13241, 13263, subd. (a), 13050, subds. (f) and (h).)

9. The State Water Board's Sources of Drinking Water Policy (Resolution No. 88-63) as incorporated into the Central Valley Water Board's water quality control plans, establishes that most surface and ground waters of the state are "suitable, or potentially suitable, for municipal or domestic water supply."

10. The Central Valley Water Board administers the Sources of Drinking Water Policy through its water quality control plans by designating water bodies as suitable, or potentially suitable, for municipal or domestic water supply (MUN).

11. Considerations relevant to the affordability of water for human consumption, cooking, and sanitary purposes include economic and cost factors, water supply operation and maintenance expenses, and household incomes.

12. At the March 3, 2015 State Water Board meeting, State Water Board staff reported on the status of the implementation of the human right to water. State Water Board staff presented results of a survey concerning the wide range of activities and projects undertaken by the Water Boards that address the human right to water through actions to protect any existing or potential MUN beneficial use, including but not limited to, basin planning, permitting actions, site remediation, monitoring, and water right administration.

13. In consideration of the legislative enactment of the human right to water and the Water Board's ongoing efforts to consider or promote attainment of that right, it is appropriate for the Central Valley Water Board to provide clear and transparent guidance to staff concerning the manner in which the human right to water continues to be administered.

THEREFORE BE IT RESOLVED THAT:

The Central Valley Water Board:

1. Adopts the human right to water as a core value and adopts the realization of the human right to water as a top priority.

2. Will continue to consider the human right to water in all activities that could affect existing or potential sources of drinking water, including, but not limited to, revising or establishing water quality control plans, policies, permitting, site remediation, and monitoring. However, this resolution does not expand the legal scope of the human right to water as described in Water Code section 106.3, alter the Central Valley Water Board's authority and obligations under applicable law, or impose new requirements on the regulated community.

3. Directs Central Valley Water Board staff to assist the State Water Board and relevant stakeholders to, as resources allow, develop new or enhance existing systems to collect the data needed to identify and track communities that do not have, or are at risk of not having, safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.

4. Directs Central Valley Water Board staff to assist the State Water Board and relevant stakeholders in the development of performance measures for the evaluation of the board's progress towards the realization of the human right to water, evaluate that progress, and explore ways to make that information more readily available to the public.

5. Directs Central Valley Water Board staff to explore opportunities, and when practical, in partnership with other governmental agencies or organizations, non-profit organizations, impacted communities, and private businesses, to work toward realizing the human right to water within the Central Valley Water Board's administration of its programs and projects.

6. Directs Central Valley Water Board staff to provide, when feasible and as resources allow, technical and compliance assistance to disadvantaged communities to develop the capacity of the recipient community to evaluate solution(s) and select a sustainable approach that supports the human right to water.

7. Directs Central Valley Water Board staff to describe how the right was considered, when submitting a recommendation to the board pertinent to the human right to water.

8. Directs Central Valley Water Board staff, as resources allow, to meaningfully engage with communities that lack adequate, affordable, or safe drinking water, including providing community outreach.

9. Directs Central Valley Water Board staff to evaluate the extent to which a proposed project, plan, decision, or action, pertinent to the human right to water, has been developed with meaningful engagement of impacted communities.

10. Encourages Central Valley Water Board staff to consider existing law and policies that may be relevant to assessing water safety, cleanliness, affordability, accessibility, adequacy, and sustainability, such as those referred to in recitals 7-11, when considering the human right to water.

11. Directs Central Valley Water Board staff to develop policies that allow for and incentivize local and regional efforts for providing replacement water where appropriate while long-term water quality solutions are developed and implemented.

12. Directs Central Valley Water Board staff to provide annual progress reports to the board regarding implementation of the human right to water, and incorporate that information into the Executive Officer's annual performance report. The report shall identify successful strategies that have furthered the realization of the human right to water.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Valley Region on 21 April 2016.

Original signed by

PAMELA C. CREEDON, Executive Officer

ATTACHMENT 7

IRRIGATED LANDS REGULATORY PROGRAM

RESOURCES FOR GROWERS
PROTECTION OF TRADE SECRETS AND SECRET PROCESSES

April 27, 2017

One of the most common questions that growers have about Agricultural Order R3-2017-0002 is: How does the Water Board protect proprietary information regarding agricultural operations that is reported to them?

Water Code section 13267, subdivision (b)(2) states that the portions of a report that might disclose trade secrets or secret processes may not be made available for inspection by the public, but shall be made available to governmental agencies for use in making studies. Condition 65 of the Agricultural Order includes an explanation of how such trade secrets or secret processes are protected from public disclosure.

The Agricultural Order may require growers to report proprietary information to the Water Board. The Agricultural Order provides the opportunity for growers to identify information related to trade secrets or secret processes which are exempt from public disclosure pursuant to Water Code §13267, including a justification of how those portions of the reports are exempt from public disclosure. As soon as a grower identifies the inclusion of trade secret or secret processes in the reported information, the Water Board will determine if any information identified by the grower qualifies as a trade secret and is exempt from public disclosure. If any member of the public wants to review information reported to the Irrigated Lands Regulatory Program, they must first submit a Public Records Act (PRA) request to review the public records maintained by the Water Board. As stated in Condition 65 of the Agricultural Order, Water Board staff will notify the grower prior to making any information identified by the grower as exempt from public disclosure, available for public inspection.

Below is a description explaining how the Water Board handles information related to trade secret and secret processes submitted by growers.

1. Growers report information to GeoTracker through standard reporting forms such as the electronic-Notice of Intent (eNOI) and Annual Compliance Form. GeoTracker provides the opportunity for growers to identify any section of the Annual Compliance Form (ACF) that they claim contains information related to trade secrets or secret processes which are exempt from public disclosure pursuant to Water Code §13267, including an explanation of why those portions of the reports are exempt from public disclosure.
2. In the case where a grower is reporting information to the Water Board in the form of a farm-specific technical report (e.g. not a standard electronic reporting form such as the

eNOI or ACF), the grower must clearly indicate on the cover of the report that the grower asserts that all or a portion of the report is exempt from public disclosure. The grower must submit a complete report with those portions that are asserted to be exempt in redacted form, and submit separately (in a separate electronic file) unredacted pages (to be maintained separately by staff). Water Board staff will place a cover letter in the file to clearly indicate that an unredacted version of the report is maintained separately. If the Water Board attorney determines that the records are not trade secrets (see bullet 6 below), then the unredacted version will be available to the public.

3. If any member of the public wants to review information reported to the Irrigated Lands Regulatory Program, they must first submit a Public Records Act (PRA) request to review the public records maintained by the Water Board.
4. As stated in Condition 65 of the Agricultural Order, Water Board staff will notify the grower prior to making any information identified by the grower as exempt from public disclosure, available for public inspection. The grower will have an additional opportunity to justify the asserted exemption and submit a complete report with those portions that are exempt in redacted form.
5. After the receipt of a PRA request, certain information that is not a trade secret or secret process will be made readily accessible to the public, including information on the eNOI, including operation name, farm/ranch name, ranch location, operator information, acreage, etc.
6. The Water Board attorney will carefully review PRA requests to ensure that information is handled in compliance with California Privacy Laws and requirements related to trade secrets and other protected information. Upon receipt of a PRA request, the Water Board staff and attorney will determine whether any such report or portion of a report, where a grower has asserted exemption from public disclosure, qualifies for an exemption from public disclosure. If the Water Board disagrees with the asserted exemption from public disclosure, the Water Board staff will notify the grower prior to making such report or portions of such report available for public inspection.

For more information about the Irrigated Lands Regulatory Program, including additional resources and guidance for growers, please visit the Water Board's Internet site at:
http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/index.shtml

If you have questions regarding the Irrigated Lands Regulatory Program or need additional assistance, please contact the Water Board at (805) 549-3147.

ATTACHMENT 8

HortScience 47(12):1768–1774. 2012.

Nitrogen Requirements and N Status Determination of Lettuce

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Additional index words. fertilizer efficiency, soil and tissue testing, *Lactuca sativa*

Abstract. **As concern over NO_3-N pollution of groundwater increases, California lettuce growers are under pressure to improve nitrogen (N) fertilizer efficiency. Crop growth, N uptake, and the value of soil and plant N diagnostic measures were evaluated in 24 iceberg and romaine lettuce (*Lactuca sativa* L. var. *capitata* L., and *longifolia* Lam., respectively) field trials from 2007 to 2010. The reliability of presidedressing soil nitrate testing (PSNT) to identify fields in which N application could be reduced or eliminated was evaluated in 16 non-replicated strip trials and five replicated trials on commercial farms. All commercial field sites had greater than 20 mg·kg^{-1} residual soil NO_3-N at the time of the first in-season N application. In the strip trials, plots in which the cooperating growers' initial sidedress N application was eliminated or reduced were compared with the growers' standard N fertilization program. In the replicated trials, the growers' N regime was compared with treatments in which one or more N fertigation through drip irrigation was eliminated. Additionally, seasonal N rates from 11 to 336 kg·ha^{-1} were compared in three replicated drip-irrigated research farm trials. Seasonal N application in the strip trials was reduced by an average of 77 kg·ha^{-1} (73 kg·ha^{-1} vs. 150 kg·ha^{-1} for the grower N regime) with no reduction in fresh biomass produced and only a slight reduction in crop N uptake (151 kg·ha^{-1} vs. 156 kg·ha^{-1} for the grower N regime). Similarly, an average seasonal N rate reduction of 88 kg·ha^{-1} (96 kg·ha^{-1} vs. 184 kg·ha^{-1}) was achieved in the replicated commercial trials with no biomass reduction. Seasonal N rates between 111 and 192 kg·ha^{-1} maximized fresh biomass in the research farm trials, which were conducted in fields with lower residual soil NO_3-N than the commercial trials. Across fields, lettuce N uptake was slow in the first 4 weeks after planting, averaging less than 0.5 kg·ha^{-1}·d^{-1}. N uptake then increased linearly until harvest (≈9 weeks after planting), averaging ≈4 kg·ha^{-1}·d^{-1} over that period. Whole plant critical N concentration (N_c, the minimum whole plant N concentration required to maximize growth) was estimated by the equation N_c (g·kg^{-1}) = 42 − 2.8 dry mass (DM, Mg·ha^{-1}); on that basis, critical N uptake (crop N uptake required to maintain whole plant N above N_c) in the commercial fields averaged 116 kg·ha^{-1} compared with the mean uptake of 145 kg·ha^{-1} with the grower N regime. Soil NO_3-N greater than 20 mg·kg^{-1} was a reliable indicator that N application could be reduced or delayed. Neither leaf N nor midrib NO_3-N was correlated with concurrently measured soil NO_3-N and therefore of limited value in directing in-season N fertilization.**

The coastal valleys of central California produce nearly 60,000 ha of lettuce annually, more than half of the nation's supply. In this region, lettuce is typically produced in rotation with other leafy vegetables. Production systems are characterized by two to three crops per year with frequent irrigation and heavy N fertilization. Water quality monitoring in the agricultural watersheds in this region has shown that both surface water and groundwater often exceed the federal drinking water standard of 10 mg·L^{-1} NO_3-N. Vegetable growers are under increasing regulatory pressure to improve both their fertilization and irrigation practices to protect environmental water quality. Recently proposed regulations would require growers to report N fertilization rates and to bring N loading from fertilizer and irrigation water into approximate balance with crop N uptake. In this region, lettuce N uptake has been reported to average 130 kg·ha^{-1} for iceberg and 107 kg·ha^{-1} for romaine (Breschini and Hartz, 2002). However, a recent field survey found that lettuce received an average seasonal N fertilization rate of 184 kg N/ha (Hartz et al., 2007), suggesting that significant N rate reduction would be required to meet these new regulations.

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Studies on lettuce response to N fertilization have reported widely varying results. Seasonal N rates required to maximize crop yield have ranged from 100 to 150 kg·ha^{-1} (Gardner and Pew, 1972, 1974, 1979; Tei et al., 2003) to greater than 220 kg·ha^{-1} (Hoque et al., 2010; Welch et al., 1979). Much of this variability may be attributed to field-specific factors affecting crop yield potential and N fertilizer efficiency; these factors include plant population, precipitation, irrigation efficiency, residual soil NO_3-N, and soil N mineralization potential. Given the high crop value and strict market standards for lettuce, growers commonly use standard fertilization programs with little field-specific modification; they are reluctant to modify current N fertilizer practices without a sound understanding of the interaction of these factors and reliable diagnostic techniques to guide field-specific N fertilization.

Adding to the uncertainty regarding efficient N management of lettuce, California growers continue to modify production practices to increase yield. Average lettuce yield rose ≈11% between 2000 and 2010 (Monterey County Agricultural Commissioner, 2000, 2010); factors potentially responsible included modified planting configurations that increased plant population and widespread adoption of drip irrigation. We undertook this study to develop detailed information on lettuce N requirements under current production practices used in California's central coast region and to critically evaluate the value of soil and plant diagnostic techniques to guide in-season N fertilizer management.

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Lettuce N uptake and response to N fertilization were evaluated in 24 field trials in the Salinas Valley of California from 2007 through 2010. Sixteen of these were non-replicated strip trials in commercial fields comparing a reduced N fertilization regime with the growers' standard N fertilization program. Replicated comparisons of reduced N management strategies and growers' N management were conducted in five additional commercial fields. All commercial fields had been in long-term rotations of cool-season vegetables. The remaining three trials, conducted at a research facility, were replicated N rate comparisons.

Strip trials. Sixteen commercial lettuce fields were selected in 2009 and 2010 to evaluate the reliability of PSNT in identifying fields in which N fertilization could be reduced or delayed with no loss of marketable yield. The fields, which were seeded between 21 Mar. and 1 Aug., were selected based on the presence of at least 20 mg·kg^{-1} NO_3-N in the top 30 cm of soil after crop thinning (typically 14 to 21 d after planting); this soil NO_3-N threshold was suggested by prior research on lettuce (Breschini and Hartz, 2002; Hartz et al., 2000). Twelve fields were planted with iceberg cultivars and four fields with romaine. The Salinas Valley is

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1	Iceberg	21 Mar.	Clay	36	144	25	80	78	140	136
2	Iceberg	1 Apr.	Silty clay	20	138	40	109	101	190	177
3	Iceberg	11 Apr.	Clay loam	48	132	29	82	85	152	151
4	Iceberg	30 May	Clay	55	143	48	85	86	158	160
5	Iceberg	22 June	Silty loam	33	112	50	101	99	157	171
6	Iceberg	1 July	Sandy clay loam	20	203	115	107	107	174	168
7	Iceberg	1 July	Silty clay loam	24	89	36	85	85	145	146
8	Iceberg	15 July	Sandy clay loam	48	190	119	86	85	147	148
9	Iceberg	16 July	Clay	32	85	36	84	84	136	134
10	Iceberg	16 July	Silty clay	71	190	119	119	113	200	197
11	Iceberg	1 Aug.	Clay	46	144	25	126	128	189	188
12	Iceberg	18 May	Clay loam	36	216	151	71	71	95	91
13	Romaine	6 June	Clay	29	148	114	74	78	158	169
14	Romaine	27 June	Sandy clay loam	20	142	47	79	78	164	124
15	Romaine	1 Aug.	Sandy clay loam	23	148	98	77	76	136	120
16	Romaine	1 Aug.	Clay	68	179	108	74	75	152	139
Avg					150	73	90	89	156	151

[z]Post-thinning, before treatment initiation.

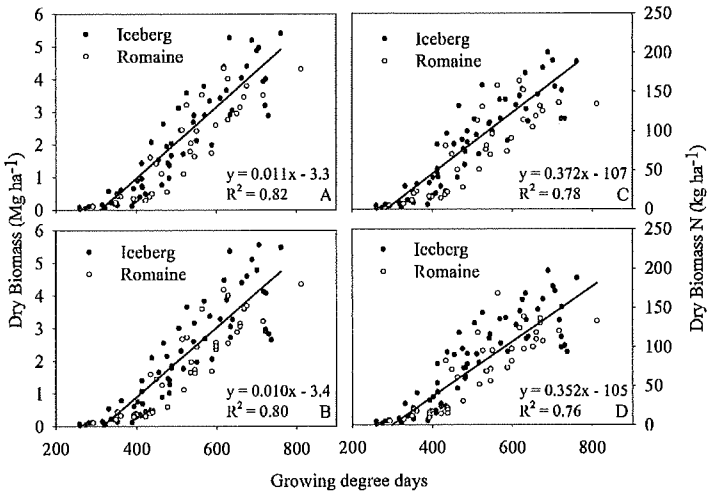

Fig. 1. Lettuce aboveground dry biomass, and dry biomass nitrogen (N), as a function of cumulative growing degree-days in the strip trial fields; grower N treatment (**A** and **C**) and reduced N treatment (**B** and **D**). Growing degree-days were calculated using 5 and 30 °C threshold temperatures.

essentially rain-free during the lettuce production period, and growers use a variety of irrigation systems and irrigation schedules. Most fields are irrigated with well water. Wells vary widely in NO_3-N concentration with most wells between 2 and 20 $mg \cdot L^{-1}$. All fields were sprinkler-irrigated for stand establishment with two fields switched to drip irrigation and one field switched to furrow irrigation after establishment. Soil texture ranged from sandy clay loam to clay. The planting configuration was either two plant rows per 1-m raised bed or five to six plant rows per 2-m raised bed; plant population varied from 72,000 to 112,000 ha. Preplant N fertilization was banded in the beds at rates ranging from 0 to 40 $kg \cdot ha^{-1}$.

Before the first sidedress N application, a strip plot in the center of each field was identified to receive a reduced N fertilization regime. These strip plots were the length of the field × 12 to 24 beds wide and averaged 0.4 ha. The width of the strip plot was set to accommodate one pass of the commercial harvest crew and equipment, which varied by grower. In all fields, the grower applied an N sidedressing 20 to 28 d after planting. Sidedress applications were typically applied in bands 5 to 10 cm deep in the bed; a variety of N fertilizers were used. The strip plot received either no sidedressing (14 fields) or a half rate sidedressing (two fields) at the cooperating growers' discretion. After the first sidedressing, the reduced N plots received all subsequent N fertilization applied by the grower, whether by additional sidedressing or by fertigation.

Soil samples (0 to 30 cm depth in the plant row) were taken before the first N sidedressing and repeated on 7- to 10-d intervals until harvest. Samples were collected separately from the head and tail ends of the reduced N plot. Samples of the grower N regime from the head and tail ends of the field were collected from the areas adjacent to the reduced N plot; samples drawn from each side of the reduced N plot were blended so that for each sampling date, a total of four composite samples per field was collected; each comprised of eight to 10 cores. Matching samples of whole plants and recently mature leaves were also collected at each soil sampling date after the initial N sidedressing. Each of the four composite samples per field per collection date contained 12 whole plants and 20 leaves; the leaves were subsequently divided into blade and midrib samples. Plant, leaf, and midrib samples were oven-dried at 65 °C to a constant weight and ground to pass a 40-mesh screen. N concentration of whole plants and leaf blades was determined by a N gas analyzer (Model FP-528; LECO Corp., St. Joseph, MI). Midrib NO_3-N was measured by flow injection analysis (Lachat Instruments, Milwaukee, WI) after extraction with 2% acetic acid. Field-moist soil was extracted in 2 N KCl and analyzed for NO_3-N by the flow injection method. Plant population was determined based on post-thinning plant counts in four representative 4 m wide × 30-m long strips within the trial area of each field.

Just before commercial harvest, aboveground biomass was determined by the collection of 32 randomly selected whole plants in both the head and tail ends of the reduced N plot and in the adjacent grower N plots, as previously described. Subsamples were oven-dried, weighed, and analyzed for total N concentration. During the commercial harvest, the harvest crews recorded marketable yield separately in the reduced N strip and in the adjacent areas receiving the full grower N regime.

Replicated trials. Five replicated field trials were conducted in drip-irrigated commercial lettuce fields between 2007 and 2009. Three fields were planted with iceberg and two fields with romaine cultivars. All of the fields were sprinkler-irrigated for stand establishment and then switched to drip irrigation. Soil texture ranged from loam to clay loam. Fields were planted between 3 Mar. and 2 Aug. N fertilization treatments differed among fields based on the grower practices. Within fields, up to four levels of seasonal N application were established by eliminating

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Nitrogen Requirements and N Status Determination of Lettuce

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Additional index words. fertilizer efficiency, soil and tissue testing, *Lactuca sativa*

Abstract. **As concern over NO_3-N pollution of groundwater increases, California lettuce growers are under pressure to improve nitrogen (N) fertilizer efficiency. Crop growth, N uptake, and the value of soil and plant N diagnostic measures were evaluated in 24 iceberg and romaine lettuce (*Lactuca sativa* L. var. *capitata* L., and *longifolia* Lam., respectively) field trials from 2007 to 2010. The reliability of presidedressing soil nitrate testing (PSNT) to identify fields in which N application could be reduced or eliminated was evaluated in 16 non-replicated strip trials and five replicated trials on commercial farms. All commercial field sites had greater than 20 mg·kg^{-1} residual soil NO_3-N at the time of the first in-season N application. In the strip trials, plots in which the cooperating growers' initial sidedress N application was eliminated or reduced were compared with the growers' standard N fertilization program. In the replicated trials, the growers' N regime was compared with treatments in which one or more N fertigation through drip irrigation was eliminated. Additionally, seasonal N rates from 11 to 336 kg·ha^{-1} were compared in three replicated drip-irrigated research farm trials. Seasonal N application in the strip trials was reduced by an average of 77 kg·ha^{-1} (73 kg·ha^{-1} vs. 150 kg·ha^{-1} for the grower N regime) with no reduction in fresh biomass produced and only a slight reduction in crop N uptake (151 kg·ha^{-1} vs. 156 kg·ha^{-1} for the grower N regime). Similarly, an average seasonal N rate reduction of 88 kg·ha^{-1} (96 kg·ha^{-1} vs. 184 kg·ha^{-1}) was achieved in the replicated commercial trials with no biomass reduction. Seasonal N rates between 111 and 192 kg·ha^{-1} maximized fresh biomass in the research farm trials, which were conducted in fields with lower residual soil NO_3-N than the commercial trials. Across fields, lettuce N uptake was slow in the first 4 weeks after planting, averaging less than 0.5 kg·ha^{-1}·d^{-1}. N uptake then increased linearly until harvest (≈9 weeks after planting), averaging ≈4 kg·ha^{-1}·d^{-1} over that period. Whole plant critical N concentration (N_c, the minimum whole plant N concentration required to maximize growth) was estimated by the equation N_c (g·kg^{-1}) = 42 − 2.8 dry mass (DM, Mg·ha^{-1}); on that basis, critical N uptake (crop N uptake required to maintain whole plant N above N_c) in the commercial fields averaged 116 kg·ha^{-1} compared with the mean uptake of 145 kg·ha^{-1} with the grower N regime. Soil NO_3-N greater than 20 mg·kg^{-1} was a reliable indicator that N application could be reduced or delayed. Neither leaf N nor midrib NO_3-N was correlated with concurrently measured soil NO_3-N and therefore of limited value in directing in-season N fertilization.**

The coastal valleys of central California produce nearly 60,000 ha of lettuce annually, more than half of the nation's supply. In this region, lettuce is typically produced in rotation with other leafy vegetables. Production systems are characterized by two to three crops per year with frequent irrigation and heavy N fertilization. Water quality monitoring in the agricultural watersheds in this region has shown that both surface water and groundwater often exceed the federal drinking water standard of 10 mg·L^{-1} NO_3-N. Vegetable growers are under increasing regulatory pressure to improve both their fertilization and irrigation practices to protect environmental water quality. Recently proposed regulations would require growers to report N fertilization rates and to bring N loading from fertilizer and irrigation water into approximate balance with crop N uptake. In this region, lettuce N uptake has been reported to average 130 kg·ha^{-1} for iceberg and 107 kg·ha^{-1} for romaine (Breschini and Hartz, 2002). However, a recent field survey found that lettuce received an average seasonal N fertilization rate of 184 kg N/ha (Hartz et al., 2007), suggesting that significant N rate reduction would be required to meet these new regulations.

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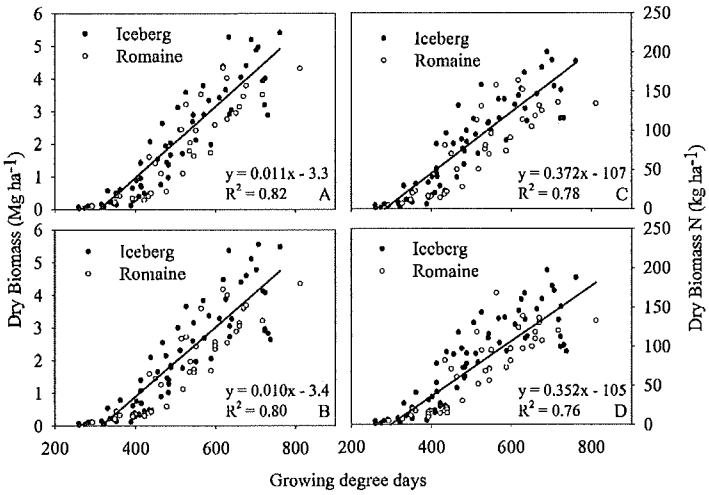

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Table 2. Effect of nitrogen (N) fertigation on lettuce fresh biomass, and biomass N, in the replicated commercial drip-irrigated trials.

Trial	Yr	Lettuce type	Germination water date	Soil texture	Soil NO_3-N ($mg \cdot kg^{-1}$)[z]	N treatment	Number of fertigations	Seasonal N ($kg \cdot ha^{-1}$)	Fresh biomass ($Mg \cdot ha^{-1}$)	Biomass N ($kg \cdot ha^{-1}$)
1	2007	Iceberg	5 June	Loam	20	Grower	3	189	96 a[y]	116 a
						Reduced 1	1	103	93 a	102 b
						Reduced 2	0	47	81 b	94 b
2	2007	Iceberg	15 June	Loam	27	Grower	4	192	87 a	115 a
						Reduced 1	2	72	91 a	113 a
						Reduced 2	0	20	83 a	100 a
3	2007	Romaine	15 Aug	Loam	21	Grower	2	129	77 a	114 a
						Reduced	1	75	77 a	97 b
4	2008	Iceberg	3 March	Clay loam	20	Grower	4	236	94 a	128 a
						Reduced 1	3	183	97 a	133 a
						Reduced 2	2	140	92 a	111 a
						Reduced 3	1	86	84 b	108 a
5	2009	Romaine	2 Aug	Loam	21	Grower	3	175	77 a	134 a
						Reduced	3	144	77 a	132 a

[z]Post-thinning, before treatment initiation.
[y]Means within columns and trials separated using the REGWQ multiple range test.

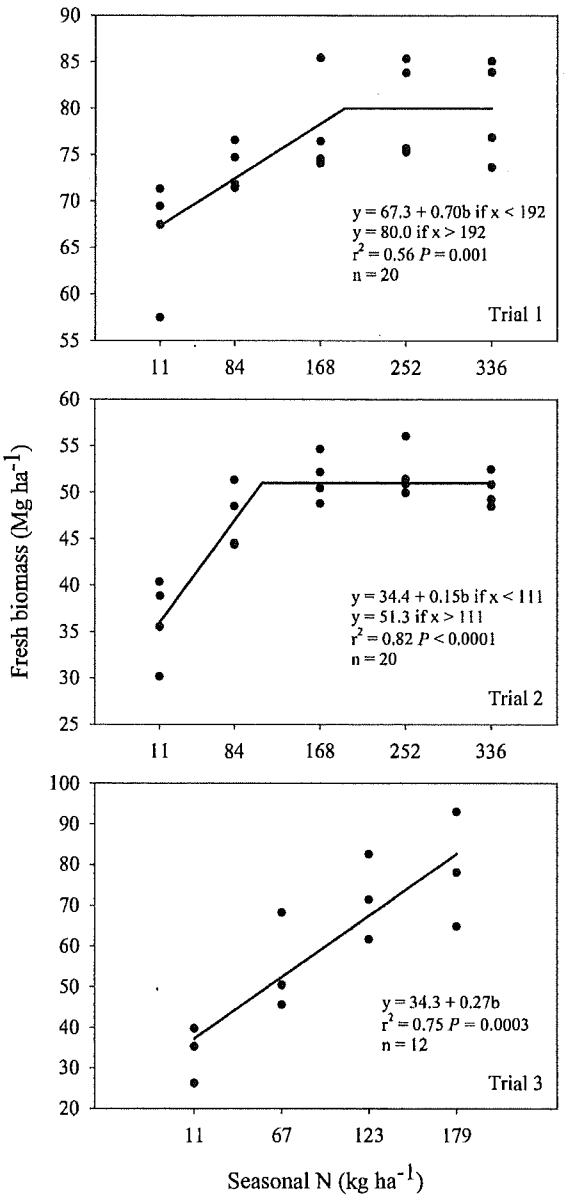

Fig. 2. Lettuce fresh biomass as affected by seasonal nitrogen (N) rate in research farm trials; linear-plateau models fit by the method of Waugh et al. (1973).

one or more of the grower N fertigations. All fields had soil NO_3-N greater than 20 $mg \cdot kg^{-1}$ (0 to 30 cm depth) at the time of the initial in-season N application. A randomized complete block experimental design was used in all fields with four replications per N treatment. Individual plots were four 1-m beds wide × 9 to 15 m long. Data were collected on the middle two beds of each plot. Soil, whole plant, leaf, and midrib sampling was done on 7- to 10-d intervals as previously described. The final plant sampling was conducted just before commercial harvest. Fresh and dry biomass of 24 randomly selected whole plants per plot was determined.

Three additional N rate trials were conducted between 2009 and 2010 at the Hartnell College research farm in Salinas, CA. All trials were seeded with romaine cultivars and grown using drip irrigation. Each trial was organized in a randomized complete block design with four replications (Trials 1 and 2) or three replications (Trial 3) per N rate. Each plot consisted of two 1 m wide beds 50 m long. Seasonal N rates ranged from 11 to 336 $kg \cdot ha^{-1}$ (Trials 1 and 2) and from 11 to 179 $kg \cdot ha^{-1}$ (Trial 3). N was applied preplant (11 $kg \cdot ha^{-1}$) and in three fertigations at ≈4, 5, and 6 weeks post-planting. Soil NO_3-N (0 to 30 cm depth) at the first N fertigation was 13, 9, and 7 $mg \cdot kg^{-1}$ in Fields 1, 2, and 3, respectively. At commercial maturity, aboveground biomass was determined on 80 randomly selected whole plants per plot.

Calculation of growing degree-days. To allow comparison of lettuce growth across fields and production seasons, growing degree-days (GDDs) were calculated from air temperature data provided by the California Irrigation Management Information System (Pruitt et al., 1987). GDDs were calculated using a single sine method (Allen, 1976) with upper and lower thresholds of 30 and 5 °C, respectively. GDD accumulation began on the day of the first irrigation rather than at seeding because seeding was typically done in dry soil.

Statistical analysis. Parallel line analysis was used to compare the regression slopes of romaine and iceberg lettuce dry biomass accumulation over time using SigmaPlot (Systat Software, Inc., San Jose, CA). All other statistical analyses were conducted using the SAS statistical package (SAS Institute, Cary, NC). Comparison of the crop biomass of the grower and reduced N management treatments in the strip trials was

done with the GLM procedure using fields as replications to evaluate the reliability of the 20 mg·kg^{-1} PSNT residual soil NO_3-N threshold as a diagnostic tool to improve N management. Comparison of lettuce biomass among N treatments in the replicated commercial trials was accomplished using the GLM procedure and the REGWQ multiple range test. Optimum N rates in the research farm trials were estimated by the linear-plateau model described by Waugh et al. (1973) using the NLIN procedure.

Results

Aboveground lettuce fresh biomass in the reduced N treatment was not different from the grower N management treatment in the strip trials (P = 0.92), confirming the reliability of PSNT in identifying fields in which the first sidedress N application could be reduced or delayed (Table 1). Across the 16 fields, total fresh biomass at harvest averaged 89.9 and 89.3 Mg·ha^{-1} in the grower N and reduced N treatments, respectively. Marketable yield was obtained from the commercial harvest crews in 12 of the fields, and the reduced N treatment averaged 41.0 Mg·ha^{-1} compared with 40.8 Mg·ha^{-1} in the grower N treatment (P = 0.97). Seasonal N application (including preplant fertilization) averaged 150 and 73 kg·ha^{-1} in the grower N and reduced N treatments, respectively. Aboveground biomass N in the reduced N treatment averaged 151 kg·ha^{-1} compared with 156 kg·ha^{-1} in the grower N treatment, suggesting inefficient use of the N applied at first sidedressing, which averaged 77 kg·ha^{-1}.

Lettuce showed a characteristic growth pattern across the strip trial fields (Fig. 1A–B). Aboveground dry biomass accumulation averaged less than 0.3 Mg·ha^{-1} over the first 300 GDD (≈3 to 4 weeks at Salinas Valley temperatures) and then increased in a linear fashion until harvest. There was no significant difference between iceberg and romaine lettuce in DM accumulation [regression slopes during the rapid growth phase were not significantly different (P = 0.51)]. There was a trend toward higher DM with increasing plant population [DM (Mg·ha^{-1}) = 0. 00003 (plants/ha) +1.44, r^2 = 0.14, P = 0.08]. Biomass N accumulation followed the same pattern as biomass accumulation (Fig. 1C–D). N uptake during the linear growth phase averaged 0.38 kg/GDD across N treatments and fields; at 10 to 12 GDD/d during the production season, daily aboveground N accumulation averaged ≈3.8 to 4.6 kg·ha^{-1}.

The replicated commercial trials also demonstrated that N fertigation could be reduced below current grower practice with no reduction in crop biomass (Table 2). Significant fresh biomass reduction was observed in only two of five fields and only in treatments in which multiple N fertigations were eliminated. In both cases of biomass reduction, the midseason soil NO_3-N had decreased to less than 10 mg·kg^{-1}. A significant response to N fertigation was observed in all research farm trials (Fig. 2). Seasonal N rates between 111 and 192 kg·ha^{-1} were sufficient to maximize fresh biomass, somewhat higher than observed in the other trials. The research farm trials began with lower residual soil NO_3-N (7 to 13 mg·kg^{-1}), and they followed a fallow period, whereas most of the commercial fields were planted after residue incorporation from a spring crop.

Collectively, these 24 trials provided extensive data on lettuce growth and plant N status on which to apply the "critical N concentration" concept (N_c, the minimum whole plant N concentration required to maximize growth; Greenwood et al., 1991; Fig. 3). Data points identified as N-deficient represented treatments in replicated trials in which DM was significantly ($P < 0.05$) below that of the highest N rate in that trial on a given sample date. Data points identified as "grower N" represented the grower N management in the strip trials and the replicated commercial trials plus the highest N rate in the research farm trials. Points identified as "reduced N" represented reduced N treatments from all strip trials plus reduced N treatments from replicated trials for which DM was not statistically different ($P > 0.05$) from the grower N treatment on a given sample date. The critical N equation [N_c = 45.6 DM (Mg·ha^{-1})$^{-0.357}$], developed in a 3-year study of lettuce in Italy by Tei et al. (2003), generally distinguished N deficiency from sufficiency. However, that equation had been validated only for DM values between 0.9 and 3.4 Mg·ha^{-1} and was clearly inappropriate for earlier growth stages. We empirically fit a linear function (N_c = 42.0 – 2.8 DM), which distinguished N-deficient from N-sufficient samples with reasonable accuracy across the entire season.

Based on the empirically derived N_c equation, the crop N uptake required to maintain whole plant N above the N_c (critical N uptake, N_{upt} = –2.8 DM^2 + 42 DM) was compared with actual crop N uptake of the grower N treatment in the commercial field trials (Fig. 4). Aboveground DM at harvest in the grower N treatment ranged from 2.4 to 5.4 Mg·ha^{-1}, and N uptake ranged from 94 to 200 kg·ha^{-1}, averaging 145 kg·ha^{-1}. The calculated N_{upt} ranged from 86 to 145 kg·ha^{-1}, averaging only 116 kg·ha^{-1}, indicating that a substantial amount of "luxury" uptake occurred

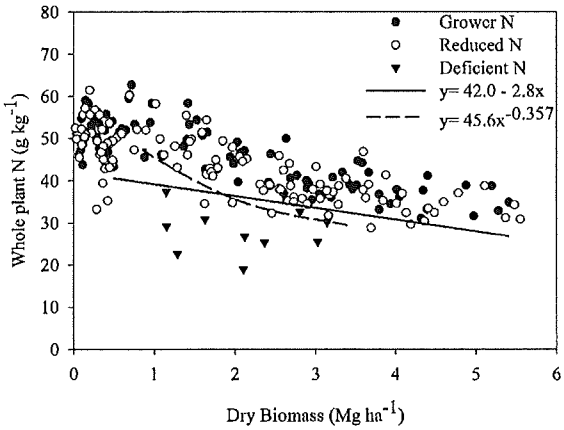

Fig. 3. The relationship between dry biomass (DM) and whole plant nitrogen (N) concentration. Dashed line represents plant critical N concentration (N_c = 45.6 DM$^{-0.357}$) from Tei et al. (2003). Solid line represents N_c as an empirically derived linear function (N_c = 42.0 – 2.8 DM).

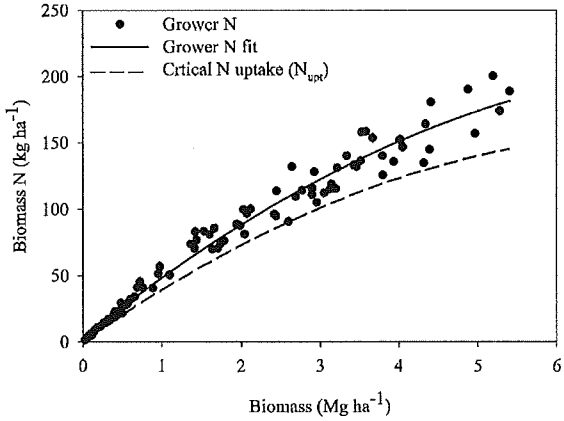

Fig. 4. Whole plant nitrogen (N) (all commercial field trials) as function of dry biomass (DM) for grower N treatment. Solid line represents grower N uptake (y = –2.8 DM^2 + 48 DM + 3); dashed line represents critical N uptake (N_{upt}, y = –2.8 DM^2 + 42 DM).

in these fields. N_{upt} during the rapid growth phase ranged between 3 and 4 kg·ha^{-1}·d^{-1} for Salinas Valley summer conditions.

Neither leaf N nor midrib NO_3-N was correlated with concurrently measured soil NO_3-N during either early growth (less than 1.5 Mg·ha^{-1} biomass) or the heading stage (greater than 1.5 Mg·ha^{-1}; Fig. 5). This insensitivity across a wide range of soil NO_3-N suggested that these tissue diagnostics provided no insight on current soil N availability. Leaf N was correlated with whole plant N (Fig. 6A). However, there was substantial variability in that relationship, indicating that leaf N was not a dependable surrogate for whole plant N. Midrib NO_3-N was not correlated with whole plant N (Fig. 6B). Based on the limited number of N-deficient leaf and midrib samples encountered in this study, empirically derived critical levels appeared to be ≈40 g·kg^{-1} leaf N and 6 g·kg^{-1} midrib NO_3-N throughout the season (Fig. 7). However, the separation between deficient and sufficient samples was not clear, and applying these critical levels would have resulted in unnecessary fertilization in some fields. Given the limitations just described, using either tissue N diagnostic to guide N fertilization, in the absence of soil NO_3-N data, would not be warranted.

The average soil NO_3-N concentration in the top 30 cm at harvest in the strip trials was 20 and 14 mg·kg^{-1} for the grower N and reduced N treatments, respectively (Fig. 8). This difference in soil NO_3-N of 6 mg·kg^{-1} represented 23 kg N/ha in the top 30 cm, assuming a typical bulk density of 1.4 g·cm^{-3}. Taking into account the slight increase in crop N uptake (≈5 kg·ha^{-1}) obtained in the grower N treatment in these fields, less than half of the extra 77 kg·ha^{-1} N applied in that treatment was accounted for at harvest, suggesting substantial in-season leaching below 30 cm. At harvest, soil NO_3-N was less than 10 mg·kg^{-1} in the reduced-N treatment in nine of the 14 fields in which data were collected and below that level in the grower N treatment in six fields. This documented that high-yield lettuce production can be managed to minimize residual soil NO_3-N at the end of the season.

Discussion

Lettuce growth was maximized by seasonal N fertilization rates substantially below current typical grower practices. The reduced N treatment in the strip plot trials received an average of only 73 kg N/ha and produced biomass equivalent to the more heavily fertilized grower N treatment. In the replicated commercial fertigation trials, the lowest seasonal N rate achieving maximum biomass averaged only 102 kg N/ha. The presence of high residual soil NO_3-N in these fields, which is common in this production system (especially after a spring crop), was a major factor limiting fertilizer N requirements. In the absence of substantial residual soil NO_3-N, fertilizer N requirements would undoubtedly

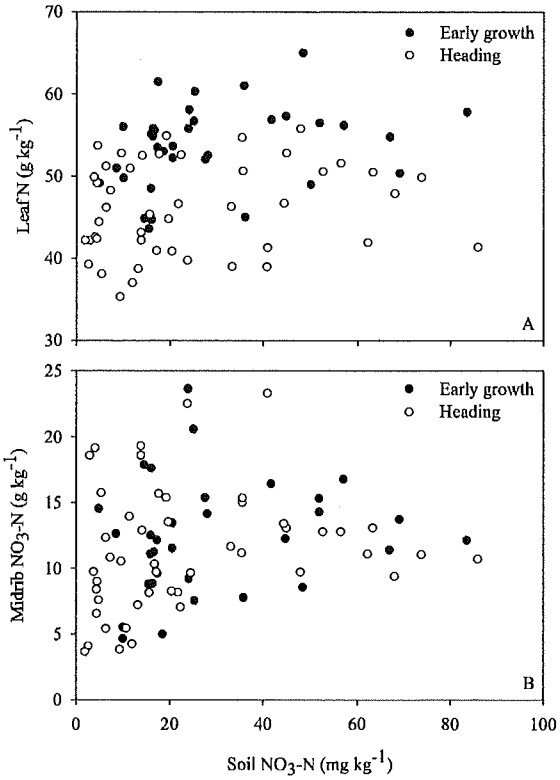

Fig. 5. Relationship between root zone soil NO_3-N and leaf nitrogen (N) (**A**) or midrib NO_3-N (**B**). Early growth and heading stages defined as dry biomass less than 1.5 Mg·ha^{-1} and greater than 1.5 Mg·ha^{-1}, respectively.

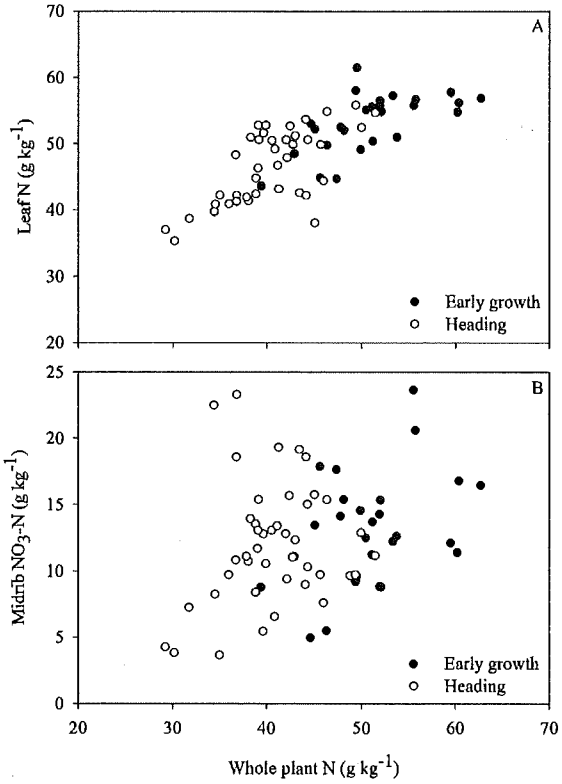

Fig. 6. Relationship between whole plant nitrogen (PN) concentration and leaf N (LN) concentration at the early growth (LN = 0.50 PN + 27.9, r^2 = 0.40) and heading stages (LN = 0.76 PN + 15.7, r^2 = 0.46, **A**). Relationship between PN concentration and midrib NO_3-N concentration at the early growth and heading stages (**B**). Early growth and heading stages defined as dry biomass less than 1.5 Mg·ha^{-1} and greater than 1.5 Mg·ha^{-1}, respectively.

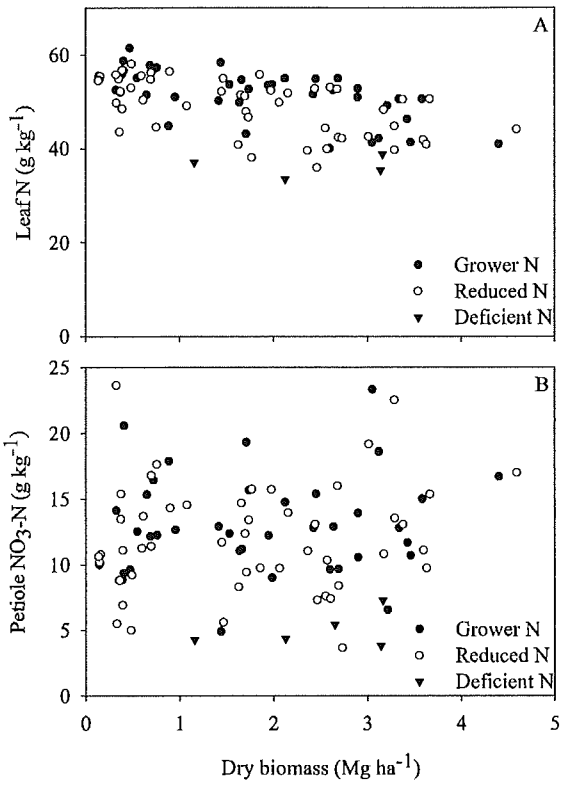

Fig. 7. Leaf nitrogen (N) (**A**) and midrib NO_3-N (**B**) as a function of dry biomass; data include all growth stages from all fields.

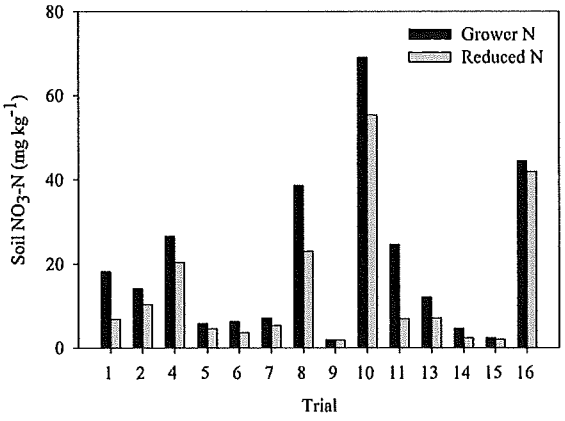

Fig. 8. Residual soil NO_3-N in the surface 30 cm at harvest in the strip trial fields.

be higher, as was the case in the research farm trials.

Crop uptake of the extra N applied in the grower N treatment was minimal. On average the apparent fertilizer recovery (AFR) of the N applied by growers at the first sidedressing was only 7% in the strip trials. In the replicated commercial fertigation trials, crop N uptake in the grower N treatment was on average only 13 kg·ha^{-1} higher than the lowest reduced N treatment that produced equivalent biomass, representing an AFR of 16% for the extra N applied by growers. Greenwood et al. (1989) reported that AFR in lettuce declined as N rate increased; at N rates greater than 100 kg·ha^{-1}, AFR was less than 15%. In this production system where multiple crops are produced annually, the overall AFR of N applied to a spring crop may be improved by subsequent recovery by a summer-planted crop. However, lettuce is shallowly rooted with most roots concentrated in the top 30 cm of soil (Jackson, 1995). The potential for NO_3-N leaching during the germination irrigation for the summer crop is substantial, and leaching losses with winter precipitation would be even more significant. Jackson et al. (1994) found that annual NO_3-N leaching loss in a double-cropped lettuce field in the Salinas Valley was ≈150 kg·ha^{-1}.

The reliability of PSNT in identifying lettuce fields in which N sidedressing can be reduced or delayed confirmed earlier California studies (Breschini and Hartz, 2002; Hartz et al., 2000). PSNT has been successfully applied to other crops, including cabbage (*Brassica oleracea* L. var. *capitata* L.; Heckman et al., 2002), celery (*Apium graveolens* L.; Hartz et al., 2000), and corn (*Zea mays* L.; Fox et al., 1989; Heckman et al., 1995); action thresholds have ranged from 20 to 30 mg·kg^{-1} soil NO_3-N. Most prior research on PSNT evaluated this approach as a once per season test to determine sidedress N requirements. However, for high-value vegetable crops on which multiple in-season N applications are common, repeated soil testing would allow growers more flexibility and confidence. Breschini and Hartz (2002) successfully demonstrated such a system in lettuce, testing soil NO_3-N up to three times per crop and on each occasion applying only enough N to bring the soil up to a 20 mg·kg^{-1} NO_3-N threshold.

Based on the observed lettuce N uptake requirements in the weeks before harvest (3 to 4 kg·ha^{-1}·d^{-1}), and the assumption that most N uptake occurs in the top 30 cm of soil, plant N uptake would be expected to reduce root zone soil NO_3-N by no more than 1 mg·kg^{-1}·d^{-1}. Soil testing for the final time 2 weeks before expected harvest, and limiting N application to no more than the amount required to return the soil to 20 mg·kg^{-1} NO_3-N, should provide sufficient mineral N for maximum crop productivity while finishing the season with a moderate level of residual soil NO_3-N. The observation that soil NO_3-N at harvest in the reduced N treatment was less than 10 mg·kg^{-1} in most fields confirmed that such low season-ending soil NO_3-N was not growth-limiting. Minimizing residual soil NO_3-N at harvest is a crucial element in a groundwater protection program.

In contrast to the documented use of soil NO_3-N monitoring to guide in-season N fertilization, plant-based diagnostics were less useful. The close agreement of our data with that of Tei et al. (2003) regarding N_c suggested that whole plant N was a robust measure of N sufficiency. Early-season whole plant N could be a practical monitoring technique, and our empirical N_c equation suggested a pre-heading critical threshold of ≈40 g·kg^{-1}. As plants get larger, whole plant sampling becomes impractical. The correlation between leaf N and whole plant N was unsatisfactory to make it a precise surrogate for whole plant N. Leaf N was not correlated with soil NO_3-N over a range of soil values from very high (greater than 40 mg·kg^{-1}) to potentially growth-limiting (less than 5 mg·kg^{-1}). Maier et al. (1990) and Westerveld et al. (2003) found that leaf N critical level varied by cultivar and location. Such confounding effects may explain the variability in published diagnostic guidelines. Lorenz and Tyler (1983) reported a leaf N sufficiency threshold for lettuce at harvest of 25 g·kg^{-1}, whereas Jones et al. (1991) suggested 38 g·kg^{-1}. Our data agreed with Jones et al.

The practical value of midrib NO_3-N monitoring was particularly questionable. Midrib NO_3-N was unrelated to either soil

NO_3-N or whole plant N. Midrib (petiole) NO_3-N has been shown to be affected by environmental conditions unrelated to soil N availability (Bates, 1971; Maynard et al., 1976) or to crop N uptake (MacKerron et al., 1995). The much higher degree of variability in midrib NO_3-N encountered in the present study (samples ranged from 4 to 24 $g \cdot kg^{-1}$) compared with either whole plant N or leaf N suggested that the rate of nitrate reduction in the plant was influenced by factors unrelated to soil NO_3-N availability or plant N status.

All plant-based N monitoring techniques share a fundamental limitation as a water quality protection practice. They can provide an indication of current crop N status. However, given the insensitivity of plant diagnostics to soil NO_3-N availability, a sufficient tissue N value provides no indication of future N fertilization requirements and therefore cannot accurately identify fields where in-season N application can be reduced or delayed.

In summary, seasonal N uptake in commercial lettuce fields averaged 145 $kg \cdot ha^{-1}$ with uptake over the last half of the growing season averaging $\approx$4 kg N/ha/d. Current commercial N fertilization rates can be reduced substantially with no reduction of crop yield. PSNT was a reliable technique on which to base N fertilization. Leaf N and midrib NO_3-N monitoring were of limited value in guiding in-season N management.

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ATTACHMENT 9

Item-6
Proposed Ag Order 3.0

March 7-8, 2017

Chris Rose
Monica Barricarte
Arwen Wyatt-Mair
Karen Worcester

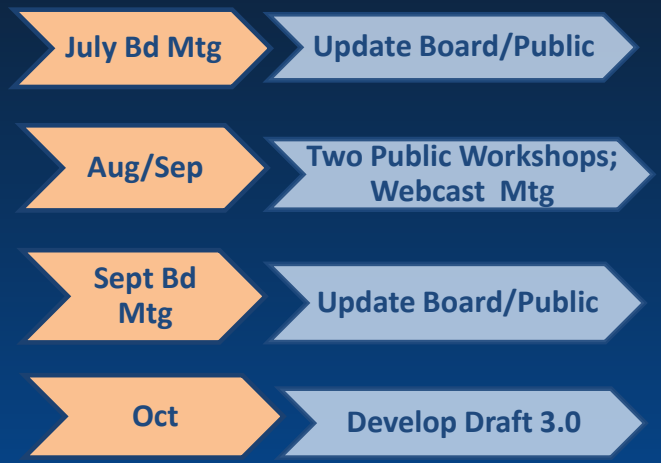
Item Summary

- Current Ag Order expires next week on March 14th
  - Recommendation: adopt Proposed Ag Order today
- Proposed Ag Order temporary, interim Order of three years or less
  - Consistent with Board input and recommendation
  - Consistent with outreach discussions
  - Largely same as current Order; expansion and continuation, where necessary
- Longer term Order being developed
  - Regular Board updates and outreach efforts

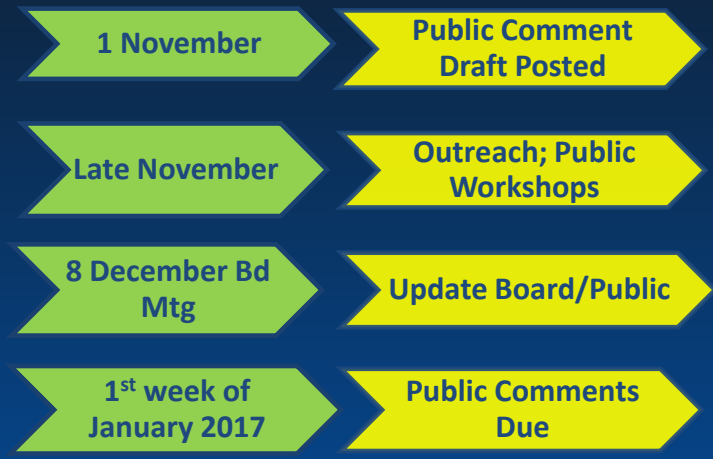
Nomenclature for Discussion

- 2004 Ag Order: version 1.0
- 2012 Ag Order: version 2.0
- 2017 Ag Order: version 3.0
  - Interim
- 2020 Ag Order: version 4.0
  - Long term order

Ag Order 3.0 Development



Ag Order 3.0 Development



Ag Order 3.0 Development

Outreach Events During Development

- August 15, 2016:
  - Webcast with technical service providers
- August 15, 2016:
  - Webcast with Environmental and EJ advocates
- August 23, 2016:
  - Public workshop Salinas
- August 24, 2016:
  - Public workshop Santa Maria
- August 31, 2016:
  - Public workshop San Luis Obispo County Farm Bureau
- September 9, 2016:
  - Webcast with CDFA, DPR, State Board
- October 17, 2016:
  - Webcast with technical service providers

Input from
Board and Stakeholders
+
Staff Evaluation
=
Draft Ag Order 3.0

Draft Order Released

- November 1, 2016: available to public
- Public comments due January 3, 2017
- Granted extension to January 9, 2017
- 69-day comment period
  - Law requires 10-day

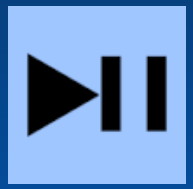
Outreach Events After Draft Released

- November 7, 2016: Public workshop San Luis Obispo Co. Farm B. (north)
- November 9, 2016: Webcast with technical service providers
- November 10, 2016: Public workshop San Luis Obispo Co.Farm B (south)
- November 14, 2016: Webcast , CDFA, DPR, State Board, Co Env Health
- November 16, 2016: Public workshop Santa Maria
- November 28, 2016: Public Workshop Salinas
- November 29, 2016: Public Workshop Monterey County Farm Bureau
- December 8, 2016: Board Meeting item during public comment period

- **Outreach after Pubic Comment Period**
- February 14, 2017: Meeting with CDFA, DPR, State Board, Division of DW
- February 14, 2017: Webcast with agricultural technical service providers

Summary of Changes

- Include
  - –Total Nitrogen Applied expansion
  - –Pesticide and toxicity monitoring



Total Nitrogen Applied

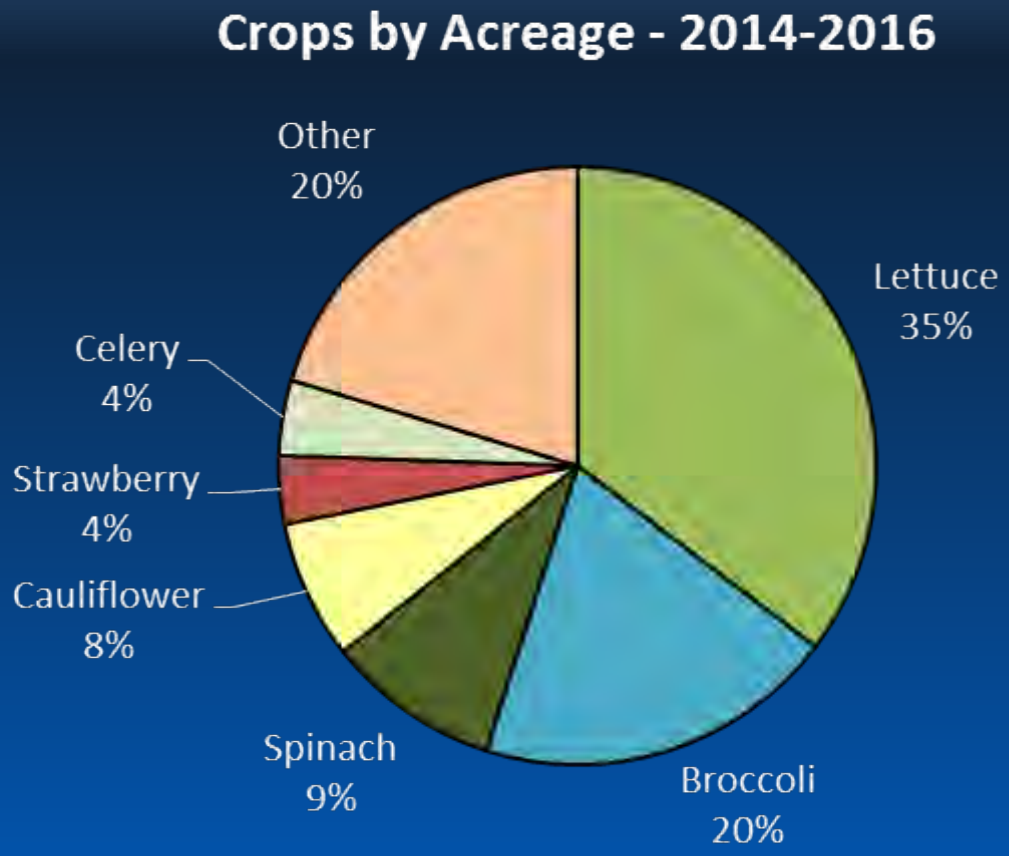
Presented by Monica Barricarte

Total Nitrogen Applied

Presented by M. Barricarte

- Proposed Ag Order 3.0
  - All T2 and T3 ranches w/high risk crops
  - Ag Order 2.0: 600 ranches
  - Ag Order 3.0: 1,700 ranches

3 Year Summary of Crops Reported



2016 values are incomplete and subject to change

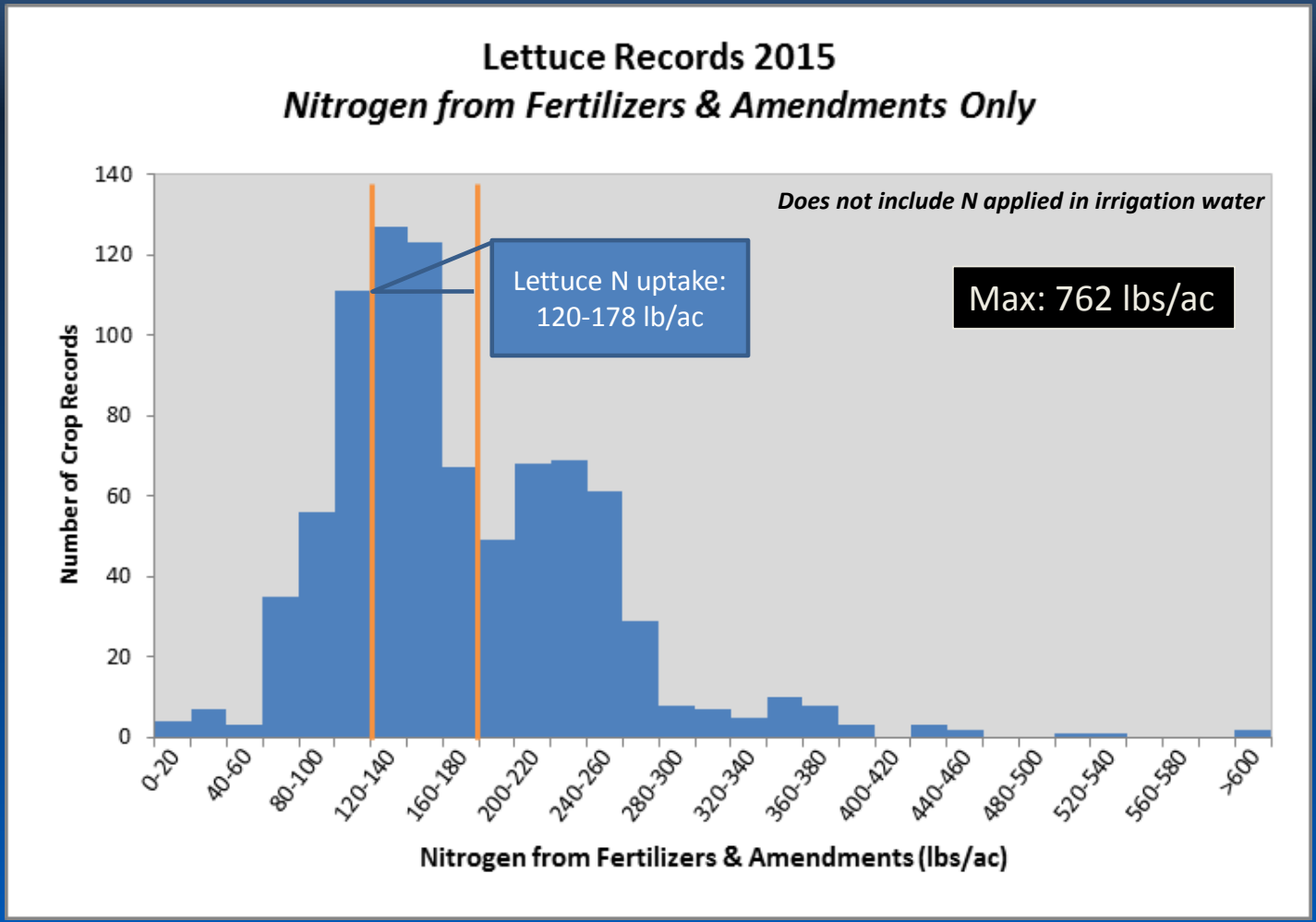
Nitrogen Uptake Ranges (pounds/crop-acre)

Crop	N Crop Uptake Range* (lbs/acre)
	*Maximum Yields
Lettuce (Leaf and Head)	120 - 178

Studies can be found at www.ucanr.edu and www.cdfa.ca.gov

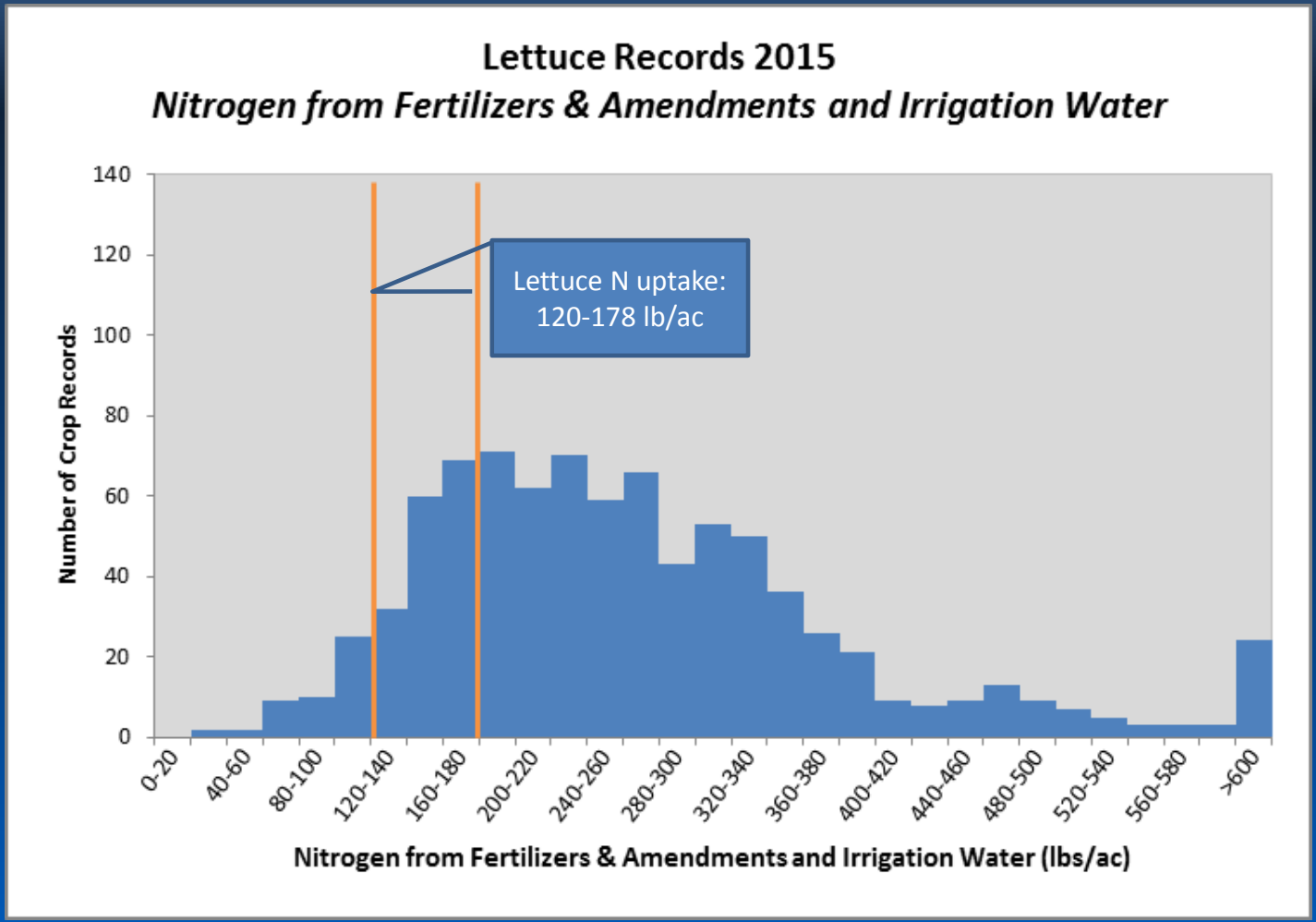
Grower Reported N from Fertilizers

Compared to Specific Crop Nitrogen Uptake



Grower Reported N from Fertilizers & Irrigation

Compared to Specific Crop Nitrogen Uptake



Harvest N Removal Ranges (pounds/crop-acre)

Crop	N Crop Uptake Range* (lbs/acre)	Harvest N Removed (lbs/acre)
	*Maximum Yields	
Lettuce (Leaf and Head)	120 - 178	50 - 80

Studies can be found at www.ucanr.edu and www.cdfa.ca.gov

Crop Nitrogen Uptake & Harvest Removal Ranges (pounds/crop-acre)

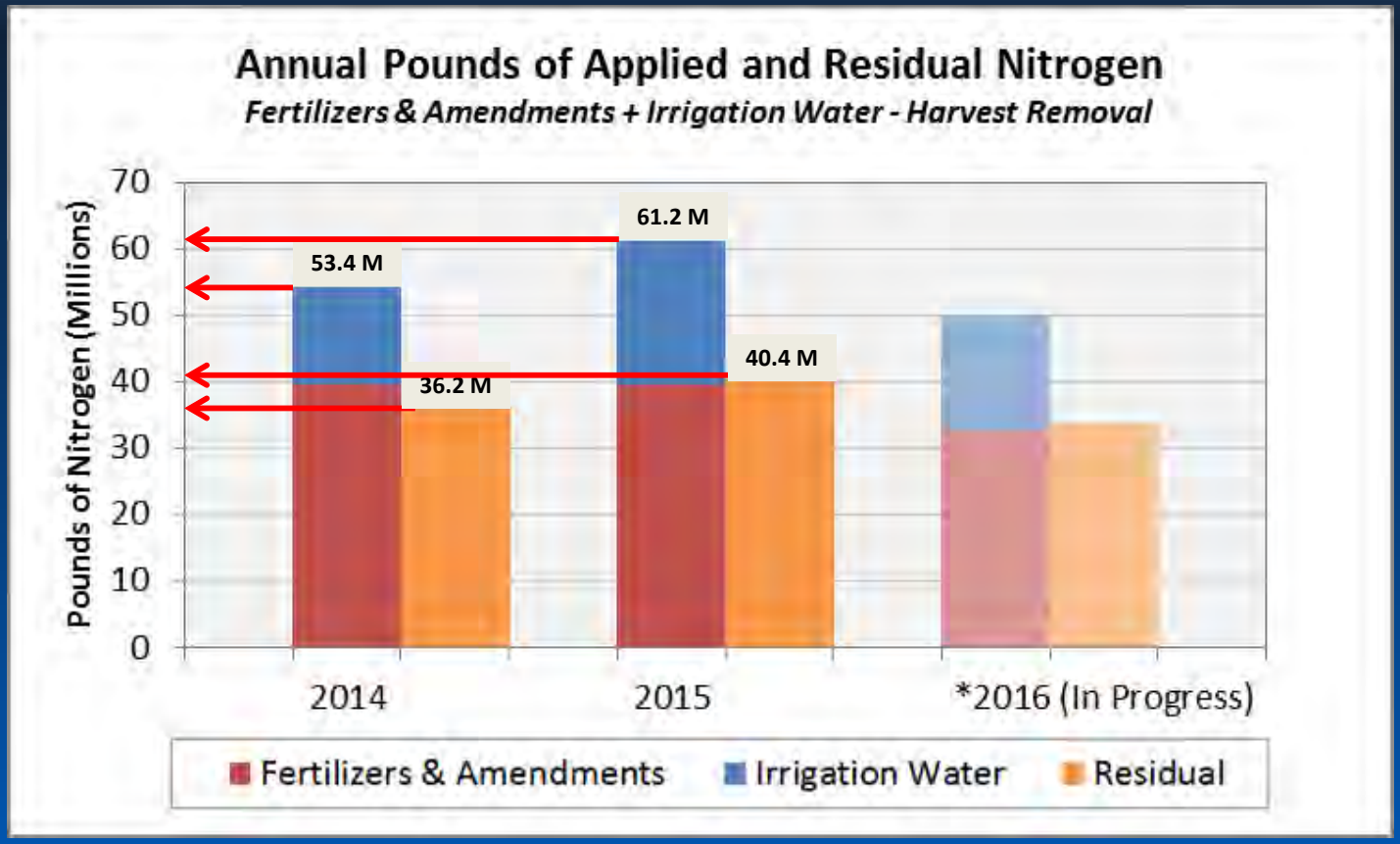
Crop	N Crop Uptake Ranges (lbs/acre)*	Harvest N Removed (lbs/acre)
	*Maximum yields	
Lettuce (Leaf and Head)	120 - 178	50 - 80
Broccoli, Harvest removes 1/3 of the uptake	180 - 337	60 - 112
Spinach (Bunch)	120 - 130	78 - 85
Cauliflower	180 - 285	60 - 70
Strawberry	200 - 240	92 - 100
Celery	200 - 305	120 - 160

Studies can be found at www.ucanr.edu and www.cdfa.ca.gov

N Residual, left in fields after harvest

Photo of lettuce crop

N Residual Relative to N Applied



**2016 values are incomplete and subject to change*

Proposed Total Nitrogen Applied (TNA) Requirement

- Expansion to all Tier 2/3 ranches growing a high risk crop
  - Nitrogen applied reported on all crops grown on the ranch
- Estimate increase from Ag Order 2.0 to 3.0:
  - From 600 to 1,700 ranches
  - From 97,000 to 230,000 acres
  - Note: > 420,000 acres enrolled in Ag Order 2.0
- Why expand the requirement?
  - Nitrogen pollution; agricultural TNA is a significant source
  - Tracking N necessary BMP to address nitrogen pollution
  - Grower awareness first step towards reducing nitrogen loading
  - Only requirement tracking N: applied; reductions; residual
  - Information needed: staff, technical providers, CDFA, educators

Surface Receiving Water Monitoring

Proposed Surface Receiving Water Monitoring

- Two years of pesticide monitoring
- Three years of toxicity monitoring
- Addition of neonicotinoid pesticides
- Addition of toxicity indicator species sensitive to neonicotinoid pesticides
- Removal of some requirements where risk to water quality is low

2014 DPR study shows significant toxicity to alternative test species

FALL 2014: DPR/SWAMP/CMP Region 3

Salinas and Santa Maria Valley Sites	*Hyalella* 10d water	*Chironomus* 10d water	EPA 3 species chronic
Water Sample	SWAMP		CMP
Alisal Slough @ Hartnell Rd	T	T	-
Chualar Creek @ Chualar River Road*	T	NT	NT
Main St. Ditch @ Main St.	NT	NT	NT
Orcutt Creek @ West Main	T	T	NT
Oso Flaco Creek @ OF Lake Rd	T	T	NT
Quail Creek @ SR-101	T	T	NT
Rec Ditch III (Near Airport Blvd)	T	T	NT
Solomon Creek @ SR-1	NT	T	NT
Tembladero Slough @ Haro	T	NT	NT
Percent Toxic	78%	67%	0%

Pesticide Use

1. Neonicotinoid pesticide use increasing
2. Pyrethroid pesticide use increasing
3. Organophosphate pesticide use declining

Pesticide Use Changes

Monterey and Santa Barbara Counties (lbs applied)		
	2010	2014
Neonicotinoids	43,251	70,824

Source: DPR Pesticide Use Database

Pesticide Use Changes

Monterey and Santa Barbara Counties (lbs applied)		
	2010	2014
Neonicotinoids	43,251	70,824
Pyrethroids	46,638	70,378

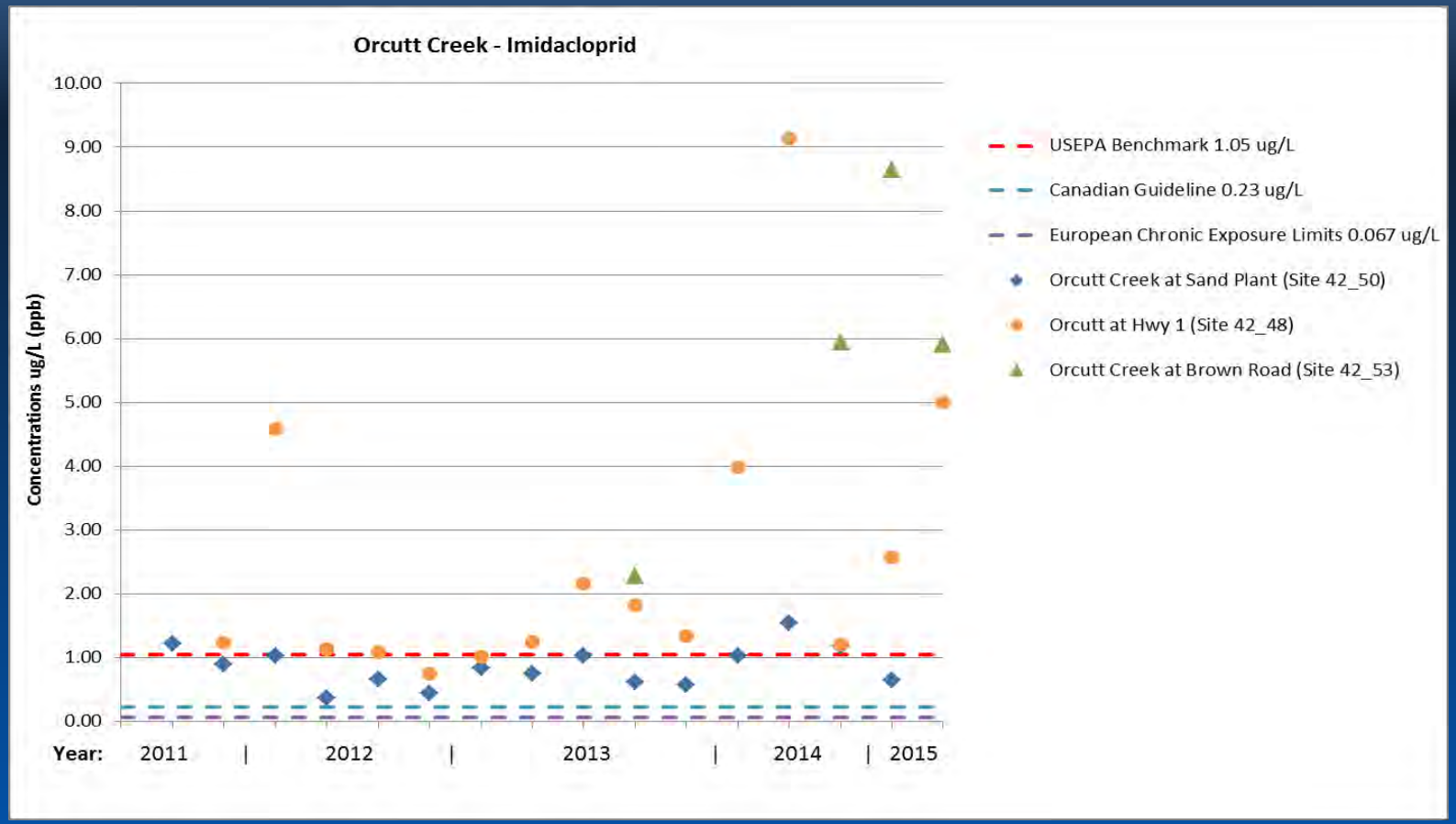
Source: DPR Pesticide Use Database

Pesticide Use Changes

Monterey and Santa Barbara Counties (lbs applied)		
	2010	2014
Neonicotinoids	43,251	70,824
Pyrethroids	46,638	70,378
Chlor/Diaz/ Malathion	362,507	137,147

Source: DPR Pesticide Use Database

Imidacloprid (Neonicotinoid) Concentration



Source: DPR

CA Neonicotinoid Sales 2014-2015

	CA Neonicotinoid Sales 2014-2015 (Lbs)		
	Clothianidin	Imidacloprid	Dinotefuran
2014	20,916	542,262	13,170
2015	119,731	791,125	750,052
Increase (%)	472	46	470

Source: Hoyle and Code, November 2016, *Neonicotinoids in California's Surface Waters, A preliminary Review of Potential Risk to Aquatic Invertebrates,* Xerces Society for Invertebrate Conservation

Proposed Surface Receiving Water Monitoring

- Six neonicotinoids
  - *Chironomus spp*. indicator species for neonics
  - Two years of pesticide monitoring
  - All years toxicity monitoring
- Why?
  - Increasing use of neonicotinoid pesticides
  - Documented exceedance of USEPA benchmark
  - Documented toxicity using species sensitive to neonicotinoids
  - Unexplained toxicity with previously used indicators
  - Information useful for next more long term Ag Order

Proposed Groundwater Monitoring

- Continued monitoring requirement
- 2017
  - Primary irrigation well
  - All domestic wells
- Same frequency as Ag Order 2.0
  - Twice: March-June; September-December
- Monitoring by coalitions: proposals welcome
  - Santa Rosa Creek Valley
  - Central Coast Groundwater Coalition

Public Comments

1. Policy and legal comments: consistency w/Policies
2. Total nitrogen applied expansion: some want less, some want more
3. Monitoring and reporting requirements (MRPs): neonicotinoids; cost; need; process of adoption
4. Economics: cost of compliance
5. New findings: total nitrogen applied data; antidegradation analysis; pesticide use
6. Human right to water: replacement water; public health
7. Cooperatives: current and future importance to growers
8. Toxicity in surface waters: must address

Summary of Changes

	Ag Order 2.0	Draft Ag Order 3.0	Proposed Ag Order 3.0	Reason
1	Term: 5 years	Term: 3 years	Term: 3 years	Anticipate legal and policy issue resolution; board input
2	Total Nitrogen Applied: **600 farms required**	**1,700 farms required**	**1,700 farms required**	Data to address nitrate pollution. Phasing in universal requirement. Consistent with Expert Panel
3	Reports due date (eNOI, ACF, TNA, Disch Mon) **Oct 1 each yr**.	**March 1st each year** beginning 2018	**March 1st each year** beginning 2018	Grower and consultant request. Aligns with growing season. Helps staff implement.
4	INMP Effectiveness Rpt **due once** in Order	**Due annually**	**Due once** March 1, 2019	Grower and consultant request. Discussed at Dec2016 Bd. Mtg. Helps staff implement
5	Water Quality Buffer Plan **due once** in Order	**Due annually**	**Due once** March 1, 2019	Grower and consultant request. Discussed at Dec2016 Bd. Mtg. Helps staff implement.
6	Photo Monitoring **due once** in Order	**Not required**	**Not required**	Photo data gathered; can use remote sensing

Summary of Changes

	Ag Order 2.0	Draft Ag Order 3.0	Proposed Ag Order 3.0	Reason
7	eNOI: grower must name adjacent waterbodies	**Not required**	**Not required**	Grower request. Staff can conduct this analysis
8	eNOI updates due each October 1; growers must annually login to system and update	**Not required if no change.** W/in 30-d of change in enrollment info.	**Not required if no change.** W/in 60-d of change in enrollment info.	Grower request to not edit/check eNOI unless change occurs. Some operations have no change from year to year
9	ACF Sec-C Risk Assessment: grower must complete annually	**Not required**	**Not required**	Sec-C was used to trigger requirements like TNA. TNA now triggered by high risk crops. Also, Sec-C asked growers to "predict" the next years farming plans; they stated this largely not possible
10	ACF Sec-B well N concentration: grower must report annually	**Not required**	**Not required**	Growers and consultants requested removal because redundant in TNA form. Groundwater monitoring also required in MRPs

Summary of Changes

	Ag Order 2.0	Draft Ag Order 3.0	Proposed Ag Order 3.0	Reason
11	Operator requirement to notify new operator of Order w/in 60 days	Within 30 days	**Within 60 days**	Consultants requested retain original 60 day requirement; staff agrees-does not affect implementation
12	New operator must enroll ranch within 60 days of control	Within 30 days	**Within 60 days**	Consultants requested retain original 60 day requirement. Staff agrees, but ranch must be enrolled prior to discharging.
13	Reports are due X-days after ranch termination: X not stated	Within 30 days	**Within 60 days**	Consultants requested 60 days, staff agrees-does not affect implementation

Summary

1. Current Ag Order 2.0 expires March 14, 2017
2. Proposed Order:
    1. Temporary, interim order
    2. Continues many current requirements
    3. Incrementally expands requirements, where necessary
    4. Consistent with Board input/recommendation
3. Staff developing longer term Order (v 4.0)

Recommendation

Adopt Order No. R3-2017-0002 and associated Monitoring and Reporting Programs

R3-2017-0002-01

R3-2017-0002-02

R3-2017-0002-03

Discussion

Extra Slides

Ag 2.0 and 3.0 Order Components

- Online enrollment: GeoTracker
- Tier structure: 3 tiers; increasing requirements
- Surface RW MRPs: 50 sites; all Ag watersheds
- Groundwater MRPs: primary and domestic
- Total Nitrogen Applied Reporting
- Irrigation and Nutrient Management Plan
- Water Quality Buffer Plan
- Edge of field monitoring

From Sept. 2016 Board Meeting

Options Considering for 3.0 Total Nitrogen Applied Reporting

REQUIRED RANCHES	ACRES	RANCHES	OTHER
Current requirement: High Risk T2 /T3	97,000	600	1) Section-C ACF required 2) Some high risk crops not reported
T1, T2, T3	420,000	4,300	1) Includes low risk crops 2) Tier1 high risk = 2% enrolled acres
All T2, T3 exclude Grapes/Orchards	230,000	1,700	1) Includes nearly all high risk crops grown 2) Revises/removes ACF Section-C

Summary of Surface Water MRPs

PARAMETER	AG ORDER 2.0 MRP	PROPOSED MRPs: 2017-18	PROPOSED MRPs 2019
Physical Parameters (flow, pH, EC, DO…)	Every monitoring event	Every monitoring event	Every monitoring event
Nutrients (N, P…)	Monthly incl. 2 stormwater events	Monthly	Monthly
Water Column Toxicity			
Algae	Twice in dry, twice in wet season	Twice in dry, twice in wet season	Twice in dry, twice in wet season
Ceriodaphnia	Twice in dry, twice in wet season	Twice in dry, twice in wet season	Twice in dry, twice in wet season
Fathead minnow	Twice in dry, twice in wet season	NOT REQUIRED	NOT REQUIRED
Chironomous	NOT REQUIRED	Twice in dry, twice in wet season	Twice in dry, twice in wet season
Water Chemistry			
Carbamate Pesticides (6)	4 times in 2nd or 3rd year; concurrent w/tox monitoring	NOT REQUIRED	NOT REQUIRED
Organophosphate Pesticides (13)	4 times in 2nd or 3rd year; concurrent w/tox monitoring	2 times, once in dry once in wet season concurrent with water tox	NOT REQUIRED
Herbicides (8)	4 times in 2nd or 3rd year; concurrent w/tox monitoring	2 times, once in dry once in wet season concurrent with water tox	NOT REQUIRED
Metals (9)	4 times in 2nd or 3rd year; concurrent w/tox monitoring	2 times, once in dry once in wet season concurrent with water tox	NOT REQUIRED
Total phenolic compounds	4 times in 2nd or 3rd year; concurrent w/tox monitoring	2 times, once in dry once in wet season concurrent with water tox	NOT REQUIRED
Neonicotinoids (5)	NOT REQUIRED	Thiamethoxam, Imidacloprid,Thiacloprid, Dinotefuran, Acetamiprid, Clothianidin (new to draft 3.0 MRPs)	NOT REQUIRED
Sediment Sampling			
Sediment Toxicity: Hyalella	Annually	2 times, once in spring once in fall concurrent w/sed tox	2 times, once in spring once in fall concurrent w/sed tox
Benthic Invertebrate/Physical Habitat	Once in 2nd or 3rd year w/sed tox	NOT REQUIRED	NOT REQUIRED
Pyrethroid Pesticides (11)	Once in 2nd or 3rd year w/sed tox	2 times, once in spring once in fall concurrent w/sed tox	NOT REQUIRED
Organochlorine Pesticides (2)	Once in 2nd or 3rd year w/sed tox	NOT REQUIRED	NOT REQUIRED
Chlorpyrifos Pesticide	Once in 2nd or 3rd year w/sed tox	2 times, once in spring once in fall concurrent w/sed tox	NOT REQUIRED

Legal, Policy and Data Issues

- Monterey Coastkeeper vs State Water Board
- East San Joaquin Agricultural Order
- Triangle/Rava Ranches vs Cen. Coast Water Board
- Zamora/Environmental Law Foundation vs Central Coast Water Board
- Several requirements due end of term

Estimations of N Residual

Year	ACREAGE		APPLIED		REMOVED
	Ranch Acres	Crop Acres Grown	Fertilizers and Amendments (A)	Irrigation Water (B)	With Crop Harvest (C)
2014	115,211	200,645	39,435,093	14,877,674	17,380,844
2015	118,010	227,367	39,593,007	21,569,341	19,767,531
2016	97,088	182,399	32,641,052	17,573,737	15,326,126

Includes estimated reductions due to N losses as gas emissions and irrigation water runoff

2016 values are incomplete and subject to change

Data/calculations

Estimations of N Residual

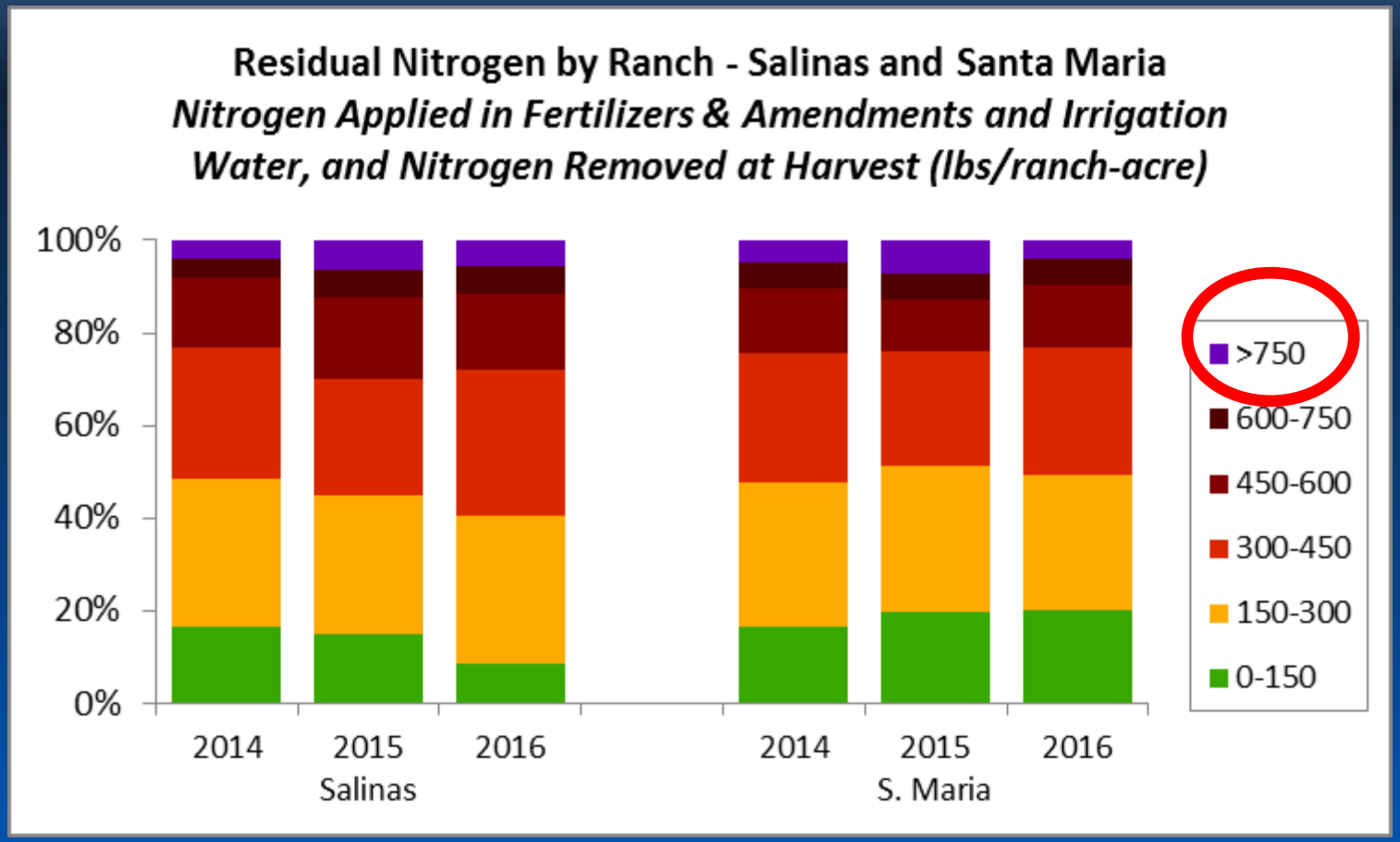
Year	RESIDUAL*	
	Accounting for N from Fert/Amend Only (Pounds)	**Accounting for N from Fert/Amend and Irrigation** (Pounds)
2014	21,882,962	36,196,020
2015	19,761,775	40,404,511
2016	16,949,241	33,743,095

Includes estimated reductions due to N losses as gas emissions and irrigation water runoff

****2016 values are incomplete and subject to change***

Data/calculations

Percentage of Ranches with ranges of N Residual 3 years, Santa Maria and Salinas

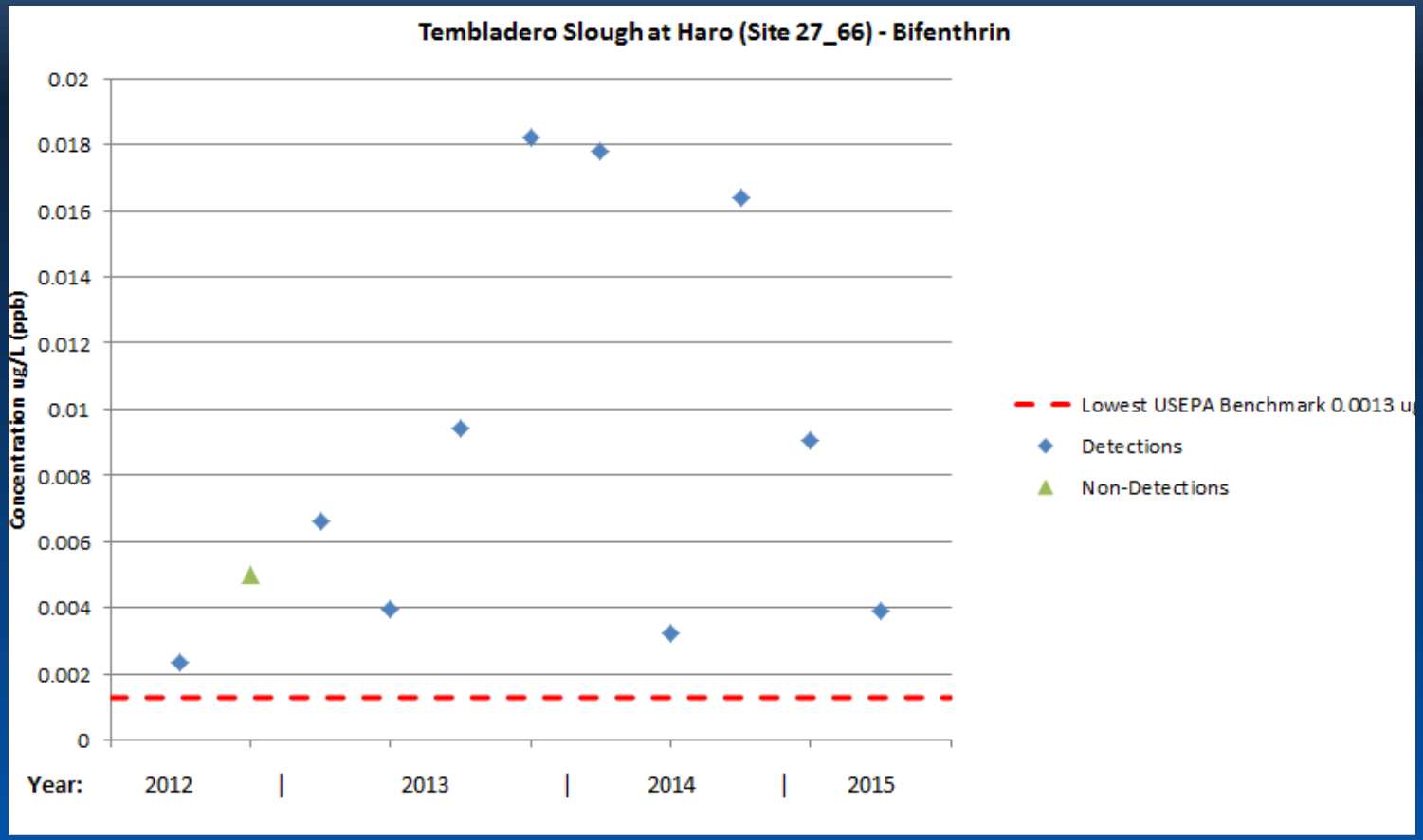


**Includes estimated reductions due to N losses as gas emissions and irrigation water runoff*

2016 values are incomplete and subject to change

Data/calculations

Pyrethroid: Bifenthrin



Source: DPR

Summary of Surface Water MRPs

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Fathead minnow	Twice in dry, twice in wet season	**NOT REQUIRED**	**NOT REQUIRED**
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Removed constituents

Summary of Surface Water MRPs

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Added constituents

TNA Expansion

- Understand current typical N applications
  - Compare with uptake and removal rates
  - Identify potential for improvement
  - Current impacts of applications, by location
    - Impaired drinking water supplies
- Inform Order 4.0
  - Information acts as a proxy for estimating potential loading
  - Identify potential future impacts and high risk areas within the region
    - Surface water
    - Groundwater
    - Human health
- Verify effectiveness of practices and changes made over time
  - Application rate versus uptake rates
  - Pump and fertilize
  - Reuse of residual nitrogen

TNA Expansion

1. We will be able to better understand the impacts of the N application onto farmland to groundwater,
2. Identify the high nitrogen application areas, units, crops,
3. Gain a greater understanding of the N over-application extent and recurrence,
4. Minimize the uncertainties related to the spatial and time scale variations and the difficulties in monitoring actual loading occurring from Ag fields into the unsaturated (vadose) zone,
5. Re-assess the areas of risk for contaminating groundwater based on surface nitrogen applications and therefore,
6. Establish areas that could pose a threat to human health,
7. Ultimately use the nitrogen application to land is useful information to make sound regulatory decisions. For example follow up in certain areas based on current impairment, or use N loading potential to protect specific areas, wells, or communities.
8. Finally, the data show that there is significant room for improvement. We wouldn't know that there was room for improvement if we had never seen this information..

Also this information can provide compliance assistance by:

1. educating growers on how much nitrogen is needed and how much extra is being applied,
2. assisting individual growers in making improvements over time

Growers can help improve the situation by adopting different BMPs, such as pump and fertilize and reuse of N left in fields.

Most importantly this information can be used to verify the effectiveness of the practices and changes/improvements made over time.

ATTACHMENT 10

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2016-0010

ADOPTING THE HUMAN RIGHT TO WATER AS A CORE VALUE AND DIRECTING ITS IMPLEMENTATION IN WATER BOARD PROGRAMS AND ACTIVITIES

WHEREAS:

1. With the enactment of Water Code section 106.3, on September 25, 2012, California became the first state in the nation to recognize legislatively the human right to water, following two other state's recognition of the right in their respective constitutions.

2. Water Code section 106.3 provides, in full:

   (a) It is hereby declared to be the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.

   (b) All relevant state agencies, including the department, the state board, and the State Department of Public Health, shall consider this state policy when revising, adopting, or establishing policies, regulations, and grant criteria when those policies, regulations, and criteria are pertinent to the uses of water described in this section.

   (c) This section does not expand any obligation of the state to provide water or to require the expenditure of additional resources to develop water infrastructure beyond the obligations that may exist pursuant to subdivision (b).

   (d) This section shall not apply to water supplies for new development.

   (e) The implementation of this section shall not infringe on the rights or responsibilities of any public water system.

3. Effective July 1, 2014, the State's Drinking Water Program was transferred from the California Department of Public Health to the State Water Resources Control Board (State Water Board).

4. To reflect the expanded scope of the State Water Board's public health responsibility, on February 3, 2015, the board clarified and revised its mission statement as follows: "To preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations."

5. The State Water Board recognizes that a wide range of activities and projects undertaken by the State Water Board and the Regional Water Quality Control Boards (Regional Water Boards) (collectively, Water Boards) may involve the human right to water, as established by Water Code section 106.3, subdivision (a).

6. Preventing and/or addressing discharges that could threaten human health by causing or contributing to pollution or contamination of drinking water sources of waters of the state, are among the Water Boards' highest priorities, and such discharges should be regulated to attain the highest water quality which is reasonable, considering all demands being made on those waters and the total values involved. (Wat. Code, §§ 13000, 13050, subds. (i)-(m), 13240, 13241, 13263.) When regulating discharges that could threaten human health by causing or contributing to pollution or contamination of drinking water sources, the Water Boards may consider all solutions for ensuring safe drinking water, including providing replacement water as an interim solution while long-term water quality solutions are developed.

7. The Federal Water Pollution Control Act Amendments of 1972, as amended (33 U.S.C. § 1251 et seq. (Clean Water Act)), and the Porter-Cologne Water Quality Control Act (Wat. Code, Div. 7, § 13000 et seq.) require the Water Boards to protect all beneficial uses of water, including municipal or domestic water sources (MUN) to ensure their suitability for those uses in water quality control planning and permitting actions. (Wat. Code, §§ 13241, 13263, subd. (a), 13050, subds. (f) and (h).)

8. The State Water Board's Sources of Drinking Water Policy (State Water Board Resolution No. 88-63) presumes that most surface and ground waters of the state are "suitable, or potentially suitable, for municipal or domestic water supply" (MUN).

9. The Regional Water Boards administer the Sources of Drinking Water Policy through their respective water quality control plans by designating water bodies as suitable, or potentially suitable, for municipal or domestic water supply (MUN).

10. In acting on applications to appropriate water, the State Water Board must consider "the relative benefit to be derived from […] all beneficial uses of the water concerned," including domestic uses, "and any uses specified in any relevant water quality control plan[.]" "The board may subject such proposed appropriations to such terms and conditions as in its judgment will best develop, conserve, and utilize in the public interest, the water sought to be appropriated." (Wat. Code, § 1257.) The State Water Board has continuing authority over permitted and licensed appropriations, and authority to ensure the water resources of the state are put to beneficial use to the fullest extent and that water not be wasted or unreasonably used. (*Id*., §§ 100, 275.)

11. Water Code section 189 established the Office of Sustainable Water Solutions within the State Water Board "to promote permanent and sustainable drinking water and wastewater treatment solutions to ensure effective and efficient provision of safe, clean, affordable, and reliable drinking water and wastewater treatment services," focusing on, among other actions, addressing financial and technical assistance needs for disadvantaged communities, and promoting regional solutions to communities unserved or underserved by public water systems and wastewater treatment systems. "Disadvantaged community" is defined as "a community with an annual median household income that is less than 80 percent of the statewide annual median household income." (Wat. Code, § 79702, subd. (j) (incorporating Water Code section 79505.5).)

12. Water Code section 189.5, referred to as the Low-Income Water Rate Assistance Act, requires the State Water Board, in collaboration with relevant stakeholders and the State Board of Equalization, to develop a plan, no later than January 1, 2018, to fund and implement the Low-Income Water Rate Assistance Program. The Act requires the State Water Board to report to the Legislature no later than February 1, 2018, on its findings regarding the program's feasibility, financial stability, and desired structure, and include any recommendations for legislative action. (Wat. Code, § 189.5, subds. (a)-(b), (e)(1).)

13. Considerations relevant to the affordability of water for human consumption, cooking, and sanitary purposes include economic and cost factors, water supply operation and maintenance expenses, and household incomes.

14. The amount of water necessary for human consumption, cooking, and sanitary purposes varies by individual circumstance but assumptions in current law provide information regarding a reasonable maximum daily per capita human use. The Water Efficiency Act of 2009 identifies 55 gallons per capita per day as a provisional conservation standard for "indoor residential water use" by 2020. (Wat. Code, § 10608.20, subd. (b)(2)(A).) Similarly, a prior State Water Board emergency regulation established an exemption from a prohibition on diverting water, under specified circumstances, up to a maximum of 50 gallons per capita daily in order to meet "minimum health and safety needs." (Cal. Code Regs., tit. 23, § 878.1, subds. (a)-(b) [operative March 30, 2015 and repealed Dec. 29, 2015].)

15. At the March 3, 2015 State Water Board meeting, staff reported on the status of the implementation of the human right to water. Staff presented results of a survey concerning the wide range of activities and projects undertaken by the Water Boards that address the human right to water through actions to protect any existing or potential MUN beneficial use, including but not limited to, basin planning, permitting actions, site remediation, monitoring, and water right administration.

16. In consideration of the legislative enactment of the human right to water and the Water Boards' ongoing efforts to consider or promote attainment of that right, it is appropriate for the State Water Board to provide clear and transparent guidance to State Water Board staff and the Regional Water Boards concerning the manner in which the human right to water continue to be administered.

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Adopts the human right to water as a core value and adopts the realization of the human right to water as a top priority for the Water Boards.

2. Will continue to consider, and encourages the Regional Water Boards to continue considering, the human right to water in all activities that could affect existing or potential sources of drinking water (MUN), including, but not limited to, revising or establishing water quality control plans, policies, and grant criteria, permitting, site remediation, monitoring, and water right administration. However, this resolution does not expand the legal scope of the human right to water as described in Water Code section 106.3, alter the Water Boards' authority and obligations under applicable law, or impose new requirements on the regulated community.

3. Directs State Water Board staff to work with relevant stakeholders to, as resources allow, develop new or enhance existing systems to collect the data needed to identify and track communities that do not have, or are at risk of not having, safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.

4. Directs State Water Board staff to work with relevant stakeholders and develop performance measures for the evaluation of the board's progress towards the realization of the human right to water, evaluate that progress, and explore ways to make that information more readily available to the public.

5. Directs State Water Board staff to explore opportunities for the State Water Board, and when practical, in partnership with other governmental agencies or organizations, non-profit organizations, impacted communities, and private businesses, to work toward realizing the human right to water within the State Water Board's administration of its programs and projects.

6. Directs the State Water Board's Office of Sustainable Water Solutions to provide, when feasible and as resources allow, technical and compliance assistance to disadvantaged communities to develop the capacity of the recipient community to evaluate solution(s) and select a sustainable approach that supports the human right to water.

7. Directs State Water Board staff, when submitting a recommendation to the board pertinent to the human right to water, to describe how the right was considered, and encourages Regional Water Board staff to do the same when making pertinent recommendations to their boards.

8. Directs State Water Board staff and encourages Regional Water Boards, as resources allow, to meaningfully engage with communities that lack adequate, affordable, or safe drinking water, including providing community outreach, technical assistance and financial resources, as part of the Water Boards' administration of programs or project funding pertinent to human right to water, including those described in recitals 11 and 12.

9. Directs State Water Board staff and encourages Regional Water Boards to evaluate the extent to which a proposed project, plan, decision, or action, pertinent to the human right to water, has been developed with meaningful engagement of impacted communities.

10. Encourages Water Board staff to consider existing law and policies that may be relevant to assessing water safety, cleanliness, affordability, accessibility, adequacy, and sustainability, such as those referred to in recitals 7-14, when considering the human right to water.

11. Directs State Water Board staff to incentivize regional approaches, where appropriate, by implementing financial assistance programs to address communities unserved or underserved by public water systems and wastewater treatment systems.

12. Encourages Regional Boards to consider developing policies that allow for and incentivize local and regional efforts for providing replacement water where appropriate while long-term water quality solutions are developed and implemented.

13. Directs State Water Board staff to provide annual progress reports to the board regarding implementation of the human right to water, and incorporate that information into the board's annual performance report. The report shall identify successful strategies that have furthered the realization of the human right to water.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Board held on February 16, 2016.

AYE:	Chair Felicia Marcus Vice Chair Frances Spivy-Weber Board Member Tam M. Doduc Board Member Dorene D'Adamo
NAY:	None
ABSENT:	Board Member Steven Moore
ABSTAIN:	None

Jeanine Townsend
Clerk to the Board