Attachment 1- Comment Letters

Response to Comments

Waste Discharge Requirements General Order for Growers within the Eastern San Joaquin River Watershed that are Members of the Third-Party Group

	Commenter
1	Community Water Center, Clean Water Action CA, CA Rural Legal Assistance Foundation
2	Environmental Protection Agency
3	Agricultural Organizations
4	Dr. Thomas Harter, UCCE Groundwater Hydrology Program
5	California Farm Bureau
6	San Joaquin County & Delta Water Quality Coalition
7	Westside San Joaquin River Watershed Coalition
8	East San Joaquin Water Quality Coalition
9	Southern San Joaquin Water Quality Coalition
10	Innovative Ag Services, LLC
11	CV-SALTS Technical Advisory Committee
12	Bud Hoekstra
13	California Sportfishing Protection Alliance
14	Paramount Farming Company

Letter 1

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EL CENTRO COMUNITARIO POR EL AGUA

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CALIFORNIA

California Rural Legal Assistance Foundation

August 6, 2012

Karl Longley
Chair, Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

Re: East San Joaquin Revised draft WDR

Dear Mr. Longley,

As representatives of environmental and environmental justice communities located in the Central Valley and throughout California, our organizations have closely followed the development of the Eastside San Joaquin Region's General Waste Discharge Requirements for Irrigated Agricultural Discharges. We appreciate the efforts made by staff as well as the regulated community to create an effective regulatory program for agriculture. Our comments on the current draft continue to reflect the urgent need to address widespread groundwater contamination attributable to irrigated agriculture, and your responsibility under the Porter-Cologne Act to do so.

We greatly appreciate the clarifications provided by this revised draft order. We continue to have two major concerns;

- That the program fails to control contamination of groundwater from pesticide use;
- That the program does not provide adequate levels of enforcement capabilities to protect water quality.

Pesticides

The Board has apparently decided to cede regulatory authority over pesticides in groundwater to the Department of Pesticide Regulation (DPR). The order makes the assumption that monitoring performed by DPR is adequate to identify groundwater contamination trends due to pesticides. Unfortunately, DPR monitors for only about one-third of the pesticides on its 1

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6800(b) list of likely groundwater contaminants. This order fails to identify which pesticides on the 6800 (b) list are used in the region, even as it acknowledges that monitoring data is not available for all pesticides in use in the region.

DPR's program as implemented does not comply with the Board's anti-degradation policy, or with DPR's own Pesticide Contamination Prevention Act. We've provided a short brief, attached to this letter, outlining our concerns. In sum, approximately 375 tons of pesticides from DPR's 6800(b) list were applied in the region in 2010, according to the departments pesticide use reporting data, of which approximately 60% by weight are included in either DPR's or CDPH's monitoring program. This seems to us to be clearly inadequate for ensuring the protection of groundwater quality. 1

The Board cannot cede its responsibilities for protecting water quality and preventing degradation to another agency, if that agency's program has demonstrated that it is not adequate to comply with California's water quality laws.

Recommendation: Require that groundwater trend monitoring workplans include monitoring protocol for those pesticides in use within DPR Groundwater Protection Areas that appear on the departments 6800 (b) list but are not being monitored by DPR's shallow groundwater or soil monitoring program.

Enforcement

We appreciate that the East San Joaquin order is the first regional order, and agree that this region should not be subject to a timeline that penalizes it for being proactive. However, we are now looking at a very long timeline for implementation of the order and associated improvements in water quality:

- 1999 – Senate Bill 390 is signed into law, required the Regional Water Boards to review their existing waivers and to renew them or replace them with WDRs 2
- 2003-2004 - surface water monitoring begins
- 2008 – board agrees to include groundwater in future regulatory program
- 2012* – October: East San Joaquin River WDR approved
  - December: application of 3rd party coalition approved
- 2014 (spring)* – first nitrogen budgets due

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- first summary report due

- 2014 (fall/winter)* - trend and representative groundwater monitoring workplans due
- 2015* – groundwater trend monitoring begins; annual data submission to GAMA
- 2016* – second summary report due
- 2018*- third summary report due – three years of GW quality monitoring information available for review/comparison

* estimated dates based upon the terms of the draft order

Given the very long timeline for implementation of the plan, and estimates of several decades after that to realize significant improvements in groundwater quality, it is clear that any enforcement based on water quality monitoring will not be possible for at least a decade, and communities will continue to suffer and pay for water quality degradation for the foreseeable future. This order, therefore, must include reasonable measures for enforcement based on reporting that indicates use of protective practices, in addition to the water quality monitoring programs aimed at showing achievement of water quality objectives over the long-term. Even small token fines for exceeding nutrient budget parameters, for example, can ensure signal the importance of protecting water quality, while also generating funds to mitigate continuing community impacts. 2

As currently written, enforcement will be based upon administrative paper compliance – timely enrollment and report submittal – rather than improvements in water quality or adoption of protective practices, which is everyone's goal. Information indicating on-giong impacts to water quality in the short term is limited to the required reporting of nitrogen budgets on a square mile basis. We strongly support this requirement, as well as the submittal of nitrogen budgets by crop and grower. This information also provides an opportunity for enforcement based on impacts to water quality.

Recommendation: The Water Board should set a level for appropriate deviation from median for crop-based nitrogen budgets, and issue violation notices and fines to those growers who report nutrient budgets outside of that deviation. This fine could be set at a minimal level for 2014, and increase with each bi-annual report, with the fines generated going to a SEP established to provide safe drinking water to communities with nitrate contamination.

Another barrier to enforcement is the limited amount of information to be made public by the 3rd party coalitions in their bi-annual reports to the Board. While nitrogen budgets are 3

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extremely useful for planning and reporting, they only provide a ratio of nitrogen applied versus nitrogen removed. Reporting of fertilizer application on the same square mile basis will, when combined with the nitrogen budget ratio, provide important information about nitrogen loading to groundwater. This information will be critical both to understanding groundwater monitoring data and in prioritizing growers for inspection and enforcement. 3

Fertilizer use, much like pesticide use, is not a confidential trade secret and is an indicator that should be provided as part of the nutrient budgets to determine nitrogen loading of groundwater.
Recommendation: Include fertilizer use reporting on a square mile basis in 3rd party coalition's bi-annual reports.

Conclusion

We appreciate the opportunity to review this order and provide input. Both staff and the East San Joaquin River Water Quality coalition have succeeded in developing a plan with clear timelines and responsibilities. We continue to be concerned about the limited amount of information that will be made available to the public, and about the establishment of clear mechanisms to enforce the order based upon threats to water quality. We trust that the final order will remedy these faults so that we can fully support this order.

Sincerely,

Laurel Firestone
Co-Executive Director and Attorney at Law
Community Water Center

Jennifer Clary
Water Policy Analyst
Clean Water Action

Phoebe Seaton
California Rural Legal Assistance Foundation

Letter 1 - Att A

Memo on Pesticide Comments for ILRP

The legacy fumigants that contaminate the drinking water supplies of our communities tomorrow are caused by inadequate protection programs today. We have a continuous history of DBCP, 123 TCP, and other pesticide contamination that has cost local governments, communities, families, schools and businesses millions of dollars. In addition, our most disadvantaged, environmental justice communities often have contaminated, unsafe water in their homes for decades as new sources and treatment remain too expensive or in accessible. As a result, for example, one local school in Tulare County just last year still had DBCP, a pesticide that was banned in the 1970s due to sterilization and other health impacts, above the legal limit in their sole well source. Additionally, private wells are even more vulnerable and already research has linked pesticide contamination of private wells to elevated levels of Parkinson's disease locally in the San Joaquin Valley.[1] There are very real health impacts to local residents as well as very significant economic impacts of pesticide contamination of groundwater.

The key is to prevent widespread contamination, not wait to detect after widespread damages have already occurred. Already, pesticides and pesticide degradates have been detected in 59 percent of wells in the Central-Eastside San Joaquin Basin in 2006 and 30% of wells in the Madera-Chowchilla Study Unit in 2008 – despite the fact that many pesticides designated as having the potential to contaminate groundwater that have been and continue to be used have never been tested for in local vulnerable groundwater environments.

In Stanislaus and Merced Counties, 56 of the pesticides on the 6800(b) list were applied in 2010 on agricultural land, for a total of roughly 375 tons. Of this, nearly 220 tons of applied pesticides were part of either a CDPH or DPR monitoring program, while the balance of 157 tons came from the list of pesticides for which DPR is not conducting monitoring. A few of the pesticides on the unmonitored list do have application restrictions.

The Pesticide Contamination Protection Act.

The Pesticide Contamination Prevention Act directs DPR to create and maintain a "Groundwater Protection List", i.e., a list of pesticides with "the potential to pollute groundwater.[2]" The Act further requires that DPR monitor the soil and groundwater in areas where pesticides on the Groundwater Protection List are applied to determine whether these pesticides have migrated to

1

http://www.sierraclub.org/sierra/201201/parkinsons-pesticides.aspx
http://aje.oxfordjournals.org/content/169/8/919.full.pdf+html

[2] Cal. Food & Ag. § 13145(d).

deep soil or groundwater.[3] The Act specifically directs that "monitoring shall commence within one year after the pesticide is placed on the Groundwater Protection List".

In 2010, DPR monitored groundwater for only six of the 98 pesticides on the Groundwater Protection List.[4] DPR relied on CDPH's groundwater monitoring program for data on 37 more pesticides. The remaining 55 pesticides were not monitored at all.

DPR seems to believe that it is not required to monitor for every pesticide on the Groundwater Protection List. The Revised Protocol For Selecting Ground Water Protection List Pesticide Active Ingredients To Be Monitored Under Certain Agricultural Conditions ["Revised Protocol"], a document published by DPR, provides that a committee (the "Environmental Hazards Assessment Program") will evaluate the pesticides on the Groundwater Protection List and recommend one or more for monitoring each year.

However, the monitoring program established by the Revised Protocol does not meet the requirements of the PCPA. The language of the Act's monitoring provisions demonstrates that the Act envisions monitoring for each pesticide according to a strict timeline. For example, Section 13148(a) provides that groundwater monitoring "shall commence within one year after the pesticide is placed on the Groundwater Protection List." The use of the definite article "the" in "the pesticide" (as opposed to "as pesticide" or "any pesticide") implies that monitoring for each pesticide is to begin at the latest one year after each pesticide is listed. A monitoring program that does not start monitoring for a pesticide within one year of its listing is in violation of the PCPA.

Moreover, the PCPA requires both soil and groundwater monitoring.[5] To the extent that DPR is monitoring for pesticides at all, it appears that it is only monitoring groundwater, not soil.

Current state of pesticide monitoring in East San Joaquin Region

Where the California Department of Public Health (CDPH) and DPR has conducted the required monitoring, they have done an excellent job. However, there are significant gaps that the Regional Water Quality Control Board must address through the Irrigated Lands Regulatory Program in order to ensure groundwater is protected from irrigated agricultural activities.

In 2010, Department of Pesticide Regulation monitored groundwater for only six of 98 actively registered pesticides on the Groundwater Protection List. DPR relies entirely on Department of Public health's public supply wells for data on another 37 pesticides. That leaves 55 actively registered pesticides that have been identified as having the potential to contaminate groundwater

[3] *Id*. § 13148(a)
[4] *See* 3 C.C.R. 6800(b); DPR, *2010 Update of the Well Inventory Database* 56-59 (2010)
[5] Cal Food & Ag. § 13148(a)

that were not monitored for at all. Of those unmonitored chemicals, 37 were applied to agricultural crops the East San Joaquin region in 2010, some in very small quantities. In total, these unmonitored pesticides totaled over 155 tons or 40% of the 6800 (b) list chemicals applied in the region in 2010 by weight.

Importantly, monitoring that relies only on public supply wells is sampling aquifers too late to detect contamination before it has polluted on a widespread basis. Chemicals on the CDPH required monitoring list either have an established regulatory standard or are being monitored because a regulatory standard is under consideration. That is, a problem has been detected, and CDPH is taking steps to protect the public. If CDPH must regulate for the presence of a pesticide in drinking water, either the contamination occurred prior to the adoption of the PCPA, or the actions of DPR are inadequate to prevent groundwater contamination.

Need for regulation in the ILRP

It is critical, in order to meet mandate of this Board to protect water quality, that the ILRP require that where growers use pesticides on the Groundwater Protection List in vulnerable groundwater areas, and those pesticides are not monitored for in shallow groundwater or soil by DPR's program, that the growers be required to sample for those pesticides within their monitoring program. This would allow us to use DPR's program and expertise, but also have a backstop on the gaps of that program, and allow the exact sampling requirement to evolve along with DPR's program.

Currently orders say that DPR's program is "sufficient to identify any emerging pesticides of concern and to track water quality trends of identified pesticides of concern." The order also states that the Board may require third party to conduct studies or implement a monitoring plan. It is clear from DPR's own data that a significant and critical data gap exists. Therefore it is imperative that the order require the collection of information to fill that gap. It can do this in a way that allows the plans to change as DPR's program evolves in order to avoid duplicative effort.

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Appendix: B-list pesticides

55 unmonitored **(56%)**; 9 individually monitored (dates monitored in parentheses)
34 monitored by DPH or DPR in 2010 WID; * - subject to regulation.
Those chemicals with strikethroughs were not applied to agricultural crops in 2010, according to the DPR database for Stanislaus and Merced Counties

1. acephate
2. **alachlor**
3. **aldicarb***
4. azinphos-methyl (1994-1995)*
5. azoxystrobin
6. bensulfuron methyl
7. bensulide
8. **carbaryl**
9. **carbofuran***
10. chloropicrin*
11. **chlorothalonil**
12. ~~chlorsulfuron~~
13. clomazone
14. ~~**cyanazine**~~
15. ~~**cycloate**~~
16. ~~**2,4-D, 2-ethylhexyl ester**~~
17. **2,4-D, diethanolamine salt**
18. **2,4-D, dimethylamine salt**
19. ~~**2,4-D, isooctyl ester**~~
20. **2,4-DP-p [*R* enantiomer of dichlorprop], dimethylamine salt**
21. dazomet*
22. **diazinon**
23. ~~**dicamba, diglycolamine salt***~~
24. **dicamba, dimethylamine salt***
25. **dicamba sodium salt***
26. ~~dichlobenil~~
27. ~~dichloran~~
28. ~~diethatyl-ethyl~~
29. diflufenzopyr, sodium salt
30. ~~dimethenamid-P~~
31. **dimethoate**
32. dinotefuran
33. **diquat dibromide**
34. dithiopyr
35. ~~**endothall, dipotassium salt**~~
36. ~~**endothall, mono-(*N,N*-dimethyl alkylamine) salt**~~
37. **EPTC (*S*-ethyl dipropylthiocarbamate)**
38. ~~ethofumesate~~
39. ethoprop
50. ~~imazapic, ammonium salt~~
51. ~~imazethapyr~~
52. imazethapyr, ammonium salt
53. imidacloprid (2009)
54. iprodione
55. isoxaben
56. linuron
57. **malathion**
58. mefenoxam
59. metalaxyl (1995-1996)
60. ~~metaldehyde~~
61. ~~**methiocarb**~~
62. **methomyl**
63. ~~methyl isothiocyanate~~
64. **methyl parathion**
65. metolachlor (2000-2001)
66. (*S*)-metolachlor (2000-2001)
67. **metribuzen**
68. ~~**molinate**~~
69. **napropamide**
70. ~~naptalam, sodium salt~~
71. ~~nitrapyrin~~
72. **oryzalin**
73. ~~oxydemeton-methyl (1995-1996)~~
74. ~~**parathion**~~
75. ~~pebulate~~
76. penoxsulam
77. ~~phorate~~
78. piperonyl butoxide
79. prometryn
80. propanil*
81. propyzamide (1995-1996)
82. ~~pyrazon~~
83. rimsulfuron
84. ~~siduron~~
85. ~~sulfometuron-methyl~~
86. ~~**tebuthiuron**~~
87. ~~terrazole~~
88. thiamethoxam
89. ~~thiazopyr~~

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40. fenamiphos (2001-2002)*
41. ~~fenoxycarb~~
42. fludioxonil
43. ~~fluometuron~~
44. ~~flutolanil~~
45. ~~fonofos (1994-1995)~~
46. fosetyl-Al (aluminum tris)
47. halosulfuron-methyl
48. **hexazinone**
49. imazamox, ammonium salt

90. thiobencarb
91. thiophanate methyl
92. ~~triallate~~
93. triclopyr, butoxyethyl ester
94. triclopyr, triethylamine salt
95. triflumizole
96. ~~uniconizole-P~~
97. ~~**vernolate**~~
98. ~~vinclozolin~~

Letter 1 - Att B

DPR 6800 (b) pesticides monitoring, use information
Stanislaus and Merced Counties, 2010

Pesticide	most recent DPR monitoring	Stanislaus Co. 2010 application (pounds)	Merced Co. 2010 application (pounds)	Total 2010 application (pounds)	notes	
acephate		3809	1615	5424		
azinphos-methyl*	1994-95	137		137		
azoxystrobin		7686	8123	15809		
bensulfuron methyl			4	4		
bensulide		6708	95	6803		
chloropicrin*		8125	113835	121960		
chlorsulfuron					not an ag chem	
clomazone			468	468		
dazomet*		772		772	may not be ag	
dichlobenil					not an ag chem	
dichloran				0		
diethatyl-ethyl				0		
diflufenzopyr, sodiumsalt		6	38	44		
dimethenamid-P				0		
dinotefuran			68	68	no just an ag chemical	
dithiopyr		1870	655	2525	nursery and other landscapes	
ethofumesate				0	not generally used in ag	
ethoprop		813		813		
fenamiphos*	2001-2002		40	40		
fenoxycarb				0		
fludioxonil		24	100	124		
flumeturon				0		
flutolanil				0	not ag chemical	
fonofos	1994-1995			0		
fosetyl-Al		2482	1873	4355		
imazapic, ammonium salt				0		
imazethapyr				0		

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imazethapyr, ammonium salt		170	570	740		
imidacloprid	2009	3245	5611	8856		
iprodione		29917	19296	49213		
isoxaben		2666	124	2790	not just an ag chemical	
linuron			224	224		
mefenoxam		287	1744	2031		
metalaxyl	1995-1996	14		14		
metaldehyde				0	not ag chemical	
methyl isothiocyanate				0		
metolachlor	2000-2001	1725	15321	17046		
(S)-metolachlor	2000-2001	18495	22895	41390		
naptalam, sodium salt				0		
nitrapyrin				0		
oxydemeton-methyl	1995-1996			0		
pebulate				0		
penoxsulam		102	62	164		
phorate				0		
piperonyl butoxide		2329	3148	5477	mostly not ag	
prometryn		203	3437	3640		
propanil		1650	8681	10331		
propyzamide	1995-`996	5	124	129	not just an ag chemical	
pyrazon				0		
rimsulfuron		343	249	592		
siduron				0	not an ag chem	
sulfometuron-methyl				0	not an ag chem	
terrazole				0		
thiamethoxam		155	442	597		
thiazopyr				0		
thiophanate methyl		1820	4458	6278		
triallate				0		
triclopyr, butoxyethyl ester		729	209	938		
triclopyr, triethylamine salt		2360	646	3006		
triflumizole		258	406	664	mostly, but not all ag	
uniconizole-P				0		
halosulfuron-methyl		185	196	381		
imazamox, ammonium salt		70	126	196		

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vinclosolin				0		
Total unmonitored pesticides applied				314043		

* these pesticides have application restrictions as part of their application permit

Chemicals monitored by DPH or DPR					Use status	Date Drinking water standard established
alachlor			12	12	no longer registered in CA	1994
aldicarb*		1	12492	12493		
carbaryl		4411	2246	6657		
carbofuran*				0		
chlorothalonil		79970	53903	133873		
cyanazine				0		
cycloate				0		
2,4-D, 2-ethylhexyl ester				0	not ag chem	
2,4-D, diethanolamine salt		2292	2624	4916		
2,4-D, dimethylamine salt		44759	40162	84921		
2,4-D isooctyl ester				0		
2,4-DP-p dimethylamin salt		792	4282	5074		
diazinon		2568	945	3513		
dicamba, diglycolamine salt				0		
dicamba, dimethylamine salt		3519	2529	6048		
dicamba, sodium salt		729	894	1623		
dimethoate		27924	8488	36412		
diquate dibromide		506	294	800	some nursery use, no ag	1994
endothall, dipotassium salt endothall, mono (N,N-dimethyl alkylamine) salt				0	not ag chem	1994
EPTC		2997	1509	4506		
malathion		7314	17007	24321		
methiocarb				0		
methomyl		660	5172	5832		
methyl parathion		1032		1032		

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metribuzen		222	176	398		
molinate				0		1989
napropamide		257	1192	1449		
oryzalin		68911	20714	89625		
parathion				0		
tebuthiuron				0	not ag chem	
thiobencarb		1221	679	1900		1989
hexazinone		3505	8073	11578		
vernolate				0		
Total application of monitored pesticides				436983		
			Total 6800 (b) application	751026		

Letter 2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street (WTR-3)
San Francisco, CA 94105

Adam Laputz
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive. #200
Rancho Cordova, CA 95670-6114

Dear Mr. Laputz

Thank you for the opportunity to provide comments on the Waste Discharge Requirements (WDR) for Growers in the Eastern San Joaquin River Watershed. EPA strongly supports the Regional Board's efforts to improve its Irrigated Lands Regulatory Program through issuing WDRs to further protect and restore surface and groundwater water quality in the San Joaquin River watershed. The Water Boards are recognized as national innovators in utilizing State regulatory authorities to address agriculture-related water quality issues, consistent with California's federally approved nonpoint source management program under Clean Water Act Section 319. In particular the farm management performance standards listed below, including the minimization of waste discharges to both surface and groundwater, are appropriate. 1

a. minimize waste discharge offsite in surface water,
b. minimize or eliminate the discharge of sediment above natural background levels,
c. minimize percolation of waste to groundwater,
d. minimize excess nutrient application relative to predicted crop need,
e. prevent pollution and nuisance
f. achieve and maintain water quality objectives and beneficial uses,
g. protect wellheads from surface water intrusion. (p.29 of Attachment A)

EPA recommends adding the prevention of toxicity into the performance standards. This change would be consistent with the protection of beneficial uses and water quality objectives in the Basin Plan. Bullet "e" would then read "e. prevent pollution, toxicity and nuisance". 2

EPA supports the WDR's approach to control nonpoint source pollution of nutrients to surface and groundwater with the development of Nitrogen Budgets. Reductions in nutrients discharges can be expected from growers taking a closer look at the nutrient requirements of their crops and the overall budgets of nitrogen applied. Reporting the Nitrogen Budget and Farm Evaluation information, at the 1 square mile scale to the Regional Board will help the Regional Board evaluate the effectiveness of practices and identify nitrogen hot spots for targeted enforcement. 1

EPA also supports the Regional Board's intent to reduce waste discharges to groundwater through the implementation of this WDR. EPA recommends focusing on the implementation of 8

practices to reduce percolation of wastes to groundwater in the high vulnerability areas as a complement to its current emphasis on monitoring groundwater quality. In general, any incentives the Regional Board can put in place for growers to reduce discharges to surface and groundwater such as implementing tailwater recovery systems, are likely to result in more immediate water quality improvements. 8

This WDR will lead to the establishment of new Nitrogen Budget, Farm Evaluation, and Sediment and Erosion Control Plan reporting templates after the adoption of the WDR. It is anticipated that these will be required elements of the many upcoming WDRs for irrigated agriculture in the Central Valley Region. EPA recommends that the Regional Board develop one consistent set of templates for all of the irrigated agriculture WDRs to ensure consistency and fairness to growers in different areas. This would also reduce the administrative burden of conducting a public process for each set of templates. Similarly, required monitoring parameters and the overall approach for monitoring should be consistent between WDRs. EPA supports having the Regional Board (rather than third parties) establish the trigger limits for pollutants without numeric water quality objectives as it is a step in the right direction towards consistency between WDRs. 3 4

EPA has concerns that chronic toxicity testing of surface water is not required by this WDR. Acute toxicity tests measure the adverse effect (usually mortality) on a group of test organisms during a short-term exposure (e.g. 24, 48, or 96 hours). Chronic tests have a sublethal endpoint and are usually conducted for a longer period. A pollutant can have a significant impact on an aquatic community without producing short term mortality, such as by reducing growth or reproductive ability. The exposure of organisms in the creeks and rivers of the Eastern San Joaquin Watershed is chronic and thus chronic toxicity testing is the most appropriate to assess the impact of irrigated agriculture discharges to aquatic life. Additionally, including chronic toxicity testing in this WDR would be consistent with the Los Angeles and Central Coast Regions' Conditional Waivers for irrigated agriculture which both include chronic toxicity testing as well as the draft Delta Regional Monitoring Program's focus on toxicity assessment. The draft statewide Policy for Toxicity Assessment and Control (Toxicity Policy) has the following recommendation for Channelized Dischargers, a category which includes irrigated agriculture: 5

> *3.2.9 Channelized Dischargers*
> *Under the Policy, channelized dischargers subject to existing toxicity monitoring requirements under a conditional waiver or nonpoint source WDR will be required to analyze toxicity data using the TST* [Test of Significant Toxicity] *approach and to report results as a "pass" or "fail." In addition, the policy recommends, but does not require, the implementation of chronic toxicity monitoring programs for these channelized dischargers not currently required to do so. The recommended program consists of four single-concentration toxicity tests conducted each quarter. Remediation is recommended if these dischargers "fail" a test.* (pp 3-5 of the Staff Report)

Acute toxicity testing is appropriate for short term exposures. At this time the monitoring plan for the conditional waiver does not monitor for toxicity at the times expected to be the worst during the year based on pesticide and fertilizer use patterns or other information. If the toxicity

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anticipated during acute monitoring events were expected to be the worst in a 24 hrs or 48 hr period for the season, acute testing would be appropriate. EPA urges the Regional Board to include a requirement for chronic toxicity testing in the WDR. 5

The Regional Board's approach for addressing impairments in this WDR is appropriate. The development and implementation of Surface Water Quality Management Plans by the third party appears to be an effective mechanism to address impairments and implement TMDLs, as long as the management plans are coupled with a mechanism to demonstrate progress toward achieving water quality standards. National experience indicates that nonpoint source pollution can be more effectively addressed when implementation of management practices is informed by TMDLs and watershed plans. Where TMDLs are available, or are newly developed, EPA recommends applying any TMDL loading information and/or management practice recommendations in the development of Surface Water Quality Management Plans and include recommendations to growers for management practice implementation at the farm scale. 6 The combination of good data, local stewardship and accountability can help direct investments and activities to maintain beneficial uses. We encourage the Regional Board to coordinate regulatory actions with technical and financial assistance programs so as to improve water quality in a manner that enhances the long-term viability of the agricultural sector. 7

If you would like to discuss these comments further, please contact me at (415) 972-3434. EPA appreciates the opportunity to review and comment on this important action to help improve water quality.

Sincerely,

Valentina Cabrera Stagno,
Agricultural Water Quality Specialist

Letter 2

References

California Regional Water Quality Control Board Central Coast Region, Order No. R3-2012-0011, *Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands*
http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order/final_agorder_atta_032612.pdf

California Regional Water Quality Control Board Los Angeles Region, Order No. R4-2010-0186, *Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands within the Los Angeles Region*
http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/waivers/11_22_10/Order%20R4-2010-0186_signed.pdf

State Water Resources Control Board 2012, *Policy for Toxicity Assessment and Control, Public Review Draft, June 2012*
http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/draft_tox_policy_0612.pdf

State Water Resources Control Board 2012, *Policy for Toxicity Assessment and Control: Draft Staff Report and Environmental Checklist, Public Review Draft, June 2012*
http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/draft_tox_staff_report_0612.pdf

State Water Resources Control Board 2004, *Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program*
http://www.waterboards.ca.gov/water_issues/programs/nps/docs/oalfinalcopy052604.pdf

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California Citrus Mutual
California Cotton Growers and Ginners Associations
California Grape & Tree Fruit League
Fresno County Farm Bureau
Nisei Farmers League
Raisin Bargaining Association
Tulare County Farm Bureau
Western Agricultural Processors Association

August 6, 2012

Mr. Adam Laputz
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670
submitted via email to: awlaputz@waterboards.ca.gov

Re: Comments on 2nd Draft Eastern San Joaquin River Watershed WDRs and MRP for Discharges from Irrigated Lands

Dear Mr. Laputz:

The agricultural organizations identified above appreciate the opportunity to review and comment on the 2nd Draft Eastern San Joaquin River Watershed WDRs and MRP for Discharges from Irrigated Lands. We submitted comments during the interested party review period and many of those concerns remain with the current draft. We also support many of the comments that are being made by the East San Joaquin Water Quality Coalition. Accordingly, we submit the following additional comments.

I. Timeframe

After review of the 2nd draft of the ESJ order and the subsequent release of the administrative draft of the Tulare Lake Basin, it has become apparent that waste discharge requirements are very similar. Given the Regional Board's approach to adoption of these orders which have similar requirements for all growers, we believe it would be a more equitable to have all stakeholders at the table for the requirements that the Regional Board

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envisions that would be replicated in all coalition areas. In the current process, growers outside the ESJWQC would be likely forced to requirements adopted in the ESJ order without an equal opportunity to participate. 1

II. Nitrogen Budget Worksheets

As groups representing farmers and ranchers in the Central Valley region, we understand the great strides that our members have taken through implementation of improved, more efficient management practices resulting in reductions. Excess nitrogen application is not in the best interest of growers. They have made great progress over the years with the cooperation of UC ANR and individual commodity specific research funding programs resulting in more bountiful crops and increasing nutrient efficiency. The current draft order does not take into account the expertise and experience that our growers already possess. The requirement that nitrate budgets be prepared or certified is an unnecessary obligation that will not help further water quality objectives. Farmers know their crops and their land and have many resources to help guide them to appropriate nutrient levels for their specific farm, soil, crop, variety and water source. Farms in the Central Valley are very diverse and some can grow up to 30 crops in any given year. Especially for these complex operations, there is no doubt that the most qualified individual to make nutrient application decisions are the growers themselves. The requirement for professional certification is not an effective or necessary requirement to achieve water quality objectives. 2

III. Reporting

We believe that it is essential for a successful program that all required reports should be kept on farm and reported only to the Coalition as necessary in a more defined high vulnerability area. The Regional Board should only have access to summary data from the coalition and no individual grower data should be made available. Reporting directly to the Regional Board or to any other entity will diminish the Coalition group's effectiveness and purpose. This is a vital issue in continuing the success in the current irrigated lands program 3

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and improving water quality in the Long-term program.

IV. Organizational Structure

The current structure with the Coalitions as the intermediary is a vital component for increasing participation and efficiency in the water quality objectives. The structure began with the conditional waiver and continues to build trust and relationships with the grower community. The structure has been successful and should be continued as the Regional Board moves into implementation of the Long-term program. We support keeping the Coalition groups structure in their current format and urge the Regional Board to continue this relationship. The success of the Regional Board's water quality objectives and efficiency depends on the continuation of the Coalition groups. 4

IV. Small Farms

According to USDA census data in California, farms under 100 acres make up 52% of the total number of farms but only represent 5% of the total farmland. The current draft regulation has no exemption level and would include every single acre of farmland in the Central Valley region. While we understand the goals of 100% participation, we believe that there should be an acreage level where efforts would produce the corresponding results. Just the reporting and logistics alone would create enormous cost burdens on coalition groups and regional board staff. The San Joaquin Valley Air Pollution Control District faced a similar issue when developing its Conservation Management Plans for valley agriculture. They determined during their process that farms less than 100 contiguous acres would convolute the process and not lead to a more effective dust reduction strategy. Efforts on behalf of the Regional Board staff and the coalition groups would be more cost effective and efficient in terms of water quality benefits by focusing on farms with more than 100 acres. 5

V. Representative Monitoring

We support the comments made by the ESJWQC about a potential representative 6

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monitoring program. The potential cost impacts to growers and coalition groups in a potential program are significant. A separate coordinated effort that brings in commodity organizations, fertilizer industry representatives, UC Cooperative Extension, California Department of Pesticide Regulation, the Natural Resources Conservation Service, and the California Department of Food and Agriculture needs to be assembled to discuss what research and work has already been completed, what is underway, and what can be achieved in a cost-effective manner. 6

VI. Cost Impacts

The above signed groups believe that it is vitally important to minimize the costs of the regulation. Measures that increase paper and electronic reporting and add additional burdens that do not have cost-effective water quality outcomes should be re-evaluated. We believe that growers are good stewards of the land and have been implementing water quality best practices in advance of any regulation and will continue to do so without regulations that increase production cost. In fact, costly measures will have the opposite effect. Additional monitoring and reporting costs will reduce revenues available for projects that do have a water quality benefit. Coalition groups and water districts have indicated that the additional cost impacts on their growers could be anywhere from $2/acre to $159/acre to implement the proposed program. We remain concerned that the cost burdens associated with this program with additional fees from the Regional Board and Coalition groups coupled with the costs on the growers for implementation and reporting are not cost effective. The Regional Board should recognize that growers and the Regional Board have similar water quality goals and should work together for cost effective solutions to a complex issue. 7

On behalf of the above listed groups, we appreciate the opportunity to comment on the 2nd Draft WDR for the Eastern San Joaquin River and look forward to working more closely with

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the Regional Board on practical solutions that build on the existing coalition framework and the success of the current conditional waiver. If you have any questions please contact Casey Creamer at (559) 252-0684 or casey@ccgga.org.

Sincerely,

California Citrus Mutual
California Cotton Growers and Ginners Associations
California Grape & Tree Fruit League
Fresno County Farm Bureau
Nisei Farmers League
Raisin Bargaining Association
Tulare County Farm Bureau
Western Agricultural Processors Association

cc: Joe Karkoski, CVRWQCB

Clay Rodgers, CVRWQCB

Pamela Creedon, CVRWQCB

Letter 4

UNIVERSITY OF CALIFORNIA, DAVIS

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August 6, 2012

Adam Laputz
awlaputz@waterboards.ca.gov
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

Re: Comments on the Eastern San Joaquin River Watershed Tentative WDRs and MRP for Discharges from Irrigated Lands, July 2012.

Dear Mr. Laputz,

The University of California Cooperative Extension Groundwater Hydrology program (http://groundwater.ucdavis.edu) provides technical support and outreach on groundwater issues specifically related to agricultural and rural regions in California. We recently published the UC Davis report for the SWRCB SBX2 1 Report to the Legislature on "Addressing Nitrate in California's Drinking Water" (http://groundwaternitrate.ucdavis.edu) and are actively engaged in research and extension activities to support a better understanding of the interface between agriculture and groundwater (http://groundwater.ucdavis.edu/Publications/). I am also a member of the Central Valley Regional Water Board ("CVRWB") Groundwater Monitoring Advisory Workgroup ("GMAW").

The comments provided here on the Eastern San Joaquin River Watershed Tentative WDRs and MRP for Discharges from Irrigated Lands (ESJR ILRP) are primarily intended to clarify the framework applied by the ESJR ILRP to regulate waste discharges to **groundwater** from **non-point sources**. A non-point source of waste discharge to groundwater is defined here as a source comprised of one to (typically) many individual land parcels (e.g., field, orchard, animal corral, and/or animal waste storage lagoon) that are mostly (but not exclusively) contiguous in space, with some level of waste discharge occurring from a large portion of the area within each land parcel.

The 2007 Waste Discharge Requirements General Order for Existing Milk Cow Dairies (Order No. R5-2007-0035, "Dairy General Order") was the first regulatory program by the Central Valley Regional Water Board ("CVRWB") designed to regulate waste discharge to groundwater from non-point sources. The proposed ESJR ILRP complements the Dairy General Order 1

program to regulate waste discharges to groundwater from all irrigated lands in the Central Valley (that are not already regulated under the Dairy General Order).

Non-point source waste discharge to groundwater is a significantly different process than **non-point source waste discharge to surface water**. It is also different from **point source waste discharge to groundwater**. Therefore, fundamental differences exist in the implementation of a regulatory program designed to protect groundwater quality from non-point source impacts when compared to regulatory programs designed to protect surface water quality from non-point sources or designed to protect groundwater quality from point- sources.

The most important differences between an irrigated lands non-point source of groundwater waste discharge (specifically: nitrate and salt discharge) and a point-source of groundwater waste discharge (e.g., leaky underground storage tanks, industrial waste spillage, landfills) are:

- Irrigated lands non-point sources are nearly contiguous across the landscape and cover millions of acres in the Central Valley (tens to hundreds to thousands of acres per grower/land-owner), while point-sources are generally less than one to a few acres in size.
- Irrigated lands non-point sources intentionally "leak". In other words, irrigated lands intentionally provide some groundwater recharge as part of reasonable and necessary agricultural practices, while point-sources are managed to be sealed against accidental waste discharge (e.g., underground storage tanks, industrial spillage prevention, landfills).
- The concentration range of salts and nitrates in groundwater is typically less than two orders of magnitude, while industrial contaminants accidentally leaked from point sources may occur at concentrations that are many orders of magnitude above regulatory limits.

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The most important differences between an irrigated lands non-point source of groundwater waste discharge and the same non-point source of surface water waste discharge is:

- Contaminant travel times in groundwater are on the order of years/decades to millennia before discharging to production wells or into streams, while the contaminant travel time in surface watersheds is typically on the order of hours to days.
- Groundwater aquifers have no single, defined outlet, while each surface watershed has a defined single stream outlet.

These differences have many consequences for the design of an effective ILRP monitoring program to protect groundwater quality, when compared to the ILRP surface water monitoring program, or when compared to the type of groundwater monitoring programs in place to regulate point sources.

Most significantly, it is impossible to directly measure, in detail, the impact to groundwater quality from across irrigated lands non-point sources. For example, the nitrate loading to groundwater varies within individual fields, between fields of the same crop, between crops, between growers, and between different hydrogeologic and soils regions.

The proposed ILRP, like the Dairy General Order, considers these differences and therefore proposes a very different approach to groundwater monitoring from that used by CVRWB (and other regulatory agencies) at point sources. The ILRP has, in principle, all the elements necessary for a successful implementation and provides significant and necessary flexibility to

the Third-Party Groups and their Members (as defined in the ILRP) and to the CVRWB for its implementation.

However, the ILRP would benefit from a clearer outline and rationale of the regulatory approach taken to monitor waste discharge to groundwater from the non-point sources regulated under the ILRP. Specifically, I propose that the "Groundwater Monitoring Strategy" explicitly identify three parallel tracks rather than two parallel tracks, that the organization of the ESJR-ILRP reflect the organization of the three parallel tracks of groundwater monitoring, and that they be listed and described in the following order: 1

1) Nitrogen Budget / Farm Management Practices Monitoring Program
2) Representative Groundwater Monitoring Program
3) Regional and Temporal Trend Groundwater Monitoring Program

The following provide specific recommendations that also explain the rationale for the proposed changes.

Attachment A to Order R5-2012-XXXX – Information Sheet, p.11 "*Groundwater Monitoring Strategy Rationale*":

Replace the second ("The Groundwater Monitoring Strategy…") and third paragraph ("A Representative Groundwater Monitoring Program….") with the following:

"The Groundwater Monitoring Strategy consists of three parallel and complementary tracks:

1) Nitrogen Budget / Farm Management Practices Monitoring Program
2) Representative Groundwater Monitoring Program
3) Regional and Temporal Trend Groundwater Monitoring Program

The Nitrogen Budget / Farm Management Practices Monitoring Program (NB/FMP-MP) consists of a Farm Evaluation and an Annual Nitrogen Budget (see below). The NB/FMP-MP is intended to provide a Member ("Member" as defined in the ESJR-ILRP) and the CVRWB with a "proxy" groundwater monitoring tool that is linked directly and immediately to the actual Member actions that may cause a waste discharge to groundwater. The Member has direct control of the outcome of the NB/FMP-MP by adjusting the Member's management practices in irrigated lands. The NB/FMP-MP also provides a "proxy" groundwater monitoring measurement that serves as an ongoing feedback in real time (at annual time scales) to the Third Party Group and CVRWB; and that demonstrates the performance of an individual Member with respect to the potential waste discharge. The NB/FMP-MP (in lieu of direct groundwater monitoring) also provides the primary regulatory vehicle to justify enforcement actions against individual Members. 2

The purpose of the Representative Groundwater Monitoring Program ("RGMP") is to provide the field research and research data necessary to assess and evaluate the groundwater quality impact as a function of the "proxy" groundwater monitoring data collected under the NB/FMP-MP. A Representative Groundwater Monitoring Program (RGMP) is to be developed where known groundwater quality impacts exist for which irrigated agricultural operations are a potential contributor or where conditions make groundwater more vulnerable to impacts from irrigated agricultural activities (high vulnerability areas). The RGMP develops the tools necessary to identify how data collected by the Members under the NB/FMP-MP "proxy" groundwater monitoring data relate to actual groundwater quality impacts (e.g., nitrate impact in

shallow groundwater), whether site and/or commodity-specific existing agricultural management practices are protective of groundwater quality in the high vulnerability areas, and to assess the effectiveness of any newly implemented management practices instituted to improve groundwater quality. By establishing the link between management practices and actual groundwater discharge, the RGMP also provides guidance to Members on how to improve management practices and how these improvements affect waste discharge to groundwater (particularly nitrate and salt leaching). It provides the CVRWB with the assessment needed to build confidence that the NB/FMP-MP as the primary regulatory enforcement tool is appropriate to protect groundwater quality. The RGMP is implemented at selected, relevant research sites with appropriate monitoring instrumentation and monitoring networks including groundwater monitoring wells. The RGMP is designed to appropriately reflect the diversity in agricultural crops and their management practices and the diversity in hydrologic and hydrogeologic conditions to allow for an effective implementation of the NB/FMP-MP. Given the wide range of management practices/commodities within the third-party's boundaries, it is anticipated that the third-party will rank or prioritize their high vulnerability areas and commodities, and present a phased approach to implement the RGMP. Representative monitoring has been designed to answer GMAW questions 2, 5, 6, and 7. Existing monitoring wells can be utilized where available for representative monitoring

The purpose of the third monitoring program track, the Regional and Temporal Trend Groundwater Monitoring Program ("RTTGMP"), is to provide an adequate record of actual regional groundwater quality distribution (spatial, regional trends) and of actual long-term groundwater quality changes (temporal trends) in irrigated lands regions. The RTTGMP provides the actual measurement of groundwater quality resulting from activities in irrigated lands and is intended to be specific to irrigated lands (and relevant subgroups within irrigated lands, e.g., individual commodity groups), but is not designed to provide information on groundwater quality impacts from individual Members. The groundwater quality measured as part of the RTTGMP does not reflect current waste discharges but is designed to reflect relatively recent (less than 5 – 10 years) waste discharge activities in irrigated lands (and its subgroups). Trend monitoring has been developed to answer GMAW questions 1 and 4. At a minimum, trend monitoring must include annual monitoring for electrical conductivity, pH, dissolved oxygen, temperature, nitrate as nitrogen (N), total kjeldahl nitrogen, and once every five year monitoring for total dissolved solids, carbonate, bicarbonate, chloride, sulfate, boron, calcium, sodium, magnesium, and potassium. Existing shallow wells, such as domestic supply wells, will be used for the trend groundwater monitoring program. The use of existing wells is less costly than installing wells specifically designed for groundwater monitoring, while still yielding data which can be compared with historical and future data to evaluate long-term groundwater trends. The RTTGMP is intended to assure the public that no long-term degradation of regional water quality occurs and that the ILRP leads to actual long-term groundwater quality improvements where necessary. In the long-term, the RTTGMP will allow for a rigorous evaluation of the success of the NB/FMP-MP program that is designed and adjusted in tandem with the RGMP program." 2

Attachment A to Order R5-2012-XXXX – Information Sheet, p.14 "*Groundwater Quality Management Plans (GQMPs)*":

Move this entire section "Groundwater Quality Management Plans" up immediately in front of (before) the section on "Groundwater Quality Monitoring". Then the GQMP rationale section immediately follows the SQMP rationale section. The Groundwater Quality Monitoring section is then immediately followed by the Farm Evaluation and Nitrogen Budget sections. 3

Attachment A to Order R5-2012-XXXX – Information Sheet, p.15 "*Sediment and Erosion Control Plans*":

Move this entire section down and insert just before the section "Technical Reports" (p.18). Thus, the three sections on "Farm Evaluation", "Nitrogen Budget", and "Spatial Resolution…." remain together. 4

Order R5-2012-XXXX (Tentative WDR), Section VII and VIII:

Switch out the order of sub-sections C and D, such that the section "Annual Nitrogen Budget" follows "VII.B. Farm Evaluation" and the section "Annual Nitrogen Budget Worksheet Template" follows VIII.B. "Farm Evaluation Template". 5

Attachment B to Order R5-2012-XXXX – MRP:

Sections IV.C. and IV.D. should be restructured to better identify and present the overall strategy of the groundwater quality monitoring program, including the "proxy" groundwater monitoring explained above, i.e., the Farm Evaluation and the Nitrogen Budget (Nitrogen Budget and Farm Management Practices Monitoring Program) need to be included here, if only by reference to the main order section VII and VIII (sections on Farm Evaluation, Annual Nitrogen Budget). The sequence of subsections should be: 6

IV.C.1. Nitrogen Budget and Farm Management Practices Monitoring Program
IV.C.2. Representative Groundwater Monitoring Program
IV.C.3. Regional and Temporal Trend Groundwater Monitoring Program

IV.D.1. Nitrogen Budget and Farm Management Practices Monitoring Program Workplan
IV.D.2. Representative Groundwater Monitoring Program Workplan
IV.D.3. Regional and Temporal Trend Groundwater Monitoring Program Workplan

Attachment B to Order R5-2012-XXXX – MRP, Section IV.C., page 14:

Replace the first paragraph of Section IV.C. "The strategy…." with the following paragraphs:

"The strategy for groundwater monitoring consists of three parallel tracks; 1) a Nitrogen Budget and Farm Management Practices (Farm Evaluation) Monitoring Program, which is a "proxy" groundwater monitoring program; 2) a Representative Groundwater Monitoring Program, and 3) a Regional and Temporal Trend Groundwater Monitoring Program. Each of these three groundwater monitoring programs has its own specific objectives, and the design of the associated monitoring networks will differ in accordance with the specific objectives to be reached. While it is anticipated that these three groundwater monitoring programs will provide sufficient data to evaluate whether management practices of irrigated agriculture are protective of groundwater quality, the Executive Officer may also, pursuant to Water Code section 13267, order Members to perform groundwater monitoring. Such an order may occur, for instance, if violations of the Order are documented or the irrigated agricultural operation is found to be a significant threat to groundwater quality. 7

1. Nitrogen Budget and Farm Management Practices (Farm Evaluation) Monitoring Program

a. Objectives – The objectives of the Nitrogen Budget and Farm Management Practices (Farm Evaluation) Monitoring Program are (1) to provide each Member with a monitoring tool that is linked directly to field management practices, while also providing indirect or "proxy" information on potential impacts to groundwater quality, (2) to document the farm management practices that are relevant to potential groundwater quality impacts, (3) to develop a nitrogen budget to evaluate the potential for nitrate leaching to groundwater. 7

b. Implementation – see General Order Sections VII.B., VII.C.

c. Reporting – see General Order Sections VIII. B., and VIII.C."

Attachment B to Order R5-2012-XXXX – MRP, Section IV.C.1, page 14:

Move the entire Section 1 ("Trend Groundwater Monitoring Program") to below Section 2 ("Representative Groundwater Monitoring Program") 8

Then replace the heading "1. Trend Groundwater Monitoring Program" with "3. Regional and Temporal Trend Groundwater Monitoring Program"

Attachment B to Order R5-2012-XXXX – MRP, Section IV.C.2, page 15:

Replace:

"The RGMP requires monitoring of wells completed into first encountered groundwater." 9

with the following sentence:

"The RGMP requires monitoring of wells completed into first encountered groundwater representative of recharge water quality from the targeted land use source."

Attachment B to Order R5-2012-XXXX – MRP, Section IV.D., page 16:

Replace the first paragraph of Section IV.D. "The third-party…." with the following paragraph:

"The third-party shall work with Central Valley Water Board staff in the development of Nitrogen Budget and Farm Management Practices (Farm Evaluation) Monitoring Program workplan. The third-party shall develop and submit workplans for conducting Representative Groundwater Monitoring Program and the Regional and Temporal Trend Groundwater Monitoring Program to the Executive Officer for approval. These workplans shall be submitted within two (2) years of third-party receipt of a NOA from the board. Required workplan elements are presented in the sections below. 10

1. Nitrogen Budget and Farm Management Practices (Farm Evaluation) Monitoring Workplan

The third-party shall work with Central Valley Water Board staff in the development of a draft Farm Evaluation Template and Nitrogen Budget Worksheet Template. The third-party shall make the final Farm Evaluation Template and Nitrogen Budget Worksheeet Template available to its Members within 30-days of receiving the final Farm Evaluation Template and Nitrogen Budget Worksheet Template as approved by the Central Valley Water Board's Executive Officer." 10

Attachment B to Order R5-2012-XXXX – MRP, Section IV.D.1, page 16:

Move the entire Section 1 ("Trend Groundwater Monitoring Program Workplan") to below Section 2 ("Representative Groundwater Monitoring Program") 11

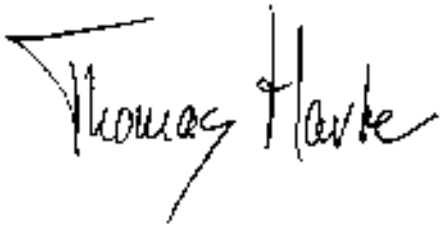
Then replace the heading "1. Trend Groundwater Monitoring Program Workplan" with "3. Regional and Temporal Trend Groundwater Monitoring Program Workplan"

Attachment B to Order R5-2012-XXXX – MRP, Section IV.D.2, page 17:

No changes proposed.

I appreciate the opportunity to comment on this ILRP.

Regards,



Thomas Harter, Ph.D.
Robert M. Hagan Endowed Chair in Water Management and Policy

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CALIFORNIA FARM BUREAU FEDERATION

OFFICE OF THE GENERAL COUNSEL

2300 RIVER PLAZA DRIVE, SACRAMENTO, CA 95833-3293 · PHONE (916) 561-5665 · FAX (916) 561-5691

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AWLaputz@waterboards.ca.gov

August 6, 2012

Adam Laputz
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

Re: Comments on the Eastern San Joaquin River Watershed Tentative WDR and MRP for Discharges from Irrigated Lands

Dear Mr. Laputz:

The California Farm Bureau Federation ("Farm Bureau") is a non-governmental, non-profit, voluntary membership California corporation whose purpose is to protect and promote agricultural interests throughout the state of California and to find solutions to the problems of the farm, the farm home, and the rural community. Farm Bureau is California's largest farm organization, comprised of 53 county Farm Bureaus currently representing more than 74,000 agricultural, associate, and collegiate members in 56 counties. Farm Bureau strives to protect and improve the ability of farmers and ranchers engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of California's resources.

Farm Bureau appreciates the opportunity to provide comments on the Eastern San Joaquin River Watershed Tentative Waste Discharge Requirements ("Tentative WDR") and Monitoring and Reporting Program ("MRP") for Discharges from Irrigated Lands and respectfully presents the following remarks.

General Order Pages 7-8, Finding 31—California Environmental Quality Act

Within this Tentative WDR, revisions include deleting a statement that expressed that the loss of productive farmland is an impact "associated, directly and indirectly, with specific compliance activities growers may conduct in response to the Order's regulatory requirements." (Administrative WDR Order, p. 7, ¶ 33.) The loss of productive farmland could occur either directly or indirectly due to the compliance activities and practices growers must conduct in response to the conditions of the Order, thus farmland 1

NANCY N. MCDONOUGH, GENERAL COUNSEL

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Letter 5

should not be deleted from this list of impacts. Given that this agricultural regulatory program impacts agriculture and agricultural lands, the WDR should acknowledge that "the loss of productive farmland may occur due to increased regulatory costs and management practices growers must implement to comply with the Order." (Tentative WDR Order, pp. 7-8, ¶ 31.) 1

General Order Page 9, Finding 36—California Water Code Sections 13141 and 13241

Pursuant to the Water Code, the Regional Board is obligated to consider costs associated with the entire Long-Term Irrigated Lands Regulatory Program, as well as each individual general order, such as the Eastern San Joaquin WDR. (Wat. Code, § 13141.) Finding 36 incorrectly states that Section 13141 "does not necessarily apply in a context where an agricultural water quality control program is being developed through waivers and waste discharge requirements. (Tentative WDR Order, p. 9, ¶ 36.) Nothing within Section 13141 provides such limitations. Rather, a proper reading of Section 13141 *requires* looking only at the plain meaning of the statutory language. (*Riverview Fire Protection Dist. v. Workers' Comp. Appeals Bd.* (1994) 23 Cal.App.4th 1120, 1126, ["we first look to the plain meaning of the statutory language, then to its legislative history and finally to the reasonableness of a proposed construction."].) Upon examining the plain language of Section 13141, it does not state or imply that an estimation of costs is only required if an agricultural water quality control program is adopted into a Basin Plan. Rather, the plain and easily interpretable language states that "prior to implementation of *any* agricultural water quality control program, an estimate of the total cost of such a program, together with an identification of potential sources of financing, shall be indicated in any regional water quality control plan." (Wat. Code, § 13141.) Therefore, notwithstanding the fact that this agricultural water quality control program, the Long-Term Irrigated Lands Regulatory Program, is comprised of waste discharge requirements, the Regional Board is still statutorily obligated to conduct a cost estimation of the program. Given that this Tentative WDR proposes new costly regulatory components not previously analyzed during the environmental review stage, the Regional Board must analyze, evaluate, and estimate all of the costs of these new regulatory requirements. 2

General Order Page 13, Finding 54—General Findings

Finding 54 has been significantly revised to now incorporate numerous independent clauses into one paragraph. Specifically, the clause regarding the privilege to discharge waste into waters of the state needs to be separate and independent from clauses regarding coalition duties such as contact information of members, as well as access to private properties. Given that each of these topics is mutually exclusive, the clauses should not be merged into the same Finding paragraph. 3

General Order Page 15, Provisions III. A and III. B—Discharge Limitations

The addition of "shall not cause *or contribute*" to an exceedance of applicable water quality objectives is overly expansive and creates an unreasonable standard that is undefined, ambiguous, and holds farmers and ranchers liable for even the smallest de 4

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minimus contribution. Thus, discharge limitations for both surface water and groundwater should be rewritten to state "wastes discharged from Member operations shall not cause an exceedence of applicable water quality objectives in surface water [or the underlying groundwater], unreasonably affect applicable beneficial uses, or cause a condition of pollution or nuisance." 4

General Order Page 17, Provision IV. B. 7—Sediment and Erosion Control

The revisions to Provision 7 are unnecessarily broad and overly expansive. Previous drafts required Sediment and Erosion Control Plans when members "have the potential to cause erosion or discharge sediment offsite during irrigation or storm events." By revising the language to include any "potential to discharge surface water offsite," the requirement is not only overly expansive, but creates edge of field discharge limitations for sediment, which is inappropriate as it is neither a receiving water limitation nor a proper waste discharge requirement. 5

General Order Page 17, Provision IV. B. 7—Nitrogen Budgets

Provision 8 requires members to prepare and implement an annual nitrogen budget. Such a budget should analyze "nitrogen" application rather than "nutrient" application. As compared to the administrative draft, the Tentative WDR now requires all members to prepare annual nitrogen budgets. Previously, only members in high vulnerable areas where nitrate is a constituent of concern were required to prepare annual nitrogen budgets. Rather than requiring all members to prepare nitrogen budgets, the WDR should allow flexibility in the requirements for those areas that have no or a lower propensity to impact water quality. 6

General Order Page 17, Provision IV. B. 13—Access to Private Property for Inspections

Provision 13 is inconsistent with Water Code Section 13267 and hampers private property rights. Water Code section 13267(c) clearly states that any inspection "shall be made with the consent of the owner or possessor of the facilities or, if the consent is withheld, with a warrant duly issued pursuant to the procedure set forth in Title 13 (commencing with Section 1822.50) of Part 3 of the Code of Civil Procedure." As currently drafted, Provision 13 ignores Section 13267 and attempts to allow inspections of private property at any time without notice to or consent from the landowner or obtaining a necessary warrant. Statements within the previous administrative draft correctly summarized the law and should replace Provision 13: 7

> "The Member understands that pursuant to Water Code section 13267(c), the Central Valley Water Board or its authorized representatives, upon presentations of credentials at reasonable hours, may inspect the facilities of persons subject to this Order to ascertain whether the purposes of the Porter-Cologne Act are being met and whether the Member is complying with the conditions of this Order. The inspection shall be made with the consent of the Member or owner of the facilities, or if consent is withheld, with a duly issued warrant pursuant to the procedure set forth in Title 13

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> Code of Civil Procedure Part 3 (commencing with section 1822.50). However, in the event of an emergency affecting the public health and safety, an inspection may be performed without the consent or the issuance of a warrant." 7

General Order Page 17, Provision IV. B. 16—Settling Ponds, Basins, and Tailwater Recovery Systems

Provision 16 was substantially revised from the administrative draft to now require licensed civil engineers to design or modify settling ponds, basins, or tailwater recovery systems. No explanation is given as to why civil engineers now must certify such projects rather than the farmers and ranchers who have been doing such work for years on their own properties. Given that no explanation is given and no cost analysis has been conducted for the inclusion of such requirements, this new requirement should be deleted. 8

General Order Pages 22-23, Provisions B, C, and D—Template Requirements for Farm Evaluation, Sediment and Erosion Control Plan, and Annual Nitrogen Budget

In the administrative draft WDR, templates for the Farm Evaluation, Sediment and Erosion Control Plan, and Annual Nitrogen Budget were to be developed by the coalitions and approved by the Executive Officer. The current Tentative WDR substantially changes how these documents will be developed, as they will no longer be developed by the coalitions, but rather by the Regional Board and stakeholders. This change is problematic as all three of these documents need to be developed by those directly in agriculture, with the assistance of professionals that work with agriculture (qualified agronomists and/or agricultural engineers). Further, by substantially changing the process, the development of the templates has become akin to new permit requirements that require action and adoption by the Central Valley Board. (See Wat. Code, § 13222(a) limiting the duties that may be delegated from the Regional Board to the Executive Officer.) 9

General Order Pages 22-23, Provisions C and D; Pages 15-17, Attachment A-Information Sheet—Certifications for Sediment and Erosion Control Plans and Annual Nitrogen Budgets

The Tentative WDR requires Sediment and Erosion Control Plans and Nitrogen Budgets (in high vulnerability groundwater areas) to be prepared, approved, amended, and certified by qualified specialists. In certain cases, growers have the educational background, qualifications and experience to be classified as qualified specialists and the Order should reflect this. Hiring a specialist to prepare and certify such plans is a costly endeavor, the cost of which has not been analyzed by the Regional Board (see need for a proper cost estimation *supra*). Further, in an attempt to justify the need for such specialists, (as explained in Attachment A-Information Sheet for the Sediment and Erosion Control Plans) it is pointed out that such requirements are used with the State Board's Construction Stormwater Program. An agricultural regulatory program is vastly different than a stormwater construction program. Although certain regulatory requirements may be appropriate for short-term construction programs, they are not 10

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necessarily appropriate for long-term agricultural activities. Thus, this certification requirement should be deleted.

Attachment B, MRP, Page 9, Provision III. C. 4—Toxicity Testing

As currently drafted, the Tentative MRP suggests that both acute and chronic toxicity testing is required for all toxicity tests. (See MRP, p. 9, footnotes 7 and 8 stating that chronic and acute toxicity testing should be completed in accordance with USEPA testing methods.) As stated in Farm Bureau's previous comments on the administrative draft WDR, the MRP should be revised to only require acute toxicity testing. Since the inception of the Irrigated Lands Regulatory Program, surface water monitoring has occurred and has utilized acute aquatic toxicity testing. Given that the MRP contains no evidence to indicate that acute testing is no longer adequate, and since chronic testing is more costly, thus triggering the need for a new economic analysis of impacts, Farm Bureau respectfully requests that requirements for "chronic" testing be removed from the WDR, footnote 8 deleted in its entirety, and the continuation of the existing surface water acute toxicity testing be added in its place. 11

Attachment B, MRP, Page 12, Provision IV. C. 4—Groundwater Vulnerability Designations

Within the administrative draft WDR, groundwater vulnerability designations were defined in a broad manner as those deemed vulnerable by the Department of Pesticides/State Water Board. (Administrative Draft Attachment B, MRP, p. 14.) The Tentative MRP proposes to expand the already overly expansive definition to define high vulnerability areas "as those areas that have been identified by the State Water Board Hydrologically Vulnerable Areas, areas covered by the California Department of Pesticide Regulations groundwater protection program, and areas identified by the board with exceedances of water quality objectives for which irrigated agriculture waste discharges may cause, or contribute to the exceedance." (Tentative MRP, p. 12.) Throughout the region, not all groundwater vulnerability areas are vulnerable due to the use of farming practices. Rather than having an extremely open-ended definition of "high vulnerability areas," Farm Bureau suggests using the term to describe those areas deemed vulnerable to contamination by the Department of Pesticide Regulation. In addition to revising the definition of "high vulnerability areas," the definition of "low vulnerability areas" should be revised to distinguish between those exceedances resulting directly from agricultural pesticide or toxicity uses as opposed to those resulting from various sources.[1] 12

[1] A proper definition of high and low vulnerability areas is needed as the groundwater monitoring programs hinge upon such definitions. Further, within the groundwater monitoring programs, flexibility should be incorporated to allow coalitions the ability to create tailored programs. Thus, rather than treating all lands within a section plot as similar, lands should undergo ground-truthing so as to isolate those areas that have a higher propensity for problems.

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Compliance with the California Environmental Quality Act

The Tentative WDR concludes that "this Order is based on elements of Alternatives 2 through 6 of the PEIR" and that "although the Order is not identical to any of the PEIR alternatives, the Order is comprised entirely of elements of the PEIR's wide range of alternatives. (Tentative WDR Order, p. 7, ¶¶ 30-31.) The Tentative WDR further finds that the PEIR "identified, disclosed, and analyzed the potential environmental impacts of the Order." (*Ibid*.) The contents of this Order do not fall within the range of alternatives analyzed within the PEIR nor have the impacts associated with the Order been properly analyzed.[2] These new components do not represent merely a "variation" on the alternatives in the PEIR but rather are elements that were not thoroughly considered previously and are likely to result in the imposition of new burdens on irrigated agricultural operations that that would have a significant and cumulatively considerable impact on the environment. 13

As seen from reviewing the administrative draft and the tentative draft, new conditions and requirements continue to be created and added to the Order long after the completion of the PEIR, such as edge of field discharge limitations. Given that the PEIR did not analyze many of the impacts associated with the Tentative WDR, the Regional Board cannot rely upon the CEQA analysis conducted within the PEIR.

Thank you for the opportunity to provide our comments and concerns. We look forward to further involvement and discussion with the Regional Board on the Eastern San Joaquin River Watershed WDR and MRP for Discharges from Irrigated Lands.

Very truly yours,

Kari E. Fisher
Associate Counsel

KEF:pkh

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[2] Farm Bureau also questions the Regional Board's authority to require mitigation measures within the Tentative WDR for farm level activities. Implementation of management practices at the farm level, which is the heart of the WDR, is not subject to a discretionary approval by the Regional Board. (See Pub. Resources Code, § 21080, CEQA generally applies only to discretionary projects.) Mitigation measures that cannot be legally imposed need not be proposed or analyzed. (CEQA Guidelines, § 15126.4(a)(5).) 14

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San Joaquin County and Delta Water Quality Coalition

San Joaquin County Resource Conservation District
3422 W. Hammer Lane, Suite A
Stockton, California 95219
209-472-7127 ext 125

August 6, 2012

Via Electronic Mail

Pamela Creedon, Executive Officer
Adam Laputz
Central Valley Regional Water Quality Control Board
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Rancho Cordova, CA 95670
AWLaputz@waterboards.ca.gov

Re: Comments on East San Joaquin River Watershed proposed WDR

Dear Ms. Creedon and Mr. Laputz,

After reviewing the July 2012 draft of the East San Joaquin River proposed Waste Discharge Requirements General Order (Order), the San Joaquin County and Delta Water Quality Coalition (SJC & DWQC) continues to have several concerns about the Order. The SJC & DWQC is commenting on this Order due to the realization that it will be precedent setting and any orders to follow concerning agriculture waste discharge compliance by third parties will have similar requirements.

The SJC & DWQC hereby incorporates its prior comments of May 21, 2012, as most of the problems with the draft order raised in those comments have not been addressed. We also join in the comments submitted by the East San Joaquin Water Quality Coalition.

Our over-arching concern is that the Regional Board is exceeding its jurisdiction by establishing a WDR program that is designed to be a very expensive research project to determine if there is a current discharge from any particular farm that actually threatens water quality. We continue to urge the board to take a step back, look at the expense of the program it has outlined, and critically assess whether the expense is justified - will this immensely expensive paper-work exercise help improve water quality. We submit, that it will not. We also urge the board to adopt a WDR that is consistent with the scope of its jurisdiction. This order continues to exceed the board's jurisdiction by treating every farmer as a discharger without justification. 1

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As with the other coalitions, we are very concerned about the cost and paperwork requirement required in the draft WDR and its extensive applicability. Annual Nitrogen Budgets, Farm Evaluations and Sediment and Erosion Control Plans will be burdensome and expensive. The plans and reports should only be required in areas with known threats, and even then, annually is overkill. Again, there is nothing in the proposed order to explain what will be done with the information. Further, because the template for these reports and plans is still unknown, the total costs of completing them are unable to be properly analyzed. Thus, the board cannot intelligently recommend that they be included in the WDR because the board is unable to evaluate whether the benefits of such a rule (which are also unspecified) are worth the cost of compliance. We urge the board to think about the limited resources of the coalitions and whether those resources are better spent on facilitating an enormous annual paperwork compilation and review, or on evaluating problem areas and methods to improve water quality. 2 3 2

We also question the need and purpose of the proposed required certifications. For example, the revised draft requires a licensed Civil Engineer to certify sediment control plans (See Section VII C) and work to modify ponds, basins, etc. (See Section IV B, Par. 16). This is really unnecessary and there is no reason given in the proposed order for why this is required. If certification is useful, the board should consider certification by a certified soil scientist under the American Society of Agronomy as well. We would ask that the board consider whether these plans could be based on a template created by the coalitions, with the assistance of the professionals listed, rather than created individually by the professionals for each member. This should accomplish the same result and be substantially less expensive. 4

The timelines for compliance in the proposed order remain unrealistic. All time lines should be extended by at least double the times proposed in order to meaningfully accomplish what is being asked in the proposed order. We also agree with the Eastern San Joaquin Water Quality Coalition, that its deadlines should not precede other regional groups so as to put them at a disadvantage. 5

In sum, we continue to believe that the proposed order exceeds the board's jurisdiction and will result in substantial burden and cost without any real or measurable improvement to water quality. We urge the Regional Board to reconsider the proposed Order consistent with these comments and aim to produce a program that can best use limited resources to improve water quality, rather than simply create mounds of paperwork and consultant fees.

Sincerely,

Mike Wackman
San Joaquin County & Delta Water Quality Coalition

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SAN JOAQUIN VALLEY DRAINAGE AUTHORITY

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August 6, 2012

Pamela Creedon, Executive Officer
Central Valley Regional Water Quality Control Board
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Subject: Westside San Joaquin River Watershed Coalition Comments on the Eastern San Joaquin River Watershed Tentative WDRs and MRP for Discharges from Irrigated Lands

Dear Pamela,

Following are the comments of the Westside San Joaquin River Watershed Coalition on The Tentative Waste Discharge Requirements General Order for Growers within the Eastern San Joaquin River Watershed that are Members of Third Party Groups (WDR). Although the Eastside WDR will not be directly applicable to growers within the Westside Coalition, we are commenting on the Eastside WDR in order to provide regional board members and staff with some practical perspective from an area that has been implementing successful agricultural water quality improvement programs for decades. The approach taken in this WDR ignores the administrative burdens placed upon the parties tasked with implementing the order. It is also clear that staff has not attempted to balance with cost of fulfilling the requirements with the water quality benefits of those requirements. 1

California agriculture has made significant progress in addressing the very difficult problem of non-point source discharges to surface waters. Farmers across the Central Valley have organized and implemented management practice to help protect the state's waters. However there are many surface water challenges remaining. In order to meet these existing challenges and the added challenge of incorporating groundwater protection into program, limited resources must be targeted to provide maximum water quality benefits and not be squandered on overly burdensome data collection and reporting requirements. The Eastside's tentative WDR will shift the coalition's efforts away from assisting growers to improve water quality and instead force the coalition to focus primarily on collecting and cataloging vast amounts of data that may or may not be needed in the future. 2

Board members and staff should evaluate the costs and expected water quality benefits of each of the extensive administrative burdens proposed in this order and determine if the resources necessary to comply with the requirements could produce greater water quality improvements by allocating those funds to other efforts such as management practice implementation. As the 1

Watershed Coordinator of theWestside Coalition with decades of experience implementing agriculturally related water quality improvement programs it is obvious that the level of staffing required to successfully implement the tentative WDR will be enormous and the associated water quality benefits of many of those requirements will be minimal.

Some of the most costly and least beneficial requirements in the order include: **1)** Unrealistically short timelines for submission of member notice of confirmation. **2)** Unrealistically short timelines for submission of the first annual membership list. **3)** Unrealistically short timelines for submission of Farm Evaluation Plans. **4)** Requirements to hire licensed individuals (i.e. engineers) to draft and certify Sediment Control Plans. **5)** Requirement to hire licensed individuals (i.e. engineers) to design and certify all settling ponds and tail water recovery systems. **6)** Requirement for all irrigated lands to prepare annual Nutrient Budgets. **7)** Requirement to submit annual Mitigation Monitoring Reports. **8)** Requirement to summarize farm evaluations on a square mile basis. **9)** Requirement to summarize on a square mile basis all Nutrient Budgets held by coalition **10)** Unrealistically short timelines for submission of Water Quality Management Plans. The cumulative resource drain of complying with the above requirements and other more substantive requirements simultaneously will limit progress to improve water quality. 2

One of the most frustrating aspects of these new burdens is the reality that resources will be focused on these administrative tasks rather than being focused on working with growers to make meaningful water quality improvements. The Westside has consistently strived to fulfill all irrigated lands program obligations, including both the specific provisions and the overall goal of improving water quality. Recently, the Westside Coalition Board authorized additional resources to increase our efforts to work with growers in areas needing additional assistance in improving water quality. If the Regional Board imposes the same requirements as are in the Eastside order we will be will be forced to devote a massive amount of resources to attempt to meet unrealistic requirements with little or no corresponding benefits to water quality. The coalition will be relegated to administrative staff of the board collecting and crunching data rather than being facilitators of water quality improvements working with growers to address problems.

Below is more detailed information on 10 specific inefficient requirements in the order. The list is not intended to be complete but serves to exemplify the flaws in the order.

<u>1) Unrealistically short timelines for submission of member NOCs.</u>

The order requires growers to submit their Notice of Confirmation (NOC) / Notice of Intent (NOI) to the coalition group with 120 days of issuance of the third party coalition's Notice of Applicability (NOA) (WDR §V-2). The Coalition is given 30 days to provide the NOC to individual coalition members. This gives Coalition members as little as 90 days to submit the NOC to the coalition. 3

At first glance completing and filing an NOC/NOI does not seem particularly time consuming. However, the new WDR is lengthy and specifically requires growers to be familiar with the entire order. Given the complexity of the order including a new groundwater component even skilled water experts require significant time to become even casually familiar with the

document. If the board actually expects all participants to be familiar with the requirements of the order they must give the coalition time to explain the order and educate growers as to it many new requirements. The board should not want growers to blindly agree to an order with which they are not familiar.

Collecting even the simplest forms from a large group is very difficult and time consuming. Even though farmers want to comply with law, at times, nature imposed deadlines such as planting, harvest or unexpected weather induce farmers to place the forms on the desk and solve more pressing problems. This requires the coalition to reach out individually to many farmers to ensure proper compliance. The 90 day deadline will require significant effort on the part of the coalition to educate and motivate some growers to file their NOC/NOI. The number of farmers likely to miss the deadline will significantly increase if the deadline occurred during planting or harvest. 3

As an example our most recent Focused Management Plan III for Poso Slough and Salt Slough required that a survey be completed by each operator with 100% return of the survey. The survey was mailed to operators in October of 2011 and just recently in August of 2012 we have reached the 100% level. This has required staff from our member districts as well as staff hired by the Westside Coalition to put in the effort to follow up with farmers. The short 90 day deadlines for multiple similar activites in the Eastside WDR if extended to the Westside Coalition are simply not possible.

This NOC/NOI filing timeline must be longer and more flexible to accommodate the specific needs of the coalition group. Extending the NOC/NOI filing requirement will not adversely impact efforts to improve water quality. In fact, a thorough process of educating growers about the requirements in the order before they confirm their willingness to adhere to it conditions could only benefit water quality.

Additionally, section VII A-3 references “120 days from the order’s effective date” this appears to be inconsistent with the prior section that refers to “120 days from the NOA”. Staff may want to consider correcting this inconsistency when they are modifying the order to extend the filing deadline for NOCs and NOIs. 4

2) Unrealistically short timelines for submission of the first annual membership list.
Coalitions are given 150 days from the issuance of the coalition’s NOA to submit membership lists to the regional board. These 150 days dwindle to 30 days when one considers that NOC/NOI are not due until 120 days from the issuance of the NOA. WDR section VII C sets forth a lengthy list of requirements to be included in the membership list. Coalitions have thousands of members and parcels to be compiled into a list with significant other information including but not limited to owner, operator, section, township and range, address and phone number, county APN, and irrigated acreage. If the Regional Board wants these lists to be complete and accurate they must give coalitions the time necessary to compile an accurate list. 5

The level of effort to compile the current list is significant. The first list of the new program will be significantly more burdensome given the additional information required on the form and the fact that many members will likely need to be dropped and others added to the list. All of this

effort will be taking place at the same time as the implementation of many other new provisions requiring the attention of coalition staff.

3) Unrealistically short timelines for submission of Farm Evaluation Plans.

The order requires growers to submit farm evaluations to the coalition within 90 days of regional board approval of the farm evaluation template. (WDR §VII B) The coalition must make the farm evaluation templates available to members within 30 days of the template approval. This leaves as little as 60 days to complete the farm evaluation. Similar to the problems associated with growers submitting NOC/NOI it will be impossible to get every farmer to return the Farm Evaluation within 60 days, especially if the deadline occurs during planting or harvest.

6

Given that the farm evaluation templates do not exist it is impossible to theorize as to how time consuming these evaluations will be to complete. Again similar to grower NOC/NOI providing additional time to ensure growers understand the form and enter the most accurate information will further the goals of the program. A hastily completed farm evaluation will be less useful to the grower, the Coalition and regional board. If the Board expects thoughtful completion of these forms with meaningful information they must give substantial time for growers to complete them. Otherwise compliance will be relatively low and the information on the submitted forms will not be as complete and accurate as possible.

4) Requirements to hire licensed individuals (i.e. engineers) to draft and certify Sediment Control Plans.

The WDR requires every irrigated acre within the Central Valley that has the potential to discharge sediment offsite to hire a qualified sediment control advisor, such as a licensed engineer, to write, amend, and certify a Sediment and Erosion Control Plan. (WDR §IV B-7 & §VIII C) The order lists several types of qualified sediment control advisors that may be able to be utilized for drafting, amending and certifying the plans. However, given the fact the sediment template has not been developed, it is impossible to judge the cost of preparing such a plan. It is almost certain that any licensed individual will not certify a plan without spending the time to understand the particular situation and being adequately compensated for the service.

7

Although many areas in the valley have sediment issues, most irrigated land within the valley do not have sediment problems. Requiring all lands to develop a sediment management plan even if they do not contain highly erodible soils demonstrates the lack of any cost benefit analysis that has been undertaken when developing these WDRs. The approach seems to be that if Sediment Management Plans are good for some it must be better to require them from everyone and if sediment plans are require from everyone they might as well be written and certified by an expert. Cost considerations were never taken into consideration.

This requirement needs to be wholly redrafted to only require sediment plans from lands with sediment issues and to eliminate the requirement to have them certified by an expert. Sediment management is not rocket science and can often be developed with the informal assistance of the coalitions and other agricultural advisors.

5) Requirement to hire licensed individuals (i.e. engineers) to design and certify all settling ponds and tail water recovery systems.

8

Section IV B-16 of the WDR requires all newly constructed or modified settling ponds, basins and tailwater recovery systems to be designed by or under the direct supervision of, and certified by, a California licensed Civil Engineer. This requirement again lacks any sensitivity to the cost farmers must incur in hiring a civil engineer for every construction or modification of a tailwater facility. This provision and many others requiring expert certifications may be justified if the goal of the program is to provide full employment for experts and engineers. However the requirement is not justified if the goal of the program is to improve water quality without jeopardizing the economic viability of all sizes of farms. This requirement is unjustified and should be eliminated. 8

6) Requirement for all irrigated lands to prepare an annual Nutrient Budget.

The order requires all irrigated lands to prepare annual nutrient budgets and requires lands in highly vulnerable areas to have these nutrient budgets certified by a qualified expert. Requiring annual nutrient budgets may be beneficial in highly vulnerable areas. However nitrogen budgets are not necessary in many areas of the Central Valley. The order should be modified to only require nutrient budgets in highly vulnerable areas.

Staff seems to be treating all irrigated lands as if they are concentrated animal feeding operations (CAFO) needing to dispose of vast amounts of manure. In fact, nutrients are not a byproduct of irrigated agricultural operations but instead they are expensive input to grow crops. Given the high cost of fertilizers farmers have an inherent economic incentive to avoid excess application of nutrients. Highly vulnerable areas my benefit from the requirement of Nutrient Budgets but these budgets need not be as extensive as a budget used on a CAFO. A more appropriate tool would be a simple sheet inducing growers to ensure that nutrient applications are appropriate for the crop being grown. 9

7) Requirement to submit annual Mitigation Monitoring Reports.

We continue to object to making CEQA mitigation requirements a term of the regulatory program. Since the Board cannot dictate what measures are implemented to meet water quality objectives, it is not taking a discretionary action under CEQA as to on-farm actions. Private farmers are not subject to CEQA. This section should be eliminated. 10

8) Requirement to summarize farm evaluations on a square mile basis.

The MRP requires coalitions to summarize farm evaluation information on a per square mile basis (section, township range) in ARcGIS electronic format. (MRP§ V C-18). The administrative difficulty of summarizing this data on a square mile basis across the entire Central Valley is staggering. Given that the Central Valley contains over 7 million acres this will require summarizing data for over 11,000 section of land each with their own unique mix of management practices. Even within a single coalition or sub section of a coalition the task is daunting. Each farm evaluation plan must be analyzed and inputted into a massive data base that correlates the information to individual section township and range. Unfortunately field level realities do not line up with imaginary section lines on a map. Significant effort must be expended to establish what practices are being implemented within each section. 11

Staff justifies the reasonableness of section by section (640 acres) reporting requirement by citing the fact that growers already report pesticide use on a section basis. This justification

misses the point. Conceptually section reporting is possible. However, the issue is the utility of the effort given the complexity of summarizing that data into a usable data base that can be helpful in ascertaining management practice implementation. Despite the fact that DPR collects data on a section by section basis our experience is the DPR data base is not useful as initially published as it contains inaccuracies and duplicates of data entries. Our experience with the DPR program shows that this scale of data summary is not useful because the data base cannot be developed on a reliable basis. The effort to ensure quality data management on this scale is too great and the benefits too small.

Staff explains the need for this scale of data summary on the basis that this scale is essential to allow the board to effectively use the data to determine if members are implementing management practices. Given the fact that this data analysis scale has proven to be unmanageable for DPR the same scale will be even more problematic when attempting to summarize the many variations on management practices that are used to protect water quality. The most effective way for the board to determine if a grower is adhering to the terms of the Order is to visit the site and review the Farm Evaluation Plan. 11

It may be appropriate to summarize farm evaluation information within small sub-regions of the coalition to address specific water quality problems. However a blanket requirement to develop a coalition wide section by section data base of management practice implementation and maintain that data base is unrealistic, unachievable and unnecessary. The program should remain flexible to allow data summaries necessary for the particular area. The section by section approach is administratively impossible to implement and will not result in a meaningful data base that will be useful in determining program compliance and the resources needed to attempt this feat should be used to help growers address water quality issues.

9) Requirement to summarize on a square mile basis all Nutrient Budgets held by coalition.

For the same reason stated above related to farm evaluation plans, the effort to summarize nutrient budget data on this scale is likely is unachievable, and unnecessary. However it is difficult to determine the difficulty of summarizing this data on a section by section scale without knowing the details of the information contained in the nitrogen budget and the amount of the information required to be summarized in the data base. Regardless of size this scale of data summary and collection will be overwhelming to develop and annually maintain. (MRP§ V C-17).

10) Unrealistically short timelines for submission of Water Quality Management Plans.

MRP section VII-I 1 requires the coalition to submit Water Quality Management Plans within 45 days of the coalition first receiving laboratory or field data that indicate the exceedance of a water quality trigger. This requirement will result in hastily developed plans. Meaningful Management Plans take significant time to develop and implement. Including this short of a timeline in the order will result in the development of less effective plans. 12

The order does allow for the development of Comprehensive Water Quality Management Plans. The order eliminates these illogical timelines if a coalition has developed a comprehensive plan. We support the ability to develop Comprehensive Plans but do not see the justification for

requiring a coalition that does not have a Comprehensive Plan to develop individual management plans on a schedule that results in the development of an ineffective plan. 12

The cumulative resource drain of complying with the above requirements and other more substantive requirements simultaneously is in efficient and unrealistic.
The above 10 new requirements are by no means the heart of the irrigated lands program. They are examples of unnecessary administrative tasks being forced on growers with little to no benefits to water quality. Agriculture and the regional board must focus its efforts on continuing the current efforts of the program to ensure that growers address agriculturally related water quality issues in an effective and efficient manner. The expansion of the irrigated lands program to include a new groundwater component will further challenge the participants in the program. Heaping unnecessary and expensive administrative tasks on the participants will serve to weaken the program and distract agriculture from the main focus of the program to minimize agricultural impacts on water quality. 1

We submit that the third party will be frantically seeking to understand the requirements and determine how to obtain staff and financial resources during the initial months of the new program, and that the requirement to accomplish so many unnecessary administrative tasks is wholly unrealistic. The Westside Coalition understood that Regional Board intended to phase the implementation of the new requirements of the program so as to not disrupt the current efforts to address water quality issues. This phased implementation has not been incorporated into the order.

Establishing timelines to submit documents is necessary but the timelines in this order are not well thought out. Developing forms, templates and reports all take time for the coalition to produce functional documents. The coalition must then explain the documents and requirements to every grower or landowner within the watershed. The effort to communicate with existing and potential new members will take significant time. It is important to remember that giving a reasonable amount of time to comply with the filing requirements is essential to a successful program. Additionally, the added time will not compromise efforts to improve water quality. 13

The inclusion of inflexible and unrealistic deadlines in the order will likely result in technical violations of the order and could result in formal enforcement action being taken against growers because the required deadlines were unachievable. Finding 48 of the WDR states that failure to timely submit reports will be considered a “priority” violation that will require formal enforcement actions. The unrealistic deadlines combined with the finding of late filings being a priority enforcement issue will serve to waste both the regional board’s and the growers’ limited resources.

In order to meet the primary goal of protecting beneficial uses, the irrigated lands program must be tailored to leverage limited resources in the most effective and efficient manner. Imposing expensive and unnecessary requirements on every agricultural parcel with no regard for the cost of implementing the requirement and the corresponding water quality benefits of that requirement will waste resources and weaken the program. Exhaustive requirement may appear to be protective of water quality. However inefficient requirements will limit agriculture’s ability to address water quality issues. The Board and staff need to tailor requirements to the

Letter 7

specific needs of the area and not impose expensive blanket requirements across the entire Central Valley.

If you should have any questions please give me a call directly at 559-582-9237.

Joseph C. McGahan
Watershed Coordinator
Westside San Joaquin River Watershed Coalition

cc via email:
Joe Karkoski
Adam Laputz

Letter 8

East San Joaquin Water Quality Coalition
1201 L Street Modesto, CA 95354
www.esjcoalition.org

August 6, 2012

Via Electronic Mail Only

Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

Attn: Mr. Adam Laputz
AWLaputz@waterboards.ca.gov

RE: East San Joaquin Water Quality Coalition Comments on Tentative Waste Discharge Requirements General Order for Growers Within the Eastern San Joaquin River Watershed That Are Members of the Third-Party Group

Dear Mr. Laputz:

The East San Joaquin Water Quality Coalition (ESJWQC) appreciates the opportunity to work with Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff on the development of the tentative Waste Discharge Requirements General Order for Growers Within the Eastern San Joaquin River Watershed that are Members of the Third-Party Group (Draft WDR), and its associated attachments, which include as follows: Attachment A to Order R5-2012-XXXX, Information Sheet (Draft Information Sheet); Attachment B to Order R5-2012-XXXX, Monitoring and Reporting Program Order (Draft MRP); Attachment C to Order R5-2012-XXXX, CEQA Mitigation Measures; Attachment D to Order R5-2012-XXXX, Findings of Fact and Statement of Overriding Consideration; and, Attachment E to Order R5-2012-XXXX, Definitions, Acronyms and Abbreviations. As you know, the ESJWQC is the existing third-party assisting growers in the Eastern San Joaquin River Watershed area, and as of this writing the entity that will submit a Notice of Intent to continue as the third-party to assist its Members in this watershed area.

Our comments are organized to address the following key issues:

- Representative Groundwater Monitoring Program
- Annual Nitrogen Budget and Farm Evaluation Reporting Requirements
- Template Development and Reporting Requirements
- Sediment and Erosion Control Plan Requirements
- Annual Nitrogen Budget Requirements

- Determination of Member Compliance With Terms of the Order by the Third-Party
- Surface Water Toxicity Testing Requirements
- Groundwater Vulnerability Designations
- Groundwater Quality Management Plan Triggers
- Time Schedules for Compliance
- Compliance with the California Environmental Quality Act (CEQA)
- Improper Incorporation of Mitigation Measures
- Compliance with the State's Policy to Protect High Quality Waters

In addition to our comments on the key issues identified here, Attachment 1 includes other comments and requested amendments to the Draft WDR and its associated documents.

I. Representative Groundwater Monitoring Program

In general, the ESJWQC is not opposed to the concept of a Representative Groundwater Monitoring Program (RGMP) in order to evaluate the effectiveness of management practices under various conditions to determine if they are protective of groundwater. However, the ESJWQC is concerned with the inclusion of the RGMP into the Draft WDR at this time. For the following reasons, it is not appropriate to include the RGMP in the Draft WDR. First, there are current discussions occurring between the coalition groups, commodity organizations, and Central Valley Water Board staff with respect to how best to develop an appropriate and coordinated RGMP so that the coalitions and commodity organizations do not duplicate efforts, and unnecessarily expend limited resources. However, such discussions have not yet resulted in consensus on the scope and breadth of the RGMP, and how a RGMP would be implemented region-wide.

Second, the ESJWQC is required to submit a RGMP workplan within two years of receiving its Notice of Applicability (NOA), regardless of the Central Valley Water Board's proposed schedule for adopting WDRs for the other coalition areas. (Draft WDR, p. 25.) Implementation of the RGMP will be required upon approval by the Executive Officer. (Draft WDR, p. 25.) This means that if the ESJWQC receives its NOA in early November of 2012, it must then submit its workplan for the RGMP by November 2014, which is soon after the Central Valley Water Board's proposed adoption of a WDR for the Westside San Joaquin River Water Quality Coalition and San Joaquin County and Delta Coalition. It is unknown how long it will take the Executive Officer to approve the workplan. However, there is nothing within the terms of the Draft WDR that would prevent or require the Executive Officer to withhold approval until after all of the coalitions had submitted workplans. In other words, the requirements for the RGMP as applied to ESJWQC are operable requirements on the ESJWQC that are independent from similar requirements being placed on other coalitions. 1

Considering that there is significant discussion with respect to coordinating such efforts, it is inappropriate to create an independent requirement on the ESJWQC. Rather, it would be more appropriate for the Central Valley Water Board to adopt a RGMP specific monitoring and reporting program for all coalitions (with the exception of the California Rice Commission) after or at the end of the coalition WDR adoption process. This would ensure that all of the coalitions are on the same schedule for development of a region-wide RGMP workplan, or at the very least, on the same schedule for development of coalition-specific RGMP workplans that are coordinated with each other.

Further, the development of a Central Valley RGMP needs to be coordinated with commodity organizations, fertilizer industry representatives, the University of California Cooperative Extension (UCCE), California Department of Pesticide Regulation (DPR), California Department of Food & Agriculture (CDFA), and Natural Resource Conservation Service (NRCS). All of these other entities have specialized expertise to assist in developing an appropriate RGMP that addresses the priority commodities grown throughout the Central Valley. It would be inefficient to make each third-party group develop and implement its own RGMP. Accordingly, the ESJWQC recommends that all the specific requirements with respect to the RGMP be removed from the Draft WDR, Draft MRP, and all other associated documents at this time so that the ESJWQC can work collectively with the Central Valley Water Board and other coalitions to develop an appropriate and effective RGMP. 1

II. Annual Nitrogen Budget Reporting and Farm Evaluation Reporting

The ESJWQC does not generally oppose the idea of Annual Nitrogen Budget and Farm Evaluation requirements. Our comments on the specific provisions for each are provided in section IV below. However, the Draft MRP includes summary reporting requirements with respect to Annual Nitrogen Budgets and Farm Evaluations that are of great concern. Specifically, the MRP requires that the third-party provide summary reports for Annual Nitrogen Budgets and Management Practices that provide data for each in an electronic format, compatible with ArcGIS, identified to at least the section (TRS) level. (Draft MRP, p. 22.) The ESJWQC is opposed to this requirement because reporting such information on a TRS (township, range, section) level is inappropriate and unnecessary. 2

The section levels of TRS are basically 640 acre blocks of land that are not dependent on ownership, assessor parcel number, geographic features, watersheds, or groundwater basins. Based on this, for the ESJWQC, there are likely over 1,300 different sections throughout the estimated 835,000 acres that may ultimately be enrolled under the Draft WDR. Reporting Annual Nitrogen Budget and Farm Evaluation data on this scale will place an extraordinary burden on the ESJWQC that will be extremely costly. More importantly, this will create a significant burden on the ESJWQC and is unreasonable as compared to the need for such information at this scale. (Wat. Code, § 13267(b)(1) [“The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports.”].)

The Draft Information Sheet alleges that reporting at this level is necessary because: (1) this is a consistent scale with respect to the DPR's pesticide use reporting system; (2) it allows the Central Valley Water Board to be able to easily identify Members that require potential compliance and enforcement activities; and, (3) helps to facilitate independent analysis by the Central Valley Water Board and other interested parties. (Draft information Sheet, p. 17.) The ESJWQC responds to each of these reasons as follows.

With respect to consistency with the DPR's pesticide use reporting system, ESJWQC contends that use reporting for pesticides at the section level is practical because the primary concern is directly related to the application of pesticides to the land itself. Moreover, pesticide use data must to be considered by the DPR in setting priorities for food monitoring, pesticide use enforcement, farm worker safety programs, environmental monitoring, pest control research, public health monitoring and research, and similar activities by the department, or by the department in cooperation with other state, regional, or local agencies with appropriate authority. (Food & Ag. Code, § 12979.) In comparison, Annual Nitrogen Budget and Farm Evaluation data is about the implementation of management practices to protect nearby surface water quality, or groundwater quality that may or may not be directly below the property in question. Providing such information on a section level does not provide any relative or correlated information with respect to surface water or groundwater quality. Thus, the value in reporting at this level in this program is questionable. 2

Next, as a practical matter, the level of effort for compiling such data at this level is far greater on the ESJWQC as compared to the local county agricultural commissioner (CAC). For example, the local CACs are each responsible for only ONE county. In comparison, the ESJWQC geographic area encompasses all, or parts of, at least five different counties. The pesticide use reporting system reports only a few variables such as the pesticide use, crop type, application rate, and number of acres. In comparison, the summary reporting requirements in the Draft MRP would include crop type, soil type, specific management practices, crop ratios, and more. The CAC also established its system of reporting on TRS more than 20 years ago and continues to receive data in this format. Conversely, coalition membership is based on APNs and asking Members to provide field information by TRS would necessitate creating a duplicate and complicated Member database. Thus, the level of work placed on the ESJWQC as compared to the local CACs, is extensive.

With respect to the reason for easy identification of Members that require compliance and enforcement activities, this is especially problematic as it relates to the Annual Nitrogen Budget information. The ESJWQC has consistently stated that nitrogen consumption ratios are a tool and are inappropriate as a regulatory end-point. Specifically, the ratio is an estimate of anticipated crop consumption in comparison to total applied nitrogen through sources including fertilizers, manures, composts, nitrates in irrigation supply water, and other sources. However, appropriate ratios vary from crop to crop, and in some cases the age of the crop (e.g., orchard crops). Because ratios are estimates, they are useful tools to inform the third-party and its Members with respect to the need for new and/or additional management practices. However, they are inappropriate as a regulatory end-point for determining compliance with water quality standards, or the terms of the Draft WDR. Unfortunately, based on the language in the Draft Information Sheet, the Central Valley Water Board

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clearly intends to use this information for enforcement purposes. Moreover, the Draft Information Sheet suggests that such information would be used if there are identified water quality problems, however, the Draft Information Sheet fails to consider that identified water quality problems in groundwater may be associated with practices from decades ago, and not associated with practices in place today.

The third reason contained in the Draft Information Sheet implies that the third-parties do not or would not appropriately analyze the information at a larger scale. (Draft Information Sheet, p. 17 ["Also, summarizing the data to a larger scale may make it difficult for the board or any other interested group to check the analysis of the third-party or conduct additional analysis."].) Such statements are offensive and inappropriate. The third-parties in this program play a very vital role in taking the information collected, and then directly communicating with growers when problems occur. Due to these efforts, there have been substantial improvements in surface water quality. One would expect that such extraordinary efforts would continue based on information garnered from the Annual Nitrogen Budgets and Farm Evaluations. In contrast, the Central Valley Water Board appears to want the information available at the section level so that it and others can conduct their own "independent analysis." Unfortunately, by allowing this level of access, there is no guarantee that the use of such information by others would result in an "objective," independent analysis versus being twisted in a manner that distorts the truth and value of the information provided. Distortion of this information by others, whether purposeful or unintended, could greatly harm growers in a section, and make them targets for threats, or potentially, environmental terrorism. Moreover, inaccurate characterizations of data and information by others would undermine the program in its entirety by sending a signal to participants that the reporting of Annual Nitrogen Budget information to the ESJWQC provides no assurance that the information is protected from public disclosure, and in fact, will result in the public reporting of such information at a level that will allow members of the public to, in some cases, readily match the information to a grower directly. This public disclosure defeats the purpose of having the information reported to the third-party versus the Central Valley Water Board directly. Rather, the third-party is no more than the Central Valley Water Board's "data-gatherer," and there is little benefit provided to the growers in having the third-party play this role. 2

Considering the level of effort and cost associated with reporting Annual Nitrogen Budget and Farm Evaluation data at the section level, and the Central Valley Water Board's intended purposes for obtaining information at this level, these reporting requirements are inappropriate and must be removed from the Draft MRP. In the alternative, the ESJWQC believes that appropriate reporting levels for this information are variable based on the depth, quality, flow direction and rate, and size of the groundwater below. Once these are known (as they will be after the GAR), the ESJWQC can then identify an appropriate size and location for reporting and for focusing its outreach efforts. Having to report on the arbitrarily small section level does not help the ESJWQC move forward with its Members and conduct the outreach needed to improve groundwater quality. In fact, it diverts resources away from efforts to work with growers. By reporting based on some appropriate hydrologic system, the information will be far more useful in attempting to match management practices to water quality.

Please be assured that the ESJWQC understands the Central Valley Water Board's need to be sure that Members are properly considering and managing nitrogen applications on the farm in order to protect vulnerable groundwater areas specifically, and to protect surface and groundwater in general. To that end, the ESJWQC anticipates working with Central Valley Water Board staff to ensure reports on a watershed or basin level provide adequate accountability and assurances that efforts will be taken when appropriate as has been the case for problems the ESJWQC identified and addressed in its surface water program. The ESJWQC is committed to conducting significant outreach and education on this when issues have been identified. However, the public reporting of individual Member's nitrogen use does not further the Central Valley Water Board's purpose of ensuring that Members are implementing effective management practices to protect surface and groundwater. Rather, it is more appropriate for the ESJWQC to work with its Members, based on information submitted to the ESJWQC. 2

III. Template Requirements for Annual Nitrogen Budget, Farm Evaluation, and Sediment and Erosion Control Plan

In the previous version of the Draft WDR (i.e., the Administrative Draft), templates for the Annual Nitrogen Budget, Farm Evaluation, and Sediment and Erosion Control Plan were to be developed by the ESJWQC and approved by the Executive Officer. Now, the Draft WDR indicates that the templates would be prepared by Central Valley Water Board staff, working with the third-parties, technical service providers, commodity groups, and other interested stakeholders, and would then be provided to the ESJWQC upon Executive Officer approval. The ESJWQC has concerns with this approach, and in fact, believes that it is more appropriate for the ESJWQC to prepare the templates associated with these requirements.

The ESJWQC's first concern is the potentially broad spectrum of interests that would be involved in template development. By developing templates through a "stakeholder" process, the Central Valley Water Board is turning what should be technical documents into political documents. All three of these documents need to be developed by those in agriculture, with the assistance of professionals that work with agriculture. Specifically, all three of these documents need to be developed with the assistance of qualified agronomists and/or agricultural engineers – not interested party advocates. It is inappropriate to suggest that others outside of the third-party coalitions and their advisors should be able to participate in the development of these templates. Again, these are technical documents that should not rise to the level of "policy," which is likely to occur if their development is subject to a stakeholder-like process. 3

Next, the ESJWQC contends that if the template documents are prepared in this proposed stakeholder-like process led by Central Valley Water Board staff, these documents then become new permit requirements, and are essentially permit amendments. Amendments to a WDR are not delegated to the Executive Officer and require full Central Valley Water Board action. (Wat. Code, § 13223(a) ["Each regional board may delegate any of its powers and duties vested in it by this division to its executive officer excepting only the following: . . . (2) the issuance, modification, or revocation of any . . . waste discharge requirement . . . ."].) Thus, before the Central Valley Water Board staff could require ESJWQC Members (or Members of any other coalition) to report

information on the developed templates, such templates would need to be subject to the appropriate noticing requirements, be available for public comment and review, be adopted by the Central Valley Water Board, and, potentially be subject to petition to the State Water Resources Control Board (State Water Board) if an interested party has concerns with requirements contained in the templates. 3

For these reasons, the ESJWQC recommends that the Central Valley Water Board remove the stakeholder process for template development, and rather, make it a requirement that the ESJWQC, in coordination with the other coalitions and their collaborators, develop the templates as appropriate for the ESJWQC.

IV. Substantive Provisions for Sediment and Erosion Control

As compared to the administrative draft of the WDR released this spring, the Draft WDR includes new Sediment and Erosion Control provisions that are of concern to the ESJWQC. The ESJWQC has advocated throughout this process that Sediment and Erosion Control Plans are important and necessary for those growers that have the potential to discharge *to* surface waters. Further, over the years of this program, the ESJWQC has gained extensive knowledge of its geographic area and is well aware of the parcels and/or areas that are most likely to have runoff to surface waters. Accordingly, the ESJWQC has recommended that it identify and notify those growers with certain parcels or in certain areas that should be required to prepare and implement sediment and erosion control plans in order to protect water quality. However, the Draft WDR proposes to not rely on the ESJWQC for making this determination, and rather propose that, "[m]embers that have the potential to discharge surface water offsite shall develop a Sediment and Erosion Control Plan as specified in section VII.C below or as directed by the Executive Officer." (Draft WDR, p. 17.) 4

This proposed requirement is problematic for several reasons. First, this expands the requirement from those that could potentially discharge to surface water, to anyone that has irrigation return flow or stormwater moving offsite of its property, regardless of the potential of this runoff discharging to a surface water. In other words, the Central Valley Water Board is creating end-of-field discharge limits for sediment. This requirement fails to take into account that growers in some areas may have collective management practices at the end of a drain, or systems that collect and return runoff, even though the irrigation return flow moves offsite first. As indicated previously, the ESJWQC is very familiar with its coalition area, and can easily identify the parcels and/or areas where such plans are necessary. Second, the requirement as proposed is broad and confusing. It provides no explanation or direction to the ESJWQC or its Members as to the category of individuals that are in fact required to prepare a Sediment and Erosion Control Plan. For these reasons, provision IV.B.7 should be revised to reflect that Sediment and Erosion Control Plans are required of those Members that are notified by the ESJWQC of the requirement to do so.

Next, the Draft WDR adds a substantial new requirement to development of Sediment and Erosion Control Plans. Previously, Sediment and Erosion Control Plans were to be prepared in accordance with a template developed by the ESJWQC and approved by the Executive Officer. The Draft WDR requires that such plans now be "written, amended, and certified by a Qualified Sediment

and Erosion Control Plan Developer . . . ." (Draft WDR, p. 22.) A Qualified Sediment and Erosion Control Plan Developer is one that fits within the categories specified in the Draft WDR, which essentially includes professional engineers or certified storm water quality specialists. The reason given for this requirement in the Draft Information Sheet is because it is consistent with "the State Water Board's Construction Stormwater Program." (Draft Information Sheet, p. 15.) In attempting to soften this requirement, the Draft WDR states that such plans can be prepared under request from service providers such as the NRCS, or UCCE. 4

The requirement with respect to development of such plans by a certified professional is problematic for a number of reasons. First, such a requirement creates a new expense and cost to those growers subject to this requirement. Professional engineers and/or certified specialists are paid consultants, which must then be hired to prepare such plans. Depending on the size of the grower's operation, the expense may be significant. Second, the intended reason for requiring preparation by a professional has no relevance to the irrigated lands program. Just because the construction stormwater program requires preparation of plans by professionals does not mean that such a requirement is appropriate for agriculture. Agricultural systems are different from construction projects. Construction projects are typically short-term projects that move extensive amounts of sediment, and typically clear project areas of all vegetation, at least for a short time. In comparison, agricultural systems are on-going operations that disc or plow the soil to prepare for planting either annually in the case of field crops, or when establishing an orchard or vineyard. Moreover, the construction stormwater program is a federal National Pollutant Discharge Elimination System (NPDES) program; the irrigated lands program is adopted under state law only. 5

With respect to references to service providers for assistance, this too is problematic. The NRCS and UCCE do not have enough resources available to assist a large sub-set of growers in developing Sediment and Erosion Control Plans. Further, NRCS or UCCE service providers are not "certified" professionals, and they do not have the authority to "sign-off" on such plans.

Accordingly, the requirement that Sediment and Erosion Control Plans need to be developed by a certified professional, and reference to service providers, need to be removed from the Draft WDR.

V. Substantive Requirements for Annual Nitrogen Budget

As compared to the administrative draft, the Draft WDR now requires all Members to prepare Annual Nitrogen Budgets. Previously, only Members in high vulnerable areas where nitrate is a constituent of concern were required to prepare Annual Nitrogen Budgets. The ESJWQC believes that it is unnecessary to require all Members to prepare Annual Nitrogen Budgets. Rather, the ESJWQC recommends that the Draft WDR be revised to state that "all Members <u>are encouraged</u> to prepare" Annual Nitrogen Budgets versus making it a requirement of the Draft WDR. (See Draft WDR, p. 23.) 6

Next, the ESJWQC reiterates its concerns with the Annual Nitrogen Budget requirements as proposed in the Draft WDR. The ESJWQC has always supported the concept of Annual Nitrogen Budgets as long as the development and use of such budgets is clearly understood and put into proper context. However, the language of the Draft WDR fails to provide the necessary safeguards with respect to the development and use of the Annual Nitrogen Budgets. First, in developing the draft provisions with respect to the Annual Nitrogen Budget process, the ESJWQC provided specific language to the Central Valley Water Board outlining the process, the annual reporting provisions, and the appropriate context for such requirements. The information and language provided by the ESJWQC has not been included in the Draft WDR. Specifically, the ESJWQC provided the following language for inclusion in the Draft WDR:

> [t]he third-party will aggregate information from Final Annual Nitrogen Budget Worksheets to adequately characterize the input, uptake, and loss of nitrogen fertilizer applications by specific crops for the significant crops in the Eastern San Joaquin River Watershed. This information may include a summary of nitrogen consumption ratios by crop or other equivalent reporting units. The ratio is an estimate of anticipated crop consumption in comparison to total applied nitrogen through sources including fertilizers, manures, composts, nitrates in irrigation supply water and other sources. However, appropriate ratios vary from crop to crop, and need to account for site-specific conditions. Ratios shall be used as a tool to inform the third-party and its members with respect to the need for new and/or additional management practices; ratios are not, and shall not be used as a regulatory end-point for determining compliance with water quality standards, or the terms of this Order.

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While some of this language has been incorporated, the reporting provisions have been expanded, and the explanatory language has not been included. As a result, the Annual Nitrogen Budget Reporting requirements are extensive and expensive, and Annual Nitrogen Budgets may be used as regulatory end-points for determining compliance with the terms of the Draft WDR. (See section II above.) The Draft MRP reporting requirements must be revised to reflect the language provided immediately above.

Moreover, to ensure that the Annual Nitrogen Budget is put into the proper context with respect to the Draft WDR, language that clearly describes the intended use and purpose of Annual Nitrogen Budgets is essential for inclusion in the Draft WDR, and in the Draft Information Sheet. With respect to the Draft WDR, the ESJWQC recommends that a new finding be added that states as follows:

> This Order encourages all Members to prepare Annual Nitrogen Budgets, and requires Members in highly vulnerable groundwater areas where nitrate is found to be a constituent of concern to prepare Annual Nitrogen Budgets. In general, Annual Nitrogen Budgets are a worksheet that may include the calculation of a nitrogen consumption ratio. The ratio as calculated on the Annual Nitrogen Budget Worksheets is an estimate of anticipated crop consumption in comparison to total

applied nitrogen through sources including fertilizers, manures, composts, nitrates in irrigation supply water and other sources. Ratios are tools to be used to inform the third-party and the Members with respect to the need for new and/or additional management practices; ratios are not, and shall not be used as regulatory end-point for determining compliance with water quality standards, or the terms of this Order.

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Without the inclusion of the above-identified language, Annual Nitrogen Budgets and the information contained therein, may be misused and improperly conveyed by Central Valley Water Board staff and others. Thus, it is essential that such language be added to the Draft WDR, Draft MRP, and Draft Information Sheet.

VI. Determination of Member Compliance With Terms of the Draft WDR by the Third-Party

Finding 22 of the Draft WDR and other associated provisions suggest that the third-party may be ordered to conduct field specific studies to identify sources of water quality problems. (See, e.g., Draft WDR Finding 22, p. 6 [". . . this Order requires the third-party to provide technical reports, which may include field specific special studies, at the direction of the Executive Officer."].) As the entity that will implement the third-party provisions of the Draft WDR, the ESJWQC is concerned with the collective impact of these provisions. As currently proposed, it appears that the ESJWQC could be put in the position of inspecting and monitoring individual Member discharges from irrigated agricultural operations to surface waters and groundwater. The ESJWQC does not believe this to be an appropriate role for the third-party. As indicated in the Draft WDR, the role of the third-party is to assist Members and to be responsible for fulfilling regional requirements, which include monitoring, development of regional or watershed-based water quality management plans, and tracking Member compliance with certain identified management plan and reporting requirements. (See Draft WDR Finding 10, p. 3.) The third-party does not replace the role of the Central Valley Water Board and has no legal standing to determine if an individual Member's discharge is in compliance with water quality standards.

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Further, the Draft MRP includes provisions to suggest that the Central Valley Water Board may require the ESJWQC to conduct site-specific field studies of an identified Member's operation. (See Draft MRP, p. 10.) The ESJWQC is opposed to such provisions. If the Central Valley Water Board determines that individual site operations need to be monitored, then the Central Valley Water Board's Executive Officer has the authority to issue an inspection and monitoring order directly to the Member under Water Code section 13267. Such a directive or order to the ESJWQC is inappropriate as it would require the ESJWQC to divert its resources and funding that is collected to meet regional requirements to be expended on one individual. Moreover, the ESJWQC contends that such an order issued to the ESJWQC would not comply with Water Code section 13267. Water Code section 13267 specifically provides the Central Valley Water Board with the authority to "investigate the quality of any waters of the state within its region." (Wat. Code, § 13267(a).) In doing so, the statute further provides the Central Valley Water Board with the authority to require "any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge . . . [to] furnish, . . . technical or monitoring program reports which the regional board requires." The ESJWQC is ***not*** a discharger, thus the Central Valley Water Board

cannot compel the ESJWQC to furnish technical or monitoring reports, except to the extent as agreed upon by the ESJWQC. Moreover, under this statutory authority, "the burden of the report, including costs of these reports, must bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports." (Wat. Code, § 13267(b)(1).) Here, the burden on the ESJWQC to monitor and prepare reports on an individual farm basis would not be reasonable. As indicated above, the role of the third-party is to conduct regional or watershed-based monitoring, conduct education and outreach, and develop and implement watershed or subwatershed water quality management plans. To support these efforts, the ESJWQC assesses all of its Members in an equitable manner. Requiring the ESJWQC to use its limited resources to monitor an individual farm would not be a reasonable use of funds, and it would deflect limited resources from its watershed and subwatershed obligations to inspect just a few. Based on these concerns, the Central Valley Water Board needs to remove these provisions from the Draft WDR. 7

To the extent that the ESJWQC has developed a water quality management plan that includes the need for field studies to verify the effectiveness of management practices, then such studies may be appropriate. But in all cases, the use of field studies must be at the discretion of the ESJWQC – not mandated by the Central Valley Water Board. Accordingly, the Central Valley Water Board must revise Draft WDR Finding 22, and the special project monitoring provision in the Draft MRP.

VII. Surface Water Toxicity Testing Requirements

As currently drafted, the Draft MRP suggests that both acute and chronic toxicity testing is required for all toxicity tests. Specifically, the aquatic toxicity testing is required to follow footnoted U.S. Environmental Protection Agency (USEPA) testing methods, which includes the methods for both acute and chronic toxicity testing. (Draft MRP, p. 9.) Although the trigger requirements for a toxicity identification evaluation (TIE) are specific to acute toxicity (i.e., mortality), the language of the Draft MRP does not clearly indicate that only acute toxicity testing is required. The ESJWQC is opposed to chronic toxicity testing for several reasons. First, chronic toxicity testing is significantly more expensive than acute toxicity testing, which is the current requirement. Specifically, implementing chronic water column toxicity testing for *Ceriodaphnia dubia* and *Pimephales promelas* will result in an increase in toxicity costs of two times the current acute toxicity testing costs. All costs will double, including the initial toxicity test of the sample, the reference toxicity tests, and any subsequent TIEs. Based on current ESJWQC toxicity testing costs for three species (algae, fat head minnow, and water flea), the increase in costs for a single sample will be $3,250. If a TIE is required, the cost increase is estimated to be $2,780 for each TIE. These increases are in addition to the current costs associated with toxicity testing. Assuming that the ESJWQC would conduct toxicity tests for 12 months at 6 sites under the Draft MRP, the increase in costs are estimated to be a minimum of $234,000 annually when compared to current toxicity costs. The addition of TIEs and additional sampling to meet management plan requirements increases this amount further. The ESJWQC estimates that if chronic toxicity testing is required, the toxicity analytical cost would increase from $381,000 to $690,000 annually. This increase in cost directly contradicts the surface water monitoring discussion contained in the Draft Information Sheet, which claims that changes are being made "to improve the cost-effectiveness of the surface water monitoring effort." (Draft Information Sheet, p. 7.) 8

Second, for this program there is no scientific or technical reason that would justify the significant increase in cost for the change from acute toxicity testing to chronic toxicity testing. As discussed further below, the Draft MRP will require chemical-specific monitoring in ambient surface water. The cost of analysis for the multiple new chemicals (that are ultimately agreed upon as being appropriate) will result in a substantial increase in the cost of chemical analysis. Monitoring for specific chemicals in surface waters coupled with the establishment of trigger limits will be protective of aquatic life in waterways of the Eastern San Joaquin River Watershed. Requiring chronic toxicity testing will not provide additional protection above that already provided by agreed upon chemical-specific monitoring and the establishment of trigger limits. Acute toxicity testing is sufficient to identify additional contaminants such as ammonium that could cause toxicity but are not discharged from irrigated agriculture. Moreover, the Draft WDR, the Draft MRP, and the Draft Information Sheet provide no reason or basis for the proposed change. Thus, chronic toxicity testing requirements, or any implication of a chronic toxicity testing requirement must be removed. 8

VIII. Groundwater Vulnerability Designations

The Draft MRP proposes to define high vulnerability areas as those areas that have been identified by the State Water Board, areas covered by the DPR groundwater protection area, and areas identified by the Central Valley Water Board as having exceedances of water quality objectives for which irrigated agriculture may cause or contribute to the exceedance. (Draft MRP, p. 12.) The ESJWQC is then allowed to refine this area during the development of the Groundwater Assessment Report (GAR). (*Ibid*.) The ESJWQC does not agree with the creation of a "default" definition of vulnerable area in advance of the development of the GAR. The approach as proposed here defeats the purpose of conducting a GAR, and identifying vulnerable areas based on appropriate data and information. 9

Moreover, the Draft MRP proposes that management practices should be used in identifying vulnerable areas. We contend that this type of information is not appropriate for determining vulnerability, and in fact would require an excessive amount of information. It implies that vulnerability determinations should be made on a field scale, which is not the envisioned or intended purpose of the GAR. Accordingly, the Draft MRP needs to be revised to remove the default definition of vulnerable area, and needs to remove reference to management practices as information for which vulnerability decisions would be made. 10

IX. Discharge Limitations

The Draft WDR improperly characterizes what should be receiving water limitations as discharge limitations. (See Draft WDR, p. 15.) Specifically, by characterizing the limitations as "discharge limitations," the Central Valley Water Board is transforming receiving water limits into end-of-field discharge limits. This means that all irrigation and stormwater leaving a field, or discharging to groundwater must comply with water quality objectives instantaneously – unless there is a management plan that includes a time schedule for compliance. Such requirements are unreasonable, and well beyond the scope of the irrigated lands program as analyzed in the Programmatic Environmental Impact Report. 11

Further, the Draft WDR states that Member operations "shall not cause or contribute" to exceedances of applicable water quality objectives. This creates an extremely broad and impossible standard that suggests one molecule of a constituent may "contribute" to an exceedance, and therefore a grower may be liable even for de minimus contributions. The ESJWQC believes that the "or contribute" standard is inappropriate and may subject growers to unwarranted liability and enforcement actions. At the very least, the "contribute" requirement should be limited to situations where the Member has significantly contributed to a violation of a water quality standard. 12

X. Time Schedule of Compliance

The limitations expressed in section III of the Draft WDR should be receiving water limitations that clearly indicate that discharges from irrigated agricultural operations shall not cause or significantly contribute to violations of applicable water quality standards in waters of the state. In other words, irrigated agriculture is in compliance with these limitations if its discharges are not the cause, or do not significantly contribute to water quality objective exceedances even if the surface water or groundwater in question does not meet applicable water quality standards. (Draft WDR, p 15.) Likewise, the time schedules for compliance in section XII of the Draft WDR must also be specifically related to causes or significant contributions from irrigated agriculture and not compliance in the receiving water itself. (Draft WDR, pp. 29-30.) As proposed, the Draft WDR suggests that discharges at the edge-of-the field are subject to time schedule provisions – not that irrigated agriculture no longer causes or significantly contributes to exceedances of water quality objectives. Further, it is important to note that the ten-year timeframe for some constituents and some practices is an aggressive timeframe. Thus, it is essential that the Central Valley Water Board's authority for modifying these schedules be maintained. 13 14

XI. Groundwater Quality Management Plan General Requirements

The Draft WDR and Draft MRP-2 propose to require Groundwater Quality Management Plans (GQMPs) within 45 days after a triggering exceedance. (Draft WDR, p. 26; Draft MRP, Appendix MRP-1, p. 2.) The program proposed is very similar to that for surface water. The ESJWQC had initially thought that this process would also work for groundwater. However, after careful evaluation and consideration, the ESJWQC has now concluded that surface water and groundwater are very different, and the same process that has been employed for surface water may not work well in conjunction with groundwater. In general, Surface Water Quality Management Plans (SQMPs) are designed to be reactive to the observed condition, identify the source of the condition, address the condition, and then for a prescribed, relatively short time period demonstrate completion of the action(s) outlined in the SQMP. The third-party could then request completion of the management plan, and pending approval by the Executive Officer, the third-party may revert to regular ongoing monitoring requirements. 15

Unlike the circumstances described above for surface water, groundwater quality conditions, especially those contributed to by widespread nonpoint sources, do not lend themselves to the same "management approach." Since an alternative groundwater monitoring approach, i.e., a Central

Valley scale RGMP, is proposed for the Central Valley Water Board's consideration, a different approach to groundwater quality management planning for the Draft WDR needs to be considered.

As recognized by Central Valley Water Board staff, the Draft Information Sheet describes the Trend Groundwater Monitoring Program as "designed to determine baseline quality of groundwater in the third-party area, and to develop long-term groundwater quality information that can be used to evaluate the regional effects (i.e., not site-specific effects) of irrigated agriculture and its practices." Notably, trend monitoring as defined by Central Valley Water Board staff recognizes the relatively longer time periods and also larger regional scale associated with the purpose of the trend monitoring. Long time periods may mean many years or even many decades depending on the hydrogeologic setting. The relatively greater depth of the trend monitoring wells (i.e., typically water supply wells which would not be constructed with a short screen section at the water table) means groundwater flow paths to the trend monitoring wells are much longer (potentially miles) and the contributing source areas more diffuse. Groundwater trend monitoring describes water quality results collected over a long period that are symptomatic of practices associated with regional land uses. Where irrigated agriculture is the predominant land use in the monitored area, it may be indicative of the effect of long time agricultural operations contributing to the observed trends. However, representative monitoring, rather than trend monitoring, is the preferred method for: (1) determining more definitively which agricultural practices are contributing to effects on water quality, and (2) more quickly and effectively demonstrating practices that control the effects on, and result in improvements to, water quality, which should occur on a valley-wide scale. 15

The GAR will include a determination of higher and lower hydrogeologically vulnerable areas. When establishing priorities for monitoring in high vulnerability areas, the third-party will also consider (among other factors) identified exceedances of water quality objectives for which irrigated agriculture waste discharges are the cause, or a contributing source. This means where sufficient existing groundwater quality data are available in the third-party area, particularly hydrogeologically sensitive areas, they are likely to show the regional effects of long time agricultural practices. Similarly, trend monitoring can also be used to show long time improvements to groundwater quality, on a regional scale, due to changed practices. As noted above, representative monitoring is the preferred method for more quickly measuring whether changed practices are effective in improving water quality.

As an alternative to the GQMP approach currently proposed in the Draft WDR, the ESJWQC proposes that the ESJWQC's monitoring and reporting requirements already encompass the elements that would be included in a GQMP. Specifically, the ESJWQC in its Monitoring Report will already address the following:

- Annual Nitrogen Budgets submitted by Members to the third-party;
- Farm Evaluations submitted by Members to the third-party;
- Education and outreach conducted by the third-party; and

- Ongoing groundwater monitoring to assess trends.

Additionally, in coordination with a proposed Central Valley RGMP, the third-party can provide and receive information directed toward furthering the collective efforts of the agricultural community to improve grower's practices.

Thus, rather than having GQMPs triggered in the way as proposed in the Draft WDR, the ESJWQC recommends that the GAR identify areas where the ESJWQC should concentrate its efforts on education and outreach to its Members, as well as identifying appropriate management practices for implementation. These efforts would be supported with information obtained from the proposed valley-wide RGMP. These areas would be prioritized in the GAR based on a number of factors, including but not limited to, groundwater monitoring information, proximity to urban areas, constituents of concern, and others. Accordingly, the ESJWQC recommends that the GQMP trigger requirements be deleted, and instead have such requirements be based on information obtained in the GAR, and reported in the third-party's Monitoring Report. Additional actions related to improved irrigation and fertilization practices would be developed through the RGMP. The results and actions stemming from that program would then be reported under that program as well as the Monitoring Report. Moreover, with this proposed approach, time schedules should be included in the GAR or a GQMP. Thus, the time schedule provision for groundwater would also need to be revised to include GAR. (See Draft WDR, p. 30.) 15

XII. Compliance With the California Environmental Quality Act (CEQA)

The Draft WDR finds that "[a]lthough the Order is not identical to any of the PEIR alternatives, the Order is comprised entirely of elements of the PEIR's wide range of alternatives." (Draft WDR, p. 7.) It then further finds that the PEIR "identified, disclosed, and analyzed the potential environmental impacts of the Order." (*Ibid*.) Putting aside the adequacy of the Program Environmental Impact Report (PEIR) in general, the ESJWQC contends that the Draft WDR goes beyond the alternatives analyzed in the PEIR, and therefore, not all potentially adverse environmental impacts of the Draft WDR have been identified, disclosed, and analyzed in the PEIR.

Specifically, the Draft WDR includes provisions that create end-of-field discharge limitations, and farm management performance standards that were not part of any of the alternatives under the PEIR, and were therefore not adequately analyzed. For example, the Draft WDR includes farm management performance standards that require implemented management practices to: (1) minimize waste discharge offsite in surface water; and, (2) minimize percolation of waste to groundwater. (Draft WDR, p. 18.) In other words, to comply with the performance standards, and to meet water quality objectives at the end of the field, growers under the Draft WDR will most likely need to avoid having any irrigated return flow or stormwater leaving the field, and will need to avoid irrigation applications that result in groundwater recharge. With respect to surface waters, this will result in a dramatic decrease in water available for aquatic life, especially in water bodies dependent on agricultural drainage for all or parts of the year. For groundwater, this will mean a dramatic decrease in groundwater recharge in all groundwater basins, and in particular in over drafted basins. 47

The PEIR did not adequately analyze these impacts. (See Irrigated Lands Regulatory Program Draft PEIR (July 2010), pp. 5.9-15 - 5.9-18.) At most, the PEIR stated that tailwater recovery systems might reduce the amount of flows, "slightly altering hydrologic patterns, but the amount of alteration is not considered a significant hydrologic impact." (*Id.*, p. 5.9-15.) However, nowhere does the Draft PEIR discuss universal application of farm management practices that minimize (or eliminate) irrigation return flows and groundwater recharge. Accordingly, the PEIR is inadequate as applied to the Draft WDR, and the Central Valley Water Board must at least prepare a supplemental EIR to address these unanalyzed impacts. This has not occurred here. 47

XIII. Improper Incorporation of Mitigation Measures

The Draft WDR improperly incorporates mitigation measures that cannot be legally imposed. (Draft WDR, p. 8, and see Attachment D thereto; see also CEQA Guidelines, § 15126.4(a)(5).) For example, vegetation and wildlife mitigation measures require avoidance of sensitive biological resources, additional CEQA review if such resources cannot be avoided, and force agricultural landowners to conduct a delineation of affected wetlands "prior to implementing any management practice that will result in the permanent loss of wetlands." In delineating wetlands, the mitigation measures require it to be conducted in accordance with current U.S. Army Corps of Engineer (Corps) methods. (Draft WDR, Attachment D, pp. 20-21.) The mitigation measures imposed here cannot be legally imposed in all cases.

First, we question the requirement to undertake additional CEQA review when an adverse affect on a sensitive biological resource cannot be avoided. While we agree that impacts to such sensitive areas should be avoided, we are concerned that the mitigation measure imposes a new CEQA requirement on agricultural landowners and operators when no discretionary project may actually be triggered by the action. For example, in some jurisdictions, and depending on the construction activity, grading permits may be required for installation of certain management practices (e.g., detention basins). However, in many jurisdictions, the act of constructing a management practice may not rise to the level of activity subject to a grading permit. Further, the implementation of management practices at the farm level, which are required by the Draft WDR, is not subject to a discretionary approval by the Central Valley Water Board. Thus, there is no universal trigger for additional CEQA review. At most, such review may be necessary if the construction activity constitutes a discretionary project under the local jurisdiction's authority. 16

Similarly, the Draft WDR incorporates a mitigation measure that requires additional CEQA review if construction of a management practice cannot be altered to avoid affects on special-status fish. (Draft WDR, Attachment D, p. 22.) For the same reasons expressed above, there is unlikely to be a "discretionary" project associated with such activity, and therefore additional CEQA review is being improperly required when there is no legal requirement for such a review. Thus, the Draft WDR improperly incorporates mitigation measures that cannot be legally imposed.

Next, we are concerned that the mitigation measure for wetland loss is too broad and fails to recognize that implementation of management practices is most likely to occur on irrigated agricultural land currently in production. The Central Valley Water Board does not have the

authority to order the delineation of affected wetland areas identified as converted croplands because such agricultural areas do not fall within the jurisdiction of the Corps. The federal]Clean Water Act (CWA) and the authority of the Corps to perform operations under the CWA apply only to "waters of the United States." The regulatory definition of waters of the United States specifically states that, "Waters of the United States do not include prior converted cropland . . . ." (33 C.F.R. § 328.3(a)(8).) Furthermore, guidance issued by the USEPA in 2008 clarifying CWA jurisdiction following the Supreme Court case of *Rapanos v. United States* (2006) 547 U.S. 715, made no mention of and had no effect on this exemption for ongoing agricultural operations. As such, cropland continues to be exempt from the Corps' CWA jurisdiction. If it is not within the authority of the Corps to conduct a delineation because the area to be examined is not a water of the United States as defined by federal law or regulation, then it follows that it is not within the authority of the Central Valley Water Board to order individual agricultural operations to undertake such an action as a mitigation measure. 16

Accordingly, the Draft WDR improperly incorporates mitigation measures that cannot be legally imposed, and such measures must be removed.

XIV. Compliance With the State's Policy to Protect High Quality Waters

The Draft WDR incorrectly characterizes application of the state's anti-degradation policy. Specifically, the Draft WDR implies that application of the anti-degradation policy is triggered by "any activity which discharges a waste to existing high quality waters." (See Draft WDR, p. 8.) However, this characterization and application of the anti-degradation policy to the Draft WDR is inappropriate. As indicated in State Water Board orders and guidance documents, the anti-degradation policy is triggered when the Central Valley Water Board is taking an action that may cause degradation to high quality waters. It is not applicable if the Central Valley Water Board's action will not cause degradation.

For example, State Water Board Order No. WQ 86-17 clearly states, "[b]efore approving any reduction in water quality, or any activity that would result in a reduction in water quality, the Regional Board must first determine that the change in water quality would not be in violation of State Board Resolution No. 68-16 or the federal antidegradation policy." (*In the Matter of the Petition of Rimmon C. Fay* (Nov. 20, 1986) Order No. WQ 86-17, at p. 17.) More recently, the State Water Board opined that, "[t]he federal antidegradation policy and State Water Board Resolution 68-16 apply to reductions in water quality." (*In the Matter of Petitions for Reconsideration of Water Quality Certification for the Re-operation of Pyramid Dam for the California Aqueduct Hydroelectric Project Federal Energy Regulatory Commission Project No. 2426* (Aug. 4, 2009) Order WQ 2009-0007 (*Pyramid Dam*), p. 12.) By its own admissions in the Draft WDR, the Central Valley Water Board finds that the order will achieve and maintain water quality. (Draft WDR, p. 8.) Thus, because adoption of the Draft WDR will not result in a reduction in water quality, the federal and state anti-degradation policies are not applicable. 17

Furthermore, even though application of the anti-degradation policies may be triggered for changes that have already occurred, such an application only occurs when the changes have not already been reviewed for consistency with those policies. (See *Pyramid Dam*, p. 12.) That is not the case here. The Draft WDR incorrectly states that, "any activity which discharges a waste to existing high quality waters must meet waste discharge requirements which will result in best practicable treatment or control (BPTC) of the discharge . . . ." (Draft WDR, p. 8.) In other words, the Central Valley Water Board is claiming that anti-degradation is triggered for any permitting action, regardless if the activity has been previously permitted. In fact, irrigated agricultural has been subject to Central Valley Water Board regulation since adoption of the original waivers in 1982 when the Central Valley Water Board adopted Resolution No. 82-036. To adopt waivers pursuant to Water Code section 13269, the Central Valley Water Board was required to find that the waivers were consistent with any applicable regional water quality control plan (i.e., Basin Plan). The water quality control plans for the Central Valley region (for both the Tulare Lake Basin and the Sacramento and San Joaquin River Basins) have included and contained State Water Board Resolution No. 68-16 since the plans were adopted in 1975. Thus, to adopt the waivers, the Central Valley Water Board needed to find that adoption of the waivers was consistent with Resolution No. 68-16. In other words, discharges from irrigated agriculture were found to be consistent with Resolution No. 68-16 in 1982, and therefore only a Central Valley Water Board action that would degrade water quality is subject to the state and federal anti-degradation policies. As already indicated, the proposed action would not degrade water quality but would improve water quality. Accordingly, the action taken here does not trigger application of the state or federal anti-degradation policies. 17

Thank you for the opportunity to comment. Should you or your staff have any questions with respect to these comments and the information contained in Attachment 1, please do not hesitate to contact me at (559) 646-2224.

Sincerely,

Parry Klassen
Executive Director

Attachment 1
cc (*via email only*): Secretary Karen Ross, Department of Food and Agriculture (karen.ross@cdfa.ca.gov)
Charles Andrews, Department of Pesticide Regulation (candrews@cdpr.ca.gov)

Letter 8

Attachment 1

East San Joaquin Water Quality Coalition's Additional Comments on Tentative Waste Discharge Requirements General Order for Growers Within the Eastern San Joaquin River Watershed That Are Members of the Third-Party Group

Draft WDR

Finding 5, p. 2: The language of this finding attempts to clarify what the Draft WDR is not intended to regulate. However, by omitting other agricultural facilities within this list, it is implying that the Draft WDR is intending to regulate water quality in other parts of agricultural facilities, and in particular, as it leaves the field. In other words, the Draft WDR is intending to regulate water quality at the end of the field, regardless if the return flow or stormwater runoff causes or contributes to violations of receiving water quality standards. Such regulation at the end of the field is inappropriate and exceeds the Central Valley Water Board's authority. First, the Porter Cologne Water Quality Control Act (Porter-Cologne) states 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." (Wat. Code, § 13000.) Regulating water quality directly at the end of the field is NOT reasonable and directly violates the legislative intent with respect to Porter-Cologne. Second, waste discharge requirements must be related to the conditions in the receiving waters upon or into which the discharge is made, or is proposed. (Wat. Code, § 13263(a).) Irrigation return flows or stormwater leaving a field may or may not discharge to or affect a water of the state. Accordingly, it is inappropriate to set forth requirements that specifically apply to water leaving the field. Rather, the Draft WDR must be limited to regulating discharges of waste that may affect waters of the state. 18

Finding 14, p. 4: The next to last sentence is confusing. It should state, "Depending on the frequency of application and the amount applied, certain soluble compounds, such as nitrate, may share common pathways to groundwater with soluble pesticides." Nitrates should not generally be classified as contaminants unless they cause or contribute to an exceedance of a water quality objective in waters of the state. 19

Finding 21, p. 6, and Provision IV.B.2, p. 16: This finding states that Members of the coalition must comply with an individual monitoring and reporting program, as specified by the Central Valley Water Board or Executive Officer. As written, this finding implies that by being subject to the terms of the order that a Member is automatically subject to any individual monitoring and reporting program issued by the Central Valley Water Board or Executive Officer. Such an implication is inconsistent with Porter-Cologne. Under Porter-Cologne, the Central Valley Water Board, or the Executive Officer through its delegated authority, has the authority to require technical reports, as necessary, under Water Code section 13267. However, section 13267 is not without limits. When the Central Valley Water Board is issuing such an order, section 13267 requires the Central Valley Water Board to show "[t]he burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports." (Wat. Code, § 13267(b)(1).) To ensure that the issuance of any individual monitoring and reporting program is in compliance with section 13267, the ESJWQC recommends that finding 21 be amended to reflect that compliance with an 20

individual monitoring and reporting program is based on an understanding that the individual monitoring and reporting program has been ordered pursuant to and in accordance with the provisions of Water Code section 13267.

Finding 36, p. 9: Finding 36 states that section 13141 of the Water Code does not apply to agricultural water quality control programs developed through waivers and/or waste discharge requirements. We disagree. The language of section 13141 does not state or imply that it is limited only to application of an agricultural water quality control program that is adopted into a Basin Plan. To the contrary, the language states that, "prior to implementation of *any* agricultural water quality control program, an estimate of the total cost of such a program, together with an identification of potential sources of financing, shall be indicated in any regional water quality control plan." (Wat. Code, § 13141.) The fact that the long-term irrigated lands regulatory program is being implemented through a series of waste discharge requirements does not negate the applicability of section 13141 of the Water Code. Regardless, the costs of this program are significant and need to be considered by the Central Valley Water Board in its adoption of the Draft WDR and all its requirements. As we indicated in the cover letter, there are many costly requirements contained herein that are unreasonable and should be eliminated. 21

Finding 44, p. 11: This finding recognizes the Department of Pesticide Regulation's (DPR) Groundwater Protection Program. In this finding, the Draft WDR suggests that the "Groundwater Protection Program can provide valuable information on potential impact to groundwater from agricultural pesticides." The ESJWQC believes that mere reference to the DPR's program is not sufficient. Rather, the Draft WDR should defer in its entirety to the DPR's Groundwater Protection Program with respect to controlling agricultural pesticides in groundwater. The DPR's program is well-established, and includes a regulatory scheme that controls agricultural pesticide use in areas that may be vulnerable. It is not necessary or appropriate for the Central Valley Water Board to require duplicative efforts with respect to pesticides here. 22

Finding 45, p. 11: This finding refers to nutrients in a generic manner. The primary issue with respect to agricultural fertilizer use and potential groundwater impacts is specific to nitrogen – not nutrients. Thus, this finding, and others, needs to be revised to refer specifically to nitrogen management. 23

Finding 48, p. 12: In conjunction with our previous comments with respect to discharge limitations, this finding regarding enforcement clearly indicates that the Central Valley Water Board intends to hold growers responsible for meeting water quality objectives at the end of the field, and that the failure to do so will result in a priority enforcement action. End-of-field discharge limitations are not, nor have they ever been, appropriate waste discharge requirements. Such limitations are unreasonable and fail to comply with the Legislative intent of Porter-Cologne. By creating such limits here, the Central Valley Water Board is embarking on a completely different regulatory program than that which was evaluated in the programmatic environmental impact report, or as is conveyed publicly to growers and Central Valley Water Board members. Accordingly, the Draft WDR is fundamentally flawed. If the central premise of the Draft WDR is not changed from end-of-field discharge limitations to receiving water limitations, the program may fail due to concerns by many growers that they will be subject to immediate liability even though return flows or stormwater runoff may not affect waters of the state. 11

Provisions IV.A.3 and IV.B.6, p. 16: As proposed, this would require Members to implement management practices that do more than achieve compliance with water quality standards. It states that Members must implement management practices to "improve and protect water quality" in addition to achieving compliance with water quality objectives. (Draft WDR, p. 16.) Such a requirement exceeds the Central Valley Water Board's regulatory authority. The Central Valley Water Board is to adopt waste discharge requirements that implement water quality control plans. (Wat. Code, § 13260(a).) Such plans include water quality standards. There is no statutory authority that gives the Central Valley Water Board the authority to require individuals to go beyond achieving compliance with applicable water quality standards. Accordingly, the references to "improve and protect water quality" must be removed. 24

Provision IV.B.4, p. 16: As expressed in our previous communications, the ESJWQC is concerned with the requirement that Members be required to participate annually in an outreach event, and that therefore, the failure to do so would constitute a violation of the Draft WDR, and may subject a Member to enforcement action. While the ESJWQC believes that all Members should be encouraged to attend such events, requiring participation is a high bar. For a plethora of reasons, Members may not be able or available to attend an outreach event on the day that it is scheduled by the ESJWQC. Likewise, it would be impossible for the ESJWQC to schedule such events in a manner that ensures all Members are available to attend. Considering the difficulty in making sure that all Members have the ability to attend an outreach event on the day or days that they are scheduled, it is unreasonable to require participation. Rather, the ESJWQC recommends that the language be changed to encourage such participation, or that participation be required to the extent feasible. 25

Provision IV.B.8, p. 17: As commented previously, the correct reference should be to nitrogen – not nutrients. Thus, this provision should be revised accordingly. 23

Provision IV.B.13, p. 17: This provision is inconsistent with the provisions of Water Code section 13267, as well as trial court's findings with respect to the Conditional Waiver and its similar provisions. In short, as proposed, this provision would require Members to automatically consent to on-site inspection activities. This is an unreasonable requirement. Under Water Code section 13267, such inspections must occur either with the consent of the owner or operator of the facilities, or after a warrant has been duly issued pursuant to appropriate procedures. (Wat. Code, § 13267(c).) Agreeing to be subject to the terms of the order does not waive an individual's constitutional right against improper search and seizure without a warrant. This provision must be revised to be consistent with the provisions of Water Code section 13267(c). 26

Provision IV.B.16, p. 17: This provision has just recently been added to the Draft WDR, and creates a new and additional unnecessary expense with respect to complying with the terms of the order. Under provision 16 as proposed, a Member would need to hire a licensed civil engineer to design and construct settling ponds, basins, and tailwater recovery systems. Like many other provisions in the Draft WDR, this provision is unreasonable, and more importantly, unnecessary. First, the Draft WDR fails to provide any findings or reasons to support the inclusion of this expensive, and unnecessary provision. Farmers have for decades designed and constructed settling ponds, basins, and tailwater recovery systems. There is no information to suggest that farmer created facilities are problematic with respect to water quality, and that farmers are unable to continue to competently develop such facilities. Second, the cost of hiring a professional engineer is unreasonable, and provides no added water quality benefit. Accordingly, this provision must be removed from the Draft WDR. 27

Provision IV.B.20, p. 18: This provision attempts to establish performance standards for management practices. However, such performance standards in fact may create unintended environmental impacts that were not evaluated in the programmatic environmental impact report. Specifically, the performance standards suggest that the answer to all problems is to eliminate return flow and the percolation of irrigation water. However, this fails to recognize that the elimination of return flows and percolation of irrigation water may eliminate water for aquatic life in surface waters, and eliminate groundwater recharge in over-drafted basins. Considering the unintended environmental impacts, the ESJWQC recommends that the farm management performance standards be eliminated. Moreover, the inclusion of such standards here in the long-term irrigated agricultural program is unprecedented, and duplicative of other requirements. 28

Provision IV.C.8.a, p. 19: Under this provision, the ESJWQC will be required to maintain attendance lists for outreach events. Because some outreach events may be held by others outside the control of the ESJWQC (e.g., commodity organizations), the ESJWQC recommends that this provision be revised to only require the ESJWQC to maintain such attendance lists for "its" outreach events. 29

Provision IV.C.10, p. 19: There are no subwatershed groups within the ESJWQC. Thus, this provision does not apply and should be deleted. 30

Provision VII.B, p. 22: The proposed 90-days for completion of Farm Evaluations is not an adequate amount of time, and is unreasonable. Rather, Members should be given six months for completion of Farm Evaluations. This additional time will allow the ESJWQC to work with its Members to ensure that Farm Evaluations are property conducted. 31

Provision VII.C, pp. 22-23: The Sediment and Erosion Control Plan provisions here are cumbersome and confusing. As indicated previously, the ESJWQC recommends that it identify and notify its Members if Sediment and Erosion Control Plans are required. This will help to avoid the confusion set forth here with respect to trying to segregate low vulnerability versus high vulnerability. It will be more efficient if the ESJWQC identifies the areas where such plans are required, and then notifies those Members, rather than trying to have Members determine which category they fit within. 4

Provision VII.D.1, p. 23: As proposed, the first Annual Nitrogen Budget Worksheets could be required to be submitted by March 1, 2013. Considering that the Draft WDR is not scheduled for adoption until October of 2012, March 1, 2013, sets forth an unreasonable deadline. Rather, Annual Nitrogen Budgets should not be due any sooner than March 1, 2014. Also, as indicated previously, all references with respect to information related to the Annual Nitrogen Budgets should be to nitrogen – not nutrients. In this provision, there are several improper references to nutrients that need to be deleted. 32

Provision VIII.C, p. 24: This provision would require the ESJWQC to develop a membership list that includes the township, range, and section (TRS) number for each parcel, and the Member's name associated therewith. Clearly, the Central Valley Water Board is requesting this information so that it can match summary Annual Nitrogen Budget and Farm Evaluation reports with individual Members. For the many reasons stated previously, the ESJWQC is very much opposed to requiring TRS information in its membership list, as well as for summary reporting for the items identified. Such a reporting scheme undermines the purpose of only reporting such information to the third-party as opposed to the Central Valley Water Board. It means that all such information will now be open and available to the public, and that growers may become the target of threats, nuisance claims, and potentially environmental 2

terrorism, even if they are implementing management practices in good faith. Accordingly, the TRS information must be removed from the membership list requirement.

Provision VIII.F, p. 25: The ESJWQC appreciates the additional time provided for submittal of the workplans for groundwater quality monitoring (i.e., trend and representative). However, as expressed previously, the timing of submittal of such workplans should start from Executive Officer approval of the GAR and not the Notice of Applicability. Until the GAR is approved by the Executive Officer, it will be difficult for the ESJWQC to develop the monitoring workplans. Further, and as indicated previously, all requirements with respect to the Groundwater Representative Monitoring Program should be removed in their entirety and be deferred to a separate monitoring and reporting order that is adopted for all coalitions after the consensus with respect to the program has been reached between the coalitions and Central Valley Water Board staff. 33

Provision VIII.I.1, p. 26: The ESJWQC believes 60 days is a more reasonable deadline for submitting newly triggered surface water quality management plans. 34

Draft Information Sheet – Attachment A to Order R5-2012-XXXX

Surface Water and Groundwater Monitoring, *p. 6:* The last paragraph on page 6 lists five basic questions to be answered by the third-party surface water monitoring program. Question 4 should be updated to the following: "Are irrigated agricultural operations *of Members* in compliance with the provision of the WDR?" 35

P. 8, item 2: The sentence states, "Board staff will work with DPR to develop a list of pesticides for monitoring by the third-party." The sentence should read, "Board staff will work with DPR and the third-party to develop a process for selecting the list of pesticides for monitoring by the third-party." This statement needs to be consistent with section II.C.2 (p. 6) of the Draft MRP. 36

Surface Water Management Plans, p. 8: To be technically correct, please change the sentence that contains "algae toxicity, sediment toxicity, minnow toxicity, and water flea toxicity" to "sediment toxicity to *Hyalella azteca*, and water column toxicity to algae (*Selenastrum capricornutum*), fathead minnows (*Pimephales promelas*), and water fleas (*Ceriodaphnia dubia*)." 37

Surface Water Management Plans, Table 2, p. 9: The trigger limit for pH should be updated from "6.5-8.5" to "< 6.5 or > 8.5". 38

Implementation of Water Quality Objectives, p. 19: The Draft Information Sheet refers to federal regulatory provisions that are not applicable to the Draft WDR. Specifically, the provisions cited apply only to NPDES permits and not state-issued WDRs. When interpreting narrative objectives for state-issued WDRs, the Central Valley Water Board must rely on associated provisions in the Basin Plan – not federal NPDES permit provisions. Accordingly, all references to 40 CFR § 122.44(d) and its provisions must be deleted from the Draft Information Sheet. 39

Draft MRP - Attachment B to Order R5-2012-XXXX

The Draft MRP references QAPP Guidelines on pages 19, 20, 21, 23 and 24. Since QAPP Guidelines are not included in the Draft WDR as an attachment, it is assumed that the QAPP Guidelines referenced are from MRP Attachment C (Irrigated Lands Conditional Waiver Program Quality Assurance Project Plan Guidelines) under Monitoring and Reporting Program Order No. R5-2008-0005. The Draft MRP also 40

states on page 23 that the East San Joaquin Water Quality Coalition's existing QAPP ". . . is acceptable for use by the third-party" (sixth paragraph, line 2). It is recommended that the reference to QAPP Guidelines be updated to reference the approved East San Joaquin Water Quality Coalition's existing QAPP. 40

Provision III.A.2, p. 3: In the last paragraph of this section, the first sentence should be revised as follows: "Any watershed areas where irrigated lands discharge to surface waters that do not contain a monitoring site . . . ." 41

Provision III.B, Table B, p. 4: The third row of Table B lists a Site Name of "TBD[1]" with the 1 as a footnote reference. There is no footnote associated with Table B. The superscript should be deleted or a footnote added. 42

Provision III.C.4.b, Sediment Toxicity, *p. 10*: The first sentence of the third paragraph states that pesticide analysis should be performed on sediment samples that exhibit a "≥ 20% reduction in organism survival compared to the control . . . ." However, the trigger limit for *Hyalella* toxicity is < 80% organism survival compared to the control. (See Draft Information Sheet, Table 2.) Therefore, a sample that has 80% survival of the organisms compared to the control would be required to have pesticide analysis but would not exceed the water quality trigger limit. It is recommended that pesticide analysis be performed when the organisms exhibit a > 20% reduction in survival to be consistent with the water quality trigger limit. 43

Provision IV.D.1, Table 3, p. 17: Annual monitoring of total kjedahl nitrogen should be removed from the trend-monitoring program. It is unnecessary and provides no useful information. 44

Provision IV.D.2, p. 18: The statement on line 7 of the top paragraph should read "groundwater monitoring data are collected . . . ." 45

Provision V.C, Monitoring Report, p. 20: The Draft MRP indicates that the monitoring report is on a two-year frequency with the first report due May 2014. With respect to groundwater, the May 2014 start date does not work. The earliest, pending approval of workplans and implementation of workplans, that a groundwater report could be provided with actual groundwater data, would be sometime in 2016. The Draft MRP needs to be revised to reflect the actual timelines associated with groundwater monitoring. 46

Letter 9

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William J. Thomas
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File No. 82231.00003

August 3, 2012

VIA EMAIL TO:
AWLaputz@waterboards.ca.gov

Karl Longley, Chair
Jon Costantino, Vice Chair
Katherine Hart, Board Member
Sandra Meraz, Board Member
Jennifer Moffitt, Board Member
Carmen Ramirez, Board Member
Robert Schneider, Board Member
Pamela Creedon, Executive Officer
Joe Karkoski, ILRP Program Manager
Adam Laputz
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

Re: Comments re Eastern San Joaquin River Watershed Tentative WDRs and MRP for Discharges from Irrigated Lands on Behalf of the Southern San Joaquin Valley Water Quality Coalition

Dear Board Chair, Vice Chair, Members, Ms. Creedon, Mr. Karkoski and Mr. Laputz:

The Southern San Joaquin Valley Water Quality Coalition (SSJVWQC) submits these comments on the proposed East San Joaquin Water Quality Coalition (ESJWQC) General Order for the Irrigated Lands Regulatory Program. The agricultural waiver which has been in existence since 2004 pursuant to California Water Code section 13269 is now being bifurcated into six or more separate general orders, as driven by the staff alternative which was adopted by the Board, even though this alternative had not been reviewed pursuant to either the EIR or the associated Economic Analysis.

The Board staff has been engaged in informal negotiations with three of the water quality coalitions, namely, ESJWQC, SSJVWQC and the Rice Water Quality Coalition on their general orders. Other coalition negotiations will follow. The SSJVWQC has recently concluded our informal negotiations with the Regional staff and our proposed general order is now subject to "interested party" review and will soon be presented for public review, and thereafter be before the Regional Board for action.

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ATTORNEYS AT LAW

We have been advised by the Board and staff that the new general orders are being advanced pursuant to CWC § 13263, and are to follow similar formats (with the likely exception of Rice); however, the operational sections will likely be significantly different to reflect the considerable differences between the coalitions in respect to commodities, rainfall, hydrology, groundwater, Delta drainage, etc. However, upon reviewing the ESJWQC proposed General Order it appears very similar to the SSJVWQC draft now out for interested party review, despite considerable differences in conditions between the two coalition areas. Therefore, we feel compelled to provide these comments with respect to the ESJWQC proposed General Order for whatever precedential value it may have with the Board.

Follows are some significant issues and potential problems with this proposed ESJWQC General Order—this is just a summary of some of the key concerns we have identified with limited time available, and we will undoubtedly have considerably more comments on the SSJVWQC draft.

1. Page 1, Section 1, Footnote 1

Section 1 references that the general order applies to "waste" discharges. Footnote 1 references Attachment E as defining "waste". Attachment E appropriately references that the CWC defines "waste" in section 13050(d). The attachment goes beyond this statutory definition and therefore is not the definition used in the general order.

Water Code, Section 13050(d): "Waste" includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal. 1

The Proposed Order, however, expands that definition of "waste" so as to include "earthen materials, inorganic materials, organic materials such as pesticides and biological materials … such water may directly impact beneficial uses or may impact water temperature, pH and dissolved oxygen."

What is the basis and authority for departing from this specific legislative direction? We have repeatedly sought this authority from the Regional staff and staff has always refrained from answering, apparently because there is no such authority.

2. Page 2, Section 8 – Landowners/Land operators

We support and appreciate the amendment to avoid the duplicative membership requirement as had been in the preceding draft. 2

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3. Page 3, Section 11 – Growers Regulated Under This Order – Sign Up

A 120-day period to convert old members and to sign up new members is inadequate even in this relatively small coalition, and it will be totally inadequate in the SSJVWQC, which is nearly eight times larger. Moreover, due to limited surface water drainage, the SSJVWQC will have to sign up nearly two million additional acres (four times the total ESJWQC area) which have not previously been subject to the water quality regulatory world. This needs to be at least 180 days to sign up new members. 3

4. Page 7, Section 31 – California Environmental Quality Act (CEQA)

The language incorrectly states that there were "2-6 alternatives in the EIR". This is expressly false, as only five alternatives were advanced and reviewed. This fact is well known by staff, however, they insist on continually advancing this falsehood. 4

5. Page 8, Sections 34, 35 - State Water Resources Control Board Resolution 68-16 - Antidegredation

In 1968, the State Board wanted to provide special protection for the state's pristine "high quality waters" as distinct from mere "quality waters", which would be those represented by waters meeting the Basin Plan standards. For those pristine high quality waters, the antidegredation policy provided for specific regulatory efforts. This general order should identify those waters which are classified as high quality, and those which are only quality waters. 5

6. Page 15, Section I.1. - Coverage

This section clarifies that the existing waiver terminates with the adoption of this general order. There is no continuation or extension provision for continuation of existing obligations (i.e., development of management plans, etc.). This should be fully understood by the Regional Board and clarified. 6

7. Page 17, Section 13 – Unlawful Access

The preceding waivers properly conformed the waiver to the controlling Water Code section 13267(c) clarifying that access to private property would be by permission or inspection warrant. With no prior discussion, this general order now is set up that such important private property rights are sacrificed. The right to enter must be in accordance with the Code and Constitutional constraints, and not as written where staff attempts to authorize their private property entry to get around the statute by this section. 7

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8. Page 18, Section C.8. and Page 18, Section 9 - Requirements of Members of Third-Party Group

This provision requires that each member shall annually participate in third-party outreach events. There are two significant problems with the language. First, these events will not be held only by the third party, but also by Farm Bureau, water districts, RCDs, commodity groups, University Ag Extension, and many other delivery methods. All these efforts will be in addition to the more traditional farm and water outreach mechanisms. There is absolutely no way to keep track of all such outreach and participation in each delivery. 8

9. Page 19, Section 9 – Report Compliance

This section inappropriately compels coalitions to become enforcement agencies – a concept clearly agreed as far back as 2004 would never be required of coalitions.

The requirement to inspect and report farmers who did not provide certain information, employ some specific potential management practice is inappropriate. Similarly, providing lists of those who did not respond to a regional board request for information is inappropriate. Further, the requirement to report if the grower's water or groundwater "failed to achieve compliance with water limitations" is a totally unjustified requirement of coalitions and is the responsibility of the Regional Board. 9

10. Page 19, Section V.2 and 3, and Page 21, Section VII.A.1 and 2 - Required Reports and Notices – Member; Notice of Confirmation/Notice of Intent/Membership Application

3

The time lines are unreasonable to obtain membership. The 120 days should be extended to at least 180 days as explained in Section 3 above.

11. Page 22, Section B.2. and page 27 – Requirements for Members in High Vulnerability Areas or subject to a SQMP

Requiring an annual update of a farm plan is needlessly burdensome on each farmer and the coalitions to which it is to be submitted. It is also needless as these thousands of annual recasts of virtually the same information will merely fill dozens of file storage boxes. These documents will not be routinely reviewed by staff in the absence of an investigation when those documents could be individually and specifically demanded by the Board. Thus, this is a needless and burdensome requirement. 10

12. Page 22, Section C – Sediment and Erosion Control Plan

The Sediment Control Plan was only discussed at the very last meeting with staff relative to our Southern San Joaquin Water Quality Coalition general order. This section states that it 11

must be written and certified by a "Certified Developer." It is uncertain as to the availability of such experts and this is yet another unnecessary additive expense.

13. Page 23, Section D – Annual Nitrogen Budget

The requirement that all farmers must submit nitrate budgets is overreach. This should only be required if farming in a high vulnerability area. 12

14: Attachment A, Page 10 and 11 – Groundwater Monitoring

The representative monitoring provisions are so uncertain they cannot be effectively responded to as vague, uncertain and arbitrary. We have asked for clarity on this requirement, and staff has intentionally secreted this requirement, which is improper for regulation notice and development. We were originally told this requirement would be limited and could mostly be satisfied with monitoring existing wells. Recently, however, we have been told that they may require from 200 to 500 all new monitoring wells. It is also noteworthy that on Page 11 of the Eastern San Joaquin order it references the ability to utilize existing wells for monitoring, but we are being told differently in the Southern San Joaquin Valley Water Quality Coalition. 13

This is unreasonable, uncertain, and is overkill. On balance, this is exactly the "unreasonable" regulation foreclosed by the Water Code.

15. Overall, the Draft GO Fails as a Reasonable Regulation of Water Quality

Throughout the Porter-Cologne Act, there is an underlying requirement of reasonableness to the regulation of water quality in the state. For example, under Section 13300, the State may only regulate water quality "reasonabl[y], considering all demands being made and to be made on those waters." Similarly, under Section 13050, "pollution means any alteration of the quality of water which may unreasonably affect" the waters of the state. While each Regional Board is required to ensure the "reasonable protection of beneficial uses,…it is recognized that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses." (§ 13241 [setting forth the Act's water quality objectives].) These multiple references to reasonableness indicate the legislature's desire for moderation and balance. 14

As evidenced by the comments above, the draft General Order for the ESJWQC fails to meet this legal standard.

16. Non-compliance with the California Environmental Quality Act (CEQA)

As you know the Environmental Impact Report (FEIR) which provides in large part the basis for the Regional Board to consider approving the proposed Eastern San Joaquin order is being challenged by both the environmental community and some coalition groups, including our Coalition. Our Complaint and Petition in *San Joaquin County Resource Conservation* 15

Letter 9

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ATTORNEYS AT LAW

District, et al. vs California Regional Water Quality Control Board, Central Valley Region, which we assume is part of the record, speaks for itself as to the many inadequacies of the FEIR. Prudence and common sense dictate that your Board defer adopting the proposed East San Joaquin order until the merits of the CEQA challenges are heard and determined by a court. 15

We respectfully request that the Board not approve the draft General Order and provided direction to its staff to develop a more reasonable and realistic approach with ESJWQC and other affected coalitions and report back to the Board,

Sincerely,

William J. Thomas
for BEST BEST & KRIEGER LLP

WJT:lmg

Letter 10

AWL

Innovative Ag Services, LLC
1201 Lacey Blvd., Suite 5 Hanford, CA 93230
Office (559) 587-2800 Fax (559) 587-2801

SACRAMENTO
CVRWQCB
12 AUG -6 PM 1:09

August 3, 2012

Adam Laputz
CVRWQCB
11020 Sun Center Drive #200
Rancho Cordova, CA 95670

Re: Tentative Order R5-2012-XXXX, Waste Discharge Requirements General Order for Growers within the Eastern San Joaquin River Watershed that are Members of the Third-Party Group

Dear Mr. Laputz and members of the Board,

Thank you for the opportunity to comment on the Central Valley Regional Water Quality Control Board's Tentative Waste Discharge Requirements General Order for Growers within the Eastern San Joaquin River Watershed (herein after "Tentative Order"). We appreciate the opportunity to review, and hope that you take our thoughts into consideration.

Innovative Ag Services, LLC provides agronomic and regulatory services to the agricultural industry in the Central Valley. We have a strong history of working with many agricultural groups and individual producers to improve their bottom line with increased regulations. We have a team of professional agronomists and environmental professionals that work closely with the Dairy General Order No. R5-2007-0035 and as such we can provide a unique and valued prospective toward the proposed tentative orders in the Irrigated Lands Regulatory Program (ILRP). We share a common goal with the RWQCB in protecting water quality and we hope that you may use our comments to strive toward this endeavor.

In our review of the Tentative Order, we have found the following points of concern:

1. **The proposed Tentative Order does not provide the necessary information to evaluate the effectiveness in protecting water quality and its effects on the growers and service providers of the region:**
    a. This Tentative Order does not provide enough information on a number of critical components: 1
        i. The identification of High and Low Vulnerability Areas
        ii. The Farm Evaluation Template
        iii. The Sediment and Erosion Control Plan Template
        iv. Annual Nitrogen Budget Worksheet Template
    b. This Tentative Order estimates the cost of compliance at 100 million dollars per year, or $120 per acre annually – yet the information to quantify these costs are not specified in the proposed Tentative Order. 2
    c. The UC Nitrate Report identified the Land Application of nutrients as a primary source of groundwater pollution – yet this Tentative Order provides very little information on the requirements to manage nutrients within Irrigated Lands. 3

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Letter 10

d. References to NRCS 590 Nutrient Management Standards are very broad and not specified for California, which cannot be used to adequately evaluate the Tentative Order. 4

e. While requiring a "Certified Nutrient Management Plan Specialist" to create a Nutrient Management Plan will provide a degree of professionalism and quality standards to protect water quality and improved crop production, technical standards should be established during the public process as well to ensure water quality, its effects on industry, and its consistency with other nutrient management requirements. 5

f. More information is needed before this Tentative Order should be considered for adoption 6

g. The RWQCB staff and/or the Executive Officer should consult with the industry and agronomic professionals prior to the adoption of this Tentative Order. Similarly, the Executive Officer should consult with agronomic professionals in the development of any agronomic monitoring and reporting requirements, such as the proposed "Annual Nitrogen Budget Worksheet Template" 7

2. Nutrient Plan/Budget Terminologies:

a. Innovative Ag Services, LLC's experience with providing agronomic and environmental services to comply with the Waste Discharge Requirements General Order for Existing Milk Cow Dairies has shown that the incorrect use of terminology creates confusion and misunderstanding.

b. With the proposed Tentative Order for the ILRP, both a "Final Nitrogen Budget" and a "Proposed Annual Nitrogen Budget" are proposed to be submitted by March 1st of each year. The term or word "Budget" infers the meaning of what will or is planned to occur and should not be used in the context of a record of what did occur. We believe that the term "Final Nitrogen Budget" should be replaced with "Final Nitrogen Record". 8

c. The Tentative Order also identifies the use of an "Annual Nitrogen Budget Worksheet Template" to be provided by the Executive Officer. This template should be available for review and comments prior to the adoption of an Order. 7

3. Proprietary Nutrient Management Plans and Nutrient Application Records:

a. The Central Valley is home to some of the most progressive and innovative farmers in the world. Agronomist and farmers alike have dedicated their lives to the management of crops and the nutrients that are applied to the land.

b. The success of a farmer is dependent on the management of nutrients and it is what gives them their competitive edge over other producers. While many growers have invested significant money into professional consultants like Innovative Ag Services, LLC, others have developed their unique Nutrient Management Plans over years of experience with a specific crop and/or specific property. 9

c. A Nutrient Management Plan and the actual records of nutrient applications are proprietary information that should not be submitted for public record that can be easily accessed, and potentially misused or copied.

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Letter 10

4. **Universal Nutrient Management Regulations:**
   a. Dairy, CAFOs, ILRP, and other Waste Discharge Requirements to crop production need to have universal standards to protect water quality. 10
   b. Agronomic standards should be consistent throughout all irrigated lands.
   c. Organic fertilizer, inorganic fertilizers, and different elemental forms of nutrients are all needed for sustainable crop production, yet all crop nutrients pose risks to water quality, and therefore no one form, crop, geology, or management practice should be exempt from nutrient regulations. 11
   d. The Tentative Order does not address specific nutrient or waste limitations as the Dairy General Order. Again, we stress that all irrigated lands need to have a base standard levels of practice and regulation. 10

5. **Consult Agronomic Professionals to assist in development and implementation of Tentative Order:**
   a. Agronomy is a professional industry.
   b. Most accredited agronomist (Certified Professional Agronomist, Certified Soil Scientist, and Certified Crop Advisors through the American Society of Agronomy) have extensive education, testing and continued education in the agronomy field. 7
   c. This level of professional knowledge should be incorporated or utilized to provide the highest level of groundwater protection.

Thank you for your time and consideration. We welcome the opportunity to work with the RWQCB to improve this Tentative Order. We believe that the issues outlined in this letter should be addressed before the Tentative Order is presented to the members of the board for their consideration of adoption. Clearly more information is needed to develop technical standards of agronomic requirements, in which Innovative Ag Services, LLC is ready and willing to address with RWQCB staff.

Additionally, we hope sufficient time will be given for growers and professional service providers alike to comply with new and/or revised waste discharge requirements on irrigated lands. We hope and respectfully ask that you take additional steps to include more growers and service providers in the future development of this Tentative Order, and future orders alike.

We look forward to speaking with you soon.

Sincerely,

Warren Hutchings

Nathan Heeringa

Letter 11

CV SALTS
Central Valley Salinity Alternatives for Long-term Sustainability

CVSC
Central Valley Salinity Coalition Inc.

August 6, 2012

Joe Karkoski
ILRP Program Manager
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Ste. 200
Rancho Cordova, CA 95670

Technical Committee Comments on the Draft Eastern San Joaquin River watershed WDR and MRP Governing Discharges from Irrigated Agriculture

Mr. Karkoski,

On May 17th the Technical Advisory Committee convened a conference call to review the draft ESJR WDR and MRP. This review provided initial comments. Subsequent meetings on May 30th, June 26th, and July 31st made additional changes and revisions. To accommodate the comment deadline, this letter is being submitted in anticipation of Executive Committee ratification on August 10, 2012. If any changes are made a follow-up letter will be submitted. The following are revised suggestions of the Committee:

CV-SALTS is working to develop a salt and nitrate management plan for the entire Central Valley. Stakeholder participation in the process is essential to developing a robust plan. Therefore CV-SALTS encourages all irrigated lands to participate in the process. Participation can include representation in the CV-SALTS process as well as the willingness to provide needed data to the group to be used to develop a more effective salt and nitrate management plan.

Because of the early stage of the CV-SALTS salt and nitrate management plan, the exact data needed from various regions for the plan have not been identified. However we can be certain that CV-SALTS will need water quality and water supply information from agricultural water users during the development of the plan. Therefore the CV-SALTS Executive Committee requests that the Regional Board encourage irrigated agriculture to actively participate in the CV-SALTS process and that agricultural interests be responsive to future data requests from CV-SALTS as these needs are identified. 1

We appreciate the opportunity to comment on the technical questions and issues presented by Regional Board staff.

Roger L. Reynolds
Co-Chair, CV-SALTS Technical Advisory Committee

cc:

Pamela Creedon, Executive Officer, Central Valley Regional Water Quality Control Board

Letter 12

From: bud Hoekstra <budhoek@yahoo.com>
To: AWLaputz@waterboards.ca.gov; budhoek@yahoo.com
Date: 7/10/2012 3:14 PM
Subject: corrections

Eastern S/J ... appendix E (definitions)

#48 "apr 200" probably means April 2000 1

#42 toxicity probably should include epigenetic markers in def. 2

nutrient ... says "elemental" which leaves out phosphorus. P is taken up as a molecular ion, not as an element. water is not a nutrient, according to NOP rules. 3

Note on antidegradation policy. 1968 US Congress passed antidegradation laws. These were incorporated into Clean Water Act These give special consideration to Upper Mokelumne River watershed that is not covered by state anti-degradtion policies. 4

Letter 13

California Sportfishing Protection Alliance

"An Advocate for Fisheries, Habitat and Water Quality"

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6 August 2012

Mr. Joe Karkoski, Supervising WRCE
Mr. Adam Laputz, Sr. WRCE
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6144

VIA: Electronic Submission
Hardcopy if Requested

RE: Waste Discharge Requirements General Order For Growers Within the Eastern San Joaquin River Watershed That Are Members of The Third-Party Group

Dear Messrs. Karkoski and Laputz,

The California Sportfishing Protection Alliance and the California Water Impact Network (collectively, CSPA) has reviewed the proposed Waste Discharge Requirements (WDRs) for growers within the Eastern San Joaquin River Watershed that are members of the Third Party Group and submits the following comments.

Over the last decade, CSPA has submitted hundreds if not thousands of pages of comments, reports and testimony regarding measures that would be both reasonable to implement and protective of the environment for the Irrigated Lands Program. After reviewing the proposed Waste Discharge Requirements, information sheet, the monitoring and reporting program and the CEQA findings, we have little to add, as there is little new. The proposed Order fails to protect surface and groundwater and violates explicit requirements in Porter-Cologne, the state's Nonpoint Source Policy, antidegradation requirements and CEQA. Simply placing waiver conditions or selective components of the Long-Term Irrigated Lands Regulatory Program under the cover of WDRs in order to eliminate requirements to revisit waivers every five years does nothing to protect water quality. 1

Accordingly, we incorporate by reference and submit as our comments on the presently proposed Order, CSPA's: 27 September 2010 comments and exhibits on the Draft Irrigated Lands Regulatory Program Environmental Impact Report and Irrigated Lands Regulatory Program Long-Term Program Development Staff Report; 21 March 2011 comments on the Recommended Irrigated Lands Regulatory Program Framework; 11 July 2011 Petition To Review California Regional Water Quality Control Board, Central Valley Region's Resolution No. R5-2011-0032 and No. R5-2011-0017 and 25 May 2012 Petition for Peremptory Writ of Mandate and Complaint for Declaratory and Injunctive Relief. Each of the comments made regarding the deficiencies in the previous waiver, Long-Term Irrigated Lands Regulatory Program and accompanying CEQA documents are applicable to the presently proposed WDRs. 2

These specially include, but are not limited to, the WDR's inconsistency with Porter-Cologne, the Antidegradation Policy, Non-point Source Control Policy and CEQA. 2

We again reiterate two points:

First, it is impossible to implement an effective, protective or legally adequate regulatory program where the Regional Board does not know the owner/operator or location of specific discharge points, the constituents discharged, whether the owner/operator has implemented specific control measures to reduce or eliminate pollution or if any specific implemented measures are effective. Every other regulatory program protecting water quality administered by the Regional Board requires a discharger to identify the discharge points, the constituents and concentrations discharged, measures implemented to control pollution and the results of implemented measures. The general orders regulating construction and industrial stormwater runoff are illustrative. The General Industrial Stormwater Permit regulates some 1,890 industrial facilities from mom-and-pop welding shops, junkyards and recycling facilities to major factories. The General Construction Stormwater Permit regulates some 2,470 construction sites (5,500 prior to the economic downturn).

Both of these programs have been successful, despite the Regional Board having only about 10% of the staff it has identified as necessary to adequately implement the program. Implemented management measures or BMPs are obvious. Pollution prevention plans are required. Board staff and the general public can easily review the annual reports to determine if water quality standards are being violated and whether management measures and Best Practicable Treatment and Control have been implemented or are effective. Recalcitrant parties are easily identified and are required to provide reports of additional measures implemented to reduce pollution. And, more importantly, improved compliance is obvious and documented. Contrast this with the Irrigated Lands Program that, after a decade, cannot identify any specific implemented management measures and is unable to quantify or document any progress toward improving water quality, other than a few occasional isolated enforcement actions undertaken when the program is up for review. Aggregate or summarized information provided by third parties cannot substitute for specific information on specific activities that violate water quality standards and impair waterways or specific measures implemented to reduce pollution. Indeed, the program could not have been better designed if its original intent had been to create a bureaucratic Taj Mahal that rewards bad actors and penalizes farmers attempting to do the right thing. 3

Second, it is impossible to protect water quality through a surface water monitoring program predicated upon a very few ambient monitoring sites far removed from actual points of discharge. For example, the Eastside San Joaquin Coalition is comprised of six zones comprising 987,058 irrigated acres. There is only one core monitoring site in each of the six zones where monitoring is conducted in any given year. Consequently, each core monitoring site in zones one through six annually monitors collected drainage from 134,304; 164,633; 88,617; 121,746; 142,686 and 334,069 irrigated acres, respectively. Zones one through six also contain 3, 8, 2, 7, 3 and 3 represented monitoring sites, respectively. Consequently, each represented monitoring site monitors collected drainage from 44,768; 20,579; 44,392; 17,392; 47,562; and 111,356 irrigated acres, respectively. Combining core and represented monitoring sites reveals 4

that each monitoring point in the six zones is expected to evaluate collected drainage from 33,576; 18,293; 29,544; 15,218; 35,715 and 83,767 acres, respectively. A water sample collected once a month represents approximately 0.1% of stream flow. Water quality standards for toxic pollutants, by definition, cause impairment if they're exceeded more than once in three years. The quality of water, compliance with water quality standards or the sources of pollution cannot be determined by collecting samples, perhaps 20 to 40 miles from a discharge point and analyzing 0.1% of streamflow draining 15,218 to 83,767 irrigated acres. This is especially true for constituents that are toxic in low parts-per-billion and that frequently occur as intermittent "pulse" flows. Discharger specific or, at a minimum, a statistically significant sampling of specific discharges is fundamental to providing the information necessary to adequately regulate specific sources of pollution that collectively comprise the largest identified source of pollution to Central Valley waterways. 4

Unfortunately, this latest iteration of regulatory requirements for irrigated agriculture continues a faith-based voluntary program that hides the identity of actual dischargers, the pollutants discharged, measures implemented to reduce or eliminate pollution or whether those measures are effective. It is predicated upon farmers snitching out their neighbors. This approach has failed in the past and will continue to fail in the future. 5

Thank you for considering these comments. If you have questions or require clarification, please don't hesitate to contact us.

Sincerely,

Bill Jennings, Executive Director
California Sportfishing Protection Alliance

Attachments

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Attorneys for Petitioners CALIFORNIA SPORTFISHING PROTECTION ALLIANCE and CALIFORNIA WATER IMPACT NETWORK

BEFORE THE STATE WATER RESOURCES CONTROL BOARD

IN RE: CERTIFICATION OF THE FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE LONG-TERM IRRIGATED LANDS REGULATORY PROGRAM, CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL VALLEY REGION.	) PETITION TO REVIEW OR,) ALTERNATIVELY, REQUEST FOR) OWN MOTION REVIEW OF) CALIFORNIA REGIONAL WATER) QUALITY CONTROL BOARD,) CENTRAL VALLEY REGION'S) RESOLUTION NO. R5-2011-0017) CERTIFYING THE FINAL PROGRAM) ENVIRONMENTAL IMPACT REPORT) FOR THE LONG-TERM IRRIGATED) LANDS REGULATORY PROGRAM) DATED APRIL 7, 2011

Pursuant to Water Code § 13320, California Sportfishing Protection Alliance and the California Water Impact Network (collectively "CSPA") hereby petitions the State Water Resources Control Board ("State Board") to review the California Regional Water Quality Control Board, Central Valley Region's ("Regional Board") certification of the final "Irrigated Lands Regulatory Program – Program Environmental Impact Report" ("EIR") prepared for the anticipated regulatory approvals implementing the Regional Board's irrigated lands regulatory program. Although it does not appear from Water Code § 13320 that the Regional Board's certification of the EIR is one of the enumerated actions requiring State Board review in order for an interested person to exhaust their administrative challenges, CSPA files this petition in an abundance of caution and, to the extent the action is not subject to such a petition, to request that the State Board review the certification on its own motion. As pointed out in CSPA's and many

others' lengthy comments to the Regional Board on the draft and final EIR, the EIR is patently deficient under the California Environmental Quality Act ("CEQA"), failing to even identify the project being analyzed amongst many other shortcomings, outlined below and set forth in the accompanying exhibit. *See* CSPA's Full Comment Letter, attached hereto as Exhibit 1. CSPA requests that (1) the State Board immediately order the Regional Board to refrain from issuing a notice of determination pursuant to CEQA, Pub. Resources Code § 21108(a) in order to assure that the State Board has time to review the Resolution[1]; (2) the State Board expedite review of Resolution No. R5-2011-0017 given the impending termination of the existing conditional waiver on June 30, 2011 and the short statute of limitations under CEQA,[2] and (3) upon review of the record, vacate Resolution No. R5-2011-0017 and order the Regional Board, by a specific and prompt deadline, to prepare a new EIR addressing each of the shortcomings identified by CSPA.

I. NAME AND CONTACT INFORMATION OF PETITIONERS.

California Sportfishing Protection Alliance
3536 Rainier Avenue
Stockton, California 95204
Attention: Bill Jennings, Executive Director

II. REGIONAL BOARD AND STATE BOARD ACTIONS BEING PETITIONED.

This petition seeks review of the Regional Board's Resolution No. R5-2011-0017 certifying the final EIR. A true and correct copy of Resolution No. R5-2011-0017 is attached hereto as Exhibit 2.

---

[1] If the Regional Board issues a notice of determination, interested persons only have 30 days in which to file a petition for writ of mandate in Superior Court. Pub. Resources Code § 21167(c).

[2] Where no notice of determination is filed, interested persons must file any court challenge within 180 days of the public agency's decision to carry out or approve the project. 14 Cal. Admin., Code § 15112(c)(5)(A). Although the Regional Board has not yet approved a renewal or modification of the existing conditional waivers, CSPA anticipates that a project will be approved prior to June 30, 2011. *See* Coalition Group Conditional Waiver of Waste Discharge Requirements For Discharges From Irrigated Lands, Order No. R5-2006-0053 and Individual Discharger Conditional Waiver of Waste Discharge Requirements For Discharges From Irrigated Lands, Order No. R5-2006-0054.

III. THE DATE THE REGIONAL BOARD ACTED.

April 7, 2011.

IV. STATEMENT OF REASONS THE REGIONAL BOARD'S ACTION WAS INAPPROPRIATE OR IMPROPER.

The Regional Board's certification of the EIR is inconsistent with CEQA and an abuse of discretion for the following numerous reasons.

A. THE PEIR FAILS TO COMPLY WITH CEQA'S PROCEDURAL AND SUBSTANTIVE REQUIREMENTS.

The PEIR fails as an analytical document under CEQA. Arguably, rather than assist the Regional Board with making the tough decisions required to properly regulate the irrigated farm dischargers and ensure compliance with the high quality waters policy and water quality standards, the PEIR erects a barrier to objective evaluation. Several flaws are worth noting right up front. First is the PEIR's failure to identify a proposed project or an environmentally superior alternative. These omissions make the PEIR unrecognizable as an EIR under CEQA.

The second most egregious flaw stems from the PEIR's premise that the current waiver (Alternative 1) will lead to implementation of the same best practicable control technologies as, for example, Alternative 5. This is entirely baseless given the fact that seven years into implementing Alternative 1, the Regional Board's staff cannot point to a single piece of evidence documenting the implementation of any management practices. Even the much touted management plans that already have been approved by staff under the existing waiver each address management practices by bobbing and weaving – replacing BPTC implementation and effectiveness monitoring with informal office meetings with groups of growers. Occasional meetings cannot verify the implementation or effectiveness of a management practice on a specific farm.

Similarly, the PEIR assumes that the four alternatives that rely on regional monitoring, rather than farm specific monitoring, will be able to evaluate the implementation of BPTC equally as well as Alternative 5, the one alternative that requires edge of field monitoring. Although as explained above, CSPA does not believe the universal and expansive monitoring proposed by Alternative 5 is necessary to take the program to its next effective level, CSPA

believes it is obvious that only by monitoring the effectiveness of a claimed BPTC at its point of discharge can the Regional Board or its staff claim to ensure it is in fact BPTC and know what effect the discharge is having on compliance with water quality objectives. It also is even more evident that a regional monitoring location 10, 20, or 30 miles downstream of a specific farm tells neither the agency, the farm nor the general public about the presence or effectiveness of any management measures that may be installed there and whether they amount to BPTC.

These few concerns are only the highlights of a long list of deficiencies in the PEIR. The following addresses each of CSPA's concerns in turn.

A. General Purposes and Standards Under CEQA.

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report ("EIR") (except in certain limited circumstances). *See, e.g.*, Pub. Res. Code § 21100. The EIR is the very heart of CEQA. *Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652. "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." *Communities for a Better Environment v. Calif. Resources Agency* (2002) 103 Cal.App.4th 98, 109.

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 Cal. Code Regs. ("CEQA Guidelines") § 15002(a)(1). "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs*. (2001) 91 Cal.App.4th 1344, 1354 ("Berkeley Jets"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and all feasible mitigation measures. CEQA Guidelines § 15002(a)(2) and (3); *See also Berkeley Jets*, 91 Cal.App.4th 1344, 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564. The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced." Guidelines §15002(a)(2). If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." Pub.Res.Code § 21081; CEQA Guidelines § 15092(b)(2)(A) & (B).

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal.App.4th at 1355 (emphasis added), quoting, *Laurel Heights Improvement Assn. v. Regents of University of California*, 47 Cal. 3d 376, 391 409, fn. 12 (1988). As the court stated in *Berkeley Jets*, 91 Cal.App.4th at 1355:

> A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process." (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal. App. 4th 713, 722]; *Galante Vineyards v. Monterey Peninsula Water Management Dist*. (1997) 60 Cal. App. 4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal. App. 4th 931, 946).

B. The PEIR fails to include a stable project description - indeed, no proposed project is included.

The PEIR does not evaluate a proposed project. The PEIR attempts to portray this omission as a benefit: "Rather than the typical EIR approach of starting with a project and then looking at alternatives to that project, this draft PEIR will be used as a tool to inform decision makers during the selection process." PEIR, p. 2-1. *See also* p. 2-5 ("In this document, … no preferred project has been identified by the Lead Agency from among the considered

alternatives"). The drafters overlook, however, that CEQA sets forth the necessary contents of an EIR that can properly serve as a tool to inform the Regional Board. The drafters, staff and the Regional Board do not have any authority to omit a description of the proposed project from the PEIR.

"An accurate, stable and finite project description is the *sine qua non* of an informative and legally adequate EIR." *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192; **Berkeley Jets,** 91 Cal.App.4th at 1354; **Sacramento Old City Assn. v. City Council** (1991) 229 Cal. App. 3d 1011, 1023; **Stanislaus Natural Heritage Project v. County of Stanislaus** (1996) 48 Cal. App. 4th 182, 201. "[A] curtailed or distorted project description," on the other hand, "may stultify the objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental costs, consider mitigation measures, assess the advantage of terminating the proposal (*i.e.*, the "no project" alternative) and weigh other alternatives in the balance." *Id. See also*, CEQA section 15124; *City of Santee v. County of San Diego*, 263 Cal.Rptr 340 (1989). As one commenter has noted:

> The adequacy of an EIR's project description is closely linked to the adequacy of the EIR's analysis of the project's environmental effects. If the description is inadequate because it fails to discuss the complete project, the environmental analysis will probably reflect the same mistake. (Kostka and Zischke, "Practice Under the California Environmental Quality Act," p. 474 (8/99 update).)

A "rigorous analysis" is required to dispose of an impact as insignificant. *Kings County Farm Bureau v. City of Hanford*, 221 Cal.App.3d 692 (1990). Such a rigorous analysis is not possible if the project description is inaccurate, inconsistent, misleading or, in the case of the PEIR, completely absent.

C. The Objectives Borrowed From The Stakeholder Process Attempt To Lend Support To Purported Benefits of Elements of Alternative 1 – Including Its Regional Planning Basis And Lack Of Farm Specific Information of Any Sort – Which Are Its Main Faults.

The PEIR's objectives rely heavily on objectives formulated through the stakeholder process coordinated by the Regional Board's staff. The stakeholder process was dominated by agricultural interests. http://www.swrcb.ca.gov/

centralvalley/water_issues/irrigated_lands/long_term_program_development/advisory_wrkgrp_member_lst.pdf; *See, e.g.* 11 May 2010 Long-term ILRP Meeting Attendees (http://www.swrcb.ca.gov/centralvalley/water_issues/irrigated_lands/long_term_program_development/11may10_stakeholder_mtg/11may10_sum.pdf). Although CSPA, for example, nominally is identified as one of the stakeholders involved in the process, CSPA was one of many groups that did not have the resources to attend numerous meetings, conduct multiple reviews of numerous documents, and participate actively in the stakeholder process. Possibly as a result of the lack of representation from a broader spectrum of stakeholders, CSPA is concerned with language included in the objectives that biases the selection of an alternative in favor of those that do not address compliance with all water quality objectives throughout the region, that water down the high quality waters policy requirement that implementation of BPTC be ensured, and that include only regional monitoring.

An overly narrow definition of project objectives renders the alternatives analysis inadequate. To narrowly define the primary "objective" of the proposed project itself constitutes a violation of CEQA since such a restrictive formulation would improperly foreclose consideration of alternatives. *See City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438 (holding that when project objectives are defined too narrowly an EIR's treatment of analysis may also be inadequate). As a leading treatise on CEQA compliance cautions, "[t]he case law makes clear that…overly narrow objectives may unduly circumscribe the agency's consideration of project alternatives." (Remy, Thomas, Moose & Manley, Guide to CEQA (Solano Books, 2007), p. 589).

1. The project's objective to restore or maintain "appropriate" beneficial uses qualifies the Regional Board's duty to maintain all existing or designated beneficial uses.

The first objective identified for the ILRP is to "[r]estore and/or maintain <u>appropriate</u> beneficial uses established in Central Valley Water Board water quality control plans by ensuring that all state waters meet applicable water quality objectives." PEIR, p. 1-2. CSPA is concerned with the PEIR's inclusion of the term "appropriate." Neither the Water Code nor the

Basin Plan qualify the Regional Boards' or dischargers' obligation to assure attainment of water quality standards by deeming some designated beneficial uses as inappropriate. This language should be revised to clarify that all designated or existing uses must be protected, including those designated by way of the Basin Plan's tributary rule.

2. The objective to encourage implementation of BMPs is inconsistent with Resolution No. 86-16's duty that the Regional Board ensure implementation of all best practicable control technologies.

The second objective is to "[e]ncourage implementation of management practices. . ." PEIR, p. 1-2. The notion that the Regional Board should limit its authority to "encouraging" the implementation of BMPs appears inconsistent with its duties under Porter-Cologne. The Regional Board must establish requirements that implement the water quality objectives. Water Code § 13263(a) ("[t]he requirements shall implement any relevant water quality control plans. . . ."); § 13269(a) (waivers must be "consistent with any applicable state or regional water quality control plan . . ."). Merely encouraging BMPs will not achieve objectives.

3. The objective to provide incentives to minimize waste discharges cannot be construed to allow less monitoring without any proof that waste discharges have been minimized.

The third objective includes to "[p]rovide incentives (i.e., financial assistance, monitoring reductions, certification, or technical help) for agricultural operations to minimize waste discharge to state waters from their operations." PEIR, p. 1-2. By specifying the incentives, CSPA believes this objective greases the skids for an alternative that trades away important components of any successful program. In particular, by specifically trading away monitoring of specific discharges, the objective directly undermines the Regional Board's ability to implement the high quality waters policy's BPTC requirement as well as the Nonpoint Source Plan's monitoring requirements. CSPA believes an order with clear requirements is incentive enough and this objective merely opens the door to alternatives that violate relevant law and will once again prove ineffective. Any incentives should be based on encouraging growers to pollute less, not, for example, agreeing to give up essential site specific monitoring for participation in a less effective regional monitoring program.

4. If the objective to coordinate with other regional programs means to mimic the regional scope of other ineffective pollution control programs, then this objective is inconsistent with the other three objectives.

The fifth objective is to "[p]romote coordination with other regulatory and non-regulatory programs associated with agricultural operations . . . to minimize duplicative regulatory oversight while ensuring program effectiveness." PEIR, p. 1-2. This objective, although sounding innocuous, is interpreted by staff as favoring alternatives that take a regional perspective like other programs referenced in the objective. *See* Staff Report, p. 103 (Alternatives 1 and 2, "[r]egional configuration for water quality plans and monitoring would facilitate efficient coordination with other programs operating at the regional level" and Alternatives 3-5, "…the farm-level management would not promote this coordination.") Unfortunately, the record is clear that none of the other regional efforts have been successful at preventing the widespread surface water pollution and toxicity from irrigated lands. If coordination with regional programs means that the program must replicate the regional scales of other unsuccessful programs and thus replicate their inability to protect water quality since their inception, then this objective is inappropriate and inconsistent with the objective to restore water quality and meet water quality standards. The objective should be clarified to promote coordination without necessarily copying the ineffective regional programs already in place.

D. The PEIR fails to identify the superior alternative.

By choosing not to propose a project, it is hardly surprising that the PEIR does not identify the superior environmental alternative. One of CEQA's fundamental requirements is that the DEIR must identify the "environmentally superior alternative." CEQA Guidelines §1526.6(e)(2); Kostka & Zischke, *Practice Under the California Environmental Quality Act* §15.37 (Cont. Educ. Of the Bar, 2008). Typically, a DEIR identifies the environmentally superior alternative, which is analyzed in detail, while other project alternatives receive more cursory review.

The lead agency is required to select the environmentally preferable alternative unless it is infeasible. A "feasible" alternative is one that is capable of being accomplished in a successful

manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. Pub. Res. Code § 21061.1; CEQA Guidelines § 15364. California courts provide guidance on how to apply these factors in determining whether an alternative or mitigation measure is economically feasible.

Since the PEIR fails to identify the environmentally superior alternative, there is not adequate analysis of its impacts or feasibility. *See Burger v. County of Mendocino* (1975) 45 Cal.App.3d 322 (county's approval of an 80 unit hotel project over a smaller 64 unit alternative was not supported by substantial evidence); *County of El Dorado v. Dept. of Transp.* (2005) 133 Cal.App.4th 1376 (agency must consider small alternative to casino project). Here, although suffering from its own defects (*see infra*, Section IV), the economic analysis prepared for the Regional Board indicates that all of the alternatives identified in the PEIR are economically feasible. Indeed, the alternatives with the most regulatory oversight expand the overall economy of the Central Valley. Because the alternatives are all feasible, the PEIR needed to select an environmentally preferable alternative.

E. The PEIR Does Not Provide Meaningful Comparative Analysis of the Selected Alternatives Because the Assumption That All Five Alternatives Would Be Equally Effective at Implementing BPTC and Achieving Standards is Unsupported by Any Evidence

As noted above, the PEIR fails to facilitate the Regional Board's selection of a new ILRP because the PEIR is based on a fiction that any program – no matter how far removed from the discharge locations and no matter how hard it may avoid documenting and measuring the implementation and effectiveness of BMPs – will result in the same level of pollution control. That core fiction does not allow for a meaningful comparative analysis by the Regional Board of the various alternatives.

CEQA requires that an EIR provide a discussion of project alternatives that allows meaningful analysis. *Laurel Heights I*, 47 Cal.3d at 403. The analysis of project alternatives must contain an accurate quantitative assessment of the impacts of the alternatives. In *Kings County Farm Bureau*, 221 Cal.App.3d at 733-735, the court found the EIR's discussion of a

natural gas alternative to a coal-fired power plant project to be inadequate because it lacked necessary "quantitative, comparative analysis" of air emissions and water use.

The PEIR does not attempt to estimate the relative effectiveness of the five alternatives. It generally assumes that they will all lead to sufficient pollution reductions. For example, the PEIR "assume[s] that continuation of the program would result in implementation of a greater number of surface water management practices than are present under baseline conditions, due to continued use of the program's monitoring feedback loops." PEIR, p. 5.7-45. Given the current absence of information about any BMPs actually installed, never mind whether they amount to BPTC, after seven years of implementing Alternative 1, the PEIR's assumption is entirely unsupported. The PEIR also asserts that "[u]nder all program alternatives, when a constituent of concern is identified through monitoring, management practices would be used to reduce the level of that constituent in surface water or groundwater." PEIR, p. 5.7-43. The PEIR repeats that, for each alternative, the "[p]otential impacts related to vegetation and wildlife under Alternative 3 are expected to be as described for Alternative 2. Like Alternative 2, Alternative 3 would implement water quality management plans that would result in a beneficial impact on surface water quality and groundwater quality, which would ultimately benefit both vegetation and wildlife communities." PEIR, p. 5.7-48. By making believe that all of the alternatives will have a beneficial effect on water quality – despite their obvious differences – the PEIR makes no effort to compare the relative effectiveness and certainty of each alternative in meeting standards or reducing pollution.

Obviously, of the flawed alternatives included in the PEIR, some have more certainty of achieving pollution reductions than others. Nothing in the record demonstrates that Alternative 1, seven years after its enactment, has reduced the volume or toxicity of pollution discharges from irrigated lands. There is no evidence in the Regional Board's files or discussed in the PEIR of what, if any, management practices have been or will be installed under the existing program. There is no discussion of evidence of any observable trends in ambient water quality conditions related to the existing program. There is certainly no evidence of any data showing any trends in pollution reductions at the edge of fields based on management measures applied to those fields.

As a result, all of the evidence is that implementation of Alternative 1 and the even weaker Alternative 2 will most likely allow increases in pollution.

Contrary to the claims that all of the alternatives are interchangeable from a water quality perspective, one section of the PEIR discussing impacts to fish acknowledges that some alternatives (Alternatives 4 and 5) will "probably be greater." PEIR, pp. 5.8-52-53. Although still sorely lacking in providing the "quantitative, comparative analysis" required by CEQA, the fisheries section does at least acknowledge that additional monitoring and additional management practices will result in less pollution being discharged.

> given the probability of increased monitoring of individual farms, and especially those at higher risk of generating significant impacts—in addition to wellhead protection, nutrient management plans, tracking of nutrient and pesticide application, and monitoring of individual wells—the positive benefit of Impact FISH1 (improved water quality) would probably be greater under Alternative 4 than under Alternative 2 or Alternative 3.

PEIR, p. 5.8-52. Likewise, contrary to the discussion of water quality, the PEIR does acknowledge in the fisheries discussion that "the positive benefit of Impact FISH1 (improved water quality) probably would be greater under Alternative 5 than under any other alternative." PEIR, p. 5.8-53. These acknowledgements contradict the PEIR's earlier unreasonable assertions that the water quality benefits of each of the alternatives are similar despite their drastic differences in monitoring requirements and management practices oversight. The PEIR's refusal to acknowledge the failure of the existing program to document any BMP implementation or water quality improvements frustrates rather than facilitates the Regional Board's decision-making. A true quantitative comparison of alternatives 2, 3, and 4 incorporating one or more of the main flaws of Alternative 1, including for example reliance solely on regional monitoring to detect and evaluate BMPs, would demonstrate they will prove equally ineffective. CSPA believes the PEIR should be rewritten to include the required comparative analysis on staff's proposed alternative.

F. The Regional Board May Not May Not Approve Four Out Of Five Of The Proferred Alternatives Because They Would Conflict With Other Laws, i.e. Porter-Cologne.

A lead agency may not approve a project with significant unavoidable impacts unless it is "otherwise permissible under applicable laws and regulations." CEQA §21002.1(c). Likewise, as the PEIR acknowledges, "[t]o be considered as an alternative under CEQA, ILRP alternatives . . . must . . . meet statutory requirements established in applicable state policy and regulations (e.g., . . ., the State Water Resources Control Board *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* [State Water Board 2004], and the State Antidegradation Policy [State Water Board 1968])." PEIR, p. 2-8.

The PEIR states that all of the alternatives will have a significant unavoidable impact on prime agricultural lands. PEIR, Summary, p. 1-13. CSPA also believes that every alternative considered in the PEIR will have unavoidable impacts to water quality and fisheries, at least in the near term and for several of the alternatives for the indefinite future. As discussed below, Alternatives 1 through 4 all violate the State's antidegradation policy and the Nonpoint Source Control program. Therefore, only one of the alternatives considered by the Regional Board (at least as currently formulated) can be approved despite any significant unavoidable impacts – Alternative 5.

1. The first four alternatives all violate the state's antidegradation policy.

The State Board's "Statement of Policy With Respect to Maintaining High Quality of Waters in California" provides, in relevant part, that:

> 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 <u>best practicable treatment or control</u> of the discharge necessary to assure that (a) 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.

Resolution No. 68-16 (Oct. 28, 1968) (emphasis added). As Regional Board staff explains, "In determining BPTC, the discharger should compare the proposed method to existing proven

technology; evaluate performance data (through treatability studies), compare alternative methods of treatment or control, and consider the method currently used by the discharger or similarly situated dischargers." Staff Report, p. 62 (citing SWRCB Order Nos. WQ 81-5, WQ 82-5, WQ 90-6, and WQ 2000-07)." To comply with Resolution No. 68-16's BPTC mandate, the Regional Board "must require the discharger to demonstrate that the proposed manner of compliance constitutes BPTC." *Id*. (citing SWRCB Order No. WQ 2000-7) (emphasis added). *See also id*. p. 67 ("where degradation is occurring, irrigated agricultural operators must *demonstrate* that any set of practices proposed for implementation represents BPTC and will be required to consider existing water quality data or conduct monitoring in support of this demonstration").

Under the existing program, not one irrigated lands discharger has complied with Resolution No. 68-16's BPTC requirement. The Regional Board is entirely in the dark regarding what, if any, measures have been implemented never mind whether they amount to BPTC. Given that the existing management plans' only map out a series of meetings between coalitions and groups of dischargers to discuss measures the dischargers may have planned, there is nothing in Alternative 1 or its mirror proposal, Alternative 2, that would cure these universal violations of the BPTC requirement. *See* Staff Report, p. 115 ("Alternative 1 would not implement the iterative BPTC and monitoring process for addressing degradation to groundwater").

Alternatives 3 and 4 also succumb to the absurd notion that downstream regional monitoring alone can somehow implement Resolution No. 68-16's BPTC requirement. Although these alternatives both close some of the gap in implementing the BPTC requirement by requiring irrigated lands dischargers to prepare farm-specific Farm Water Quality Management Plans ("FWQMPs"), the omission of monitoring to determine the effectiveness of those measures means the Regional Board will not know whether the measures are BPTC. Alternative 3 omits any surface or groundwater quality monitoring, essentially erasing the BPTC requirement. *See* Staff Report, p. 116 ("Surface and/or groundwater quality monitoring would not be required under Alternative 3 to determine effectiveness of BPTC and whether degradation is occurring"). Alternative 4, to the extent it allows dischargers to forego farm specific

monitoring in exchange for participating in regional monitoring, cannot reasonably be claimed to identify BPTC many miles upstream of the monitoring location. Nor would measurements of pollution downstream at levels below applicable criteria indicate whether or not waters upstream – shallower and perhaps closer to various pollution discharges – were being degraded by irrigated lands discharges. Any resort to regional monitoring without a farm-specific monitoring component cannot meet Resolution No. 68-16's requirement. The Staff Report does not explain how regional monitoring would suffice to determine whether upstream measures are BPTC or the presence and extent of upstream degradation. *See* Staff Report, p. 116.

Of the five alternatives considered in the PEIR, only Alternative 5 is consistent with Resolution No. 68-16. That alternative requires discharges to identify the measures they are installing or implementing and it requires monitoring of the measure's effectiveness (though as CSPA notes below, Alternative 5 is weighted down with too much monitoring).

As the staff acknowledges, "With regard to selection of measures and practices, the Central Valley Water Board and USEPA recognize that there is often site-specific, crop-specific, and regional variability that affects the selection of appropriate management measures, as well as design constraints and pollution-control effectiveness of various practices." Staff Report, p. 66-67. Because BPTC and compliance with the state's antidegradation policy is ultimately a farm specific question, there is no getting around the fact that to implement the policy, one must identify and measure BPTC at the farm level. *See PEIR, p. 3-9* ("The appropriate management practice is typically selected on a site-specific or property-specific basis"). It is simply ridiculous to claim that one can determine that a discharger has installed BPTC by measuring ambient water quality many miles downstream. If that were the case, the regional monitoring that has occurred under Alternative 1 for the last seven years would already allow the Regional Board to evaluate BPTC throughout the region. Of course, the opposite is true. The Regional Board has no idea what, if any, measures have been installed and whether they amount to BPTC. Alternatives that continue the current failure to apply Resolution No. 68-16 to tens of thousands of dischargers of toxic and impairing pollutants and vast swaths of the State's inland waters amount to licenses to degrade water. CSPA agrees that farmers can have flexibility but they

have to tell the Boards and the public what they decided to implement and then measure its effectiveness to comply with the BPTC requirement.

2. Alternatives 1 through 4 violate the NPS Policy

Alternatives 1 through 4 also are inconsistent with the State Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (May 20, 2004) ("NPS Policy"). Any NPS program must be consistent with five key elements of the NPS Policy. Alternatives 1 through 4 are all inconsistent the NPS Policy's element requiring compliance with Resolution No. 86-16. Alternatives 1 and 2, as well as the staff's recommended program, fail to comply with second and fourth key elements as well. Alternatives 3 and 4 also fall short of the second and fourth elements to the extent they call for no water quality monitoring or only regional water quality monitoring. Each of the four relevant elements is discussed in turn.

Key element 1 states that "[a]n 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." NPS Policy, pp. 11-12. As discussed above, Alternatives 1 through 4 do not comply with Resolution No. 68-16. Hence, they also cannot comply with Key Element 1 of the NPS.

Key element 2 provides that: "[a] nonpoint-source control implementation program must include a description of the management practices and other program elements that are expected to be implemented to ensure attainment of the implementation program's stated purpose, the process to be used to select or develop management practices, and the process to be used to ensure and verify proper management practice implementation." NPS Policy, p. 12. "A RWQCB must be convinced there is a high likelihood the MP will be successful." *Id*. In regard to discharges from irrigated lands, this element of the NPS Policy effectively requires farm-based water quality management plans, or their equivalent. "MPs must be tailored to a specific site and circumstances, and justification for the use of a particular category or type of MP must show that

the MP has been successfully used in comparable circumstances. If an MP has not previously been used, documentation to substantiate its efficacy must be provided by the discharger." *Id.*, p. 12. In this case, the dischargers are the individual farms and the only way to document the efficacy of a specific management practices for their particular lands is for them to tell the Regional Board what they are doing and why. Likewise, in order "to ensure and verify proper management practice implementation" for irrigated lands, the farms must report on their implementation, including pollutant specific monitoring of the BMP's resulting effluent. Because Alternatives 1 and 2 do not include FWQMPs, they cannot comply with key element 2. Likewise, Alternatives 1 and 2 and Alternative 4's reliance on regional monitoring also cannot comply with key element 2's verification requirement. Alternative 3 has no water quality monitoring at all and, thus, in the context of irrigated lands management practices, cannot verify the effectiveness of any management practice.

Key element 3 of the NPS Policy provides that "[w]here the Regional Water Board determines it is necessary to allow time to achieve water quality objectives, the nonpoint-source pollution control implementation program must include a specific time schedule and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements." NPS Policy, p. 13. Although CSPA may not be opposed to reasonable time frames for irrigated lands dischargers to come into compliance with the requirements of a revised program, the PEIR and staff report need to be clarified to acknowledge that the Regional Board may not have authority to include schedules of compliance in either WDRs or conditional waivers because the Central Valley Bain Plan fails to include any such authority in its program to achieve the applicable water quality standards. *See* Water Code § 13242(b) (program to achieve standards must include "[a] time schedule for actions to be taken" – if no time schedule provided in Basin Plan, no authority); Basin Plan, p. IV-16 (compliance schedules only authorized for NPDES permits). The Board's authority appears to be limited to adopting time schedules through enforcement orders. The documents also should be careful to emphasize the NPS Policy's requirement that, assuming such schedules are authorized in the Basin Plan, the

schedules "may not be longer than that which is reasonably necessary to achieve an NPS implementation program's water quality objectives."

Key element 4 requires that "[a]n NPS pollution control implementation program must include sufficient feedback mechanisms so that the Regional Water Board, dischargers, and the public can determine whether the program is achieving its stated purpose, or whether additional or different management practices or other actions are required." NPS Policy, p. 13. "In all cases the NPS control implementation program should describe the measures, protocols, and associated frequencies that will be used to verify the degree to which the MPs are being properly implemented and are achieving the program's objectives, and/or to provide feedback for use in adaptive management." *Id*. "[I]f the program relies upon dischargers' use of MPs, there should be a strong correlation between the specific MPs implemented and the relevant water quality requirements." *Id*., p. 12. In the context of irrigated lands, this key element requires reporting and monitoring. It is impossible to describe the management practices that were used and a "strong correlation" between the management practices and water quality standards without FWQMPs and annual reporting. And it is impossible to determine that the management practices are effective without reports from the discharger that they have been properly implemented and monitored to confirm they have reduced pollution. Alternatives 1 through 4 do not achieve this level of comprehensible feedback.

Key element 5 requires that "[t]he Regional Water Board must make clear, in advance, the potential consequences for failure to achieve a nonpoint-source pollution control implementation program's stated objectives." Neither Alternative 1 nor 2 make clear the consequences of any failures by coalitions. No coalition or discharger takes seriously the notion that a coalition will be dissolved for failing to comply with the program's requirements. In essence, the coalition-based alternatives require the Regional Board to dissolve an entire watershed program – with nothing in place to back it up once it is gone. The Regional Board would appear to punish itself as much as the dischargers under these scenarios. Likewise, as for Alternatives 3 and 4, the consequences of failure also are not clear because the proposals do not include monitoring of the individual dischargers. Although these alternatives have the Regional

Board involved (CSPA believes unrealistically) in the development of the FWQMPs, without management practice effluent data and only sporadic site inspections by staff, there are no clear consequences for noncompliance by individual dischargers.

G. The PEIR Fails To Consider a Reasonable Range of Alternatives Because Most of the Alternatives are Weighted Down With Components That Render Them Ineffective.

Because four out of the five alternatives considered in the PEIR are not viable because they violate some of the elemental water quality regulations, the Regional Board is left with only a single feasible alternative – Alternative 5. *See* PEIR, p. 2-8 ("Alternatives must … meet statutory requirements established in applicable state policy and regulations"). This is not a reasonable range of alternatives. Even assuming one additional alternative – Alternative 4 – comes close to being legal and thus feasible, the Board is still left with only two options. The Regional Board should redraft the PEIR to focus on feasible alternatives. These would include in addition to Alternative 5, staff's proposed program (although as discussed below, staff's proposal is also inconsistent with the PS Policy and Resolution No. 68-16), CSPA's proposed alternative above, and at least one other variation that includes FWQMPs and farm-specific monitoring for at least some portion of the discharging farms.

An EIR must describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. "An EIR's discussion of alternatives must contain analysis sufficient to allow informed decision making." *Laurel Heights I*, 47 Cal.3d at 404. An EIR must also include "detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." *Id*. at 405.

In addition to their failure to comply with Resolution No. 68-16 and the NPS Policy, CSPA also believes the alternatives considered in the PEIR suffer from the following defects.

1. The ILRP Should Not Rely on Coalitions to Implement or Comply with Irrigated Lands Program.

What, if any, value the existing coalitions may have brought to the program to facilitate some of the regional monitoring and performing outreach to growers, has now passed. The ILRP, to be effective, must now concentrate on getting individual farmers to take actions necessary to control their pollution discharges and document implementation of BPTC. CSPA's review of the coalitions' management plans approved by the Regional Board under the existing program shows that the coalitions have no intention of documenting each farm's management measures or their effectiveness. Instead, as their management plans make clear, the coalitions propose to replace various office meetings with groups of growers as a surrogate for documenting each farm's BMPs and their effectiveness. Of course, to confirm the selection, implementation and monitoring of BPTC on each farm, each farm must provide that information. Adding a layer of unofficial bureaucracy with an interest in obscuring information from both the Board and the public does not add any efficiency to the program. In 2003, CSPA pointed out that:

> If one thing is clear, the existing Coalition program has managed to mask from the Regional Board what is going on on-the-ground at most of the farms around the Valley. As several Board members commented and as is painfully evidenced from reviewing the available documents, we still do not have the most basic information about what, if any, BMPs are being applied in the fields, where they're being applied, whether they are working or improving the quality of discharges and what other BMPs might be tried in the future.

Letter from Law Office of Michael R. Lozeau on behalf of Deltakeeper, pp. 5-6 (Nov. 4, 2005). Remarkably, seven years later, the mask erected by the coalitions remains in place. Neither the Board nor the public has any idea what if any management practices have been proposed or implemented by any of the estimated 30,000 farms in the Central Valley. *See e.g.*, Technical Memo, p. 1-2 ("Although Alternative 1 represents the continued implementation of current Central Valley Water Board policies, limited information was available to determine the extent of management practice implementation to date"); *Id.*, p. 2-2 ("Conceptually, the best source of this type of information would be growers or grower coalitions. Because this information was

not widely available, other sources were used to estimate the existing conditions (NRCS 2005; DWR 2001)"); Staff Report, p. 117 (explaining that only effort to date by coalitions to "track the progress of management practice implementation through the results of periodic surveys sent to growers"). Nor does the informal effort of the coalitions to collect the farm-specific data appear to have changed since the Regional Board's approval of management plans. *See, e.g.* East San Joaquin Water Quality Coalition Web Site ("Properties adjacent to or in close proximity to each waterway sampled by the Coalition are the primary focus of mailings and notices for local workshops that cover BMPs to solve the water quality problem"); San Joaquin County and Delta Water Quality Coalition, 2010 Annual Monitoring Report, p. 4 (March 1, 2010) (focused outreach in three subwatersheds consists of asking growers to complete surveys and then conducting unspecified follow-up with growers). The next phase of the ILRP cannot allow coalitions to continue and further obstruct the Board's collection of discharger information.

The use of coalitions also will continue to undermine the Regional Board's enforcement discretion. As the staff acknowledges, by relying on coalitions, the Board effectively limits the availability of all of its enforcement tools. 'The Central Valley Water Board does not have any direct enforcement authority over a third-party group that is not responsible for the waste discharge (i.e., the Board cannot take enforcement against the coalition." Staff Report, p. 117. The only option available to the Regional Board to address coalitions' noncompliance is not to enforce the requirements, but to eliminate the entire program within large areas of the Central Valley. Rather than a readily available and precise tool available to the Regional Board, like a notice of violation or an administrative civil liability, a decision to dismantle the ILRP for an entire area would be the least likely response the Board would want to take and would not be commensurate with the scope and seriousness of most of the violations the Board was trying to address. The coalitions also undermine the Board's ability to effectively enforce against individual dischargers as well by failing to collect the necessary data regarding management practices on individual farms and otherwise obstructing or slowing down the review and analysis of that information. *See* Staff Report, p. 140 (discussing Alternative 1, "the Board . . . would not have information regarding the method(s) and practices

the operation has or plans to implement to work toward solving identified water quality concerns”).

Staff’s proposal argues that the presence of coalitions will “take advantage of local knowledge and administrative/cost efficiencies in dealing with a few groups versus thousands of individual operations.” Staff Report p. 3. The only administrative/cost efficiencies visible from the record are those realized by the coalitions’ successful effort to date to avoid gathering the key information and data that is necessary to implement a successful program – farm-specific management practices and monitoring data to prove they have been implemented and are effective at reducing the pollutants of concern. It makes no sense that establishing an intermediate layer of bureaucracy between the dischargers who have the information and the agency that needs to know the information makes that process more efficient.

Nor do the coalitions bring the local knowledge necessary for a successful ILRP. If anything, the coalitions are preventing local knowledge of each farm from reaching the Board. As far as CSPA can tell, staffing by the coalitions consists of a few staff for each coalition. There is no reason that the Regional Board itself could not provide the same local presence by modestly expanding its staff and gain efficiencies by cutting out the middleman. To the extent any alternative proposes to rely on coalitions who are not themselves dischargers to conduct sampling, gather information, and prepare plans and reports pursuant to a conditional waiver or WDRs, the program will continue to fail to measurably reduce any pollution discharges and perpetuate or worsen the existing pollution discharges from irrigated lands.

2. Alternatives that rely solely on regional monitoring to determine the adequacy of BPTC or enforcement of individual farms are destined to fail and do not meet CEQA’s duty to mitigate impacts.

The four alternatives that rely on regional monitoring to determine that the program is reducing, rather than increasing, pollution discharges and that management practices are installed and equal to BPTC, do not provide for the mitigation of impacts required by CEQA. CEQA requires public agencies to avoid or reduce environmental damage when “feasible” by requiring “environmentally superior” alternatives and mitigation measures. CEQA Guidelines §

15002(a)(2) and (3); *See also*, *Berkeley Jets*, 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564. The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced." CEQA Guidelines §15002(a)(2). If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." Pub. Res. Code § 21081; CEQA Guidelines § 15092(b)(2)(A) & (B).

In general, mitigation measures must be designed to minimize, reduce or avoid an identified environmental impact or to rectify or compensate for that impact. CEQA Guidelines § 15370. Where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. *Id.* at § 15126.4(a)(1)(B). A lead agency may not make the required CEQA findings unless the administrative record clearly shows that all uncertainties regarding the mitigation of significant environmental impacts have been resolved. A public agency may not rely on mitigation measures of uncertain efficacy or feasibility. *Kings County Farm Bureau*, 221 Cal.App.3d at 727 (finding groundwater purchase agreement inadequate mitigation measure because no record evidence existed that replacement water was available). "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. CEQA Guidelines § 15364. Mitigation measures must be fully enforceable through permit conditions, agreements or other legally binding instruments. *Id.* at § 15126.4(a)(2).

By not requiring any farm-specific mitigation measures, Alternatives 1 and 2 fail to meet CEQA's mitigation requirements. These two alternatives make no effort to resolve the vast uncertainties surrounding the selection and implementation of management practices on irrigated lands throughout the Central Valley, the very mitigation measures relied upon by the PEIR to find that impacts to water quality will be less than significant. Despite the PEIR's

acknowledgement that "[t]he appropriate management practice is typically selected on a site-specific or property-specific basis[,]" Alternatives 1 and 2 do not include any site-specific BPTC requirements that are or will be fully enforceable.

Similarly, Alternatives 3 and 4, although requiring FWQMPs that would require, in the future, individual farms to describe their management practices, the absence of any farm specific and BMP-specific monitoring to confirm their implementation and effectiveness also fails to eliminate the rampant uncertainty regarding BMP implementation and their effectiveness at reducing pollution from specific farms. And, again, making believe that one can monitor for the implementation and effectiveness of management practices on a specific farm from several miles downstream makes any management practice mitigation unenforceable, never mind fully enforceable.

3. Alternative 3 includes components that begin to address the shortcomings of the current program but is weighed down with odious requirements and illegal delegation of Board responsibilities.

Although flawed, some of the alternatives described in the PEIR include components that CSPA believes are necessary to an effective ILRP. However, in each instance, the PEIR weighs down the effective components with various poison pills and odious requirements that stifle any serious consideration of alternatives that substantially change the current program. Additional comments and flaws in Alternative 3, in addition to the absence of any effluent quality monitoring discussed above, include the following.

Alternative 3 does include the important requirement that all irrigated land dischargers prepare a FWQMP. CSPA believes this requirement is fundamental to a program that will achieve BPTC, achieve water quality standards and allow proper oversight by the Regional Board. However, the 2-year time period for developing a FWQMP should be shortened to 6 months for surface water discharges and one year for groundwater discharges.

Alternative 3's proposal that the Regional Board review and approve every FWQMP is unrealistic and unnecessary. *See* PEIR, p. 3-14 ("Review applications and determine priorities for FWQMP review and approval"); p. 3-16 ("Submit the FWQMP for review and approval by

the Central Valley Water Board"). As proposed, the task of reviewing in advance each and every FWQMP is unrealistic. Moreover, such review and approval would be a desk top review of whatever information is included in the FWQMP without the benefit of any field observations. This process would simply repeat the currently inadequate surveys and informal meetings which the coalitions claim can accurately evaluate management practice implementation and effectiveness. Rather than requiring review of and approval of all FWQMPs, the program should specify in sufficient detail the contents of the FWQMP and require them to be submitted under penalty of perjury. CSPA also believes there is a role for an iterative process. The requirements for the FWQMP should include requiring additional management practices wherever effluent data indicates that pollutant discharges are not decreasing or standards are being violated. Any review by the Board staff would be in the context of reviewing for compliance and prioritizing any inspections and enforcement investigations. Staff also could, of course, require additional measures or monitoring for specific problem farms.

Similarly, because such up front review and approval is unnecessary, any resources expended to review proposals by third-parties to take over such review and approval of FWQMPs is also unnecessary. To the extent the Board thought it was possible to review and approve every FWQMP, farming that task out to third parties would be an illegal delegation of discharge requirements. Water Code § 13223.

CSPA certainly agrees that the Regional Board should prioritize and conduct a significant number of site inspections every year. It is through this oversight and enforcement process that CSPA believes the Regional Board can realistically and accurately review a specific farm's FWQMP to determine its compliance with the program requirements. Likewise, to the extent the Board staff wanted to "coordinate" with a specific farmer or even a group of farmers, such an inspection would be the opportunity for coordination. By including effluent monitoring, the Regional Board would have a better means of prioritizing its inspections and evaluating whether management practices are BPTC. By publicizing through Board meetings and the web site the outcome of these inspections including any "certifications" issued or, equally important, enforcement responses by the Board or staff, CSPA believes that the Regional Board would be

taken seriously by a much larger percentage of individual dischargers who would then seek to comply with BPTC and water quality standards.

As discussed in various sections of these comments above, Alternative 3's failure to require any farm-specific water quality monitoring is a fatal flaw. *See* PEIR, p. 3-16 ("unless specifically required in response to water quality problems, owners/operators would not be required to conduct water quality monitoring of adjacent receiving waters or underlying groundwater"). CSPA believes that monitoring of discharged effluent is what needs to be required to determine compliance with both the BPTC requirement and applicable water quality standards. As outlined in CSPA's proposed alternative, such monitoring should be limited to Tier 2 and Tier 3 dischargers within areas covered by management plans and limited to basic parameters plus any pollutants triggering the management plan. CSPA agrees that visual monitoring does have a role but cannot be the only monitoring. CSPA has many years of experience reviewing annual reports and initiating enforcement actions under the Statewide General Industrial Storm Water Permit. The visual monitoring conducted under that permit is of limited value to documenting pollution discharges or BMP effectiveness (though with appropriate photographs, visual monitoring can document the installation of BMPs and their condition).

4. Alternative 4 includes fewer poison pills but its failure to require BMP and effluent monitoring means that it would not achieve water quality objectives or ensure implementation of BPTC.

Alternative 4 also includes a number of components that CSPA believes are key components to a successful ILRP, including FWQMPs and a tiering component to guide both BMP implementation and different levels of monitoring. Alternative 4 proposes the same procedures for preparing, reviewing and approving FWQMPs. CSPA agrees with requiring all dischargers to prepare and implement FWQMPS but CSPA has the same concerns with the FWQMP procedures discussed for Alternative 3 above.

The key difference proposed in Alternative 4 would be the inclusion of a tiering system to guide dischargers on the proper levels of BMPs they should be considering as well as the

intensity of monitoring that is required. PEIR, p. 3-17 ("The tiers represent fields with minimal (Tier 1), low (Tier 2), and high (Tier 3) potential threat to water quality. Requirements to avoid or minimize discharge of waste would be the least stringent for Tier 1 fields and the most stringent for Tier 3 fields"). CSPA agrees that a tiering system is important to controlling the costs of implementing and overseeing the program and assuring that limited resources are aimed at potentially significant pollution dischargers. CSPA believes that the three tiers proposed in the PEIR for both surface and groundwater make sense in providing some initial guidance on the selection and implementation of BMPs. However, CSPA believes both Tier 2 and 3 should conduct similar levels of farm-specific water quality monitoring, albeit not as extensive as that proposed for Alternative 5 and, at least theoretically, for Alternative 4. In addition, CSPA also would use the information gleaned from the ambient monitoring and water quality management plans to further prioritize the farms that must conduct effluent water quality monitoring.

Alternative 4's monitoring requirements for both Tier 2 and 3 dischargers fail to implement Resolution 68-16, evaluate management practice effectiveness and assure compliance with water quality standards by allowing regional monitoring by discharger coalitions to replace the outlined farm-specific monitoring. *See* PEIR, p. 3-19. The inclusion of farm specific monitoring is an illusion as every discharger obviously will opt for the cheaper monitoring far away from their activities and effluent. Monitoring required by the ILRP should be focused on effluent monitoring and BMP effectiveness.

Likewise, for groundwater monitoring the Alternative should focus on onsite wells and leave the regional monitoring to the Regional Board and its consultants. Regional monitoring could also be supplemented by use of the California Department of Public Health public drinking water supply database. Use of the database, in selecting for pesticide and nitrate concentrations in Central Valley wells, would allow for an analysis of the effectiveness of the Alternative as implemented. CSPA believes the monitoring of existing wells is a reasonable proposal and should be implemented by both Tier 2 and 3 groundwater dischargers. Most farms will have one or more functional wells already in place. It is a simple step to require nutrient and pathogen monitoring of those existing wells. The data also would be much more relevant (though perhaps

initially not sufficient to define the scope of any water quality exceedances) to that particular discharger. Any regional groundwater problem would simply measure in that locale and say little if anything about dischargers several miles away.

The proposed monitoring frequency for Tier 2 dischargers of once every five years is also woefully inadequate, whether considered on a farm-specific or regional basis. It is already difficult enough to make determinations about compliance with standards or implementation of BPTC based on edge of field monitoring four times in a single year. To then wait five more years before the next set of samples would prevent any determination of trends and any improvements to BMPs for that amount of time or longer. Sampling needs to occur every year, whether a discharger is in Tier 2 or Tier 3.

Although not ideal, CSPA believes the proposed number of sampling events in any given year strikes a proper balance. PEIR, p. 3-24 ("Tailwater discharges during the first discharge of the irrigation season and once mid-season. Storm water discharges during the first event of the wet season (between October 1 and May 31) and once during the peak storm season (typically February). Discharges of subsurface (tile) drainage systems annually").

Alternative 4 again discloses staff's penchant for encouraging the formation of intermediate bureaucracies and entities over whom they have no enforcement authority by inviting groups of dischargers to form "legal entities that could serve a group of growers who discharge to the same general location and share monitoring locations." PEIR, p. 3-20. CSPA agrees that there exist opportunities for neighboring farms to work together to monitor shared irrigation ditches and implement joint control measures. CSPA does not see any reason for the individual dischargers to have to form a separate entity to accomplish this goal. Each of them could incorporate the measure into their respective FWQMPs and each would simply be jointly and severally responsible for its implementation and effectiveness. The Regional Board could respond to one or all, though obviously any inspection and follow-up would want to be with all of the cooperating farms.

5. Alternative 5's aggressive agency reviews and approvals and expensive monitoring proposals go beyond the reasonable next step but it is the one alternative reviewed in the PEIR that, if implemented would dramatically reduce irrigated lands pollution discharges.

Of the five alternatives described in the PEIR, Alternative 5 is the only one that proposes an effective framework that (1) would comply with Resolution 68-16's requirement that each discharger demonstrate BPTC and prevent degradation, (2) assure the attainment of water quality standards not only miles downstream but in the immediate area of a discharger's effluent, and (3) provide information sufficient for the Regional Board staff to properly prioritize its inspections and enforcement. Alternative 5 is modeled on the successful industrial and construction site storm water permit programs, with a few important exceptions. Unfortunately, in their apparent excitement, the PEIR drafters could not refrain themselves from layering in too many requirements the sole purpose of which appears to be to make the alternative so expensive that it would never be selected. CSPA believes that, although the regulatory framework of Alternative 5 is sound, the monitoring frequency and constituents (at least as defined in the accompanying economic analysis) are excessive and the absence of any tiering that would prioritize the riskier dischargers also misses a reasonable method of reducing costs.

Alternative 5 proposes monitoring that goes well beyond, for example, the storm water general permits' focus on basic parameters and representative metals monitoring. Technical Memo, pp. 2-17 – 2-19. *See* Kings River Coalition Annual Monitoring Report (2010) (according to the Technical Memo, the monitoring constituents are based on the regional samples taken by the Kings River Coalition). This is overkill for site specific monitoring. The frequency of monitoring also is dramatically increased in this Alternative for tailwater discharges. For example, Alternative 5 would require monthly sampling of tailwater as compared to Alternative 4's proposal of twice per irrigation season (albeit with its regional monitoring exception). CSPA believes the extensive and costly monitoring parameters proposed for Alternative 5 go well beyond what is necessary for the Board and a discharger to determine whether they have installed BPTC and are protecting water quality objectives.

The most obvious poison pill in Alternative 5 is the proposal that every farmer drill and install groundwater monitoring wells. Focusing on existing wells would be much more reasonable. Additionally, use of the California Department of Public Health public drinking water supply database would allow for an analysis of the effectiveness of Alternative 5 as implemented. The database could be queried for pesticide and nitrate concentrations in wells in the Central Valley to determine of concentrations are increasing or decreasing. The database could also be used for analysis to determine the role of the Alternative in contributing to trends (*i.e.* what role the Alternative plays in increases or decreases).

As for the FWQMPs, CSPA does not believe there is any basis for allowing dischargers two-years to prepare and implement FWQMPs. PEIR, p. 3-27. They have been on notice for the last seven years that they need to implement management measures. In many areas, management plans that supposedly will not lead to implementation of BMPs have been in place for some time. CSPA believes that all dischargers should prepare and implement FWQMPs within 6 months.

Alternative 5 does drop the proposal to have the Regional Board coordinate with dischargers regarding their FWQMPs and review and approve each plan as well. CSPA believes this is a reasonable omission. However, the FWQMPs need to be submitted to the Regional Board, ideally as pdfs that could be posted on-line. The proposal to have them on-site and available upon the Regional Board's request would eliminate their utility for staff to rely upon them to make decisions about enforcement priorities, undercuts the public's ability to review FWQMPs, precludes other dischargers from reviewing similar dischargers' plans, and sends a message to dischargers that they need not worry until the Board shows up.

Alternative 5 states that Board staff will "[f]ollow up and coordinate with growers to ensure that FWQMPs and implemented management practices are addressing identified water quality problems." PEIR, p. 3-26. The economic analysis presumes that by merely interacting directly with growers, Board staff will have to provide them technical assistance on their FWQMPs. *See* Technical Memo, p. 2-24 ("Board staff will be required to interact directly with growers and provide technical assistance when requested"). In so presuming, the economic analysis comes up with an estimated staffing level of 356 staff. *Id*. This number completely

exaggerates the level of staff necessary to implement this alternative. Indeed, the industrial and construction storm water program covers more than 7,500 facilities throughout the Central Valley. Currently, the Regional Board assigns fewer than a dozen staff to implement and enforce that entire program, which also includes overseeing the 93 Phase I and II municipal stormwater permits. More staff is clearly necessary to more effectively implement that program. Even with those few staff however, it is clear that almost all of the 7,500 facilities have implemented some level of management measures.

Alternative 5 itself does not suggest that Board staff are obliged to act as dischargers' consultants. That notion, expressed in the economic analysis, is entirely improper. Any follow-up by staff should be pursuant to its oversight and enforcement authority. The Regional Board need not add 356 staff to effectively implement this alternative. As CSPA also proposed for Alternatives 3 and 4, the Board should focus its limited resources by using the monitoring data and FWQMPs to prioritize site inspections and distribute the results – providing examples of good compliance and issuing enforcement orders and penalties where compliance falls short.

6. The PEIR fails to consider the true no project alternative – automatic termination of the waiver and implementation of individual WDRs

The PEIR's formulation of the no project alternative is wrong because the PEIR incorrectly treats the existing general waivers as continuing in perpetuity. PEIR, p. 3-4 ("no project alternative" identified as <u>future</u> renewal of existing program and continued implementation) (emphasis added). The PEIR claims that a future extension or renewal of the existing waiver is of a "ministerial nature." *Id*. Both of these assertions are incorrect as a matter of law. If the Board takes no action, the existing waiver terminates on June 30, 2011. Order No. R5-2006-0053, p. 17; Water Code § 13269(a)(2). Any renewal of the existing waiver is not ministerial but discretionary, requiring the Regional Board to hold a hearing and exercise its discretion to determine whether renewing an existing waiver complies with the Basin plan, is in the public interest and includes adequate monitoring. Water Code §§ 13269(a)(2), (f). Hence, the no project alternative is allowing the existing waiver to automatically terminate on June 30, 2011 and what would reasonably be expected to occur once that happens.

The PEIR cites out-of-context a single sentence from the CEQA Guidelines relating to revising a regulatory plan. The PEIR quotes the following sentence from CEQA Guideline § 15126.6(e)(3)(A) – "When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the 'No Project' Alternative will be the continuation of the existing plan, policy, or operation into the future." PEIR, p. 1-3. The PEIR suggests that guidance allows the Regional Board to make believe that doing nothing somehow magically renews the existing waivers come June 20, 2011. That, of course, is not a "no action" or "no project" alternative. Renewing the waivers would be selecting a discretionary action.

CEQA requires that an EIR consider a no project alternative. CEQA Guidelines § 15126.6(e)(1) ("The specific alternative of "no project" shall also be evaluated along with its impact"). "The purpose of describing and analyzing a no project alternative is to allow decisionmakers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project." *Id*. "The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. CEQA Guidelines § 15126.6(e)(2). "The [no project] description must be straightforward and intelligible, assisting the decision maker and the public in ascertaining the environmental consequences <u>of doing nothing</u>; requiring the reader to painstakingly ferret out the information from the reports is not enough." *Planning & Conservation league v. Dept. of Water Resources* (2000) 83 Cal.App.4th 892, 911 (emphasis added).

The Guidelines note that "[a] discussion of the "no project" alternative will usually proceed along one of two lines . . . CEQA Guidelines § 15126.6(e)(3). The PEIR attempts to rely on the first category, which states in full that:

> When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the "no project" alternative will be the continuation of the existing plan, policy or operation into the future. <u>Typically this is a situation where other projects initiated under the existing plan will continue while the new</u>

> plan is developed. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan.

CEQA Guidelines § 15126.6(e)(3)(A) (emphasis added). However, the existing waiver, unlike a typical land use or general plan (or for example the Regional Board's Basin Plan) that does not expire by a date certain, expires as a matter of law on a date certain, June 30, 2011. The Guidelines make clear that the Regional Board cannot treat one of its alternatives to a proposed project (assuming the PEIR included a proposed project) as a no project alternative:

> After defining the no project alternative . . ., the lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

CEQA Guidelines § 15126.6(e)(3)(C). The current relevant plans germane to the PEIR are the existing waivers. If the Regional Board were to do nothing by June 30, 2011, *i.e.*, a true no project alternative, the waivers will automatically expire. The Board cannot assume it will select one of the project's alternatives and pretend it is not approving the project. This methodology was firmly rejected by the Court in *Planning & Conservation League*:

> A no project description is nonevaluative. It provides the decision makers and the public with specific information about the environment if the project is not approved. It is a factually based forecast of the environmental impacts of preserving the status quo. It thus provides the decision makers with a base line against which they can measure the environmental advantages and disadvantages of the project and alternatives to the project. By contrast, the discussion of alternatives is evaluative.

Planning & Conservation League, 83 Cal.App.4th at 917-918. The PEIR fails to project out an actual no project alternative, incorporating the reality that the existing waivers are temporary with only two months to live.

The PEIR's assertion that the existing waivers can be ministerially extended or renewed is blatantly incorrect. *See* PEIR, p. 3-29 ("If the Central Valley Water Board fails to take the ministerial action to extend or renew the waiver program, regulation of irrigated agriculture would not cease"); *id.*, p. 1-3 ("Given the ministerial nature of the extension or renewal of the

ongoing waiver, which would allow continuation of the existing program, Alternative 1 is best characterized as the "No Project" Alternative"). Pursuant to Water Code § 13269, the Regional Board must apply its discretion to adopt or renew a conditional waiver. Water Code §§ 13269(a)(2), (f). *See* CEQA Guidelines §§ 15002(i)(2) ("[w]hether an agency has discretionary or ministerial controls over a project depends on the authority granted by the law providing the controls over the activity"). The initial decision as to whether to renew a waiver or adopt waste discharge requirements or a prohibition are highly discretionary. Assuming the Regional Board chooses to pursue issuance of a conditional waiver, the Regional Board wields considerable discretion in adopting the necessary conditions of the waiver. The Regional Board must employ its discretion to make the fundamental determinations that the conditional waiver will be consistent with the Basin Plan and in the public interest. Lastly, Section 13269 precludes the Regional Board from renewing any waiver without holding a public hearing where it must review the terms of the waiver.

Porter-Cologne's waiver renewal process cannot be equated even remotely with a ministerial action. "'Ministerial' describes a governmental decision involving little or no personal judgment by the public official as to the wisdom or manner of carrying out the project. The public official merely applies the law to the facts as presented but uses no special discretion or judgment in reaching a decision." CEQA Guidelines, 14 CCR § 15369. "A ministerial decision involves only the use of fixed standards or objective measurements, and the public official cannot use personal, subjective judgment in deciding whether or how the project should be carried out." *Id*. As we are all well aware, having gone through this waiver process several times now, the decisions to be made by the regional Board are loaded with subjective, personal judgment. *See* CEQA Guidelines § 15357 ("'Discretionary project' means a project which requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations"); § 15002(i) ("[a] project subject to . . . judgmental controls is called a 'discretionary project'"). *See also* CEQA Guidelines § 15268(d) ("Where a project

involves an approval that contains elements of both a ministerial action and a discretionary action, the project will be deemed to be discretionary and will be subject to the requirements of CEQA").

The PEIR must be revised and recirculated with a properly defined and evaluated no project alternative.

H. The PEIR Ignored CSPA's and Others Scoping Comments.

As the PEIR recognizes, "[i]n accordance with State CEQA Guidelines Section 15123(b)(2), the areas of controversy known to the lead agency, including issues raised by agencies and the public, shall be identified in the EIR." PEIR, p. 1-8. *See* CEQA Guidelines § 15123 ("(a) An EIR shall contain a brief summary of the proposed actions and its consequences. . . . (b) The summary shall identify: . . . (2) Areas of controversy known to the lead agency including issues raised by agencies and the public. . .).

CSPA and others have participated in the development of the EIR from its inception, submitting detailed scoping comments that fully advised the Regional Board of CSPA's long-standing criticisms of the existing ILRP and the need for FWQMPs, farm-specific monitoring and compliance with antidegradation requirements. *See* CSPA/Baykeeper Scoping Comments (May 30, 2008); CSPA et al. Scoping Comments (March 12, 2003). In those comments, CSPA emphasized the main controversies surrounding the ILRP – embellished further by these PEIR comments – that the ILRP and EIR "must directly address and eliminate . . . violations of water quality standards in light of the fact that, under the present program, the Regional Board cannot know who is actually discharging pollutants, what specific pollutants are being discharged, what are the localized water quality impacts in the vicinity of the discharge, who has or has not implemented best management practices (BMPs) and whether any reductions in pollutant loading or improvements in water quality have occurred." CSPA/Baykeeper Scoping, p. 3 (May 30, 2008). CSPA also reiterated the ongoing controversy "that Reports of Waste Discharge and individual farm-based management plans (similar to pollution prevention plans under the industrial or construction stormwater permits) are fundamentally necessary for any meaningful program addressing discharges from irrigated lands." *Id*., p. 4. The scoping comments also

highlighted the ongoing controversy that the ILRP, to be successful and comply with Resolution No. 68-16, must include farm specific water quality monitoring. *See id*., p. 2 ("[EIR] cannot rely on information collected far downstream to adequately address and mitigate upstream adverse impacts to sensitive biological resources, *i.e.*, it must identify localized impacts in the vicinity of actual discharge locations"). Many of these same issues have been raised by CSPA and others in their comments on the previous waivers as well, debated by the Regional and State Boards, and been the subject of previous litigation. *See, e.g.* CSPA et al. Comments (May 23, 2003); Deltakeeper et al. Comments (November 4, 2005).

Despite these well-known areas of controversy, the PEIR fails to include them in the summary as required by CEQA. This blatant omission underscores the bias built-into the PEIR and ultimately informing staff's separate recommendation in its staff report. Indeed, the few controversies listed in the summary are for the most part restricted to those articulated by the coalitions. PEIR, p. 2-9. The PEIR's summary needs to be rewritten to comply with the CEQA Guidelines.

I. The PEIR Overlooks a Number of Important Significant Impacts.

The PEIR opts not to discuss any impacts on at least three issue categories – recreation, aesthetics, public health and cultural impacts – which common sense would indicate will be adversely affected by the Regional Board's selection of an ILRP that is ineffective and fails to significantly reduce pollution discharges from irrigated lands. PEIR, p. 1-8. Since the EIR fails entirely to analyze the impact of the alternatives on these issues, these impacts are subject to the fair argument, rather than the substantial evidence standard. Fair argument standard applies even to EIRs if the EIR fails entirely to analyze a particular impact. *Bakersfield Citizens For Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1208.

Under the "fair argument" standard, an EIR must analyze an impact if *any* substantial evidence in the record indicates that a project may have an adverse environmental effect – even if contrary evidence exists to support the agency's decision. CEQA Guidelines § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 931; *Stanislaus Audubon v. Stanislaus* (1995) 33 Cal.App.4th 144, 150-151 (1995); *Quail Botanical Gardens Found., Inc. v. City of Encinitas*

(1994) 29 Cal. App. 4th 1597, 1602. The "fair argument" standard creates a "low threshold" favoring environmental review through analysis in an EIR. *Pocket Protectors*, 124 Cal.App.4th at 928.

1. The PEIR fails to address impacts to Recreation and Aesthetics.

In its scoping comments, CSPA pointed out the need to evaluate the ILRP's alternatives on recreational uses in the Central Valley. *See* CSPA et al. Scoping Comments (March 12, 2003) (EIR should analyze impacts on "recreational, tourism and beneficial uses"). There is clearly a "fair argument" that any version of the ILRP may have significant impacts on both recreation and aesthetics in the Central Valley, especially within the Delta. By authorizing irrigated lands discharges without FWQMPs or "edge-of-field" effluent quality monitoring, any new ILRP could further exacerbate pollution discharges from irrigated lands. Discharges of both nutrients and pesticides likely would have adverse affects on recreational and aesthetics by continuing to support the growth of nuisance aquatic species, including for example water hyacinth. The growth of water hyacinth in turn results in further water quality impacts to the Delta, including depressed dissolved oxygen levels, increased herbicide spraying, including toxic surfactants, and other pollution concerns. None of these potential impacts were discussed in the PEIR. *See* PEIR, p. 5-11-2 ("It is not anticipated that the program alternatives would substantially increase or decrease the use of recreational facilities, create the need for such facilities, or result in any other foreseeable significant impact on recreational opportunities in the program area"); p. 5.11-1 (no review of impacts to aesthetics).

Discharges of nutrients from farms contribute to the explosive growth of water hyacinth (*Eichhornia* crassipes) and Brazilian elodea (*Egeria densa*) in the Sacramento-San Joaquin River Delta. Both Brazilian elodea *Egeria densa* and water hyacinth *Eichhornia crassipes* "form dense growths that block waterways and destroy natural habitat by slowing water flow and drastically changing water quality. http://www.dbw. ca.gov/PDF/Egeria/WHSciProbsExcerpts.pdf. As the San Francisco Estuary Institute reports, "[d]ense contiguous mats" of water hyacinth "create navigation and safety concerns in waterways, harbors, and marinas." http://legacy.sfei.org/nis/hyacinth.html. Hyacinths "[i]nterfere[] with irrigation and power

generation by clogging pumps and siphons." *Id*. Hyacinth "[c]an completely exclude native floating and submerged vegetation, shade habitat, change water temperature [and] … deplete dissolved oxygen." *Id*. As Dr. G. Fred Lee has summarized,

> Delta waters experience excessive growths of aquatic plants such as water hyacinth and *Egeria densa*. These water weeds interfere with recreational use of Delta waters for boating, swimming, water skiing, fishing, etc. The water weeds develop on nutrients added to Delta tributaries from urban, agricultural and wetlands sources in the Delta watershed, and from Delta island discharges. The California Department of Boating and Waterways spends several hundred thousand dollars per year to apply chemicals for controlling water weeds. There is concern about the potential toxic and other impacts of these chemicals on non-target organisms, such as fish food organisms, in the water column and sediments.

Lee, G. Fred and Anne Jones Lee, "Overview of Sacramento-San Joaquin River Delta Water Quality Issues," p. v (June 24, 2004). Because of the significant contribution of nutrients from irrigated lands, there is plainly a fair argument that the Regional Board's authorization of irrigated lands discharges may have a significant impact on recreational boaters and persons recreating in the Delta and observing vast areas of water hyacinth.

Because of the navigational, recreational and aesthetic impacts resulting from excessive water hyacinth growth, the State of California expends resources every year spraying herbicides into Delta waterways. *See* Lee, p. 19 ("large amounts of aquatic herbicides are used in the Delta to control excessive growths of water hyacinth this could be an important issue impacting Delta water quality"). *See* Dept. of Fish & Game, "Acute Toxicities of Herbicides Used to Control Water Hyacinth and Brazilian Elodea on Larval Delta Smelt and Sacramento Splittail (June 8, 2004).

In addition to increasing herbicide discharges to the Delta, water hyacinths also provide habitat for other nonnative crabs and parasites, which ultimately may affect endangered salmon in the Central Valley. As one recent study reports,

> [t]he newfound presence of these crustaceans could have significant ramifications apart from just adding their names to the already lengthy list of non-indigenous species in the Delta. Amphipods and isopods are known to be intermediate hosts of a number of parasites, including acanthocephalan parasites of fish (Nagasawa et al. 1983, Yasumoto and Nagasawa 1996). *Asellus*

> *hilgendorfii* has specifically been shown to serve as an intermediate host for numerous species of acanthocephalans that parasitize salmonids and other fish in waters of Japan (Nagasawa and Egusa 1981, Nagasawa et al. 1983, Mayama 1989). Infection occurs when fish prey upon *A. hilgendorfii* that contain acanthocephalan larvae. Adult acanthocephalans parasitize the intestinal tract of the definitive host fish (Nagasawa et al. 1983). Studies have shown that salmonids can have infection levels of 83-100% depending on the season, when *A. hilgendorfii* is only 2.1 % of the total wet weight of food items in the fish diet (Nagasawa et al. 1983). Thus, even though *A. hilgendorfii* occurs in low abundance in the diets of fish in the Sacramento/San Joaquin Delta, it could still potentially infect the entire population of salmonids with acanthocephalan parasites."

Toft, Jason David, "Community Effects of the Non-Indigenous Aquatic Plant Water Hyacinth (*Eichhornia crassipes*) in the Sacramento/San Joaquin Delta, California" (2000). All of these direct and indirect effects must be discussed and analyzed in the PEIR.

In addition, the presence of bacteria in samples collected by the existing ILRP obviates the need to address the affect of PEIR's alternatives and their ability to reduce fecal discharges on recreation, especially swimming, and human health. In CSPA's experience, it is not possible to keep kids from playing in water. As the staff report summarizes:

> The fecal pathogen indicator *E. coli* is the most common parameter with surface water exceedances of water quality objectives in the ILRP; it was detected in 99 percent of all samples. Fecal contamination is a concern because certain pathogenic bacteria found in feces can cause gastrointestinal illness.

Staff Report, p. 33. Indeed, 24 and 55 management plans in the Sacramento River and San Joaquin, respectively, have been triggered because of exceedances of E. coli standards in those rivers. Staff Report, p. 26, Table 3. The PEIR makes a passing reference to the fecal coliform problem, noting that "[t]oxicity, and bacteria are also known water quality problems in the Sacrament River Basin." PEIR, p. 5.9-6. The obvious impacts of fecal coliform discharges on recreational uses like swimming and boating in the Delta and other waters of the Central Valley must be addressed in the PEIR.

Lastly, CSPA is aware of numerous individuals who once recreated in and on the Delta and other Central Valley waters who have stopped or reduced such recreation because of fears of

contaminants and experiencing health effects that were associated with exposure to Central Valley waters. For example, one of CSPA's members, Linda Forbes, reports:

> I was a frequent visitor to the Delta region for five years, enjoying water skiing, camping, boating and swimming. I experienced several strange skin rashes after weekends of recreation at the Delta, with the severity increasing over time. Two summers ago I began to feel more and more uncomfortable about the risks of pursuing my water sports passion there; I have not gone swimming or skiing in Delta waters for over a year.

E-mail from Linda Forbes to Bill Jennings, CSPA (Sept. 23, 2010). Another example is from Barbara Barrigan-Parrilla, a CSPA member and the Director of Restore the Delta. She tells of her daughter's first swim in the Delta as an infant resulting in an emergency room visit and her refusal to swim in the Delta since that day. E-mail from Barbara Barrigan-Parrilla to Bill Jennings, CSPA (Sept. 25, 2010). Kari Burr, a fisheries biologist, also describes the adverse impacts of agricultural discharges on her professional and recreational activities. E-mail from Kari Burr to Bill Jennings, CSPA (Sept. 26, 2010). *See also* E-mail from Frank T. Rauzi to Bill Jennings (Sept. 26, 2010) (Mr. Rauzi, a lifelong resident and fisherman of the Delta, recounts his refusal to eat fish and concerns about swimming in the Delta). Based on conversations between Bill Jennings and other CSPA members over the years, CSPA does not believe Ms. Forbes,' Ms. Barrigan-Parilla's, Ms. Burr's or Mr. Rauzi's experiences are isolated incidents but unfortunately are shared by numerous people who would recreate in waters of the Central Valley but for the incredible levels of toxic and health-threatening pollution that is discharged from irrigated lands.

2. PEIR fails to analyze cultural impacts re: traditional uses of salmon or other fish.

The PEIR opts not to evaluate any cultural impacts of the various ILRP alternatives. PEIR, p. 5.3-9. Contaminants affecting Central Valley salmon and contributing to their decline have adverse impacts on Native American culture and religious practices. It is widely acknowledged by scientists and government agencies that agricultural runoff is one of the factors adversely affecting Chinook salmon. *See* PEIR, p. 5.8-22 ("Other factors affecting the fall-run/late fall–run Chinook salmon include . . . pollution (*e.g.*, municipal discharges and agricultural runoff), ... (Moyle et al. 2008:141–143)"). *Id*. at 5.8-39 ("NMFS (2008)

concluded that EPA registration of chlorpyrifos, diazinon, and malathion would jeopardize the continued existence of, and destroy or adversely modify critical habitat for, the Central Valley spring-run Chinook salmon ESU, the Sacramento River winter-run Chinook salmon ESU, and the California Central Valley steelhead DPS"); National Academy of Sciences, "A Scientific Assessment of Alternatives for Reducing Water Management Effects on Threatened and Endangered Fishes in California's Bay–Delta," p. 42 (2010) ("It has long been recognized that contaminants are present in the delta, have had impacts on the fishes, and may be increasing (Linville et al., 2002; Davis et al., 2003; Edmunds et al., 1999).

Native American traditional uses and religious ceremonies involving salmon continue on the Sacramento River and, to a lesser degree, the San Joaquin River, and their tributaries. As the United States District Court for the Eastern District of California recently ruled, "salmon have sustained the Winnemem Wintu and have formed the foundation of the Tribe's cultural and spiritual ceremonies and beliefs." Order, p. 88. (May 18, 2010). Judge Wanger specifically recognized the "significant cultural and spiritual interests of the Winnemem Wintu" tied to the health of salmon. *Id.*, pp. 88-89. The District Court relied upon the declaration of Gary Hayward Slaughter Mulcahy, the Governmental Liaison and a Tribe member of the Winnemem Wintu Tribe. As Mr. Mulcahy testified to the Court,

> For centuries, the Winnemem Wintu have had a deep cultural and spiritual relationship with the salmon that utilize the Sacramento River and its tributaries. We sing to the salmon and the waters that sustain them. Our history, traditions, ceremonies, and culture are filled with respect, reverence, appreciation, and dependence on the salmon and these waters. Salmon were the staple of the Winnemem Wintu. Salmon are the food necessary to complete and fulfill many of the Winnemen Wintu's very special sacred ceremonies. Salmon are the sustainer of health and life of the Winnemem Wintu. We believe that when the first spirits were choosing what form they would take (i.e., Salmon, Eagle, Bear, Human, etc.), when Human chose to be human, the Grandfather spirit said that these Humans will need lots of help, and each of the other spirits gave something to Humans to help them through life. We believe that Salmon gave us speech and in return we promised to always speak for them. This is remembered and celebrated in ceremonies on the McCloud River, Sacramento River, Squaw Creek and at Mt. Shasta several times a year. We believe that if the salmon go, the Winnemem Wintu will also disappear.

Declaration of Gary Hayward Slaughter Mulcahy, ¶ 3 (March 12, 2010). The Tsi-Akim Maidu Tribe conducts a "calling back the salmon" ceremony on the Yuba River. http://www.callingbackthesalmon.com/ceremony.php. The PEIR must gather in and discuss relevant information regarding Native American cultural and religious uses of salmon that may be affected by the Regional Board's proposal to authorize contaminants affecting salmon in the Central Valley.

3. The PEIR fails to address public health impacts of authorizing continued discharges of pesticides and other pollutants from irrigated lands effluent to groundwater.

As early as March 2003, CSPA and others urged the Regional Board to consider human health impacts of authorizing irrigated land discharges in its EIR. CSPA et al. Scoping Comments (March 12, 2003) (EIR must consider "human health throughout the Central Valley and California in terms of both acute and chronic impacts including, but not limited to: - children, including residents and school children - laborers, including farmworkers, farmers, pesticide appliers, etc. – residents – anglers - pregnant women - newborn infants"). Despite that request, the PEIR has opted to ignore potential human health impacts of the various ILRP alternatives approval of continuing irrigated land discharges.

More than two million Californians have been exposed to harmful levels of nitrates in drinking water over the past 15 years and the population of those exposed keeps growing. The PEIR acknowledges the extent of nitrate contamination and includes, as Figure 5.9-17, a map that shows nitrate contamination to be concentrated in the Central Valley. Incredibly, however, the PEIR makes no attempt to analyze how nitrogen-based fertilizer application in the Central Valley results in the exposure of the public to contaminated groundwater, the health impacts of that exposure, or how implementation of any of the five alternatives would reduce exposure, other than to say, for Alternative 1:

> Nutrient management would improve both surface water quality and groundwater quality by improving the use of chemicals and using improved application techniques, and by limiting the use of nutrients as fertilizer that could potentially seep to groundwater and add nitrate to the groundwater table.

PEIR, p. 5.9-14.

The assertion that ongoing nutrient management efforts would somehow improve water quality is not borne out by recent data. In fact, the status quo, as proposed in Alternative 1, has resulted in an increase, statewide, in the number of wells that exceeded the health limit for nitrates, from nine in 1980 to 648 by 2007. http://articles.sfgate.com/2010-05-17/news/20901575_1_nitrate-contamination-water-supply-water-systems. In Tulare County, more than 40% of private domestic water wells exceed the drinking water standard for nitrate. http://www.swrcb.ca.gov/ gama/docs/ekdahl_gra2009.pdf. On the basis of more than 25 years of data, the number of wells that exceed the drinking water standard for nitrate is growing as a percentage of all nitrate detections. http://www.swrcb.ca.gov/gama/docs/ekdahl_gra2009.pdf Clearly the status quo is not working.

Health effects of exposure to nitrates most notably results in methemoglobinemia or "blue baby syndrome." Toxic effects of methemoglobinemia occur when bacteria in the infant stomach convert nitrate to more toxic nitrite, a process that interferes with the body's ability to carry oxygen to body tissues. Infants with these symptoms need immediate medical care since the condition can lead to coma and eventually death. Pregnant women are susceptible to methemoglobinemia and should be sure that the nitrate concentrations in their drinking water are at safe levels. Additionally, some scientific studies suggest a linkage between high nitrate levels in drinking water with birth defects and certain types of cancer. http://www.swrcb.ca.gov/water_issues/ programs/gama/docs/coc_nitrate.pdf.

The PEIR should be rewritten to include an assessment of the potential for the public to be exposed to nitrates in drinking water from agricultural practices in the Central Valley and measures implemented as a result of the ILRP. This is especially important to the extent the Regional Board anticipates the installation of numerous tailwater recovery systems. *See* Technical Memo, p. A-2. The assessment of each alternative should include an estimate of nitrogen loading to fields; nitrogen fate and transport in soil, surface water, and groundwater; nitrogen monitoring; and a summary nitrogen impacts to water supplies. Linking monitoring to

measurement of each of the alternatives is critical. An annual assessment of the performance of the alternative that is selected should be required and use of the 10,000-well California Department of Public Health database should be required as a tool for evaluation.

Another potential health impact unaddressed by the PEIR is the potential threats from fecal contamination of wells and surface waters. As the Existing Conditions Report tells us:

> The presence of pathogen indicators, such as fecal coliform and *E. coli*, are ubiquitous in water samples collected throughout the Central Valley and are frequently measured at levels higher than the EPA recommended criterion for *E. coli*. Not all strains of *E. coli* are pathogenic, but the presence of *E. coli* or fecal coliform is an indicator of fecal contamination. Several coalitions funded a study to determine the sources of *E. coli* contamination.

Existing Conditions Report, p. 3-11. See also U.S. EPA, "Conceptual Model For Pathogens and Pathogen Indicators in The Central Valley and Sacramento-San Joaquin Delta - Final Report, " p. ES-1 (Aug. 24, 2007) (highest concentrations of E. coli data "were observed for waters affected by urban environments and intensive agriculture in the San Joaquin Valley") (http://www.swrcb.ca.gov/rwqcb5/water_issues/drinking_water_policy/concept_path_indicators/cover_toc_es.pdf). As the California Department of Public Health's health notices explain:

> Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

DPH, Tier 1 Fecal Coliform or E. coli Notice Template (http://www.cdph.ca.gov/certlic/drinkingwater/Documents/Notices/Tier%201%20Fecal%20Coliform%20or%20E%20coli%20Notice.doc). Despite its ubiquitous presence and clear connection to irrigated land discharges, the only mention of pathogens in the PEIR is a passing reference in the Fisheries section. PEIR, p. 5.8-49 ("Pathogens are monitored for potential exceedance of trigger limits in relation to human health. Pathogens of concern to fish may affect fish populations in the program area, but data are insufficient to draw any conclusions about existing effects"). Like nitrates, no effort is made in the PEIR to discuss the obvious human health and recreational impacts that are adversely affected by an ILRP that authorizes coliform discharges from farms.

Lastly, the PEIR fails to consider any human health impacts PEIR associated with discharges of other pollutants, including certain metals, that will be authorized through the ILRP. The Existing Conditions Report acknowledges that irrigated land discharges authorized by the ILRP will mobilize various metals that can pose serious human health risks, including lead and arsenic. Existing Conditions Report, p. 3-55 ("elevated levels of naturally occurring metals that are mobilized and suspended in agricultural return flows are common in these watersheds—such as copper, arsenic, cadmium, boron, nickel, lead, and selenium"). The PEIR also should explore the human health impacts of ILRP-authorized discharges of metals.

J. PEIR's Analysis of Many Key Potential Impacts and the Alternatives' Proposed Mitigations Are Not Supported by Substantial Evidence.

The alternatives, at their core, are projects by which the Regional Board proposes to authorize discharges of polluted effluent from irrigated lands to surface and groundwater throughout the Central Valley. Each alternative includes various program elements which are the mitigations proposed to purportedly reduce the effect of the Regional Board authorizing the discharge of hundreds of millions of gallons of polluted effluent. The PEIR's discussion of impacts boils down to a discussion of the alternatives' proposed mitigation measures. In addition to those proposed mitigations, the actual dischargers would have to implement site-specific mitigation measures, *i.e.* BPTC, in order to address the impacts of discharging to the State's waters.

The PEIR fails to substantiate or properly analyze the alternatives' programmatic-level mitigation measures, including for example the effectiveness of any FWQMPs and reporting requirements, monitoring requirements, and third party actions. Nor does the PEIR adequately discuss the effectiveness in reducing pollution of any of the BMPs that are listed and which might achieve BPTC. The PEIR leaves out any discussion of numerous management measures that likely will be applied on irrigated lands. Lastly, the PEIR fails to analyze cumulative impacts of the alternatives when considered with numerous other projects in the Central Valley relating to water diversions, dam operations, proposed development, pending pesticide

registration proceedings, dredging projects and others that are and will affect water quality, fisheries, and other impacts.

Mitigation measures must be designed to minimize, reduce or avoid an identified environmental impact or to rectify or compensate for that impact. CEQA Guidelines § 15370. Mitigations may be proposed as part of the project but must still be fully discussed and analyzed. "The discussion of mitigation measures shall distinguish between the measures which are proposed by project proponents to be included in the project and other measures proposed by the lead, responsible or trustee agency or other persons which are not included but the lead agency determines could reasonably be expected to reduce adverse impacts if required as conditions of approving the project." CEQA Guidelines § 151126.4(a)(1)(A)

Where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. *Id.*, § 15126.4(a)(1)(B). A lead agency may not make the required CEQA findings unless the administrative record clearly shows that all uncertainties regarding the mitigation of significant environmental impacts have been resolved. A public agency may not rely on mitigation measures of uncertain efficacy or feasibility. *Kings County Farm Bureau*, 221 Cal.App.3d at 727 (finding groundwater purchase agreement inadequate mitigation measure because no record evidence existed that replacement water was available). "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. CEQA Guidelines § 15364.

CEQA requires the lead agency to adopt feasible mitigation measures that will substantially lessen or avoid the Project's potentially significant environmental impacts and describe those mitigation measures in the CEQA document. Pub. Res. Code §§ 21002, 21081(a), 21100(b)(3); CEQA Guidelines § 15126.4. Mitigation measures must be fully enforceable through permit conditions, agreements or other legally binding instruments. *Id.* at § 15126.4(a)(2). If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall

be discussed but in less detail than the significant effects of the project as proposed. CEQA Guidelines § 151126.4(a)(1)(D).

1. The analysis of impacts to water quality is flawed because there is no evidentiary support for the assumption that mitigation measures proposed by each alternative would be equally effective.

The most obvious impact of the Regional Board authorizing discharges of waste from irrigated lands to surface or groundwater is impaired water quality. The PEIR, however, takes an entirely cavalier approach to evaluating this obvious impact. No effort is made in the PEIR to discuss the efficacy and uncertainty of the various monitoring and management plans proposed by each alternative. The PEIR makes no effort to quantify or compare the actual pollution reductions that would be likely to occur under each alternative. Nor does the PEIR discuss whether the monitoring proposed or omitted by each alternative would be effective in informing the Regional Board and public about whether irrigated lands pollution in specific areas is increasing or decreasing. Nor does the PEIR compare how long it would take to figure out pollution trends based on the level of monitoring proposed or omitted in each alternative.

As mentioned above, a fundamental flaw in the PEIR is its failure to estimate the relative effectiveness of the five alternatives. It generally assumes that they will all lead to sufficient pollution reductions. This flaw is magnified in the discussion of impacts to water quality. In addressing water quality impacts, the PEIR assumes that surface water quality improvements under Alternative 1 would be the same as all of the other alternatives, including Alternative 5. As for groundwater, the PEIR makes a similar assumption – that Alternatives 2 through 5 will be equally effective at reducing pollution to groundwater (the PEIR does acknowledge that not addressing groundwater at all would be less effective).

Thus, for Alternative 1, the PEIR states that "[i]t is expected that existing water quality conditions, such as the surface water quality impairments detailed in the environmental setting section above and in the ECR, would improve over time as the program would continue to implement surface water management practices and management plans." PEIR, p. 5.9-14. The same is said for Alternatives 2 and 3, even though the former reduces water quality monitoring

and the latter eliminates water quality monitoring. *Id*, pp. 5.9-16 ("Under Alternative 2, existing water quality impairments are expected to improve over time as third parties develop and implement surface water and groundwater quality management plans"), 5.9-17 ("Alternative 3, existing surface water quality and groundwater quality impairments are expected to improve over time as the FWQMPs are developed and implemented"). The same unexplained expectation is stated for Alternatives 4 and 5, simply incorporating the assertion made for Alternative 2. Id., p. 5.9-18 (Alternative 4) ("Potential impacts to water quality and hydrology under Alternative 4 would be similar to those described for Alternative 2"); p. 5.9-18 ("Potential impacts to water quality and hydrology under Alternative 5 would be similar to those described for Alternative 2").

These expectations are unsupported by any evidence in the record. The Regional Board cannot point to anything in its current record that "clearly shows that all uncertainties" of the mitigations set forth in each alternative will eliminate the well-documented significant environmental impacts of allowing irrigated lands to discharge waste to surface and ground water.

The PEIR's simplistic and conclusory assertions fail to assist the Regional Board or the public in discerning the real life differences in pollution discharge rates that the different mitigations incorporated into each of the proposed alternatives will have. For example, in regard to FWQMPs, it is simply not realistic to assume that the two alternatives that do not require FWQMPs – Alternatives 1 and 2 – will be as effective at identifying and implementing measures as the alternatives that do require dischargers to prepare FWQMPs and, at least for two of them, require them to be submitted to the Regional Board. Likewise, for the alternatives that require FWQMPs, there would have to be some difference in effectiveness and pollution reductions between the two alternatives (3 and 4) that would have the Regional Board review and approve FWQMPs and Alternative 5's provision that FWQMPs not be reviewed or approved. Conversely, if the proposal to have the Regional Board approve every FWQMP before they go into effect slows down their implementation, then there would undoubtedly be an impact during the term the Board did not act on any FWQMPs. Until the PEIR can remove the uncertainty of

how the Regional Board can assure BPTC is implemented without requiring FWQMPs, the Regional Board may not rely on alternatives that do not propose FWQMPs.

In terms of monitoring, no evidence could support the PEIR's assumption that Alternative 3's omission of any water quality monitoring for surface or groundwater discharges could somehow be as effective as any of the alternatives that do provide some water quality monitoring. And as between Alternative 5's farm-specific monitoring requirement and Alternatives 1, 2 and in effect 4's proposal to rely on regional monitoring, no evidence could support the PEIR's assertion that the regional monitoring measures will tell the Board or anyone whether a particular dischargers' management measures in fact reduce any pollution discharges and would address specific dischargers' pollution problems as promptly as a measure that required them to monitor their discharges. Until the PEIR sufficiently discusses and eliminates the obvious uncertainty of a regional monitoring mitigation measure to evaluate the effectiveness of an on-site management measure miles upstream, the Regional Board cannot rely on alternatives relying on such regional monitoring.

As noted above, the PEIR's assumption that the monitoring required by each of the proposed alternatives is equally effective, is inconsistent with the PEIR's acknowledgment in its discussion of fisheries that more farm-specific monitoring results in more pollution reductions and fewer impacts. PEIR, p. 5.8-52 ("given the probability of increased monitoring of individual farms, and especially those at higher risk of generating significant impacts—in addition to wellhead protection, nutrient management plans, tracking of nutrient and pesticide application, and monitoring of individual wells—the positive benefit of Impact FISH1 (improved water quality) would probably be greater under Alternative 4 than under Alternative 2 or Alternative 3"); *Id.*, p. 5.8-53 (Alternative 5) ("Given the emphasis on monitoring of individual farms, wellhead protection, nutrient management plans, tracking of nutrient and pesticide application, monitoring of individual wells, and potential installation of monitoring wells, the positive benefit of Impact FISH1 (improved water quality) probably would be greater under Alternative 5 than under any other alternative"). Although as discussed below, these analyses also must be better

analyzed, the general observation is obvious and the PEIR's failure to discuss these differences in the water quality section renders it inadequate.

Nor is there any attempt in the water quality discussion to quantify the effectiveness of management measures that will likely be employed by individual farms. The PEIR lists a handful of likely measures. This list is incomplete, omitting numerous measures that one can find by reviewing some of the management plans that have been developed. Of particular note is the complete omission in the PEIR of any discussion of integrated pest management options to reduce the use or rate of pesticide applications. Until the Regional Board can sufficiently discuss the available management measures and whether any of them, alone or in combination will effectively eliminate the significant impacts of the Board authorizing waste discharges from irrigated lands, then the Board cannot rely on them.

2. The analysis of impacts to fisheries is flawed because there is no evidentiary support for the assumption that all alternatives would be equally effective at protecting fisheries

The PEIR's handling of impacts to fisheries suffers from flaws similar to those described in the discussion of water quality above. The PEIR's discussion of fisheries impacts, again without any evidence or common sense, simply assumes that the same level of management measures and surface water pollution control effectiveness will result with implementation of any of the alternatives, with or without FWQMPs and without regard to how far away some water quality monitoring may (or may not) be occurring. PEIR, p. 5.8-50 ("Under this alternative, management practices would be implemented to reduce the levels of identified constituents of concern below the baseline conditions. Monitoring and management plan requirements of Alternative 1 are expected to result in further implementation of management practices by growers") As for groundwater, the same is true with the exception of Alternative 1.

The PEIR's assertion that Alternative 1 will improve surface water quality is entirely unsupported by any evidence. Alternative 1, now in its seventh year of implementation, has failed to result in the Regional Board documenting the installation of a single management measure anywhere in the Central Valley. Nor is there any evidence of a trend that the rampant

violations of water quality standards throughout the Central Valley resulting from irrigated lands discharges are on the mend. Nevertheless, the PEIR asserts that "[i]mprovements to surface water quality from implementation of management practices [under Alternatives 1] in impaired water bodies receiving inputs from lands in the program area are likely to benefit fish (e.g., by reducing contaminant loads and decreasing sedimentation and total suspended solids)." PEIR, p. 5.8-50. The PEIR makes the same assertion for Alternative 2. *Id*., p. 5.8-52. As discussed above, the coalitions' current plans are to have informal meetings with some farms to discuss BMPs. *See supra*, Section F.1. The coalitions have no legal authority to require implementation of any BMPs by any of their members. What, if any, BMPs may result from the proposed meetings is anybody's guess. And, without FWQMPs, whether or not the Regional Board would even be aware of a specific farmer's installation of measures is not clear. The PEIR's cavalier assertion that Alternatives 1 and 2, despite omitting any FWQMPs or farm-specific monitoring could somehow lead to the certain implementation of pollution reduction measures, does not resolve the uncertainties that coalitions and regional monitoring will resolve irrigated land's water pollution impacts.

Although the PEIR does acknowledge some relevant benefit from the mitigations included in Alternatives 4 and 5 farm-specific monitoring proposals, coupled with the farm-specific plan requirements, the discussion is still insufficient to remove uncertainties about the efficacy of Alternative 4's proposal. *See* PEIR, pp. 5.8-52; 5.8-53. Specifically, because a discharger may opt out of farm-specific monitoring in exchange for participation in regional monitoring, it is uncertain whether any discharger will conduct farm-specific water quality monitoring. As a result, and as discussed above, there is no certainty that the Regional Board will be able to determine that any measures installed on that farm will amount to BPTC or assure compliance with water quality standards. In addition, the PEIR's discussion of the relative benefit to water and additional pollution reductions one should expect from requiring FWQMPs coupled with farm-specific monitoring is not specific enough for the Regional Board to compare those benefits to the other alternatives.

Even assuming all of the alternatives may have some benefit on water quality, the PEIR also makes no effort to determine the time frames within which any such improvements would be realized under the various alternatives. Given the frames of reference in each alternative, it appears clear that some, for example, Alternative 5, would result in measures being installed faster and hence pollution reductions being achieved more quickly, as compared to any other alternative.

The PEIR cannot succeed in achieving the goals of CEQA if it shies away from frankly addressing the mitigations proposed in each alternative and comparing their ability or inability to reduce pollution that will be discharged to surface and groundwater from irrigated lands.

3. The PEIR fails to discuss numerous cumulative impacts to water quality and fisheries habitat currently plaguing the Delta and other areas of the Central Valley.

The PEIR attempts to pass on evaluating the cumulative impacts of the ILRP. PEIR, p. 6-1 ("Because of the unidentified location of potential impacts, the Lead Agency has not identified any projects or programs adequately similar in nature, location, and type to result in a meaningful comparative analysis"). The notion that either the geographic area or obvious water quality and fisheries impacts of allowing discharges of irrigated lands waste is unknown is patently incorrect, as the preceding sections of the PEIR make clear despite their obvious flaws. The PEIR recognizes a number of specific categories of actions in the Central Valley that are contributing to impacts to fisheries and water quality, in addition to discharges from agricultural lands. Of particular note is the operation of the massive state and federal water projects, which are having obvious cumulative impacts to fish in the Central Valley by killing massive numbers of fish at their respective pumping facilities. *See* http://www.swr.noaa.gov/ ocap/Executive_summary_to_NMFS'_CVP-SWP_operations_BO_RPA.pdf; 5.8-17 ("water projects have adversely modified [longfin smelt's] habitat, distribution, food supply, and probably abundance"); *See* NMFS Biological Opinion Regarding Proposed Long-Term Operations of the Central Valley Project And State Water Project (June 4, 2009) (http://www.swr.noaa.gov/ocap/NMFS_Biological_and_Conference_Opinion _on_the_Long-

Term_Operations_of_the_CVP_and_SWP.pdf). Both EPA's registration of various pesticides that the National Marine Fisheries Service has determined will jeopardize the continued existence of listed salmon must be considered, especially considering NMFS's proposed mitigation requirements prohibiting pesticide application on irrigated lands within 1000 feet of water. PEIR, p. 5.8-39 ("NMFS (2008) concluded that EPA registration of chlorpyrifos, diazinon, and malathion would jeopardize the continued existence of, and destroy or adversely modify critical habitat for, the Central Valley spring-run Chinook salmon ESU, the Sacramento River winter-run Chinook salmon ESU, and the California Central Valley steelhead DPS"); NMFS Biological Opinion on the Effects of the U.S. Environmental Protection Agency's Proposed Registration of Pesticide Products (Nov. 18, 2008) (http://www.nmfs.noaa.gov/pr/pdfs/pesticide_biop.pdf).

The proposed Peripheral Canal being pursued by various agencies also is a reasonably foreseeable project that will enormously exacerbate water quality and fisheries impacts within the Delta. *See* Bay Delta Conservation Plan, Status Update 3 (June 2010). Likewise, the Regional Board is in the best position to evaluate the cumulative impacts of the hundreds of discharge permits it has issued to dischargers throughout the Central Valley. *See* Central Valley Regional Board Web Site, Adopted Orders (http://www.swrcb.ca.gov/centralvalley/board_decisions/adopted_orders/index. shtml). The PEIR also should evaluate, for example, cumulative bacterial issues resulting from rampant sewage overflows from municipalities throughout the Valley in combination with the bacteria coming from farms. http://www.waterboards.ca.gov/water_issues/programs/sso/sso_map/sso_pub.shtml (accessed September 27, 2010).

These and other cumulative impacts must be addressed in the PEIR. Recognizing that several projects may together have a considerable impact, CEQA requires an agency to consider the "cumulative impacts" of a project along with other projects in the area. Pub. Resources Code §21083(b); CEQA Guidelines §15355(b). It is vital that an agency assess "'the environmental damage [that] often occurs incrementally from a variety of small sources . . .'" *Bakersfield Citizens*, 124 Cal.App.4th at 1214. This requirement flows from CEQA section 21083, which

requires a finding that a project may have a significant effect on the environment if "the possible effects of a project are individually limited but cumulatively considerable. . . . 'Cumulatively considerable' means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." CEQA Guidelines §15355(a). "[I]ndividual effects may be changes resulting from a single project or a number of separate projects." CEQA Guidelines § 15355(a).

"The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." *Communities for a Better Environment v. Cal. Resources Agency ("CBE v. CRA")* (2002) 103 Cal.App.4th 98, 117. A legally adequate cumulative impacts analysis views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the project at hand.

As the court recently stated in *CBE v. CRA*, 103 Cal. App. 4th at 114:

> Cumulative impact analysis is necessary because the full environmental impact of a proposed project cannot be gauged in a vacuum. One of the most important environmental lessons that has been learned is that environmental damage often occurs incrementally from a variety of small sources. These sources appear insignificant when considered individually, but assume threatening dimensions when considered collectively with other sources with which they interact.

In *Kings County Farm Bureau v. City of Hanford*, 221 Cal.App.3d at 718, the court concluded that an EIR inadequately considered an air pollution (ozone) cumulative impact. The court said: "The [ ] EIR concludes the project's contributions to ozone levels in the area would be immeasurable and, therefore, insignificant because the [cogeneration] plant would emit

relatively minor amounts of [ozone] precursors compared to the total volume of [ozone] precursors emitted in Kings County. The EIR's analysis uses the magnitude of the current ozone problem in the air basin in order to trivialize the project's impact." The court concluded: "The relevant question to be addressed in the EIR is not the relative amount of precursors emitted by the project when compared with preexisting emissions, but whether any additional amount of precursor emissions should be considered significant in light of the serious nature of the ozone problems in this air basin."[3] The *Kings County* case was recently reaffirmed in *CBE v. CRA*, 103 Cal.App.4th at 116, where the court rejected cases with a narrower construction of "cumulative impacts."

Similarly, in *Friends of Eel River v. Sonoma County Water Agency*, (2003) 108 Cal. App. 4th 859, the court held that the EIR for a project that would divert water from the Eel River had to consider the cumulative impacts of the project together with other past, present and reasonably foreseeable future projects that also divert water from the same river system. The court held that the EIR even had to disclose and analyze projects that were merely proposed, but not yet approved. The court stated, CEQA requires "the Agency to consider 'past, present, and probable future projects producing related or cumulative impacts . . . .' (Guidelines, § 15130, subd. (b)(1)(A).) The Agency must interpret this requirement in such a way as to 'afford the fullest possible protection of the environment.'" *Id.*, at 867, 869. The court held that the failure of the EIR to analyze the impacts of the project together with other proposed projects rendered the document invalid. "The absence of this analysis makes the EIR an inadequate informational document." *Id.*, at 872.

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[3] *Los Angeles Unified v. City of Los Angeles*, 58 Cal.App.4th at 1024-1026 found an EIR inadequate for concluding that a project's additional increase in noise level of another 2.8 to 3.3 dBA was insignificant given that the existing noise level of 72 dBA already exceeded the regulatory recommended maximum of 70 dBA. The court concluded that this "ratio theory" trivialized the project's noise impact by focusing on individual inputs rather than their collective significance. The relevant issue was not the relative amount of traffic noise resulting from the project when compared to existing traffic noise, but whether any additional amount of traffic noise should be considered significant given the nature of the existing traffic noise problem.

The court in *Citizens to Preserve the Ojai v. Bd. of Supervisors* (1985) 176 Cal.App.3d 421, held that an EIR prepared to consider the expansion and modification of an oil refinery was inadequate because it failed to consider the cumulative air quality impacts of other oil refining and extraction activities combined with the project. The court held that the EIR's use of an Air District Air Emissions Inventory did not constitute an adequate cumulative impacts analysis. The court ordered the agency to prepare a new EIR analyzing the combined impacts of the proposed refinery expansion together with the other oil extraction projects.

As the PEIR notes, water quality standards already are not being met in locations throughout the Delta. As the National Academy of Sciences report and a plethora of other reports and agency decisions make clear, fisheries and water quality already are adversely affected by the massive water diversions of the State and Federal water projects and flow reductions caused by dams throughout the Valley. As NMFS makes clear, pesticide use currently approved by EPA registrations throughout the Valley is threatening salmon with extinction throughout the Central Valley. In short, the need for a cumulative impact analysis of water quality, fisheries, and other related impacts like human health, cultural, recreational, air quality, and aesthetic cannot be seriously questioned. It is plain that massive cumulative impacts from water diversions, pesticide use approvals and, with the ILRP, massive pollution from irrigated lands are occurring throughout the Central Valley and particularly in the Delta.

4. The PEIR's discussion of possible agricultural impacts is inadequate because it relies on a flawed economic analysis.

CSPA retained the economic consulting firm ECONorthwest to evaluate and comment on the economic analysis accompanying the PEIR. The PEIR's consideration of agricultural impacts relies almost exclusively on the economic analysis. PEIR, p. 5.10-1 ("The catalyst for these impacts is the cost of achieving and maintaining compliance with the alternatives as discussed in *Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program* (ICF International 2010) (Draft ILRP Economics Report), incorporated herein by reference"). Because the economic analysis is not reliable, as is discussed in detail

below, the PEIR's discussion of asserted impacts to agricultural production is unsupported by substantial evidence.

B. THE ECONOMIC ANALYSIS RELIED UPON BY THE PEIR AND STAFF REPORT IS SUBSTANTIALLY DEFICIENT AND BIASED TOWARD THE LEAST EFFECTIVE AND COALITION-PREFERRED ALTERNATIVES.

Both the PEIR, especially in its discussion of potential agricultural impacts, and the Staff Report rely extensively on ICF International's Technical Memo. A review of that analysis by ECONorthwest, a firm exclusively dedicated to expert economic consulting, reveals fundamental errors and biases. Because of the following errors, any reliance on the Technical Memo by the Regional Board and its staff would be an abuse of discretion. The Regional Board cannot substantiate a finding under Resolution No. 68-16 or the federal antidegradation policy that under a newly adopted ILRP, "the highest water quality consistent with maximum benefit to the people of the State will be maintained." Resolution No. 68-16 (emphasis added). Similarly, to the extent the Board intends to rely on any conditional waivers to implement the next version of the ILRP, a finding by the Regional Board pursuant to Water Code § 13269 that such waiver is in the public interest also would not be supported by substantial evidence.

The ECONorthwest Review discloses the following fundamental errors in the preparation of the Technical Memo.

1. **The Analytical Objectives and Approach**: ECONorthwest demonstrates that the Technical Memo ignores generally accepted guidelines for this type of analysis, including for example guidelines prepared by the California Department of Water Resources, an agency with, of course, considerable experience interfacing with California's agricultural community. Because of this failure, ECONorthwest concludes that the Technical Memo "provides decision-makers and stakeholders with biased and unreliable descriptions of the economic outcomes likely to materialize if the Board were to implement any of the alternatives in the EIR." ECONorthwest Review, pp. 1, 2-5.

2. **Baseline**: ECONorthwest's review establishes that ICF International's analysis "does not compare the alternatives against an appropriate baseline that describes potential future conditions absent implementation of each alternative" further biasing its conclusions. Hence, it provides an incomplete, biased representation of the alternatives' economic consequences. ECONorthwest Review, pp. 1, 5-7.

3. **Management Practices**: ECONorthwest's review discloses that ICF International only considered a truncated range of the more expensive management practices in determining projected costs of the various alternatives and excluding the less expensive and more efficient practices. ECONorthwest Review, pp. 1, 7-9. As a result, "the EIR and *Technical Memo* provide an incomplete and biased representation of the choices that realistically are available to the [Regional] Board." *Id*., p. 1.

4. **Costs and Benefits**: ECONorthwest's review shows that the Technical Memo incorrectly calculates the costs of adopting practices that improve water quality and completely overlooks major categories of economic costs and benefits, once again skewing its conclusions to support the less rigorous and coalition-preferred alternatives. *See* ECONorthwest Review, pp. 1, 9-11.

5. **Risk and Uncertainty**: ECONorthwest also criticizes the Technical Memo for failing to provide information and analysis of the risks and uncertainty facing irrigators and others from each proposed alternative. The omission of this standard component of any complete economic analysis of a program such as the IRLP is a fatal flaw in the Technical Memo. *See* ECONorthwest Review, pp. 1, 11.

6. **Regional Impacts**: Lastly, ECONorthwest's review demonstrates that the Technical Memo's discussion of regional impacts "emphasize[s] negative outcomes and ignore[s] the analytical assumptions that overstate costs and the resulting negative outcomes." ECONorthwest Review, p. 1. Even with this built-in bias, the Technical Memo still must acknowledge the improvement to the Central Valley's economy by implementation of Alternatives 3 through 5. An accurate economic analysis likely would further support the economic benefit of the alternatives that incorporate farm specific measures.

Because of these fundamental flaws, the Technical Memo, as well as the portions of the PEIR and Staff Report that rely upon it, must be redone and recirculated in order to provide the Regional Board with substantial evidence upon which it may rely.

V. STATEMENT OF POINTS AND AUTHORITIES.

CSPA's arguments and points of authority are adequately detailed in the above comments and CSPA's attached September 27, 2010 comment letter. Should the State Board have additional questions regarding the issues raised in this petition, CSPA will provide additional briefing on any such questions. The petitioners believe that an evidentiary hearing before the State Board will not be necessary to resolve the issues raised in this petition. However, CSPA welcomes the opportunity to present oral argument and respond to any questions the State Board may have regarding this petition.

VI. PETITIONERS ARE AGGRIEVED.

Petitioners CSPA and C-WIN are non-profit, environmental organizations that have a direct interest in reducing pollution to the waters of the Central Valley. CSPA's and C-WIN's members benefit directly from the waters in the form of recreational hiking, photography, fishing, swimming, hunting, bird watching, boating, consumption of drinking water and scientific investigation. Additionally, these waters are an important resource for recreational and commercial fisheries. Central Valley waterways also provide significant wildlife values important to the mission and purpose of the Petitioners. This wildlife value includes critical nesting and feeding grounds for resident water birds, essential habitat for endangered species and other plants and animals, nursery areas for fish and shellfish and their aquatic food organisms, and numerous city and county parks and open space areas. CSPA's and C-WIN's members reside in communities whose economic prosperity depends, in part, upon the quality of water. CSPA and C-WIN have actively promoted the protection of fisheries and water quality throughout California before state and federal agencies, the State Legislature and Congress and regularly participates in administrative and judicial proceedings on behalf of its members to protect, enhance, and restore declining aquatic resources. CSPA and C-WIN member's health, interests and pocketbooks are directly harmed by the failure of the Regional Board to develop an effective and legally defensible program addressing discharges of gross amounts of pollution from the Central Valley's irrigated lands to waters of the state and nation.

VII. REQUESTED STATE BOARD ACTION.

Petitioners request the State Board to issue an order 1) immediately ordering the Regional Board to refrain from issuing a Notice of Determination pursuant to CEQA, Public Resources Code § 21108(a); 2) mandating that the Regional Board vacate Resolution No. R5-2011-0017; 3) ordering the Regional Board to issue by not later than 6 months from the date of this petition, or as soon thereafter as the State Board may find appropriate, a new environmental impact report curing each of the above flaws in the existing EIR.

VIII. STATEMENT OF COPIES SENT TO THE REGIONAL BOARD AND DISCHARGERS.

Copies of this petition and the accompanying attachments are being sent to the Regional Board at the following e-mail address. Although they are not dischargers, copies of the petition and attachments also are being sent via e-mail to representatives of each of the coalition groups currently operating under the Central Valley's existing irrigated lands waiver, as set forth in Exhibit 3 attached hereto. Petitioners are unaware of the existence of any list of the current contacts and e-mail addresses of actual dischargers under the existing waivers.

Pamela Creedon, Executive Officer
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Rancho Cordova, CA 95670
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IX. ISSUES RAISED BEFORE REGIONAL BOARD.

CSPA presented the issues addressed in this petition to the Regional Board in its September 27, 2010 comment letter as well as orally to the Board at the Regional Board hearing held on April 7, 2011.

Dated: May 6, 2011

Respectfully submitted,

Michael R. Lozeau
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EXHIBIT 1

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September 27, 2010

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Re: California Sportfishing Protection Alliance Comments on Draft Irrigated Lands Regulatory Program - Program Environmental Impact Report

Dear Ms. Smith, Ms. Creedon and Mr. Laputz,

On behalf of the California Sportfishing Protection Alliance and California Water Impact Network (collectively "CSPA"), thank you for this opportunity to provide comments on the "Draft Program Environmental Impact Report for the Long-term Irrigated Lands Regulatory Program ("ILRP") within the Central Valley Region" (July 28, 2010) ("PEIR") and the accompanying "Irrigated Lands Regulatory Program Long-Term Program Development Staff Report (July 2010) ("Staff Report") and the "Draft Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program" (July 2010) ("Technical Memo") prepared by ICF International. On 26 May, 2006, CSPA previously submitted comments on the Draft Central Valley Existing Conditions Report released in February 2006 and finalized in December 2008 and on 30 May, 2008 CSPA submitted scoping comments on the Long-term Irrigated Lands Regulatory Program and Associated Programmatic Environmental Impact Report, which are hereby incorporated by reference.

We have prepared these comments with the assistance of EcoNorthwest, SWAPE (Soil/Water/Air Protection Enterprise) and Steven Bond & Associates, Inc. ECONorthwest has reviewed and prepared a critique of the Technical Memo prepared

by ICF International. *See* ECONorthwest, "An Economic Review of the Draft Irrigated Lands Regulatory Program Environmental Impact Report" ("ECONorthwest Review") (Sept. 27, 2010). SWAPE and Steven Bond & Associates have reviewed and prepared comments regarding the proposed monitoring and management practice implementation. Their comments are attached hereto as Exhibits A through C and are incorporated herein in their entirety. The experts' comments require separate responses in the Final EIR.

I. INTRODUCTION.

As the Staff Report acknowledges, "a regulatory program that is lax or allows too much time for compliance can lead to an exacerbation of water quality problems and prolonged impacts on beneficial uses." Staff Report, p. 2. This is in fact the result of the first seven years of the current ILRP. Impacts have been prolonged while staff spends all of its time wrangling with informal coalitions over which the Regional Board has no enforcement authority and which have cornered a vast majority of the fees thus far provided for the ILRP from the regulated dischargers. No improving trend in water quality impacts has been reported. Instead, for seven years, the coalitions have managed to steer the program to focus exclusively regional monitoring while avoiding farm-specific monitoring or information collection. The regional monitoring has further documented the extensive pollution already apparent in November 2000 when CSPA first petitioned the Regional Board to terminate the obsolete and water quality-damaging agricultural waiver from 1982.

Since the inception of the ILRP in 2003, staff and the Regional Board have been reticent in mandating that best practicable controls and technology ("BPTC") be installed and implemented by individual farms, reported to the Board and monitored for their effectiveness. Since 2003, CSPA and numerous experts have stated the obvious – any program that refuses to require dischargers to implement BPTC and confirm its effectiveness is bound to fail or at least delay for a very long time compliance with the Central Valley's water quality standards and antidegradation requirement.

CSPA has now stood by for seven years and observed each of its concerns coming true. After seven years, the Regional Board does not have any idea whether any farms have implemented any specific management measures. Assuming some measures are in place, the Board does not know whether they are working to reduce pollution, comply with applicable water quality standards or qualify as BPTC. And the current program's exclusive reliance on regional monitoring will never inform the Regional Board about the presence or effectiveness of management measures miles upstream.

The various coalitions have produced watershed management plans but, invariably, each of those plans fizzles in its follow-up to enforce implementation of management measures by specific farms. The plans indicate the coalitions will coordinate various meetings with a subset of farms and perhaps do some follow-up visits on site. However, because the coalitions exist in some extra-legal realm, none of their members need to do anything they say. The Board may or may not know about

which farms failed to implement any effective management measures. And it is virtually certain that the Regional Board, having based its entire program on coalitions, would not likely eliminate a coalition for an entire section of the Central Valley.

According to staff, after seven years, the Board is preparing to proceed with a single enforcement action including proposed civil penalties for one recalcitrant discharger. It is CSPA's understanding that enforcement action apparently is based on a tip from a water district and the violations could not have been discovered by the Regional Board based on the information required under the existing coalition-based program.

Now, staff is proposing to build on this record of lack of progress by proposing more of the same. It is clear from the PEIR, the bias evident in the accompanying economic analysis and staff's interpretations of the objectives identified by the coalition-dominated stakeholder group to promote the status quo, that staff is not focused on a program that achieves water quality objectives and protects beneficial uses consistent with the Regional Board's primary mission. Instead, staff is focused on proposing a program that is acceptable to the irrigated lands dischargers. The current program and staff's proposal unfortunately give real meaning to the phrase, "letting the fox guard the hen house." If the Regional Board chooses an ILRP alternative that does not have all individual farms reporting to the Regional Board on their specific management measures, *i.e.*, a farm water quality management plan ("FWQMP"), the Regional Board will not know in a timely manner or perhaps at all what any specific farm is planning on implementing. If the ILRP does not require individual farms to report on what measures they in fact implemented or installed, then the Regional Board will not know in a timely manner or perhaps at all what BMPs have been implemented throughout the Central Valley. And if the Regional Board does not require dischargers to gather water quality data that evaluates the performance of installed management measures, the Regional Board will never know what if any pollution reductions have resulted and whether the measures achieve the BPTC standard.

CSPA's frustration is exacerbated by staff's decision to circulate an environmental impact report that snubs its nose at CEQA's requirements and fails to provide the Regional Board the basic comparative tool to assist it in devising an ILRP that will work to protect water quality while balancing – not pandering – to the possible costs that the agricultural dischargers may have to bear for their pollution. CSPA, however, is not interested in simply critiquing every step that staff takes. CSPA, with the help of its consultants and almost a decade of constructive engagement on the irrigated lands pollution problem, has prepared its own alternative that balances the needs for firm regulatory action while allowing prioritization based on already measured regional pollution problems and basic monitoring needs to balance and alleviate some of the potential costs. We appreciate the Board's and staff's consideration of the following comments and proposals.

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II. CSPA'S PROPOSED (EFFECTIVE, PROTECTIVE AND LEGALLY ADEQUATE) IRRIGATED LANDS REGULATORY PROGRAM.

As is described below in CSPA's comments on the PEIR, the PEIR's proposed alternatives do not evaluate or provide the Regional Board a reasonable range of alternatives to the current ILRP. The following alternative should be included in the PEIR's evaluation. This alternative could be appropriately labeled "Direct Oversight and Prioritized Farm Monitoring," and on the spectrum of alternatives presented in the PEIR falls somewhere between Alternatives 3 and 4 and Alternative 5, depending on the specific component that is being addressed.

1. Individual Growers Covered Not Third Parties: Individual growers would apply for coverage. No third-party applications would be authorized. CSPA generally agrees with the application information outlined in the PEIR. *See* PEIR, p. 3-15.

2. Farm Water Quality Management Plans (FWQMPs): Under this alternative, growers would be required to develop and implement individual FWQMPs in order to minimize discharge of waste to groundwater and surface water from irrigated agricultural lands. FWQMPs for surface water should be completed within 6 months of issuance of the WDR/conditional waiver and submitted to the Board. The groundwater component could be phased to be completed not later than one year from the WDR/conditional waiver issuance date. The contents of the FWQMPs would be consistent with the contents described in the PEIR. PEIR, p. 3-15. Even though each farm would have its own plan, neighboring farms could still agree on joint practices that address multiple farms. As described in PEIR, "[m]anagement practices could be instituted on an individual basis or could be installed to serve a group of growers discharging to a single location." PEIR, p. 3-16. As the State Board's Policy For Implementation And Enforcement of The Nonpoint Source Pollution Control Program (May 20, 2004) ("NPS Policy") states, "[a] first step in the education process offered by these programs often consists of discharger assessment of their lands or operations to determine NPS problems, followed by development of a plan to correct those problems." NPS Policy, p. 11 (emphasis added). The Board already has ignored this first step for the last 7 years. In regard to agriculture, the NPS Policy effectively requires a FWQMP: "MPs must be tailored to a specific site and circumstances, and justification for the use of a particular category or type of MP must show that the MP has been successfully used in comparable circumstances. If an MP has not previously been used, documentation to substantiate its efficacy must be provided by the discharger." NPS Policy, p. 12 (emphasis added).

3. Tiered Approach: This alternative would regulate the discharge of waste to surface water and groundwater using a tiered approach. Fields would be placed in one of three tiers based on their threat to water quality. The tiers represent fields with minimal (Tier 1), low (Tier 2), and high (Tier 3) potential threat to water quality, along the lines proposed in the PEIR for Alternative 4. PEIR, pp. 3-17 – 3-18. The tiers would be used to adjust the monitoring requirements, assist the dischargers in determining the level of management measures necessary to meet BPTC, and assist the Regional Board in prioritizing enforcement inspections.

4. Non-Water Quality Monitoring: As proposed in the PEIR's Alternative 4, all growers would conduct nutrient tracking, pesticide tracking and implemented tracking of management practices. Again, this information is necessary for a discharger or the Regional Board to evaluate the rationale of a discharger's FWQMP. As the NPS Policy emphasizes, "[i]t is important to recognize that development of a plan is only the first step in developing an implementation program that addresses a discharger's NPS pollution discharges. Implementation of the plan, including any necessary iterative steps to adjust and improve the plan and/or implementation must follow the planning stage." NPS Policy, p. 11.

5. Surface Effluent Quality Monitoring: Within areas where Coalitions are currently required to prepare and implement a management plan, all Tier 2 and 3 farms within that management area that are discharging any pollutant which triggered the management plan, must prepare and implement a discharge monitoring plan for the pollutants governed by the management plan as well as basic parameters that serve as indicators of pollution discharges. The basic parameters would include, for example, flow, toxicity, total nitrogen, nitrate-nitrite, total ammonia, total phosphorous, soluble ortho-phosphate, temperature, turbidity, pH, electrical conductivity, coliform if livestock is present and any applied pesticides and metals. If no toxicity is identified in the initial year, toxicity testing could be dropped for several years. The monitoring plan would include monitoring of effluent discharges at a point downgradient of implementation of BMPs. Where possible, monitoring of influent to any BMP also must be included. CSPA agrees with the proposed number of samples per season outlined in the PEIR. PEIR, p. 3-24. However, like Tier 3, sampling by Tier 2 growers should be every year. Only by direct monitoring of site-specific BMPs can the Regional Board comply with the NPS Policy, where it states that "if the program relies upon dischargers' use of MPs, there should be a strong correlation between the specific MPs implemented and the relevant water quality requirements." NPS Policy, p. 11. Likewise, effluent data of BMP effectiveness within areas known already to be degraded is necessary to implement the state

antidegradation requirement, Resolution No. 68-16, in particular its BPTC requirement as well as its nondegradation provision.

6. Groundwater Monitoring: Growers who qualify as Tier 2 or Tier 3 for groundwater pollution should be required to conduct individual monitoring annually as described for the Tier 3 groundwater growers in the PEIR. PEIR, p. 3-25. All farms should do one season of sampling any existing wells on their property to determine their tier level. All farms also should be required to evaluate any existing public water supply data regarding the presence of pesticides or other pollutants in nearby groundwater. Any regional monitoring should be conducted by the Regional Board or its consultants or other qualified governmental research entities and paid for by a portion of the permit fees collected annually from the dischargers.

7. No Agency "Approval" of Plans: Although staff should review FWQMP or monitoring plans in general, this alternative would not require the Regional Board to approve either an FWQMP or monitoring plan. The minimum conditions of the FWQMP should be clearly set forth in the conditional waiver or general WDRs and staff should "review" as part of their enforcement follow-up. By employing the Board's enforcement options to address any violators who, for example, fail to prepare a good faith FWQMP, the Board also would be in a position to recover the staff costs of those enforcement efforts.

8. Coordination With Dischargers Folded Into Prioritized Inspection and Enforcement by Regional Board: Along those same lines, any follow-up or coordination with growers re compliance would be part of the annual inspection effort. Compliance inspections would include appropriate compliance advice and be implemented consistent with State Board's existing enforcement policy. Growers would have to allow the Regional Board access to inspect. Prioritization of inspections and level of enforcement actions would be up to the Regional Board. Prioritization would be much easier because staff would already have farm specific FWQMPs and effluent data within the management areas where problems already have been identified, which data would make it much easier for Board staff to prioritize inspections and possible enforcement.

9. Regional Monitoring By Board Expanded to All Dischargers: There is no reason why WDRs or waivers in the ILRP should incorporate a regional monitoring program. No NPDES permits require all municipalities to conduct regional monitoring as part of their permits (CSPA is not suggesting any changes to receiving water quality monitoring currently required by most major NPDES permittees). The industrial storm water and construction storm water permit also do not include such a component. That being said, all of these dischargers should be

contributing a portion of their permitting fees toward an objective and agency-controlled (not discharger-controlled) regional monitoring program. Fees for all of these permittees should be assessed annually. Regional monitoring, including toxicity monitoring, would be conducted by the Regional Board, its consultants or other governmental research entities. CSPA believes regional monitoring is important to determining the overall health of waterways in the Central Valley. However, its inclusion in permits for irrigated lands dischargers takes away resources that need to be focused on implementing BMPs and evaluating their effectiveness at the points of discharge. It also would be fairer that all sources of pollution to the Valley's ambient waters contribute a proportionate share of the funds necessary to conduct regional monitoring. Lastly, by consolidating that program within the Regional Board and other non-discharger agencies – rather than under the current program with inexperienced coalitions made up of discharger representatives – the objectivity of the program will be maintained. Placing regional monitoring in another program outside of the ILRP will of course free up a vast quantity of time currently spent by staff attempting to track the coalitions' various monitoring efforts.

10. Request Additional Fee Authority: Critical to any alternative selected by the Regional Board is a frank request to the State Board to increase current fees to cover all of the costs of the program. It is unreasonable to base a regulatory program regulating the largest source of pollution to Central Valley waters on the political reluctance of the Board or Administration to assess appropriate fees to support a regulatory program that is capable of enforcing statutory and regulatory requirements. The fees for the irrigated lands dischargers, as well as fees on existing NPDES permittees, including stormwater permittees, should also be adjusted to accommodate a separate regional monitoring program.

The Regional Board's review and selection of the above alternative would address many of the legal flaws that currently hamper staff's proposal as well as most of the PEIR's alternatives, discussed at length below. More importantly, CSPA believes that, unlike staff's proposal or Alternatives 1 through 4 of the PEIR, the above alternative would have a reasonable chance of achieving significant reductions in irrigated lands pollution, achieving water quality standards and improving the region's overall economy and quality of life without any significant impact on the agricultural industry.

III. THE PEIR FAILS TO COMPLY WITH CEQA'S PROCEDURAL AND SUBSTANTIVE REQUIREMENTS.

The PEIR fails as an analytical document under CEQA. Arguably, rather than assist the Regional Board with making the tough decisions required to properly regulate the irrigated farm dischargers and ensure compliance with the high quality waters policy

and water quality standards, the PEIR erects a barrier to objective evaluation. Several flaws are worth noting right up front. First is the PEIR's failure to identify a proposed project or an environmentally superior alternative. These omissions make the PEIR unrecognizable as an EIR under CEQA.

The second most egregious flaw stems from the PEIR's premise that the current waiver (Alternative 1) will lead to implementation of the same best practicable control technologies as, for example, Alternative 5. This is entirely baseless given the fact that seven years into implementing Alternative 1, the Regional Board's staff cannot point to a single piece of evidence documenting the implementation of any management practices. Even the much touted management plans that already have been approved by staff under the existing waiver each address management practices by bobbing and weaving – replacing BPTC implementation and effectiveness monitoring with informal office meetings with groups of growers. Occasional meetings cannot verify the implementation or effectiveness of a management practice on a specific farm.

Similarly, the PEIR assumes that the four alternatives that rely on regional monitoring, rather than farm specific monitoring, will be able to evaluate the implementation of BPTC equally as well as Alternative 5, the one alternative that requires edge of field monitoring. Although as explained above, CSPA does not believe the universal and expansive monitoring proposed by Alternative 5 is necessary to take the program to its next effective level, CSPA believes it is obvious that only by monitoring the effectiveness of a claimed BPTC at its point of discharge can the Regional Board or its staff claim to ensure it is in fact BPTC and know what effect the discharge is having on compliance with water quality objectives. It also is even more evident that a regional monitoring location 10, 20, or 30 miles downstream of a specific farm tells neither the agency, the farm nor the general public about the presence or effectiveness of any management measures that may be installed there and whether they amount to BPTC.

These few concerns are only the highlights of a long list of deficiencies in the PEIR. The following addresses each of CSPA's concerns in turn.

A. General Purposes and Standards Under CEQA.

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report ("EIR") (except in certain limited circumstances). *See, e.g.*, Pub. Res. Code § 21100. The EIR is the very heart of CEQA. *Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652. "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." *Communities for a Better Environment v. Calif. Resources Agency* (2002) 103 Cal.App.4th 98, 109.

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project.

14 Cal. Code Regs. ("CEQA Guidelines") § 15002(a)(1). "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs*. (2001) 91 Cal.App.4th 1344, 1354 ("Berkeley Jets"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and all feasible mitigation measures. CEQA Guidelines § 15002(a)(2) and (3); *See also Berkeley Jets*, 91 Cal.App.4th 1344, 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564. The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced." Guidelines §15002(a)(2). If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." Pub.Res.Code § 21081; CEQA Guidelines § 15092(b)(2)(A) & (B).

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal.App.4th at 1355 (emphasis added), quoting, *Laurel Heights Improvement Assn. v. Regents of University of California*, 47 Cal. 3d 376, 391 409, fn. 12 (1988). As the court stated in *Berkeley Jets*, 91 Cal.App.4th at 1355:

> A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process." (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal. App. 4th 713, 722]; *Galante Vineyards v. Monterey Peninsula Water Management Dist*. (1997) 60 Cal. App. 4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal. App. 4th 931, 946).

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B. The PEIR fails to include a stable project description - indeed, no proposed project is included.

The PEIR does not evaluate a proposed project. The PEIR attempts to portray this omission as a benefit: "Rather than the typical EIR approach of starting with a project and then looking at alternatives to that project, this draft PEIR will be used as a tool to inform decision makers during the selection process." PEIR, p. 2-1. *See also* p. 2-5 ("In this document, … no preferred project has been identified by the Lead Agency from among the considered alternatives"). The drafters overlook, however, that CEQA sets forth the necessary contents of an EIR that can properly serve as a tool to inform the Regional Board. The drafters, staff and the Regional Board do not have any authority to omit a description of the proposed project from the PEIR.

"An accurate, stable and finite project description is the *sine qua non* of an informative and legally adequate EIR." *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192; *Berkeley Jets*, 91 Cal.App.4th at 1354; *Sacramento Old City Assn. v. City Council* (1991) 229 Cal. App. 3d 1011, 1023; *Stanislaus Natural Heritage Project v. County of Stanislaus* (1996) 48 Cal. App. 4th 182, 201. "[A] curtailed or distorted project description," on the other hand, "may stultify the objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental costs, consider mitigation measures, assess the advantage of terminating the proposal (*i.e.*, the "no project" alternative) and weigh other alternatives in the balance." *Id. See also*, CEQA section 15124; *City of Santee v. County of San Diego*, 263 Cal.Rptr 340 (1989). As one commenter has noted:

> The adequacy of an EIR's project description is closely linked to the adequacy of the EIR's analysis of the project's environmental effects. If the description is inadequate because it fails to discuss the complete project, the environmental analysis will probably reflect the same mistake. (Kostka and Zischke, "Practice Under the California Environmental Quality Act," p. 474 (8/99 update).)

A "rigorous analysis" is required to dispose of an impact as insignificant. *Kings County Farm Bureau v. City of Hanford*, 221 Cal.App.3d 692 (1990). Such a rigorous analysis is not possible if the project description is inaccurate, inconsistent, misleading or, in the case of the PEIR, <u>completely absent</u>.

C. The Objectives Borrowed From The Stakeholder Process Attempt To Lend Support To Purported Benefits of Elements of Alternative 1 – Including Its Regional Planning Basis And Lack Of Farm Specific Information of Any Sort – Which Are Its Main Faults.

The PEIR's objectives rely heavily on objectives formulated through the stakeholder process coordinated by the Regional Board's staff. The stakeholder process was dominated by agricultural interests. http://www.swrcb.ca.gov/ centralvalley/water_issues/irrigated_lands/long_term_program_development/advisory_

wrkgrp_member_lst.pdf; *See, e.g.* 11 May 2010 Long-term ILRP Meeting Attendees (http://www.swrcb.ca.gov/centralvalley/water_issues/irrigated_lands/long_term_program_development/11may10_stakeholder_mtg/11may10_sum.pdf). Although CSPA, for example, nominally is identified as one of the stakeholders involved in the process, CSPA was one of many groups that did not have the resources to attend numerous meetings, conduct multiple reviews of numerous documents, and participate actively in the stakeholder process. Possibly as a result of the lack of representation from a broader spectrum of stakeholders, CSPA is concerned with language included in the objectives that biases the selection of an alternative in favor of those that do not address compliance with all water quality objectives throughout the region, that water down the high quality waters policy requirement that implementation of BPTC be ensured, and that include only regional monitoring.

An overly narrow definition of project objectives renders the alternatives analysis inadequate. To narrowly define the primary "objective" of the proposed project itself constitutes a violation of CEQA since such a restrictive formulation would improperly foreclose consideration of alternatives. *See City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438 (holding that when project objectives are defined too narrowly an EIR's treatment of analysis may also be inadequate). As a leading treatise on CEQA compliance cautions, "[t]he case law makes clear that…overly narrow objectives may unduly circumscribe the agency's consideration of project alternatives." (Remy, Thomas, Moose & Manley, Guide to CEQA (Solano Books, 2007), p. 589).

1. The project's objective to restore or maintain "appropriate" beneficial uses qualifies the Regional Board's duty to maintain all existing or designated beneficial uses.

The first objective identified for the ILRP is to "[r]estore and/or maintain <u>appropriate</u> beneficial uses established in Central Valley Water Board water quality control plans by ensuring that all state waters meet applicable water quality objectives." PEIR, p. 1-2. CSPA is concerned with the PEIR's inclusion of the term "appropriate." Neither the Water Code nor the Basin Plan qualify the Regional Boards' or dischargers' obligation to assure attainment of water quality standards by deeming some designated beneficial uses as inappropriate. This language should be revised to clarify that all designated or existing uses must be protected, including those designated by way of the Basin Plan's tributary rule.

2. The objective to encourage implementation of BMPs is inconsistent with Resolution No. 86-16's duty that the Regional Board ensure implementation of all best practicable control technologies.

The second objective is to "[e]ncourage implementation of management practices. . ." PEIR, p. 1-2. The notion that the Regional Board should limit its authority to "encouraging" the implementation of BMPs appears inconsistent with its duties under Porter-Cologne. The Regional Board must establish requirements that implement the

water quality objectives. Water Code § 13263(a) ("[t]he requirements shall implement any relevant water quality control plans. . . ."); § 13269(a) (waivers must be "consistent with any applicable state or regional water quality control plan . . ."). Merely encouraging BMPs will not achieve objectives.

3. The objective to provide incentives to minimize waste discharges cannot be construed to allow less monitoring without any proof that waste discharges have been minimized.

The third objective includes to "[p]rovide incentives (i.e., financial assistance, monitoring reductions, certification, or technical help) for agricultural operations to minimize waste discharge to state waters from their operations." PEIR, p. 1-2. By specifying the incentives, CSPA believes this objective greases the skids for an alternative that trades away important components of any successful program. In particular, by specifically trading away monitoring of specific discharges, the objective directly undermines the Regional Board's ability to implement the high quality waters policy's BPTC requirement as well as the Nonpoint Source Plan's monitoring requirements. CSPA believes an order with clear requirements is incentive enough and this objective merely opens the door to alternatives that violate relevant law and will once again prove ineffective. Any incentives should be based on encouraging growers to pollute less, not, for example, agreeing to give up essential site specific monitoring for participation in a less effective regional monitoring program.

4. If the objective to coordinate with other regional programs means to mimic the regional scope of other ineffective pollution control programs, then this objective is inconsistent with the other three objectives.

The fifth objective is to "[p]romote coordination with other regulatory and non-regulatory programs associated with agricultural operations . . . to minimize duplicative regulatory oversight while ensuring program effectiveness." PEIR, p. 1-2. This objective, although sounding innocuous, is interpreted by staff as favoring alternatives that take a regional perspective like other programs referenced in the objective. *See* Staff Report, p. 103 (Alternatives 1 and 2, "[r]egional configuration for water quality plans and monitoring would facilitate efficient coordination with other programs operating at the regional level" and Alternatives 3-5, "…the farm-level management would not promote this coordination.") Unfortunately, the record is clear that none of the other regional efforts have been successful at preventing the widespread surface water pollution and toxicity from irrigated lands. If coordination with regional programs means that the program must replicate the regional scales of other unsuccessful programs and thus replicate their inability to protect water quality since their inception, then this objective is inappropriate and inconsistent with the objective to restore water quality and meet water quality standards. The objective should be clarified to promote coordination without necessarily copying the ineffective regional programs already in place.

D. The PEIR fails to identify the superior alternative.

By choosing not to propose a project, it is hardly surprising that the PEIR does not identify the superior environmental alternative. One of CEQA's fundamental requirements is that the DEIR must identify the "environmentally superior alternative." CEQA Guidelines §1526.6(e)(2); Kostka & Zischke, *Practice Under the California Environmental Quality Act* §15.37 (Cont. Educ. Of the Bar, 2008). Typically, a DEIR identifies the environmentally superior alternative, which is analyzed in detail, while other project alternatives receive more cursory review.

The lead agency is required to select the environmentally preferable alternative unless it is infeasible. A "feasible" alternative is one that is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. Pub. Res. Code § 21061.1; CEQA Guidelines § 15364. California courts provide guidance on how to apply these factors in determining whether an alternative or mitigation measure is economically feasible.

Since the PEIR fails to identify the environmentally superior alternative, there is not adequate analysis of its impacts or feasibility. *See Burger v. County of Mendocino* (1975) 45 Cal.App.3d 322 (county's approval of an 80 unit hotel project over a smaller 64 unit alternative was not supported by substantial evidence); *County of El Dorado v. Dept. of Transp*. (2005) 133 Cal.App.4th 1376 (agency must consider small alternative to casino project). Here, although suffering from its own defects (*see infra*, Section IV), the economic analysis prepared for the Regional Board indicates that all of the alternatives identified in the PEIR are economically feasible. Indeed, the alternatives with the most regulatory oversight expand the overall economy of the Central Valley. Because the alternatives are all feasible, the PEIR needed to select an environmentally preferable alternative.

E. The PEIR Does Not Provide Meaningful Comparative Analysis of the Selected Alternatives Because the Assumption That All Five Alternatives Would Be Equally Effective at Implementing BPTC and Achieving Standards is Unsupported by Any Evidence

As noted above, the PEIR fails to facilitate the Regional Board's selection of a new ILRP because the PEIR is based on a fiction that any program – no matter how far removed from the discharge locations and no matter how hard it may avoid documenting and measuring the implementation and effectiveness of BMPs – will result in the same level of pollution control. That core fiction does not allow for a meaningful comparative analysis by the Regional Board of the various alternatives.

CEQA requires that an EIR provide a discussion of project alternatives that allows meaningful analysis. *Laurel Heights I,* 47 Cal.3d at 403. The analysis of project alternatives must contain an accurate quantitative assessment of the impacts of the

alternatives. In *Kings County Farm Bureau*, 221 Cal.App.3d at 733-735, the court found the EIR's discussion of a natural gas alternative to a coal-fired power plant project to be inadequate because it lacked necessary "quantitative, comparative analysis" of air emissions and water use.

The PEIR does not attempt to estimate the relative effectiveness of the five alternatives. It generally assumes that they will all lead to sufficient pollution reductions. For example, the PEIR "assume[s] that continuation of the program would result in implementation of a greater number of surface water management practices than are present under baseline conditions, due to continued use of the program's monitoring feedback loops." PEIR, p. 5.7-45. Given the current absence of information about any BMPs actually installed, never mind whether they amount to BPTC, after seven years of implementing Alternative 1, the PEIR's assumption is entirely unsupported. The PEIR also asserts that "[u]nder all program alternatives, when a constituent of concern is identified through monitoring, management practices would be used to reduce the level of that constituent in surface water or groundwater." PEIR, p. 5.7-43. The PEIR repeats that, for each alternative, the "[p]otential impacts related to vegetation and wildlife under Alternative 3 are expected to be as described for Alternative 2. Like Alternative 2, Alternative 3 would implement water quality management plans that would result in a beneficial impact on surface water quality and groundwater quality, which would ultimately benefit both vegetation and wildlife communities." PEIR, p. 5.7-48. By making believe that all of the alternatives will have a beneficial effect on water quality – despite their obvious differences – the PEIR makes no effort to compare the relative effectiveness and certainty of each alternative in meeting standards or reducing pollution.

Obviously, of the flawed alternatives included in the PEIR, some have more certainty of achieving pollution reductions than others. Nothing in the record demonstrates that Alternative 1, seven years after its enactment, has reduced the volume or toxicity of pollution discharges from irrigated lands. There is no evidence in the Regional Board's files or discussed in the PEIR of what, if any, management practices have been or will be installed under the existing program. There is no discussion of evidence of any observable trends in ambient water quality conditions related to the existing program. There is certainly no evidence of any data showing any trends in pollution reductions at the edge of fields based on management measures applied to those fields. As a result, all of the evidence is that implementation of Alternative 1 and the even weaker Alternative 2 will most likely allow increases in pollution.

Contrary to the claims that all of the alternatives are interchangeable from a water quality perspective, one section of the PEIR discussing impacts to fish acknowledges that some alternatives (Alternatives 4 and 5) will "probably be greater." PEIR, pp. 5.8-52-53. Although still sorely lacking in providing the "quantitative, comparative analysis" required by CEQA, the fisheries section does at least

acknowledge that additional monitoring and additional management practices will result in less pollution being discharged.

> given the probability of increased monitoring of individual farms, and especially those at higher risk of generating significant impacts—in addition to wellhead protection, nutrient management plans, tracking of nutrient and pesticide application, and monitoring of individual wells—the positive benefit of Impact FISH1 (improved water quality) would probably be greater under Alternative 4 than under Alternative 2 or Alternative 3.

PEIR, p. 5.8-52. Likewise, contrary to the discussion of water quality, the PEIR does acknowledge in the fisheries discussion that "the positive benefit of Impact FISH1 (improved water quality) probably would be greater under Alternative 5 than under any other alternative." PEIR, p. 5.8-53. These acknowledgements contradict the PEIR's earlier unreasonable assertions that the water quality benefits of each of the alternatives are similar despite their drastic differences in monitoring requirements and management practices oversight. The PEIR's refusal to acknowledge the failure of the existing program to document any BMP implementation or water quality improvements frustrates rather than facilitates the Regional Board's decision-making. A true quantitative comparison of alternatives 2, 3, and 4 incorporating one or more of the main flaws of Alternative 1, including for example reliance solely on regional monitoring to detect and evaluate BMPs, would demonstrate they will prove equally ineffective. CSPA believes the PEIR should be rewritten to include the required comparative analysis on staff's proposed alternative (perhaps with some improvements – *see* Section V below), CSPA's proposed alternative (Section II above), and perhaps one or two other of the existing alternatives.

F. The Regional Board May Not May Not Approve Four Out Of Five Of The Proferred Alternatives Because They Would Conflict With Other Laws, i.e. Porter-Cologne.

A lead agency may not approve a project with significant unavoidable impacts unless it is "otherwise permissible under applicable laws and regulations." CEQA §21002.1(c). Likewise, as the PEIR acknowledges, "[t]o be considered as an alternative under CEQA, ILRP alternatives . . . must . . . meet statutory requirements established in applicable state policy and regulations (e.g., . . ., the State Water Resources Control Board *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* [State Water Board 2004], and the State Antidegradation Policy [State Water Board 1968])." PEIR, p. 2-8.

The PEIR states that all of the alternatives will have a significant unavoidable impact on prime agricultural lands. PEIR, Summary, p. 1-13. CSPA also believes that every alternative considered in the PEIR will have unavoidable impacts to water quality and fisheries, at least in the near term and for several of the alternatives for the indefinite future. As discussed below, Alternatives 1 through 4 all violate the State's antidegradation policy and the Nonpoint Source Control program. Therefore, only one

of the alternatives considered by the Regional Board (at least as currently formulated) can be approved despite any significant unavoidable impacts – Alternative 5.

1. The first four alternatives all violate the state's antidegradation policy.

The State Board's "Statement of Policy With Respect to Maintaining High Quality of Waters in California" provides, in relevant part, that:

> 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) 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.

Resolution No. 68-16 (Oct. 28, 1968) (emphasis added). As Regional Board staff explains, "In determining BPTC, the discharger should compare the proposed method to existing proven technology; evaluate performance data (through treatability studies), compare alternative methods of treatment or control, and consider the method currently used by the discharger or similarly situated dischargers." Staff Report, p. 62 (citing SWRCB Order Nos. WQ 81-5, WQ 82-5, WQ 90-6, and WQ 2000-07)." To comply with Resolution No. 68-16's BPTC mandate, the Regional Board "must require the discharger to demonstrate that the proposed manner of compliance constitutes BPTC." *Id*. (citing SWRCB Order No. WQ 2000-7) (emphasis added). *See also id*. p. 67 ("where degradation is occurring, irrigated agricultural operators must *demonstrate* that any set of practices proposed for implementation represents BPTC and will be required to consider existing water quality data or conduct monitoring in support of this demonstration").

Under the existing program, not one irrigated lands discharger has complied with Resolution No. 68-16's BPTC requirement. The Regional Board is entirely in the dark regarding what, if any, measures have been implemented never mind whether they amount to BPTC. Given that the existing management plans' only map out a series of meetings between coalitions and groups of dischargers to discuss measures the dischargers may have planned, there is nothing in Alternative 1 or its mirror proposal, Alternative 2, that would cure these universal violations of the BPTC requirement. *See* Staff Report, p. 115 ("Alternative 1 would not implement the iterative BPTC and monitoring process for addressing degradation to groundwater").

Alternatives 3 and 4 also succumb to the absurd notion that downstream regional monitoring alone can somehow implement Resolution No. 68-16's BPTC requirement. Although these alternatives both close some of the gap in implementing the BPTC requirement by requiring irrigated lands dischargers to prepare farm-specific Farm Water Quality Management Plans ("FWQMPs"), the omission of monitoring to determine the effectiveness of those measures means the Regional Board will not know whether

the measures are BPTC. Alternative 3 omits any surface or groundwater quality monitoring, essentially erasing the BPTC requirement. *See* Staff Report, p. 116 ("Surface and/or groundwater quality monitoring would not be required under Alternative 3 to determine effectiveness of BPTC and whether degradation is occurring"). Alternative 4, to the extent it allows dischargers to forego farm specific monitoring in exchange for participating in regional monitoring, cannot reasonably be claimed to identify BPTC many miles upstream of the monitoring location. Nor would measurements of pollution downstream at levels below applicable criteria indicate whether or not waters upstream – shallower and perhaps closer to various pollution discharges – were being degraded by irrigated lands discharges. Any resort to regional monitoring without a farm-specific monitoring component cannot meet Resolution No. 68-16's requirement. The Staff Report does not explain how regional monitoring would suffice to determine whether upstream measures are BPTC or the presence and extent of upstream degradation. *See* Staff Report, p. 116.

Of the five alternatives considered in the PEIR, only Alternative 5 is consistent with Resolution No. 68-16. That alternative requires discharges to identify the measures they are installing or implementing and it requires monitoring of the measure's effectiveness (though as CSPA notes below, Alternative 5 is weighted down with too much monitoring).

As the staff acknowledges, "With regard to selection of measures and practices, the Central Valley Water Board and USEPA recognize that there is often site-specific, crop-specific, and regional variability that affects the selection of appropriate management measures, as well as design constraints and pollution-control effectiveness of various practices." Staff Report, p. 66-67. Because BPTC and compliance with the state's antidegradation policy is ultimately a farm specific question, there is no getting around the fact that to implement the policy, one must identify and measure BPTC at the farm level. *See PEIR, p. 3-9* ("The appropriate management practice is typically selected on a site-specific or property-specific basis"). It is simply ridiculous to claim that one can determine that a discharger has installed BPTC by measuring ambient water quality many miles downstream. If that were the case, the regional monitoring that has occurred under Alternative 1 for the last seven years would already allow the Regional Board to evaluate BPTC throughout the region. Of course, the opposite is true. The Regional Board has no idea what, if any, measures have been installed and whether they amount to BPTC. Alternatives that continue the current failure to apply Resolution No. 68-16 to tens of thousands of dischargers of toxic and impairing pollutants and vast swaths of the State's inland waters amount to licenses to degrade water. CSPA agrees that farmers can have flexibility but they have to tell the Boards and the public what they decided to implement and then measure its effectiveness to comply with the BPTC requirement.

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2. Alternatives 1 through 4 violate the NPS Policy

Alternatives 1 through 4 also are inconsistent with the State Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (May 20, 2004) ("NPS Policy"). Any NPS program must be consistent with five key elements of the NPS Policy. Alternatives 1 through 4 are all inconsistent the NPS Policy's element requiring compliance with Resolution No. 86-16. Alternatives 1 and 2, as well as the staff's recommended program, fail to comply with second and fourth key elements as well. Alternatives 3 and 4 also fall short of the second and fourth elements to the extent they call for no water quality monitoring or only regional water quality monitoring. Each of the four relevant elements is discussed in turn.

Key element 1 states that "[a]n 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." NPS Policy, pp. 11-12. As discussed above, Alternatives 1 through 4 do not comply with Resolution No. 68-16. Hence, they also cannot comply with Key Element 1 of the NPS.

Key element 2 provides that: "[a] nonpoint-source control implementation program must include a description of the management practices and other program elements that are expected to be implemented to ensure attainment of the implementation program's stated purpose, the process to be used to select or develop management practices, and the process to be used to ensure and verify proper management practice implementation." NPS Policy, p. 12. "A RWQCB must be convinced there is a high likelihood the MP will be successful." *Id*. In regard to discharges from irrigated lands, this element of the NPS Policy effectively requires farm-based water quality management plans, or their equivalent. "MPs must be tailored to a specific site and circumstances, and justification for the use of a particular category or type of MP must show that the MP has been successfully used in comparable circumstances. If an MP has not previously been used, documentation to substantiate its efficacy must be provided by the discharger." *Id*., p. 12. In this case, the dischargers are the individual farms and the only way to document the efficacy of a specific management practices for their particular lands is for them to tell the Regional Board what they are doing and why. Likewise, in order "to ensure and verify proper management practice implementation" for irrigated lands, the farms must report on their implementation, including pollutant specific monitoring of the BMP's resulting effluent. Because Alternatives 1 and 2 do not include FWQMPs, they cannot comply with key element 2. Likewise, Alternatives 1 and 2 and Alternative 4's reliance on regional monitoring also cannot comply with key element 2's verification requirement. Alternative 3 has no water quality monitoring at all and, thus, in the context of irrigated lands management practices, cannot verify the effectiveness of any management practice.

Key element 3 of the NPS Policy provides that "[w]here the Regional Water Board determines it is necessary to allow time to achieve water quality objectives, the nonpoint-source pollution control implementation program must include a specific time schedule and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements." NPS Policy, p. 13. Although CSPA may not be opposed to reasonable time frames for irrigated lands dischargers to come into compliance with the requirements of a revised program, the PEIR and staff report need to be clarified to acknowledge that the Regional Board may not have authority to include schedules of compliance in either WDRs or conditional waivers because the Central Valley Bain Plan fails to include any such authority in its program to achieve the applicable water quality standards. *See* Water Code § 13242(b) (program to achieve standards must include "[a] time schedule for actions to be taken" – if no time schedule provided in Basin Plan, no authority); Basin Plan, p. IV-16 (compliance schedules only authorized for NPDES permits). The Board's authority appears to be limited to adopting time schedules through enforcement orders. The documents also should be careful to emphasize the NPS Policy's requirement that, assuming such schedules are authorized in the Basin Plan, the schedules "may not be longer than that which is reasonably necessary to achieve an NPS implementation program's water quality objectives."

Key element 4 requires that "[a]n NPS pollution control implementation program must include sufficient feedback mechanisms so that the Regional Water Board, dischargers, and the public can determine whether the program is achieving its stated purpose, or whether additional or different management practices or other actions are required." NPS Policy, p. 13. "In all cases the NPS control implementation program should describe the measures, protocols, and associated frequencies that will be used to verify the degree to which the MPs are being properly implemented and are achieving the program's objectives, and/or to provide feedback for use in adaptive management." *Id*. "[I]f the program relies upon dischargers' use of MPs, there should be a strong correlation between the specific MPs implemented and the relevant water quality requirements." *Id*., p. 12. In the context of irrigated lands, this key element requires reporting and monitoring. It is impossible to describe the management practices that were used and a "strong correlation" between the management practices and water quality standards without FWQMPs and annual reporting. And it is impossible to determine that the management practices are effective without reports from the discharger that they have been properly implemented and monitored to confirm they have reduced pollution. Alternatives 1 through 4 do not achieve this level of comprehensible feedback.

Key element 5 requires that "[t]he Regional Water Board must make clear, in advance, the potential consequences for failure to achieve a nonpoint-source pollution control implementation program's stated objectives." Neither Alternative 1 nor 2 make clear the consequences of any failures by coalitions. No coalition or discharger takes seriously the notion that a coalition will be dissolved for failing to comply with the program's requirements. In essence, the coalition-based alternatives require the Regional Board to dissolve an entire watershed program – with nothing in place to back

it up once it is gone. The Regional Board would appear to punish itself as much as the dischargers under these scenarios. Likewise, as for Alternatives 3 and 4, the consequences of failure also are not clear because the proposals do not include monitoring of the individual dischargers. Although these alternatives have the Regional Board involved (CSPA believes unrealistically) in the development of the FWQMPs, without management practice effluent data and only sporadic site inspections by staff, there are no clear consequences for noncompliance by individual dischargers.

G. The PEIR Fails To Consider a Reasonable Range of Alternatives Because Most of the Alternatives are Weighted Down With Components That Render Them Ineffective.

Because four out of the five alternatives considered in the PEIR are not viable because they violate some of the elemental water quality regulations, the Regional Board is left with only a single feasible alternative – Alternative 5. *See* PEIR, p. 2-8 ("Alternatives must … meet statutory requirements established in applicable state policy and regulations"). This is not a reasonable range of alternatives. Even assuming one additional alternative – Alternative 4 – comes close to being legal and thus feasible, the Board is still left with only two options. The Regional Board should redraft the PEIR to focus on feasible alternatives. These would include in addition to Alternative 5, staff's proposed program (although as discussed below, staff's proposal is also inconsistent with the PS Policy and Resolution No. 68-16), CSPA's proposed alternative above, and at least one other variation that includes FWQMPs and farm-specific monitoring for at least some portion of the discharging farms.

An EIR must describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. "An EIR's discussion of alternatives must contain analysis sufficient to allow informed decision making." *Laurel Heights I*, 47 Cal.3d at 404. An EIR must also include "detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." *Id*. at 405.

In addition to their failure to comply with Resolution No. 68-16 and the NPS Policy, CSPA also believes the alternatives considered in the PEIR suffer from the following defects.

1. The ILRP Should Not Rely on Coalitions to Implement or Comply with Irrigated Lands Program.

What, if any, value the existing coalitions may have brought to the program to facilitate some of the regional monitoring and performing outreach to growers, has now passed. The ILRP, to be effective, must now concentrate on getting individual farmers to take actions necessary to control their pollution discharges and document implementation of BPTC. CSPA's review of the coalitions' management plans approved

by the Regional Board under the existing program shows that the coalitions have no intention of documenting each farm's management measures or their effectiveness. Instead, as their management plans make clear, the coalitions propose to replace various office meetings with groups of growers as a surrogate for documenting each farm's BMPs and their effectiveness. Of course, to confirm the selection, implementation and monitoring of BPTC on each farm, each farm must provide that information. Adding a layer of unofficial bureaucracy with an interest in obscuring information from both the Board and the public does not add any efficiency to the program. In 2003, CSPA pointed out that:

> If one thing is clear, the existing Coalition program has managed to mask from the Regional Board what is going on on-the-ground at most of the farms around the Valley. As several Board members commented and as is painfully evidenced from reviewing the available documents, we still do not have the most basic information about what, if any, BMPs are being applied in the fields, where they're being applied, whether they are working or improving the quality of discharges and what other BMPs might be tried in the future.

Letter from Law Office of Michael R. Lozeau on behalf of Deltakeeper, pp. 5-6 (Nov. 4, 2005). Remarkably, seven years later, the mask erected by the coalitions remains in place. Neither the Board nor the public has any idea what if any management practices have been proposed or implemented by any of the estimated 30,000 farms in the Central Valley. *See e.g.*, Technical Memo, p. 1-2 ("Although Alternative 1 represents the continued implementation of current Central Valley Water Board policies, limited information was available to determine the extent of management practice implementation to date"); *Id*., p. 2-2 ("Conceptually, the best source of this type of information would be growers or grower coalitions. Because this information was not widely available, other sources were used to estimate the existing conditions (NRCS 2005; DWR 2001)"); Staff Report, p. 117 (explaining that only effort to date by coalitions to "track the progress of management practice implementation through the results of periodic surveys sent to growers"). Nor does the informal effort of the coalitions to collect the farm-specific data appear to have changed since the Regional Board's approval of management plans. *See, e.g.* East San Joaquin Water Quality Coalition Web Site ("Properties adjacent to or in close proximity to each waterway sampled by the Coalition are the primary focus of mailings and notices for local workshops that cover BMPs to solve the water quality problem"); San Joaquin County and Delta Water Quality Coalition, 2010 Annual Monitoring Report, p. 4 (March 1, 2010) (focused outreach in three subwatersheds consists of asking growers to complete surveys and then conducting unspecified follow-up with growers). The next phase of the ILRP cannot allow coalitions to continue and further obstruct the Board's collection of <u>discharger</u> information.

The use of coalitions also will continue to undermine the Regional Board's enforcement discretion. As the staff acknowledges, by relying on coalitions, the Board effectively limits the availability of all of its enforcement tools. 'The Central Valley

Water Board does not have any direct enforcement authority over a third-party group that is not responsible for the waste discharge (i.e., the Board cannot take enforcement against the coalition." Staff Report, p. 117. The only option available to the Regional Board to address coalitions' noncompliance is not to enforce the requirements, but to eliminate the entire program within large areas of the Central Valley. Rather than a readily available and precise tool available to the Regional Board, like a notice of violation or an administrative civil liability, a decision to dismantle the ILRP for an entire area would be the least likely response the Board would want to take and would not be commensurate with the scope and seriousness of most of the violations the Board was trying to address. The coalitions also undermine the Board's ability to effectively enforce against individual dischargers as well by failing to collect the necessary data regarding management practices on individual farms and otherwise obstructing or slowing down the review and analysis of that information. *See* Staff Report, p. 140 (discussing Alternative 1, "the Board . . . would not have information regarding the method(s) and practices the operation has or plans to implement to work toward solving identified water quality concerns").

Staff's proposal argues that the presence of coalitions will "take advantage of local knowledge and administrative/cost efficiencies in dealing with a few groups versus thousands of individual operations." Staff Report p. 3. The only administrative/cost efficiencies visible from the record are those realized by the coalitions' successful effort to date to avoid gathering the key information and data that is necessary to implement a successful program – farm-specific management practices and monitoring data to prove they have been implemented and are effective at reducing the pollutants of concern. It makes no sense that establishing an intermediate layer of bureaucracy between the dischargers who have the information and the agency that needs to know the information makes that process more efficient.

Nor do the coalitions bring the local knowledge necessary for a successful ILRP. If anything, the coalitions are preventing local knowledge of each farm from reaching the Board. As far as CSPA can tell, staffing by the coalitions consists of a few staff for each coalition. There is no reason that the Regional Board itself could not provide the same local presence by modestly expanding its staff and gain efficiencies by cutting out the middleman. To the extent any alternative proposes to rely on coalitions who are not themselves dischargers to conduct sampling, gather information, and prepare plans and reports pursuant to a conditional waiver or WDRs, the program will continue to fail to measurably reduce any pollution discharges and perpetuate or worsen the existing pollution discharges from irrigated lands.

2. Alternatives that rely solely on regional monitoring to determine the adequacy of BPTC or enforcement of individual farms are destined to fail and do not meet CEQA's duty to mitigate impacts.

The four alternatives that rely on regional monitoring to determine that the program is reducing, rather than increasing, pollution discharges and that management

practices are installed and equal to BPTC, do not provide for the mitigation of impacts required by CEQA. CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and mitigation measures. CEQA Guidelines § 15002(a)(2) and (3); *See also*, *Berkeley Jets*, 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564. The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced." CEQA Guidelines §15002(a)(2). If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." Pub. Res. Code § 21081; CEQA Guidelines § 15092(b)(2)(A) & (B).

In general, mitigation measures must be designed to minimize, reduce or avoid an identified environmental impact or to rectify or compensate for that impact. CEQA Guidelines § 15370. Where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. *Id.* at § 15126.4(a)(1)(B). A lead agency may not make the required CEQA findings unless the administrative record clearly shows that all uncertainties regarding the mitigation of significant environmental impacts have been resolved. A public agency may not rely on mitigation measures of uncertain efficacy or feasibility. *Kings County Farm Bureau*, 221 Cal.App.3d at 727 (finding groundwater purchase agreement inadequate mitigation measure because no record evidence existed that replacement water was available). "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. CEQA Guidelines § 15364. Mitigation measures must be fully enforceable through permit conditions, agreements or other legally binding instruments. *Id.* at § 15126.4(a)(2).

By not requiring any farm-specific mitigation measures, Alternatives 1 and 2 fail to meet CEQA's mitigation requirements. These two alternatives make no effort to resolve the vast uncertainties surrounding the selection and implementation of management practices on irrigated lands throughout the Central Valley, the very mitigation measures relied upon by the PEIR to find that impacts to water quality will be less than significant. Despite the PEIR's acknowledgement that "[t]he appropriate management practice is typically selected on a site-specific or property-specific basis[,]" Alternatives 1 and 2 do not include any site-specific BPTC requirements that are or will be fully enforceable.

Similarly, Alternatives 3 and 4, although requiring FWQMPs that would require, in the future, individual farms to describe their management practices, the absence of any farm specific and BMP-specific monitoring to confirm their implementation and effectiveness also fails to eliminate the rampant uncertainty regarding BMP implementation and their effectiveness at reducing pollution from specific farms. And, again, making believe that one can monitor for the implementation and effectiveness of

management practices on a specific farm from several miles downstream makes any management practice mitigation unenforceable, never mind fully enforceable.

3. Alternative 3 includes components that begin to address the shortcomings of the current program but is weighed down with odious requirements and illegal delegation of Board responsibilities.

Although flawed, some of the alternatives described in the PEIR include components that CSPA believes are necessary to an effective ILRP. However, in each instance, the PEIR weighs down the effective components with various poison pills and odious requirements that stifle any serious consideration of alternatives that substantially change the current program. Additional comments and flaws in Alternative 3, in addition to the absence of any effluent quality monitoring discussed above, include the following.

Alternative 3 does include the important requirement that all irrigated land dischargers prepare a FWQMP. CSPA believes this requirement is fundamental to a program that will achieve BPTC, achieve water quality standards and allow proper oversight by the Regional Board. However, the 2-year time period for developing a FWQMP should be shortened to 6 months for surface water discharges and one year for groundwater discharges.

Alternative 3's proposal that the Regional Board review and approve every FWQMP is unrealistic and unnecessary. *See* PEIR, p. 3-14 ("Review applications and determine priorities for FWQMP review and approval"); p. 3-16 ("Submit the FWQMP for review and approval by the Central Valley Water Board"). As proposed, the task of reviewing in advance each and every FWQMP is unrealistic. Moreover, such review and approval would be a desk top review of whatever information is included in the FWQMP without the benefit of any field observations. This process would simply repeat the currently inadequate surveys and informal meetings which the coalitions claim can accurately evaluate management practice implementation and effectiveness. Rather than requiring review of and approval of all FWQMPs, the program should specify in sufficient detail the contents of the FWQMP and require them to be submitted under penalty of perjury. CSPA also believes there is a role for an iterative process. The requirements for the FWQMP should include requiring additional management practices wherever effluent data indicates that pollutant discharges are not decreasing or standards are being violated. Any review by the Board staff would be in the context of reviewing for compliance and prioritizing any inspections and enforcement investigations. Staff also could, of course, require additional measures or monitoring for specific problem farms.

Similarly, because such up front review and approval is unnecessary, any resources expended to review proposals by third-parties to take over such review and approval of FWQMPs is also unnecessary. To the extent the Board thought it was

possible to review and approve every FWQMP, farming that task out to third parties would be an illegal delegation of discharge requirements. Water Code § 13223.

CSPA certainly agrees that the Regional Board should prioritize and conduct a significant number of site inspections every year. It is through this oversight and enforcement process that CSPA believes the Regional Board can realistically and accurately review a specific farm's FWQMP to determine its compliance with the program requirements. Likewise, to the extent the Board staff wanted to "coordinate" with a specific farmer or even a group of farmers, such an inspection would be the opportunity for coordination. By including effluent monitoring, the Regional Board would have a better means of prioritizing its inspections and evaluating whether management practices are BPTC. By publicizing through Board meetings and the web site the outcome of these inspections including any "certifications" issued or, equally important, enforcement responses by the Board or staff, CSPA believes that the Regional Board would be taken seriously by a much larger percentage of individual dischargers who would then seek to comply with BPTC and water quality standards.

As discussed in various sections of these comments above, Alternative 3's failure to require any farm-specific water quality monitoring is a fatal flaw. *See* PEIR, p. 3-16 ("unless specifically required in response to water quality problems, owners/operators would not be required to conduct water quality monitoring of adjacent receiving waters or underlying groundwater"). CSPA believes that monitoring of discharged effluent is what needs to be required to determine compliance with both the BPTC requirement and applicable water quality standards. As outlined in CSPA's proposed alternative, such monitoring should be limited to Tier 2 and Tier 3 dischargers within areas covered by management plans and limited to basic parameters plus any pollutants triggering the management plan. CSPA agrees that visual monitoring does have a role but cannot be the only monitoring. CSPA has many years of experience reviewing annual reports and initiating enforcement actions under the Statewide General Industrial Storm Water Permit. The visual monitoring conducted under that permit is of limited value to documenting pollution discharges or BMP effectiveness (though with appropriate photographs, visual monitoring can document the installation of BMPs and their condition).

4. Alternative 4 includes fewer poison pills but its failure to require BMP and effluent monitoring means that it would not achieve water quality objectives or ensure implementation of BPTC.

Alternative 4 also includes a number of components that CSPA believes are key components to a successful ILRP, including FWQMPs and a tiering component to guide both BMP implementation and different levels of monitoring. Alternative 4 proposes the same procedures for preparing, reviewing and approving FWQMPs. CSPA agrees with requiring all dischargers to prepare and implement FWQMPS but CSPA has the same concerns with the FWQMP procedures discussed for Alternative 3 above.

The key difference proposed in Alternative 4 would be the inclusion of a tiering system to guide dischargers on the proper levels of BMPs they should be considering as well as the intensity of monitoring that is required. PEIR, p. 3-17 ("The tiers represent fields with minimal (Tier 1), low (Tier 2), and high (Tier 3) potential threat to water quality. Requirements to avoid or minimize discharge of waste would be the least stringent for Tier 1 fields and the most stringent for Tier 3 fields"). CSPA agrees that a tiering system is important to controlling the costs of implementing and overseeing the program and assuring that limited resources are aimed at potentially significant pollution dischargers. CSPA believes that the three tiers proposed in the PEIR for both surface and groundwater make sense in providing some initial guidance on the selection and implementation of BMPs. However, CSPA believes both Tier 2 and 3 should conduct similar levels of farm-specific water quality monitoring, albeit not as extensive as that proposed for Alternative 5 and, at least theoretically, for Alternative 4. In addition, CSPA also would use the information gleaned from the ambient monitoring and water quality management plans to further prioritize the farms that must conduct effluent water quality monitoring.

Alternative 4's monitoring requirements for both Tier 2 and 3 dischargers fail to implement Resolution 68-16, evaluate management practice effectiveness and assure compliance with water quality standards by allowing regional monitoring by discharger coalitions to replace the outlined farm-specific monitoring. *See* PEIR, p. 3-19. The inclusion of farm specific monitoring is an illusion as every discharger obviously will opt for the cheaper monitoring far away from their activities and effluent. Monitoring required by the ILRP should be focused on effluent monitoring and BMP effectiveness.

Likewise, for groundwater monitoring the Alternative should focus on onsite wells and leave the regional monitoring to the Regional Board and its consultants. Regional monitoring could also be supplemented by use of the California Department of Public Health public drinking water supply database. Use of the database, in selecting for pesticide and nitrate concentrations in Central Valley wells, would allow for an analysis of the effectiveness of the Alternative as implemented. CSPA believes the monitoring of existing wells is a reasonable proposal and should be implemented by both Tier 2 and 3 groundwater dischargers. Most farms will have one or more functional wells already in place. It is a simple step to require nutrient and pathogen monitoring of those existing wells. The data also would be much more relevant (though perhaps initially not sufficient to define the scope of any water quality exceedances) to that particular discharger. Any regional groundwater problem would simply measure in that locale and say little if anything about dischargers several miles away.

The proposed monitoring frequency for Tier 2 dischargers of once every five years is also woefully inadequate, whether considered on a farm-specific or regional basis. It is already difficult enough to make determinations about compliance with standards or implementation of BPTC based on edge of field monitoring four times in a single year. To then wait five more years before the next set of samples would prevent

any determination of trends and any improvements to BMPs for that amount of time or longer. Sampling needs to occur every year, whether a discharger is in Tier 2 or Tier 3.

Although not ideal, CSPA believes the proposed number of sampling events in any given year strikes a proper balance. PEIR, p. 3-24 ("Tailwater discharges during the first discharge of the irrigation season and once mid-season. Storm water discharges during the first event of the wet season (between October 1 and May 31) and once during the peak storm season (typically February). Discharges of subsurface (tile) drainage systems annually"). CSPA incorporates this proposal into its preferred alternative.

Alternative 4 again discloses staff's penchant for encouraging the formation of intermediate bureaucracies and entities over whom they have no enforcement authority by inviting groups of dischargers to form "legal entities that could serve a group of growers who discharge to the same general location and share monitoring locations." PEIR, p. 3-20. CSPA agrees that there exist opportunities for neighboring farms to work together to monitor shared irrigation ditches and implement joint control measures. CSPA does not see any reason for the individual dischargers to have to form a separate entity to accomplish this goal. Each of them could incorporate the measure into their respective FWQMPs and each would simply be jointly and severally responsible for its implementation and effectiveness. The Regional Board could respond to one or all, though obviously any inspection and follow-up would want to be with all of the cooperating farms.

5. Alternative 5's aggressive agency reviews and approvals and expensive monitoring proposals go beyond the reasonable next step but it is the one alternative reviewed in the PEIR that, if implemented would dramatically reduce irrigated lands pollution discharges.

Of the five alternatives described in the PEIR, Alternative 5 is the only one that proposes an effective framework that (1) would comply with Resolution 68-16's requirement that each discharger demonstrate BPTC and prevent degradation, (2) assure the attainment of water quality standards not only miles downstream but in the immediate area of a discharger's effluent, and (3) provide information sufficient for the Regional Board staff to properly prioritize its inspections and enforcement. Alternative 5 is modeled on the successful industrial and construction site storm water permit programs, with a few important exceptions. Unfortunately, in their apparent excitement, the PEIR drafters could not refrain themselves from layering in too many requirements the sole purpose of which appears to be to make the alternative so expensive that it would never be selected. CSPA believes that, although the regulatory framework of Alternative 5 is sound, the monitoring frequency and constituents (at least as defined in the accompanying economic analysis) are excessive and the absence of any tiering that would prioritize the riskier dischargers also misses a reasonable method of reducing costs.

Alternative 5 proposes monitoring that goes well beyond, for example, the storm water general permits' focus on basic parameters and representative metals monitoring. Technical Memo, pp. 2-17 – 2-19. *See* Kings River Coalition Annual Monitoring Report (2010) (according to the Technical Memo, the monitoring constituents are based on the regional samples taken by the Kings River Coalition). This is overkill for site specific monitoring. The frequency of monitoring also is dramatically increased in this Alternative for tailwater discharges. For example, Alternative 5 would require monthly sampling of tailwater as compared to Alternative 4's proposal of twice per irrigation season (albeit with its regional monitoring exception). CSPA believes the extensive and costly monitoring parameters proposed for Alternative 5 go well beyond what is necessary for the Board and a discharger to determine whether they have installed BPTC and are protecting water quality objectives.

The most obvious poison pill in Alternative 5 is the proposal that every farmer drill and install groundwater monitoring wells. Focusing on existing wells would be much more reasonable. Additionally, use of the California Department of Public Health public drinking water supply database would allow for an analysis of the effectiveness of Alternative 5 as implemented. The database could be queried for pesticide and nitrate concentrations in wells in the Central Valley to determine of concentrations are increasing or decreasing. The database could also be used for analysis to determine the role of the Alternative in contributing to trends (*i.e.* what role the Alternative plays in increases or decreases).

As for the FWQMPs, CSPA does not believe there is any basis for allowing dischargers two-years to prepare and implement FWQMPs. PEIR, p. 3-27. They have been on notice for the last seven years that they need to implement management measures. In many areas, management plans that supposedly will not lead to implementation of BMPs have been in place for some time. CSPA believes that all dischargers should prepare and implement FWQMPs within 6 months.

Alternative 5 does drop the proposal to have the Regional Board coordinate with dischargers regarding their FWQMPs and review and approve each plan as well. CSPA believes this is a reasonable omission. However, the FWQMPs need to be submitted to the Regional Board, ideally as pdfs that could be posted on-line. The proposal to have them on-site and available upon the Regional Board's request would eliminate their utility for staff to rely upon them to make decisions about enforcement priorities, undercuts the public's ability to review FWQMPs, precludes other dischargers from reviewing similar dischargers' plans, and sends a message to dischargers that they need not worry until the Board shows up.

Alternative 5 states that Board staff will "[f]ollow up and coordinate with growers to ensure that FWQMPs and implemented management practices are addressing identified water quality problems." PEIR, p. 3-26. The economic analysis presumes that by merely interacting directly with growers, Board staff will have to provide them

technical assistance on their FWQMPs. *See* Technical Memo, p. 2-24 ("Board staff will be required to interact directly with growers and provide technical assistance when requested"). In so presuming, the economic analysis comes up with an estimated staffing level of 356 staff. *Id*. This number completely exaggerates the level of staff necessary to implement this alternative. Indeed, the industrial and construction storm water program covers more than 7,500 facilities throughout the Central Valley. Currently, the Regional Board assigns fewer than a dozen staff to implement and enforce that entire program, which also includes overseeing the 93 Phase I and II municipal stormwater permits. More staff is clearly necessary to more effectively implement that program. Even with those few staff however, it is clear that almost all of the 7,500 facilities have implemented some level of management measures.

Alternative 5 itself does not suggest that Board staff are obliged to act as dischargers' consultants. That notion, expressed in the economic analysis, is entirely improper. Any follow-up by staff should be pursuant to its oversight and enforcement authority. The Regional Board need not add 356 staff to effectively implement this alternative. As CSPA also proposed for Alternatives 3 and 4, the Board should focus its limited resources by using the monitoring data and FWQMPs to prioritize site inspections and distribute the results – providing examples of good compliance and issuing enforcement orders and penalties where compliance falls short.

6. The PEIR fails to consider the true no project alternative – automatic termination of the waiver and implementation of individual WDRs

The PEIR's formulation of the no project alternative is wrong because the PEIR incorrectly treats the existing general waivers as continuing in perpetuity. PEIR, p. 3-4 ("no project alternative" identified as <u>future</u> renewal of existing program and continued implementation) (emphasis added). The PEIR claims that a future extension or renewal of the existing waiver is of a "ministerial nature." *Id*. Both of these assertions are incorrect as a matter of law. If the Board takes no action, the existing waiver terminates on June 30, 2011. Order No. R5-2006-0053, p. 17; Water Code § 13269(a)(2). Any renewal of the existing waiver is not ministerial but discretionary, requiring the Regional Board to hold a hearing and exercise its discretion to determine whether renewing an existing waiver complies with the Basin plan, is in the public interest and includes adequate monitoring. Water Code §§ 13269(a)(2), (f). Hence, the no project alternative is allowing the existing waiver to automatically terminate on June 30, 2011 and what would reasonably be expected to occur once that happens.

The PEIR cites out-of-context a single sentence from the CEQA Guidelines relating to revising a regulatory plan. The PEIR quotes the following sentence from CEQA Guideline § 15126.6(e)(3)(A) – "When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the 'No Project' Alternative will be the continuation of the existing plan, policy, or operation into the future." PEIR, p. 1-3. The PEIR suggests that guidance allows the Regional Board to make believe that

doing nothing somehow magically renews the existing waivers come June 20, 2011. That, of course, is not a "no action" or "no project" alternative. Renewing the waivers would be selecting a discretionary action.

CEQA requires that an EIR consider a no project alternative. CEQA Guidelines § 15126.6(e)(1) ("The specific alternative of "no project" shall also be evaluated along with its impact"). "The purpose of describing and analyzing a no project alternative is to allow decisionmakers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project." *Id*. "The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. CEQA Guidelines § 15126.6(e)(2). "The [no project] description must be straightforward and intelligible, assisting the decision maker and the public in ascertaining the environmental consequences <u>of doing nothing</u>; requiring the reader to painstakingly ferret out the information from the reports is not enough." *Planning & Conservation league v. Dept. of Water Resources* (2000) 83 Cal.App.4th 892, 911 (emphasis added).

The Guidelines note that "[a] discussion of the "no project" alternative will usually proceed along one of two lines . . . CEQA Guidelines § 15126.6(e)(3). The PEIR attempts to rely on the first category, which states in full that:

> When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the "no project" alternative will be the continuation of the existing plan, policy or operation into the future. <u>Typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed</u>. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan.

CEQA Guidelines § 15126.6(e)(3)(A) (emphasis added). However, the existing waiver, unlike a typical land use or general plan (or for example the Regional Board's Basin Plan) that does not expire by a date certain, expires as a matter of law on a date certain, June 30, 2011. The Guidelines make clear that the Regional Board cannot treat one of its alternatives to a proposed project (assuming the PEIR included a proposed project) as a no project alternative:

> After defining the no project alternative . . ., the lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future <u>if the project were not approved</u>, based on current plans and consistent with available infrastructure and community services.

CEQA Guidelines § 15126.6(e)(3)(C). The current relevant plans germane to the PEIR are the existing waivers. If the Regional Board were to do nothing by June 30, 2011, *i.e.*, a true no project alternative, the waivers will automatically expire. The Board cannot assume it will select one of the project's alternatives and pretend it is not approving the project. This methodology was firmly rejected by the Court in *Planning & Conservation League*:

> A no project description is nonevaluative. It provides the decision makers and the public with specific information about the environment if the project is not approved. It is a factually based forecast of the environmental impacts of preserving the status quo. It thus provides the decision makers with a base line against which they can measure the environmental advantages and disadvantages of the project and alternatives to the project. By contrast, the discussion of alternatives is evaluative.

Planning & Conservation League, 83 Cal.App.4th at 917-918. The PEIR fails to project out an actual no project alternative, incorporating the reality that the existing waivers are temporary with only 10 months to live.

The PEIR's assertion that the existing waivers can be ministerially extended or renewed is blatantly incorrect. *See* PEIR, p. 3-29 ("If the Central Valley Water Board fails to take the ministerial action to extend or renew the waiver program, regulation of irrigated agriculture would not cease"); *id*., p. 1-3 ("Given the ministerial nature of the extension or renewal of the ongoing waiver, which would allow continuation of the existing program, Alternative 1 is best characterized as the "No Project" Alternative"). Pursuant to Water Code § 13269, the Regional Board must apply its discretion to adopt or renew a conditional waiver. Water Code §§ 13269(a)(2), (f). *See* CEQA Guidelines §§ 15002(i)(2) ("[w]hether an agency has discretionary or ministerial controls over a project depends on the authority granted by the law providing the controls over the activity"). The initial decision as to whether to renew a waiver or adopt waste discharge requirements or a prohibition are highly discretionary. Assuming the Regional Board chooses to pursue issuance of a conditional waiver, the Regional Board wields considerable discretion in adopting the necessary conditions of the waiver. The Regional Board must employ its discretion to make the fundamental determinations that the conditional waiver will be consistent with the Basin Plan and in the public interest. Lastly, Section 13269 precludes the Regional Board from renewing any waiver without holding a public hearing where it must review the terms of the waiver.

Porter-Cologne's waiver renewal process cannot be equated even remotely with a ministerial action. "'Ministerial' describes a governmental decision involving little or no personal judgment by the public official as to the wisdom or manner of carrying out the project. The public official merely applies the law to the facts as presented but uses no special discretion or judgment in reaching a decision." CEQA Guidelines, 14 CCR § 15369. "A ministerial decision involves only the use of fixed standards or objective

measurements, and the public official cannot use personal, subjective judgment in deciding whether or how the project should be carried out." *Id*. As we are all well aware, having gone through this waiver process several times now, the decisions to be made by the regional Board are loaded with subjective, personal judgment. *See* CEQA Guidelines § 15357 ("'Discretionary project' means a project which requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations"); § 15002(i) ("[a] project subject to . . . judgmental controls is called a 'discretionary project'"). *See also* CEQA Guidelines § 15268(d) ("Where a project involves an approval that contains elements of both a ministerial action and a discretionary action, the project will be deemed to be discretionary and will be subject to the requirements of CEQA").

The PEIR must be revised and recirculated with a properly defined and evaluated no project alternative.

H. The PEIR Ignored CSPA's and Others Scoping Comments.

As the PEIR recognizes, "[i]n accordance with State CEQA Guidelines Section 15123(b)(2), the areas of controversy known to the lead agency, including issues raised by agencies and the public, shall be identified in the EIR." PEIR, p. 1-8. *See* CEQA Guidelines § 15123 ("(a) An EIR shall contain a brief summary of the proposed actions and its consequences. . . . (b) The summary shall identify: . . . (2) Areas of controversy known to the lead agency including issues raised by agencies and the public. . .).

CSPA and others have participated in the development of the EIR from its inception, submitting detailed scoping comments that fully advised the Regional Board of CSPA's long-standing criticisms of the existing ILRP and the need for FWQMPs, farm-specific monitoring and compliance with antidegradation requirements. *See* CSPA/Baykeeper Scoping Comments (May 30, 2008); CSPA et al. Scoping Comments (March 12, 2003). In those comments, CSPA emphasized the main controversies surrounding the ILRP – embellished further by these PEIR comments – that the ILRP and EIR "must directly address and eliminate . . . violations of water quality standards in light of the fact that, under the present program, the Regional Board cannot know who is actually discharging pollutants, what specific pollutants are being discharged, what are the localized water quality impacts in the vicinity of the discharge, who has or has not implemented best management practices (BMPs) and whether any reductions in pollutant loading or improvements in water quality have occurred." CSPA/Baykeeper Scoping, p. 3 (May 30, 2008). CSPA also reiterated the ongoing controversy "that Reports of Waste Discharge and individual farm-based management plans (similar to pollution prevention plans under the industrial or construction stormwater permits) are fundamentally necessary for any meaningful program addressing discharges from irrigated lands." *Id*., p. 4. The scoping comments also highlighted the ongoing controversy that the ILRP, to be successful and comply with Resolution No. 68-16, must

include farm specific water quality monitoring. *See id*., p. 2 ("[EIR] cannot rely on information collected far downstream to adequately address and mitigate upstream adverse impacts to sensitive biological resources, *i.e.*, it must identify localized impacts in the vicinity of actual discharge locations"). Many of these same issues have been raised by CSPA and others in their comments on the previous waivers as well, debated by the Regional and State Boards, and been the subject of previous litigation. *See, e.g.* CSPA et al. Comments (May 23, 2003); Deltakeeper et al. Comments (November 4, 2005).

Despite these well-known areas of controversy, the PEIR fails to include them in the summary as required by CEQA. This blatant omission underscores the bias built-into the PEIR and ultimately informing staff's separate recommendation in its staff report. Indeed, the few controversies listed in the summary are for the most part restricted to those articulated by the coalitions. PEIR, p. 2-9. The PEIR's summary needs to be rewritten to comply with the CEQA Guidelines.

I. The PEIR Overlooks a Number of Important Significant Impacts.

The PEIR opts not to discuss any impacts on at least three issue categories – recreation, aesthetics, public health and cultural impacts – which common sense would indicate will be adversely affected by the Regional Board's selection of an ILRP that is ineffective and fails to significantly reduce pollution discharges from irrigated lands. PEIR, p. 1-8. Since the EIR fails entirely to analyze the impact of the alternatives on these issues, these impacts are subject to the fair argument, rather than the substantial evidence standard. Fair argument standard applies even to EIRs if the EIR fails entirely to analyze a particular impact. *Bakersfield Citizens For Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1208.

Under the "fair argument" standard, an EIR must analyze an impact if *any* substantial evidence in the record indicates that a project may have an adverse environmental effect – even if contrary evidence exists to support the agency's decision. CEQA Guidelines § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 931; *Stanislaus Audubon v. Stanislaus* (1995) 33 Cal.App.4th 144, 150-151 (1995); *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal. App. 4th 1597, 1602. The "fair argument" standard creates a "low threshold" favoring environmental review through analysis in an EIR. *Pocket Protectors*, 124 Cal.App.4th at 928.

1. The PEIR fails to address impacts to Recreation and Aesthetics.

In its scoping comments, CSPA pointed out the need to evaluate the ILRP's alternatives on recreational uses in the Central Valley. *See* CSPA et al. Scoping Comments (March 12, 2003) (EIR should analyze impacts on "recreational, tourism and beneficial uses"). There is clearly a "fair argument" that any version of the ILRP may have significant impacts on both recreation and aesthetics in the Central Valley,

especially within the Delta. By authorizing irrigated lands discharges without FWQMPs or "edge-of-field" effluent quality monitoring, any new ILRP could further exacerbate pollution discharges from irrigated lands. Discharges of both nutrients and pesticides likely would have adverse affects on recreational and aesthetics by continuing to support the growth of nuisance aquatic species, including for example water hyacinth. The growth of water hyacinth in turn results in further water quality impacts to the Delta, including depressed dissolved oxygen levels, increased herbicide spraying, including toxic surfactants, and other pollution concerns. None of these potential impacts were discussed in the PEIR. *See* PEIR, p. 5-11-2 ("It is not anticipated that the program alternatives would substantially increase or decrease the use of recreational facilities, create the need for such facilities, or result in any other foreseeable significant impact on recreational opportunities in the program area"); p. 5.11-1 (no review of impacts to aesthetics).

Discharges of nutrients from farms contribute to the explosive growth of water hyacinth (*Eichhornia* crassipes) and Brazilian elodea (*Egeria densa*) in the Sacramento-San Joaquin River Delta. Both Brazilian elodea *Egeria densa* and water hyacinth *Eichhornia crassipes* "form dense growths that block waterways and destroy natural habitat by slowing water flow and drastically changing water quality. http://www.dbw.ca.gov/PDF/Egeria/WHSciProbsExcerpts.pdf. As the San Francisco Estuary Institute reports, "[d]ense contiguous mats" of water hyacinth "create navigation and safety concerns in waterways, harbors, and marinas." http://legacy.sfei.org/nis/hyacinth.html. Hyacinths "[i]nterfere[] with irrigation and power generation by clogging pumps and siphons." *Id*. Hyacinth "[c]an completely exclude native floating and submerged vegetation, shade habitat, change water temperature [and] … deplete dissolved oxygen." *Id*. As Dr. G. Fred Lee has summarized,

> Delta waters experience excessive growths of aquatic plants such as water hyacinth and *Egeria densa*. These water weeds interfere with recreational use of Delta waters for boating, swimming, water skiing, fishing, etc. The water weeds develop on nutrients added to Delta tributaries from urban, agricultural and wetlands sources in the Delta watershed, and from Delta island discharges. The California Department of Boating and Waterways spends several hundred thousand dollars per year to apply chemicals for controlling water weeds. There is concern about the potential toxic and other impacts of these chemicals on non-target organisms, such as fish food organisms, in the water column and sediments.

Lee, G. Fred and Anne Jones Lee, "Overview of Sacramento-San Joaquin River Delta Water Quality Issues," p. v (June 24, 2004). Because of the significant contribution of nutrients from irrigated lands, there is plainly a fair argument that the Regional Board's authorization of irrigated lands discharges may have a significant impact on recreational boaters and persons recreating in the Delta and observing vast areas of water hyacinth.

Because of the navigational, recreational and aesthetic impacts resulting from excessive water hyacinth growth, the State of California expends resources every year spraying herbicides into Delta waterways. *See* Lee, p. 19 ("large amounts of aquatic herbicides are used in the Delta to control excessive growths of water hyacinth this could be an important issue impacting Delta water quality"). *See* Dept. of Fish & Game, "Acute Toxicities of Herbicides Used to Control Water Hyacinth and Brazilian Elodea on Larval Delta Smelt and Sacramento Splittail (June 8, 2004).

In addition to increasing herbicide discharges to the Delta, water hyacinths also provide habitat for other nonnative crabs and parasites, which ultimately may affect endangered salmon in the Central Valley. As one recent study reports,

> [t]he newfound presence of these crustaceans could have significant ramifications apart from just adding their names to the already lengthy list of non-indigenous species in the Delta. Amphipods and isopods are known to be intermediate hosts of a number of parasites, including acanthocephalan parasites of fish (Nagasawa et al. 1983, Yasumoto and Nagasawa 1996). *Asellus hilgendorfii* has specifically been shown to serve as an intermediate host for numerous species of acanthocephalans that parasitize salmonids and other fish in waters of Japan (Nagasawa and Egusa 1981, Nagasawa et al. 1983, Mayama 1989). Infection occurs when fish prey upon *A. hilgendorfii* that contain acanthocephalan larvae. Adult acanthocephalans parasitize the intestinal tract of the definitive host fish (Nagasawa et al. 1983). Studies have shown that salmonids can have infection levels of 83-100% depending on the season, when *A. hilgendorfii* is only 2.1 % of the total wet weight of food items in the fish diet (Nagasawa et al. 1983). Thus, even though *A. hilgendorfii* occurs in low abundance in the diets of fish in the Sacramento/San Joaquin Delta, it could still potentially infect the entire population of salmonids with acanthocephalan parasites."

Toft, Jason David, "Community Effects of the Non-Indigenous Aquatic Plant Water Hyacinth (*Eichhornia crassipes*) in the Sacramento/San Joaquin Delta, California" (2000). All of these direct and indirect effects must be discussed and analyzed in the PEIR.

In addition, the presence of bacteria in samples collected by the existing ILRP obviates the need to address the affect of PEIR's alternatives and their ability to reduce fecal discharges on recreation, especially swimming, and human health. In CSPA's experience, it is not possible to keep kids from playing in water. As the staff report summarizes:

> The fecal pathogen indicator *E. coli* is the most common parameter with surface water exceedances of water quality objectives in the ILRP; it was detected in 99 percent of all samples. Fecal contamination is a concern

> because certain pathogenic bacteria found in feces can cause gastrointestinal illness.

Staff Report, p. 33. Indeed, 24 and 55 management plans in the Sacramento River and San Joaquin, respectively, have been triggered because of exceedances of E. coli standards in those rivers. Staff Report, p. 26, Table 3. The PEIR makes a passing reference to the fecal coliform problem, noting that "[t]oxicity, and bacteria are also known water quality problems in the Sacrament River Basin." PEIR, p. 5.9-6. The obvious impacts of fecal coliform discharges on recreational uses like swimming and boating in the Delta and other waters of the Central Valley must be addressed in the PEIR.

Lastly, CSPA is aware of numerous individuals who once recreated in and on the Delta and other Central Valley waters who have stopped or reduced such recreation because of fears of contaminants and experiencing health effects that were associated with exposure to Central Valley waters. For example, one of CSPA's members, Linda Forbes, reports:

> I was a frequent visitor to the Delta region for five years, enjoying water skiing, camping, boating and swimming. I experienced several strange skin rashes after weekends of recreation at the Delta, with the severity increasing over time. Two summers ago I began to feel more and more uncomfortable about the risks of pursuing my water sports passion there; I have not gone swimming or skiing in Delta waters for over a year.

E-mail from Linda Forbes to Bill Jennings, CSPA (Sept. 23, 2010). Another example is from Barbara Barrigan-Parrilla, a CSPA member and the Director of Restore the Delta. She tells of her daughter's first swim in the Delta as an infant resulting in an emergency room visit and her refusal to swim in the Delta since that day. E-mail from Barbara Barrigan-Parrilla to Bill Jennings, CSPA (Sept. 25, 2010). Kari Burr, a fisheries biologist, also describes the adverse impacts of agricultural discharges on her professional and recreational activities. E-mail from Kari Burr to Bill Jennings, CSPA (Sept. 26, 2010). *See also* E-mail from Frank T. Rauzi to Bill Jennings (Sept. 26, 2010) (Mr. Rauzi, a lifelong resident and fisherman of the Delta, recounts his refusal to eat fish and concerns about swimming in the Delta). Based on conversations between Bill Jennings and other CSPA members over the years, CSPA does not believe Ms. Forbes,' Ms. Barrigan-Parilla's, Ms. Burr's or Mr. Rauzi's experiences are isolated incidents but unfortunately are shared by numerous people who would recreate in waters of the Central Valley but for the incredible levels of toxic and health-threatening pollution that is discharged from irrigated lands.

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2. PEIR fails to analyze cultural impacts re: traditional uses of salmon or other fish.

The PEIR opts not to evaluate any cultural impacts of the various ILRP alternatives. PEIR, p. 5.3-9. Contaminants affecting Central Valley salmon and contributing to their decline have adverse impacts on Native American culture and religious practices. It is widely acknowledged by scientists and government agencies that agricultural runoff is one of the factors adversely affecting Chinook salmon. *See* PEIR, p. 5.8-22 ("Other factors affecting the fall-run/late fall–run Chinook salmon include . . . pollution (*e.g.*, municipal discharges and agricultural runoff), ... (Moyle et al. 2008:141–143)"). *Id*. at 5.8-39 ("NMFS (2008) concluded that EPA registration of chlorpyrifos, diazinon, and malathion would jeopardize the continued existence of, and destroy or adversely modify critical habitat for, the Central Valley spring-run Chinook salmon ESU, the Sacramento River winter-run Chinook salmon ESU, and the California Central Valley steelhead DPS"); National Academy of Sciences, "A Scientific Assessment of Alternatives for Reducing Water Management Effects on Threatened and Endangered Fishes in California's Bay–Delta," p. 42 (2010) ("It has long been recognized that contaminants are present in the delta, have had impacts on the fishes, and may be increasing (Linville et al., 2002; Davis et al., 2003; Edmunds et al., 1999).

Native American traditional uses and religious ceremonies involving salmon continue on the Sacramento River and, to a lesser degree, the San Joaquin River, and their tributaries. As the United States District Court for the Eastern District of California recently ruled, "salmon have sustained the Winnemem Wintu and have formed the foundation of the Tribe's cultural and spiritual ceremonies and beliefs." Order, p. 88. (May 18, 2010). Judge Wanger specifically recognized the "significant cultural and spiritual interests of the Winnemem Wintu" tied to the health of salmon. *Id*., pp. 88-89. The District Court relied upon the declaration of Gary Hayward Slaughter Mulcahy, the Governmental Liaison and a Tribe member of the Winnemem Wintu Tribe. As Mr. Mulcahy testified to the Court,

> For centuries, the Winnemem Wintu have had a deep cultural and spiritual relationship with the salmon that utilize the Sacramento River and its tributaries. We sing to the salmon and the waters that sustain them. Our history, traditions, ceremonies, and culture are filled with respect, reverence, appreciation, and dependence on the salmon and these waters. Salmon were the staple of the Winnemem Wintu. Salmon are the food necessary to complete and fulfill many of the Winnemen Wintu's very special sacred ceremonies. Salmon are the sustainer of health and life of the Winnemem Wintu. We believe that when the first spirits were choosing what form they would take (i.e., Salmon, Eagle, Bear, Human, etc.), when Human chose to be human, the Grandfather spirit said that these Humans will need lots of help, and each of the other spirits gave something to Humans to help them through life. We believe that Salmon gave us speech and in return we promised to always speak for them. This

> is remembered and celebrated in ceremonies on the McCloud River, Sacramento River, Squaw Creek and at Mt. Shasta several times a year. We believe that if the salmon go, the Winnemem Wintu will also disappear.

Declaration of Gary Hayward Slaughter Mulcahy, ¶ 3 (March 12, 2010). The Tsi-Akim Maidu Tribe conducts a "calling back the salmon" ceremony on the Yuba River. http://www.callingbackthesalmon.com/ceremony.php. The PEIR must gather in and discuss relevant information regarding Native American cultural and religious uses of salmon that may be affected by the Regional Board's proposal to authorize contaminants affecting salmon in the Central Valley.

3. The PEIR fails to address public health impacts of authorizing continued discharges of pesticides and other pollutants from irrigated lands effluent to groundwater.

As early as March 2003, CSPA and others urged the Regional Board to consider human health impacts of authorizing irrigated land discharges in its EIR. CSPA et al. Scoping Comments (March 12, 2003) (EIR must consider "human health throughout the Central Valley and California in terms of both acute and chronic impacts including, but not limited to: - children, including residents and school children - laborers, including farmworkers, farmers, pesticide appliers, etc. – residents – anglers - pregnant women - newborn infants"). Despite that request, the PEIR has opted to ignore potential human health impacts of the various ILRP alternatives approval of continuing irrigated land discharges.

More than two million Californians have been exposed to harmful levels of nitrates in drinking water over the past 15 years and the population of those exposed keeps growing. The PEIR acknowledges the extent of nitrate contamination and includes, as Figure 5.9-17, a map that shows nitrate contamination to be concentrated in the Central Valley. Incredibly, however, the PEIR makes no attempt to analyze how nitrogen-based fertilizer application in the Central Valley results in the exposure of the public to contaminated groundwater, the health impacts of that exposure, or how implementation of any of the five alternatives would reduce exposure, other than to say, for Alternative 1:

> Nutrient management would improve both surface water quality and groundwater quality by improving the use of chemicals and using improved application techniques, and by limiting the use of nutrients as fertilizer that could potentially seep to groundwater and add nitrate to the groundwater table.

PEIR, p. 5.9-14.

The assertion that ongoing nutrient management efforts would somehow improve water quality is not borne out by recent data. In fact, the status quo, as proposed in Alternative 1, has resulted in an increase, statewide, in the number of wells that exceeded the health limit for nitrates, from nine in 1980 to 648 by 2007. http://articles.sfgate.com/2010-05-17/news/20901575_1_nitrate-contamination-water-supply-water-systems. In Tulare County, more than 40% of private domestic water wells exceed the drinking water standard for nitrate. http://www.swrcb.ca.gov/ gama/docs/ekdahl_gra2009.pdf. On the basis of more than 25 years of data, the number of wells that exceed the drinking water standard for nitrate is growing as a percentage of all nitrate detections. http://www.swrcb.ca.gov/gama/docs/ekdahl_gra2009.pdf Clearly the status quo is not working.

Health effects of exposure to nitrates most notably results in methemoglobinemia or "blue baby syndrome." Toxic effects of methemoglobinemia occur when bacteria in the infant stomach convert nitrate to more toxic nitrite, a process that interferes with the body's ability to carry oxygen to body tissues. Infants with these symptoms need immediate medical care since the condition can lead to coma and eventually death. Pregnant women are susceptible to methemoglobinemia and should be sure that the nitrate concentrations in their drinking water are at safe levels. Additionally, some scientific studies suggest a linkage between high nitrate levels in drinking water with birth defects and certain types of cancer. http://www.swrcb.ca.gov/water_issues/ programs/gama/docs/coc_nitrate.pdf.

The PEIR should be rewritten to include an assessment of the potential for the public to be exposed to nitrates in drinking water from agricultural practices in the Central Valley and measures implemented as a result of the ILRP. This is especially important to the extent the Regional Board anticipates the installation of numerous tailwater recovery systems. *See* Technical Memo, p. A-2. The assessment of each alternative should include an estimate of nitrogen loading to fields; nitrogen fate and transport in soil, surface water, and groundwater; nitrogen monitoring; and a summary nitrogen impacts to water supplies. Linking monitoring to measurement of each of the alternatives is critical. An annual assessment of the performance of the alternative that is selected should be required and use of the 10,000-well California Department of Public Health database should be required as a tool for evaluation.

Another potential health impact unaddressed by the PEIR is the potential threats from fecal contamination of wells and surface waters. As the Existing Conditions Report tells us:

> The presence of pathogen indicators, such as fecal coliform and *E. coli*, are ubiquitous in water samples collected throughout the Central Valley and are frequently measured at levels higher than the EPA recommended criterion for *E. coli*. Not all strains of *E. coli* are pathogenic, but the presence of *E. coli* or fecal coliform is an indicator of fecal contamination.

> Several coalitions funded a study to determine the sources of *E. coli* contamination.

Existing Conditions Report, p. 3-11. See also U.S. EPA, "Conceptual Model For Pathogens and Pathogen Indicators in The Central Valley and Sacramento-San Joaquin Delta - Final Report, " p. ES-1 (Aug. 24, 2007) (highest concentrations of E. coli data "were observed for waters affected by urban environments and intensive agriculture in the San Joaquin Valley") (http://www.swrcb.ca.gov/rwqcb5/water_issues/drinking_water_policy/concept_path_indicators/cover_toc_es.pdf). As the California Department of Public Health's health notices explain:

> Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

DPH, Tier 1 Fecal Coliform or E. coli Notice Template (http://www.cdph.ca.gov/certlic/drinkingwater/Documents/Notices/Tier%201%20Fecal%20Coliform%20or%20E%20coli%20Notice.doc). Despite its ubiquitous presence and clear connection to irrigated land discharges, the only mention of pathogens in the PEIR is a passing reference in the Fisheries section. PEIR, p. 5.8-49 ("Pathogens are monitored for potential exceedance of trigger limits in relation to human health. Pathogens of concern to fish may affect fish populations in the program area, but data are insufficient to draw any conclusions about existing effects"). Like nitrates, no effort is made in the PEIR to discuss the obvious human health and recreational impacts that are adversely affected by an ILRP that authorizes coliform discharges from farms.

Lastly, the PEIR fails to consider any human health impacts PEIR associated with discharges of other pollutants, including certain metals, that will be authorized through the ILRP. The Existing Conditions Report acknowledges that irrigated land discharges authorized by the ILRP will mobilize various metals that can pose serious human health risks, including lead and arsenic. Existing Conditions Report, p. 3-55 ("elevated levels of naturally occurring metals that are mobilized and suspended in agricultural return flows are common in these watersheds—such as copper, arsenic, cadmium, boron, nickel, lead, and selenium"). The PEIR also should explore the human health impacts of ILRP-authorized discharges of metals.

J. PEIR's Analysis of Many Key Potential Impacts and the Alternatives' Proposed Mitigations Are Not Supported by Substantial Evidence.

The alternatives, at their core, are projects by which the Regional Board proposes to authorize discharges of polluted effluent from irrigated lands to surface and

groundwater throughout the Central Valley. Each alternative includes various program elements which are the mitigations proposed to purportedly reduce the effect of the Regional Board authorizing the discharge of hundreds of millions of gallons of polluted effluent. The PEIR's discussion of impacts boils down to a discussion of the alternatives' proposed mitigation measures. In addition to those proposed mitigations, the actual dischargers would have to implement site-specific mitigation measures, *i.e.* BPTC, in order to address the impacts of discharging to the State's waters.

The PEIR fails to substantiate or properly analyze the alternatives' programmatic-level mitigation measures, including for example the effectiveness of any FWQMPs and reporting requirements, monitoring requirements, and third party actions. Nor does the PEIR adequately discuss the effectiveness in reducing pollution of any of the BMPs that are listed and which might achieve BPTC. The PEIR leaves out any discussion of numerous management measures that likely will be applied on irrigated lands. Lastly, the PEIR fails to analyze cumulative impacts of the alternatives when considered with numerous other projects in the Central Valley relating to water diversions, dam operations, proposed development, pending pesticide registration proceedings, dredging projects and others that are and will affect water quality, fisheries, and other impacts.

Mitigation measures must be designed to minimize, reduce or avoid an identified environmental impact or to rectify or compensate for that impact. CEQA Guidelines § 15370. Mitigations may be proposed as part of the project but must still be fully discussed and analyzed. "The discussion of mitigation measures shall distinguish between the measures which are proposed by project proponents to be included in the project and other measures proposed by the lead, responsible or trustee agency or other persons which are not included but the lead agency determines could reasonably be expected to reduce adverse impacts if required as conditions of approving the project." CEQA Guidelines § 151126.4(a)(1)(A)

Where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. *Id.*, § 15126.4(a)(1)(B). A lead agency may not make the required CEQA findings unless the administrative record clearly shows that all uncertainties regarding the mitigation of significant environmental impacts have been resolved. A public agency may not rely on mitigation measures of uncertain efficacy or feasibility. *Kings County Farm Bureau*, 221 Cal.App.3d at 727 (finding groundwater purchase agreement inadequate mitigation measure because no record evidence existed that replacement water was available). "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. CEQA Guidelines § 15364.

CEQA requires the lead agency to adopt feasible mitigation measures that will substantially lessen or avoid the Project's potentially significant environmental impacts and describe those mitigation measures in the CEQA document. Pub. Res. Code §§ 21002, 21081(a), 21100(b)(3); CEQA Guidelines § 15126.4. Mitigation measures must be fully enforceable through permit conditions, agreements or other legally binding

instruments. *Id.* at § 15126.4(a)(2). If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed. CEQA Guidelines § 151126.4(a)(1)(D).

1. The analysis of impacts to water quality is flawed because there is no evidentiary support for the assumption that mitigation measures proposed by each alternative would be equally effective.

The most obvious impact of the Regional Board authorizing discharges of waste from irrigated lands to surface or groundwater is impaired water quality. The PEIR, however, takes an entirely cavalier approach to evaluating this obvious impact. No effort is made in the PEIR to discuss the efficacy and uncertainty of the various monitoring and management plans proposed by each alternative. The PEIR makes no effort to quantify or compare the actual pollution reductions that would be likely to occur under each alternative. Nor does the PEIR discuss whether the monitoring proposed or omitted by each alternative would be effective in informing the Regional Board and public about whether irrigated lands pollution in specific areas is increasing or decreasing. Nor does the PEIR compare how long it would take to figure out pollution trends based on the level of monitoring proposed or omitted in each alternative.

As mentioned above, a fundamental flaw in the PEIR is its failure to estimate the relative effectiveness of the five alternatives. It generally assumes that they will all lead to sufficient pollution reductions. This flaw is magnified in the discussion of impacts to water quality. In addressing water quality impacts, the PEIR assumes that surface water quality improvements under Alternative 1 would be the same as all of the other alternatives, including Alternative 5. As for groundwater, the PEIR makes a similar assumption – that Alternatives 2 through 5 will be equally effective at reducing pollution to groundwater (the PEIR does acknowledge that not addressing groundwater at all would be less effective).

Thus, for Alternative 1, the PEIR states that "[i]t is expected that existing water quality conditions, such as the surface water quality impairments detailed in the environmental setting section above and in the ECR, would improve over time as the program would continue to implement surface water management practices and management plans." PEIR, p. 5.9-14. The same is said for Alternatives 2 and 3, even though the former reduces water quality monitoring and the latter eliminates water quality monitoring. *Id*, pp. 5.9-16 ("Under Alternative 2, existing water quality impairments are expected to improve over time as third parties develop and implement surface water and groundwater quality management plans"), 5.9-17 ("Alternative 3, existing surface water quality and groundwater quality impairments are expected to improve over time as the FWQMPs are developed and implemented"). The same unexplained expectation is stated for Alternatives 4 and 5, simply incorporating the assertion made for Alternative 2. Id., p. 5.9-18 (Alternative 4) ("Potential impacts to water quality and hydrology under Alternative 4 would be similar to those described for

Alternative 2"); p. 5.9-18 ("Potential impacts to water quality and hydrology under Alternative 5 would be similar to those described for Alternative 2").

These expectations are unsupported by any evidence in the record. The Regional Board cannot point to anything in its current record that "clearly shows that all uncertainties" of the mitigations set forth in each alternative will eliminate the well-documented significant environmental impacts of allowing irrigated lands to discharge waste to surface and ground water.

The PEIR's simplistic and conclusory assertions fail to assist the Regional Board or the public in discerning the real life differences in pollution discharge rates that the different mitigations incorporated into each of the proposed alternatives will have. For example, in regard to FWQMPs, it is simply not realistic to assume that the two alternatives that do not require FWQMPs – Alternatives 1 and 2 – will be as effective at identifying and implementing measures as the alternatives that do require dischargers to prepare FWQMPs and, at least for two of them, require them to be submitted to the Regional Board. Likewise, for the alternatives that require FWQMPs, there would have to be some difference in effectiveness and pollution reductions between the two alternatives (3 and 4) that would have the Regional Board review and approve FWQMPs and Alternative 5's provision that FWQMPs not be reviewed or approved. Conversely, if the proposal to have the Regional Board approve every FWQMP before they go into effect slows down their implementation, then there would undoubtedly be an impact during the term the Board did not act on any FWQMPs. Until the PEIR can remove the uncertainty of how the Regional Board can assure BPTC is implemented without requiring FWQMPs, the Regional Board may not rely on alternatives that do not propose FWQMPs.

In terms of monitoring, no evidence could support the PEIR's assumption that Alternative 3's omission of any water quality monitoring for surface or groundwater discharges could somehow be as effective as any of the alternatives that do provide some water quality monitoring. And as between Alternative 5's farm-specific monitoring requirement and Alternatives 1, 2 and in effect 4's proposal to rely on regional monitoring, no evidence could support the PEIR's assertion that the regional monitoring measures will tell the Board or anyone whether a particular dischargers' management measures in fact reduce any pollution discharges and would address specific dischargers' pollution problems as promptly as a measure that required them to monitor their discharges. Until the PEIR sufficiently discusses and eliminates the obvious uncertainty of a regional monitoring mitigation measure to evaluate the effectiveness of an on-site management measure miles upstream, the Regional Board cannot rely on alternatives relying on such regional monitoring.

As noted above, the PEIR's assumption that the monitoring required by each of the proposed alternatives is equally effective, is inconsistent with the PEIR's acknowledgment in its discussion of fisheries that more farm-specific monitoring results in more pollution reductions and fewer impacts. PEIR, p. 5.8-52 ("given the probability

of increased monitoring of individual farms, and especially those at higher risk of generating significant impacts—in addition to wellhead protection, nutrient management plans, tracking of nutrient and pesticide application, and monitoring of individual wells—the positive benefit of Impact FISH1 (improved water quality) would probably be greater under Alternative 4 than under Alternative 2 or Alternative 3"); *Id*., p. 5.8-53 (Alternative 5) ("Given the emphasis on monitoring of individual farms, wellhead protection, nutrient management plans, tracking of nutrient and pesticide application, monitoring of individual wells, and potential installation of monitoring wells, the positive benefit of Impact FISH1 (improved water quality) probably would be greater under Alternative 5 than under any other alternative"). Although as discussed below, these analyses also must be better analyzed, the general observation is obvious and the PEIR's failure to discuss these differences in the water quality section renders it inadequate.

Nor is there any attempt in the water quality discussion to quantify the effectiveness of management measures that will likely be employed by individual farms. The PEIR lists a handful of likely measures. This list is incomplete, omitting numerous measures that one can find by reviewing some of the management plans that have been developed. Of particular note is the complete omission in the PEIR of any discussion of integrated pest management options to reduce the use or rate of pesticide applications. Until the Regional Board can sufficiently discuss the available management measures and whether any of them, alone or in combination will effectively eliminate the significant impacts of the Board authorizing waste discharges from irrigated lands, then the Board cannot rely on them.

2. The analysis of impacts to fisheries is flawed because there is no evidentiary support for the assumption that all alternatives would be equally effective at protecting fisheries

The PEIR's handling of impacts to fisheries suffers from flaws similar to those described in the discussion of water quality above. The PEIR's discussion of fisheries impacts, again without any evidence or common sense, simply assumes that the same level of management measures and surface water pollution control effectiveness will result with implementation of any of the alternatives, with or without FWQMPs and without regard to how far away some water quality monitoring may (or may not) be occurring. PEIR, p. 5.8-50 ("Under this alternative, management practices would be implemented to reduce the levels of identified constituents of concern below the baseline conditions. Monitoring and management plan requirements of Alternative 1 are expected to result in further implementation of management practices by growers") As for groundwater, the same is true with the exception of Alternative 1.

The PEIR's assertion that Alternative 1 will improve surface water quality is entirely unsupported by any evidence. Alternative 1, now in its seventh year of implementation, has failed to result in the Regional Board documenting the installation of a single management measure anywhere in the Central Valley. Nor is there any evidence of a trend that the rampant violations of water quality standards throughout the

Central Valley resulting from irrigated lands discharges are on the mend. Nevertheless, the PEIR asserts that "[i]mprovements to surface water quality from implementation of management practices [under Alternatives 1] in impaired water bodies receiving inputs from lands in the program area are likely to benefit fish (e.g., by reducing contaminant loads and decreasing sedimentation and total suspended solids)." PEIR, p. 5.8-50. The PEIR makes the same assertion for Alternative 2. *Id*., p. 5.8-52. As discussed above, the coalitions' current plans are to have informal meetings with some farms to discuss BMPs. *See supra*, Section F.1. The coalitions have no legal authority to require implementation of any BMPs by any of their members. What, if any, BMPs may result from the proposed meetings is anybody's guess. And, without FWQMPs, whether or not the Regional Board would even be aware of a specific farmer's installation of measures is not clear. The PEIR's cavalier assertion that Alternatives 1 and 2, despite omitting any FWQMPs or farm-specific monitoring could somehow lead to the certain implementation of pollution reduction measures, does not resolve the uncertainties that coalitions and regional monitoring will resolve irrigated land's water pollution impacts.

Although the PEIR does acknowledge some relevant benefit from the mitigations included in Alternatives 4 and 5 farm-specific monitoring proposals, coupled with the farm-specific plan requirements, the discussion is still insufficient to remove uncertainties about the efficacy of Alternative 4's proposal. *See* PEIR, pp. 5.8-52; 5.8-53. Specifically, because a discharger may opt out of farm-specific monitoring in exchange for participation in regional monitoring, it is uncertain whether any discharger will conduct farm-specific water quality monitoring. As a result, and as discussed above, there is no certainty that the Regional Board will be able to determine that any measures installed on that farm will amount to BPTC or assure compliance with water quality standards. In addition, the PEIR's discussion of the relative benefit to water and additional pollution reductions one should expect from requiring FWQMPs coupled with farm-specific monitoring is not specific enough for the Regional Board to compare those benefits to the other alternatives.

Even assuming all of the alternatives may have some benefit on water quality, the PEIR also makes no effort to determine the time frames within which any such improvements would be realized under the various alternatives. Given the frames of reference in each alternative, it appears clear that some, for example, Alternative 5, would result in measures being installed faster and hence pollution reductions being achieved more quickly, as compared to any other alternative.

The PEIR cannot succeed in achieving the goals of CEQA if it shies away from frankly addressing the mitigations proposed in each alternative and comparing their ability or inability to reduce pollution that will be discharged to surface and groundwater from irrigated lands.

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3. The PEIR fails to discuss numerous cumulative impacts to water quality and fisheries habitat currently plaguing the Delta and other areas of the Central Valley.

The PEIR attempts to pass on evaluating the cumulative impacts of the ILRP. PEIR, p. 6-1 ("Because of the unidentified location of potential impacts, the Lead Agency has not identified any projects or programs adequately similar in nature, location, and type to result in a meaningful comparative analysis"). The notion that either the geographic area or obvious water quality and fisheries impacts of allowing discharges of irrigated lands waste is unknown is patently incorrect, as the preceding sections of the PEIR make clear despite their obvious flaws. The PEIR recognizes a number of specific categories of actions in the Central Valley that are contributing to impacts to fisheries and water quality, in addition to discharges from agricultural lands. Of particular note is the operation of the massive state and federal water projects, which are having obvious cumulative impacts to fish in the Central Valley by killing massive numbers of fish at their respective pumping facilities. *See* http://www.swr.noaa.gov/ocap/Executive_summary_to_NMFS'_CVP-SWP_operations_BO_RPA.pdf; 5.8-17 ("water projects have adversely modified [longfin smelt's] habitat, distribution, food supply, and probably abundance"); *See* NMFS Biological Opinion Regarding Proposed Long-Term Operations of the Central Valley Project And State Water Project (June 4, 2009) (http://www.swr.noaa.gov/ocap/NMFS_Biological_and_Conference_Opinion_on_the_Long-Term_Operations_of_the_CVP_and_SWP.pdf). Both EPA's registration of various pesticides that the National Marine Fisheries Service has determined will jeopardize the continued existence of listed salmon must be considered, especially considering NMFS's proposed mitigation requirements prohibiting pesticide application on irrigated lands within 1000 feet of water. PEIR, p. 5.8-39 ("NMFS (2008) concluded that EPA registration of chlorpyrifos, diazinon, and malathion would jeopardize the continued existence of, and destroy or adversely modify critical habitat for, the Central Valley spring-run Chinook salmon ESU, the Sacramento River winter-run Chinook salmon ESU, and the California Central Valley steelhead DPS"); NMFS Biological Opinion on the Effects of the U.S. Environmental Protection Agency's Proposed Registration of Pesticide Products (Nov. 18, 2008) (http://www.nmfs.noaa.gov/pr/pdfs/pesticide_biop.pdf).

The proposed Peripheral Canal being pursued by various agencies also is a reasonably foreseeable project that will enormously exacerbate water quality and fisheries impacts within the Delta. *See* Bay Delta Conservation Plan, Status Update 3 (June 2010). Likewise, the Regional Board is in the best position to evaluate the cumulative impacts of the hundreds of discharge permits it has issued to dischargers throughout the Central Valley. *See* Central Valley Regional Board Web Site, Adopted Orders (http://www.swrcb.ca.gov/centralvalley/board_decisions/adopted_orders/index.shtml). The PEIR also should evaluate, for example, cumulative bacterial issues resulting from rampant sewage overflows from municipalities throughout the Valley in combination with the bacteria coming from farms. http://www.waterboards.ca.gov/water_issues/programs/sso/sso_map/sso_pub.shtml (accessed September 27, 2010).

These and other cumulative impacts must be addressed in the PEIR. Recognizing that several projects may together have a considerable impact, CEQA requires an agency to consider the "cumulative impacts" of a project along with other projects in the area. Pub. Resources Code §21083(b); CEQA Guidelines §15355(b). It is vital that an agency assess "'the environmental damage [that] often occurs incrementally from a variety of small sources . . .'" *Bakersfield Citizens*, 124 Cal.App.4th at 1214. This requirement flows from CEQA section 21083, which requires a finding that a project may have a significant effect on the environment if "the possible effects of a project are individually limited but cumulatively considerable. . . . 'Cumulatively considerable' means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." CEQA Guidelines §15355(a). "[I]ndividual effects may be changes resulting from a single project or a number of separate projects." CEQA Guidelines § 15355(a).

"The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." *Communities for a Better Environment v. Cal. Resources Agency ("CBE v. CRA")* (2002) 103 Cal.App.4th 98, 117. A legally adequate cumulative impacts analysis views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the project at hand.

As the court recently stated in *CBE v. CRA,* 103 Cal. App. 4th at 114:

> Cumulative impact analysis is necessary because the full environmental impact of a proposed project cannot be gauged in a vacuum. One of the most important environmental lessons that has been learned is that environmental damage often occurs incrementally from a variety of small sources. These sources appear insignificant when considered individually, but assume threatening dimensions when considered collectively with other sources with which they interact.

In *Kings County Farm Bureau v. City of Hanford,* 221 Cal.App.3d at 718, the court concluded that an EIR inadequately considered an air pollution (ozone) cumulative impact. The court said: "The [ ] EIR concludes the project's contributions to ozone levels in the area would be immeasurable and, therefore, insignificant because the [cogeneration] plant would emit relatively minor amounts of [ozone] precursors compared to the total volume of [ozone] precursors emitted in Kings County. The EIR's analysis uses the magnitude of the current ozone problem in the air basin in order to trivialize the project's impact." The court concluded: "The relevant question to be addressed in the EIR is not the relative amount of precursors emitted by the project

when compared with preexisting emissions, but whether any additional amount of precursor emissions should be considered significant in light of the serious nature of the ozone problems in this air basin."[1] The *Kings County* case was recently reaffirmed in *CBE v. CRA,* 103 Cal.App.4th at 116, where the court rejected cases with a narrower construction of "cumulative impacts."

Similarly, in *Friends of Eel River v. Sonoma County Water Agency,* (2003) 108 Cal. App. 4th 859, the court held that the EIR for a project that would divert water from the Eel River had to consider the cumulative impacts of the project together with other past, present and reasonably foreseeable future projects that also divert water from the same river system. The court held that the EIR even had to disclose and analyze projects that were merely proposed, but not yet approved. The court stated, CEQA requires "the Agency to consider 'past, present, and probable future projects producing related or cumulative impacts . . . .' (Guidelines, § 15130, subd. (b)(1)(A).) The Agency must interpret this requirement in such a way as to 'afford the fullest possible protection of the environment.'" *Id.*, at 867, 869. The court held that the failure of the EIR to analyze the impacts of the project together with other proposed projects rendered the document invalid. "The absence of this analysis makes the EIR an inadequate informational document." *Id.,* at 872.

The court in *Citizens to Preserve the Ojai v. Bd. of Supervisors* (1985) 176 Cal.App.3d 421, held that an EIR prepared to consider the expansion and modification of an oil refinery was inadequate because it failed to consider the cumulative air quality impacts of other oil refining and extraction activities combined with the project. The court held that the EIR's use of an Air District Air Emissions Inventory did not constitute an adequate cumulative impacts analysis. The court ordered the agency to prepare a new EIR analyzing the combined impacts of the proposed refinery expansion together with the other oil extraction projects.

As the PEIR notes, water quality standards already are not being met in locations throughout the Delta. As the National Academy of Sciences report and a plethora of other reports and agency decisions make clear, fisheries and water quality already are adversely affected by the massive water diversions of the State and Federal water projects and flow reductions caused by dams throughout the Valley. As NMFS makes clear, pesticide use currently approved by EPA registrations throughout the Valley is

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[1] *Los Angeles Unified v. City of Los Angeles*, 58 Cal.App.4th at 1024-1026 found an EIR inadequate for concluding that a project's additional increase in noise level of another 2.8 to 3.3 dBA was insignificant given that the existing noise level of 72 dBA already exceeded the regulatory recommended maximum of 70 dBA. The court concluded that this "ratio theory" trivialized the project's noise impact by focusing on individual inputs rather than their collective significance. The relevant issue was not the relative amount of traffic noise resulting from the project when compared to existing traffic noise, but whether any additional amount of traffic noise should be considered significant given the nature of the existing traffic noise problem.

threatening salmon with extinction throughout the Central Valley. In short, the need for a cumulative impact analysis of water quality, fisheries, and other related impacts like human health, cultural, recreational, air quality, and aesthetic cannot be seriously questioned. It is plain that massive cumulative impacts from water diversions, pesticide use approvals and, with the ILRP, massive pollution from irrigated lands are occurring throughout the Central Valley and particularly in the Delta.

4. The PEIR's discussion of possible agricultural impacts is inadequate because it relies on a flawed economic analysis.

CSPA retained the economic consulting firm ECONorthwest to evaluate and comment on the economic analysis accompanying the PEIR. *See infra*, Section IV. The PEIR's consideration of agricultural impacts relies almost exclusively on the economic analysis. PEIR, p. 5.10-1 ("The catalyst for these impacts is the cost of achieving and maintaining compliance with the alternatives as discussed in *Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program* (ICF International 2010) (Draft ILRP Economics Report), incorporated herein by reference"). Because the economic analysis is not reliable, as is discussed in detail below and in the accompanying ECONorthwest Review, the PEIR's discussion of asserted impacts to agricultural production is unsupported by substantial evidence.

IV. THE ECONOMIC ANALYSIS RELIED UPON BY THE PEIR AND STAFF REPORT IS SUBSTANTIALLY DEFICIENT AND BIASED TOWARD THE LEAST EFFECTIVE AND COALITION-PREFERRED ALTERNATIVES.

Both the PEIR, especially in its discussion of potential agricultural impacts, and the Staff Report rely extensively on ICF International's Technical Memo. A review of that analysis by ECONorthwest, a firm exclusively dedicated to expert economic consulting, reveals fundamental errors and biases. Because of the following errors, any reliance on the Technical Memo by the Regional Board and its staff would be an abuse of discretion. The Regional Board cannot substantiate a finding under Resolution No. 68-16 or the federal antidegradation policy that under a newly adopted ILRP, "the highest water quality consistent with <u>maximum benefit</u> to the people of the State will be maintained." Resolution No. 68-16 (emphasis added). Similarly, to the extent the Board intends to rely on any conditional waivers to implement the next version of the ILRP, a finding by the Regional Board pursuant to Water Code § 13269 that such waiver is in the public interest also would not be supported by substantial evidence.

The ECONorthwest Review discloses the following fundamental errors in the preparation of the Technical Memo.

1. **The Analytical Objectives and Approach**: ECONorthwest demonstrates that the Technical Memo ignores generally accepted guidelines for this type of analysis, including for example guidelines prepared by the California Department

of Water Resources, an agency with, of course, considerable experience interfacing with California's agricultural community. Because of this failure, ECONorthwest concludes that the Technical Memo "provides decision-makers and stakeholders with biased and unreliable descriptions of the economic outcomes likely to materialize if the Board were to implement any of the alternatives in the EIR." ECONorthwest Review, pp. 1, 2-5.

2. **Baseline**: ECONorthwest's review establishes that ICF International's analysis "does not compare the alternatives against an appropriate baseline that describes potential future conditions absent implementation of each alternative" further biasing its conclusions. Hence, it provides an incomplete, biased representation of the alternatives' economic consequences. ECONorthwest Review, pp. 1, 5-7.

3. **Management Practices**: ECONorthwest's review discloses that ICF International only considered a truncated range of the more expensive management practices in determining projected costs of the various alternatives and excluding the less expensive and more efficient practices. ECONorthwest Review, pp. 1, 7-9. As a result, "the EIR and *Technical Memo* provide an incomplete and biased representation of the choices that realistically are available to the [Regional] Board." *Id*., p. 1.

4. **Costs and Benefits**: ECONorthwest's review shows that the Technical Memo incorrectly calculates the costs of adopting practices that improve water quality and completely overlooks major categories of economic costs and benefits, once again skewing its conclusions to support the less rigorous and coalition-preferred alternatives. *See* ECONorthwest Review, pp. 1, 9-11.

5. **Risk and Uncertainty**: ECONorthwest also criticizes the Technical Memo for failing to provide information and analysis of the risks and uncertainty facing irrigators and others from each proposed alternative. The omission of this standard component of any complete economic analysis of a program such as the IRLP is a fatal flaw in the Technical Memo. *See* ECONorthwest Review, pp. 1, 11.

6. **Regional Impacts**: Lastly, ECONorthwest's review demonstrates that the Technical Memo's discussion of regional impacts "emphasize[s] negative outcomes and ignore[s] the analytical assumptions that overstate costs and the resulting negative outcomes." ECONorthwest Review, p. 1. Even with this built-in bias, the Technical Memo still must acknowledge the improvement to the Central Valley's economy by implementation of Alternatives 3 through 5. An accurate economic analysis likely would further support the economic benefit of the alternatives that incorporate farm specific measures.

Because of these fundamental flaws, the Technical Memo, as well as the portions of the PEIR and Staff Report that rely upon it, must be redone and recirculated in order to provide the Regional Board with substantial evidence upon which it may rely.

V. THE STAFF REPORT FAILS TO ACKNOWLEDGE THE LEGAL AND POLLUTION CONTROL SHORTCOMINGS OF THE CURRENT ILRP

The Staff Report disingenuously seeks to justify a predetermined and environmentally non-protective course of action by misrepresenting the present program and carefully crafting a needlessly expensive and overly bureaucratic strawman to reject alternatives that would better protect water quality. Water quality problems and the adverse impacts resulting from the continuing discharge of agricultural pollutants are largely ignored while the Staff Report focuses on potential impacts to farmers from having to comply with water quality standards.

A. Rather Than Keep Its Eye On The Regional Board's Primary Mission To Protect Water Quality, Staff's Analysis And Proposed Alternative Make Believe The Serious Flaws In The Current Program Are Actually Benefits.

The "elements" from each of the alternatives selected by Regional Board staff to be included in the long-term irrigated lands program (or recommended alternative) are flawed and represent the continuation of a program that has failed to protect water quality.

There can be no doubt that, after seven years, the ILRP has not demonstrated any success at protecting or even reducing the rampant pollution of Central Valley waters by irrigated land dischargers. According to the *Revised Draft of the 2007 Review of Monitoring Data for the Irrigated Lands Conditional Waiver Program*, 12 July 2007, between 2003 and 2007, agricultural coalitions and the U.C. Davis Irrigated Lands Monitoring Project collected data from 313 sites throughout the Central Valley. Coalitions or individual water agencies monitored 148 sites and U.C. Davis monitored the remaining 165 sites. While the adequacy of monitoring (*i.e.*, frequency and comprehensiveness of monitoring) varied dramatically from site to site, the report presents a dramatic panorama of the epidemic of pollution caused by the discharge of agricultural wastes. Toxicity to aquatic life was present at 63% of the sites monitored for toxicity (50% were toxic to more than one species). Pesticide water quality standards were exceeded at 54% of sites monitored for pesticides (many for multiple pesticides). One or more metals violated criteria at 66% of the sites monitored for metals. Human health standards for bacteria were violated at 87% of sites monitored for coliform. More than 80% of the locations reported exceedances of general parameters (dissolved oxygen, pH, salt, TSS). It would be difficult for anyone reading the Surface Water Summary (p. 23-44) of the Staff Report to appreciate the extent of pollution caused by irrigated agriculture. An Examination of the Draft 2007 Review of Monitoring Data, Irrigated Lands Condition Waiver Program, CSPA, p. 1-2. The PEIR

Staff Report discussion of surface water quality also fails to describe and discuss the monitoring results from other programs (i.e., NPDES, SWAMP, etc.).

After seven years of the irrigated lands program, the Central Valley Regional Water Quality Control Board still does not know who is actually discharging pollutants, the points of discharge, the constituents discharged, receiving water impacts, whether management measures have been implemented or if those measures are BPTC that are effective in reducing pollutant discharges. The Board cannot enforce against recalcitrant dischargers because it cannot know who they are and dischargers have little incentive to comply because they know that monitoring far downstream cannot produce the evidence to hold them accountable.

The irrigated lands waiver adopted by the Central Coast Regional Board in 2004 is illustrative. The Central Coast Board conditional waiver is substantially more rigorous than the waiver adopted by Region 5. The Central Coast Board had hopes that, because there were fewer irrigated lands dischargers in the region, they would be able to see significant water quality improvements within the first term of the waiver. The Central Coast waiver requires farmers to enroll with the Board, prepare individual farm management plans, attend water quality education courses and participate in a third-party watershed monitoring program. Yet, it has proved incapable of protecting water quality, even in that smaller region, because it fell short of requiring farm-specific monitoring. If that more robust program in a smaller region could not protect water quality, the less stringent program currently in place and proposed to be continued by staff for the much larger Central Valley will certainly fall even further short of protecting water quality.

Unlike the Central Valley staff's report, the Central Coast staff frankly addressed their existing program's shortcomings . As the Central Coast *Preliminary Draft Staff Recommendations For An Agricultural Order* (February 2010) puts it, "[t]he current Conditional Waiver . . . lacks clarity and does not focus on accountability and verification of directly resolving the known water quality problems" and "[c]urrently, the Water board and the public have no direct evidence that water quality is improving due to the 2004 Conditional Waiver." Central Coast Staff Report, p. 6. It goes on to note, "[t]he current watershed monitoring program only indicates long-term (multi-year), receiving water changes without measuring: 1) if individual agricultural dischargers are in compliance with Conditional Waiver conditions or water quality standards, or 2) if short-term progress towards water quality improvements on farms or in agricultural discharges is occurring" and "[c]urrently, information that provides evidence of on-farm improvements and reductions in pollutant loading from farms is not required, and therefore probably does not exist for most farms. The public, including those who are directly impacted farm discharge, and the Water Board, do not have the necessary evidence of compliance or improvements. This is unacceptable given the magnitude and scale of the documented water quality impacts and the number of people directly affected. At a minimum, we continue to observe that agricultural discharges continue to severely impact water quality." *Id.*, 7.

Acknowledging the failure of its present program (i.e., "Most of the same areas that showed serious contamination from agricultural pollutants five years ago are still seriously contaminated," (*id.* Page 11), Central Coast Board staff has recommended a revised program where dischargers must; 1) enroll to be covered by the order, 2) develop and implement a farm plan that includes management practices, 3) eliminate non-storm water discharges, or use source control or treatment such that non-storm water discharges meet water quality standards, 3) demonstrate through water quality monitoring that individual discharges meet certain basic water quality targets (that are or indicate water quality standards that protect beneficial uses), 4) demonstrate through water quality monitoring that receiving water is trending toward water quality standards that protect beneficial uses or is being maintained at existing levels for high quality water and 5) farm operation must support a functional riparian system and associated beneficial uses. *Id.*, p. 20. Individual monitoring is in addition to the watershed monitoring program. *Id.*, p. 23.

Inexplicably, Central Valley Board staff persists in the illusion that inserting an unaccountable bureaucracy between the Board and actual dischargers and relying upon a monitoring program that ignores numerous waterways and collects ambient data far removed from the point of actual discharges will somehow protect water quality. Right from the opening paragraphs, the Staff Report predetermines its analysis by conjuring up five "[e]lements of the long-term ILRP alternatives found to best achieve evaluation measures are summarized below." Staff Report, p. 2. Four out of five of these elements are baseless. Staff boldly asserts that unaccountable coalitions' "local knowledge" and claimed efficiencies somehow trump the Regional Board taking a lead role in implementing an ILRP; that regional monitoring is more effective at implementing measures than farm-specific monitoring; that providing incentives is better than requiring; and that in order to coordinate with other failed regional programs, the ILRP must also avoid focusing on individual dischargers and only address problems from a distance. As is discussed above in CSPA's comments on the PEIR, these are not attributes of an effective or legal program. Staff's generalizations dramatically conflict with the Central Coast Regional Board staff's more objective and frank assessment. Contrary to Central Valley staff's blind optimism that doing less equals more, the evidence in the record demonstrates that the staff's recommendation will not be able to document any improvements in water quality, the effectiveness of applied management measures or compliance with water quality standards by individual dischargers.

1. Staff cannot continue to pretend that relying on discharger coalitions conducting regional monitoring and management plans with no plan to require BMPs by dates certain will implement BPTC on individual farms and achieve standards in a timely manner.

The first element that staff claims best achieve its "evaluation measures" is the reliance on "[t]hird-party lead or coalitions groups, as opposed to Central Valley Board lead, to take advantage of local knowledge and administrative/cost efficiencies in dealing with a few groups versus thousands of individual operations."

There is no evidence coalition groups have successfully used their purported "local knowledge" to secure and verify implementation of management measures at the farm level and quantitatively reduce the mass loading of agricultural contaminates. *See supra*, Section G.1. Nor is there any evidence of cost efficiencies that would materialize if coalitions actually instituted a comprehensive program that successfully complied with regulatory requirements and held farmers accountable for implementing management measures and reducing pollutant loading.

Other Central Valley Board regulatory programs with inadequate resources have been far more successful in protecting water quality than the irrigated lands program. For example, the Board has less than a dozen staff to manage a stormwater program that oversees more than 7,500 industrial and construction operations and more than 93 Phase I and Phase II municipal permits. *State of the Central Valley Region*, slide 32, presentation by Executive Officer Pamela Creedon at the Central Valley Water Board meeting of August 2007. The stormwater program requires industrial and construction program applicants to submit a Notice of Intent, develop a comprehensive Stormwater Pollution Prevention Plan (SWPPP), implement BMPs, monitor individual discharges, revise BMPs, iteratively install new BMPs as needed and submit annual reports. Municipal permits are complicated, resource draining and consume the majority of staff time. However, CSPA has reviewed the files of literally hundreds of industrial and construction program permittees and found that the severely understaffed program (the program has less than 12% of needed staff, *Id.*) has been able to routinely review annual reports, conduct many routine site evaluations, send corrective and enforcement notices to numerous facilities. The relative successes of the stormwater program stand in stark contrast to the black hole of the irrigated lands program that remains unable to document any implementation of management measures or reduction of pollutant mass loading. For staff to claim still unproven coalitions as a key element to success is contrary to the available evidence.

2. Staff cannot protect water quality by making believe that regional monitoring results in clear expectations for dischargers or by putting reducing paperwork ahead of protecting water quality.

The next key element to success identified by the Staff Report is to rely upon "[r]egional surface and groundwater quality management plans, as opposed to individual water quality management plans, to minimize paperwork/administrative burdens while clearly defining the expectations and approach for addressing water quality problems." Staff Report, p. 2. Again, staff cannot cite to any evidence that this statement is reliable. Avoiding paperwork is simply a euphemism for not collecting information. At some point, staff has to acknowledge that the Board cannot claim to regulate 30,000 farms without at some point gathering information from them about their pollution discharges. The notion that the requisite information becomes less bureaucratic and involves less paperwork by inserting fictitious entities – with their own layers of management and paperwork – between the Regional Board and the dischargers is nonsensical. And staff has no explanation as to how plans devised on a

regional basis can clearly define expectations of all relevant dischargers in that area. Especially where, as the PEIR acknowledges, "[t]he appropriate management practice is typically selected on a site-specific or property-specific basis." PEIR, p. 3-9. Even the Staff Report admits that "[w]ith regard to selection of measures and practices, the Central Valley Water Board and USEPA recognize that there is often site-specific, crop-specific, and regional variability that affects the selection of appropriate management measures, as well as design constraints and pollution-control effectiveness of various practices." Staff Report, p. 66-67. Only by addressing site-specific measures that are at least BPTC and assure compliance with standards can expectations and water quality measures be clearly defined. To rely exclusively on regional management plans rather than FWQMPs, the Board will only continue to maintain the existing fog that obscures individual farm's actions or, more likely, inactions. *See supra*, Section F-2.

3. Staff cannot protect water quality by making believe that repeating the regional scale of other monitoring efforts that have not curtailed irrigated lands' pollution dischargers will miraculously characterize effluent quality and BPTC implementation at individual farms.

Staff continues to regulate in a dream state by claiming a third element to achieve success is that "[r]egional surface and groundwater quality monitoring, as opposed to individual or no water quality monitoring, to take advantage of cost efficiencies in coordinating with other monitoring efforts while providing sufficient information to characterize water quality." Once again, staff's claim that regional monitoring miles downstream from a farm's discharge location would characterize that discharger's water quality is absurd. It is not clear what monitoring efforts staff is referring to, but there is no evidence that any regional monitoring effort to date has reduced any irrigated lands pollution in the Central Valley. For example, the Rice Pesticide Program has not succeeded in reducing pesticide discharges from rice fields by relying on regional monitoring. Rice farmers monitor specific fields before releasing their irrigation waters. As discussed above, like the absence of FWQMPs, allowing farm dischargers to rely solely on regional monitoring to determine water quality impacts occurring near their discharge locations or to evaluate whether their management measures are BPTC defies common sense. *See supra*, Sections F.1 - .2, G.2. No current monitoring program is monitoring only farm discharges. Nor has any existing program, including even the current ILRP regional monitoring, reduced the massive pollution from irrigated farms. Any "cost efficiencies" claimed by staff are simply another way of saying they do not want the most relevant information necessary to implement BPTC and achieve water quality standards.

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B. The "Goals and Objectives" selected by a stakeholder group dominated by agriculture protect the regulated community more than they protect water quality, in contrast to virtually every other regulatory program.

As discussed in Section III.C above, CSPA is concerned with the language of the objectives selected by the coalition-dominated stakeholder process. CSPA's concerns are heightened by the further spin placed on the objectives by staff's interpretations of those objectives applied in the staff report. Invariably, staff's interpretation of each objective favors the status quo and avoiding any site specific regulation of farms and trumping resolution 68-16.

Staff restates the PEIR's goals and objectives. Staff Report, pp. 98-99. The objectives, other than the objectives of restoring and/or maintaining beneficial uses, ensuring that all state waters with the Central Valley meet applicable water quality objectives and ensuring that irrigated agricultural discharges do not impair Central Valley communities' and residents' access to safe and reliable drinking water are flawed. In fact, the other four objects work against the successful attainment of restoring beneficial uses and meeting standards. Yet, invariably, the non-water quality or public safety objectives are the hooks which staff uses to propose an ineffectual ILRP recommendation.

For example, the goal of maintaining the economic viability of agriculture in California's Central Valley is highly subjective because it contains no yardsticks by which to measure impacts to irrigated agriculture and is buttressed by a seriously deficient economic analysis. Retirement of some farmland may be an overall economic benefit where overproduction has depressed commodity prices. Retirement of lands because of an inability to continue externalizing adverse costs of production benefits farmers who internalize those costs and comply with regulatory requirements. Economic viability of agriculture cannot be considered in a vacuum where the costs of agricultural pollution are simply transferred to other economic sectors, *i.e.*, recreation, commercial fishing, public health, municipalities, etc. It is unreasonable to establish a program goal of maintaining the economic viability of agriculture at the expense of other sectors of society who comply with requirements to protect water quality.

Also for example, the objective of maintaining "appropriate" beneficial uses ignores mandates to protect all identified beneficial uses. Encouraging "implementation of management practices that improve water quality in keeping with the first objective without jeopardizing the economic viability for all sizes of irrigated agriculture" ignores the fact that discharging pollutants is a privilege allowable only so long as measures are implemented to reduce or eliminate conditions of pollution. Likewise, providing "incentives for agricultural operations to minimize waste discharge to state waters" ignores that this is a mandated requirement. The objective to coordinate with other programs, such as the Grasslands Bypass Project, TMDLs, CV-Salts and WDRs for dairies is simply a non sequitur as none of those programs have been effective in cleaning up polluted waterways. For example, the Central Valley Board recently

extended the compliance schedule for the Grasslands Bypass Project to more than 20 years. To "promote coordination with other regulatory and non-regulatory programs associated with agricultural operations" is simply an attempt to replicate other regional programs that have failed to protect water quality. The Central Valley Board has apparently forgotten the failures of the Management Agency Agreement with the Department of Pesticide Regulation (DPR), where after the five-year agreement had expired, DPR claimed it didn't have the authority to implement the measures it had agreed to.

The last four objectives simply provide Regional Board staff the rationale to avoid rigorously implementing what staff believes to be a politically unpalatable program that would meet the first objective of maintaining beneficial uses and meeting water quality standards. Consequently, staff dismisses individual edge-of-field monitoring because it would be expensive, *i.e.*, subject farmers to the same requirements applicable to every other segment of society that discharges pollutants to waters of the state. However, without individual discharger monitoring, the Board will never know the impacts of individual discharges or whether implemented management measures are effective.

Direct Regional Board administration is rejected because it would require the Regional Board to candidly acknowledge the politically unpalatable need to assess additional fees to provide sufficient staff to regulate 30,000 plus farms spread over eight million acres. In 2002-05, Regional Board staff estimated that 40 to 70 staff would be needed to effectively implement the program. This seems to be a reasonable estimate based upon the stormwater program.

C. Staff's Recommended Alternative Continues The Existing Flaws Of The Existing Program.

1. The "recommended alternative" cannot identify sources of pollution, localized water quality impacts, the implementation of Best Management Practices (BMPs) or the effectiveness of BMPs.

The reality is that the regional monitoring approach embraced by staff has been woefully inadequate, as revealed by even a cursory review of coalition monitoring reports. What staff characterizes as cost efficiencies is simply insufficient monitoring that is incapable of characterizing all receiving waters, let alone identify specific sources or quantify the effectiveness of management measures. Coalition monitoring only represents a small percentage of irrigated acres. For example, review of recent monitoring reports submitted to the Regional Board by coalitions representing irrigated lands that discharge into the Sacramento-San Joaquin Delta estuary or waters tributary to the estuary shows that:

The San Joaquin County and Delta Water Quality Coalition comprises approximately 609,134 acres of irrigated land. SJCDWQC Annual Monitoring Report

2010, p. 6. Between October 2008 and March 2009, the Coalition monitored 10 sites and six sites from April 2009 through December 2009. In addition, three sites were monitored for Management Plan monitoring. *Id.*, p. 1. The report observes, "…water quality is still not protective of beneficial uses across most of the Coalition." *Id.*, p. 4. Rough calculations reveal that irrigation season monitoring represented approximately one site for every 60,000 plus acres.

The East San Joaquin Water Quality Coalition comprises approximately 919,730 acres of irrigated land. ESJWQC Annual Monitoring Report 2010, p. 5. Between October 2008 and December 2009, the Coalition monitored 20 sites and eleven additional sites were monitored for Management Plan monitoring. *Id.*, p. 1. Fourteen sites were monitored during the 2009 irrigation season and 12 sites were monitored during the 2009 wet season. *Id.*, p. 23-24. The report observes, "…water quality is still not protective of beneficial uses across most of the Coalition." *Id.*, p. 4. Rough calculations reveal that irrigation season monitoring represented approximately one site for every 54,000 plus acres.

The Westside San Joaquin River Watershed Coalition comprises approximately 460,500 acres. Westside Coalition Semi-Annual Report, 15 June 2010, p. 3. The Coalition monitors 17 discharge sites during the irrigation and wet seasons. *Id.*, Table 3, p. 5. This represents approximately one site for every 27,000 acres.

The Sacramento Valley Water Quality Coalition comprises approximately 27,000 square miles and contains over a million acres of farms. SVWQC Annual Monitoring Report 2009, March 2010, p. 3. Apparently, the Coalition monitored 32 sites, of which 18 were sampled during the irrigation season. *Id.*, Table 5, Planned Annual Sampling Frequency, p. 19. This would represent irrigation season monitoring of one site for approximately every 55,000 acres.

Monitoring a downstream point draining thousands of acres accomplishes little other than long-term trend analysis. And trend analysis requires a program that consistently monitors the same set of constituents over many years. Most coalition sites are not monitored every year for the same parameters and, consequently, existing coalition monitoring programs are unreliable even for trend analysis. In any case, trend analysis of downstream monitoring points can never establish whether an individual upstream discharger is in compliance with water quality standards or implementing BPTC.

Staff has apparently forgotten that the 2003 waiver originally required coalitions to yearly monitor all major drainages, 20% of intermediate drainages on a yearly rotating basis and minor drainages where downstream problems are identified. Those requirements have been substantially relaxed and currently large areas of the Central Valley are not monitored and have never been monitored, despite identification of serious downstream water quality problems.

Monitoring of actual discharge points is important because upstream waterways are disproportionally important as their increased energy inputs, higher invertebrate production, spawning, nursery and rearing habitat and lower discharge make these smaller aquatic systems vital to the overall health of the aquatic system. Larval fish and their food supplies found in these areas also are particularly vulnerable to adverse impacts of pesticides and other pollutants. Monitoring at the edge-of-field is crucial for evaluating the presence of BPTC and determining if recommended management practices are being implemented properly or if benefits from adopted practices are actually being realized.

2. The "recommended alternative" cannot ensure that dischargers will demonstrate that they have implemented Best Practical Treatment and Control (BPTC) or prevent degradation of water quality.

The Staff Report states, "… the Regional Water Board still must require the discharger to demonstrate that the proposed manner of compliance constitutes BPTC (SWRCB Order No. WQ 2000-7)." Staff Report, p. 62. And that, "…implementation of the program must work to achieve site-specific antidegradation requirements through implementation of BPTC and representative monitoring to confirm the effectiveness of the BPTC measures in preventing or minimizing degradation. Any regulatory program adopted will rely on implementation of practices and treatment technologies that constitute BPTC, based to the extent possible on existing data, and require monitoring of water quality to ensure that the selected practices in fact constitute BPTC where degradation of high quality waters is or may be occurring." *Id.*, p. 66
However, staff's recommended alternative abandons any effort to implement staff's own admonition. *See supra*, Section C.2.

3. The "recommended alternative" cannot ensure that the Regional Board can enforce program requirements.

As discussed above, any enforcement efforts by the Regional Board will be hampered by staff's recommendation. *See supra*, Section F.2. Staff's concept that enforcement will be vigorous by not having information available in the form of FWQMPs and individual monitoring data to assist in prioritizing inspections and enforcement cannot be rationalized. Without this information, staff's enforcement efforts will be as nominal as we have seen for the last seven years. Instead of enforcing water quality requirements, staff will be lead down a well-papered path of regional coalition monitoring – none of which will identify a single potential violator.

4. The "recommended alternative" is clearly inconsistent with the state's Non-Point Source Control Policy.

For the same reasons discussed above, staff's recommendation fails to comply with the NPS Policy. *See supra*, pp. Section F.2. Like the PEIR's first four alternatives,

staff's recommendations falls well short of all five key elements required by the NPS Policy. *Id*.

5. The "recommended alternative" cannot be in the public interest.

Staff continues to treat irrigated agriculture as a privileged sector by allowing farmers to externalize adverse production impacts by transferring the costs of pollution from the polluter to the general public. The recommended alternative does not serve the interests of California's 35 million residents. It arguably does not even serve the interests of the discharger's it seeks to immunize from monitoring, reporting and permitting requirements applicable to everyone else.

Central Valley fisheries are experiencing catastrophic collapse. The team of federal and state scientists investigating the decline of fisheries has identified toxic pollutants as one of the three major suspected causes of the collapse of the Delta's pelagic fishery. This collapse has cost the recreational and commercial fishing communities tens upon tens of millions of dollars.

The degraded aquatic ecosystem in the Delta threatens the reliability of the delivery system that supplies water to 23 million Californians. Polluted waters have forced municipalities to spend hundreds of millions of dollars on increased wastewater and drinking water treatment. Degraded waters threaten public health and have diminished the aesthetic and recreational enjoyment of millions of individuals.

Central Valley agriculture is a relatively small part of the California community. According to the July 2010 (revised) employment data by the California Employment Development Department, total employment in the 34 Central Valley counties under the ILRP and analyzed in the PEIR's economic analysis is 3,509,620, of which farm labor comprises 237,000 or 6.758%. EDD, Employment by Industry Data at: http://www.labormarketinfo.edd.ca.gov/?pageid=166. Statewide, the agriculture production and processing industry directly accounts for approximately 4.3% of the state output, 3.8% of the jobs, 2.5% of labor income and 2.9% of value added in the state. The Measure of California Agriculture, 2006, Agricultural Issues Center, University of California, Chapter 5, Table 5.5, p. 10.

The PEIR's severely deficient economic analysis with its unrealistic assessment of the cost impacts of potential management measures, acknowledges that Alternative 5, despite being burdened with absurd administrative and monitoring requirements, would be of negligible cost to the overall economy. In fact the economic analysis predicts that, under Alternative 5: 1) jobs in the Central Valley would increase, 2) personal income and industrial output would increase in the Tulare Lake Basin, 3) personal income would only decrease by 0.013% in the Sacramento River Basin and by 0.019% in the San Joaquin River Basin and 4) industrial output would only decrease by 0.045% in the Sacramento River Basin and by 0.043% in the San Joaquin River Basin. And the economic analysis inexplicably failed to analyze the cost benefits of reduced pollution. Had the advantages of better water quality been evaluated, implementation of

Alternative 5 would be shown to result in significant economic benefit across the spectrum for the entire Central Valley.

The recommended alternative will not reduce agricultural pollution any time in the near future. Nothing in the recommended alternative precludes agricultural dischargers from continuing the historic trend to discharging wastes into the foreseeable future. At its core, the recommended alternative will perpetuate substantial discharges of wastes from thousands of farms to impaired waters throughout the Central Valley, causing irreversible and substantial harm to degraded and stressed ecosystems, threatening public health and imposing increased costs to millions of Californians.

It cannot be in the public interest to exempt one small segment of the California economy from regulatory requirements applicable to everyone else. It clearly cannot be in the public interest, as the recommended alternative does, to exempt farmers from having to monitor their discharges in order to establish compliance with water quality standards and BPTC requirements.

6. **CSPA agrees ILRP must restrict groundwater pollution but unfortunately staff's proposed reliance upon regional efforts is unlikely to be more successful than existing programs that have chaperoned groundwater degradation.**

Groundwater pollution is a serious problem and relying upon regional efforts is unlikely to address site-specific sources of groundwater pollution. The staff alternative of requiring farmers to participate in a regional groundwater program once every five years ignores the obvious protective step of requiring individual farms to monitor their own wells to evaluate groundwater pollution. The staff recommendation also contains no specific measures to identify and prevent contamination of groundwater from management measures implemented to prevent surface water pollution.

The California Department of Water Resources (DWR) has concluded that water from California's groundwater basins "has been the most important single resource contributing to the present development of the state's economy." Between 25% and 40% of California's water supply comes from groundwater. That figure can rise to as much as two-thirds during critically dry years. Fifty percent of California's population depends upon groundwater for all or part of their drinking water. Data from the waterboards, USGS, Department of Health, DPR and others, demonstrate that groundwater has been severely degraded. DWR has stated that three-fourths of the impaired groundwater in California was contaminated by salts, pesticides, and nitrates, primarily from agricultural practices. Thousands of public drinking water wells have been closed because of pollution. Many of California's more than 71,000 agricultural irrigation wells are degraded or polluted. USGS data collected over a ten-year period in Fresno County showed that some 70% of the wells sampled exceeded the secondary MCL and agricultural goal for total dissolved solids. Kings County was even worse, with 87% exceeding criteria. Even the State Board's own data indicates that more than one third of the areal extent of groundwater assessed in California is so polluted that it

cannot fully support at least one of its intended uses, and at least 40 percent is either impaired by pollution or threatened with impairment.

For example, a study conducted by the United States Geological Survey documented extensive contamination of groundwater by pesticides applied to rice fields. Dawson, B., USGS, "Shallow Ground-Water Quality Beneath Rice Areas in the Sacramento Valley, California 1997" (2001). Pursuant to an existing Basin Plan prohibition, rice growers are required to hold their irrigation waters for up to 30 days in order to facilitate the breakdown of toxic pesticides. Rice fields are typically flooded from April to September with some significant portion also flooded during winter months to help break down leftover straw. Detections of pesticides and nitrites in groundwater beneath rice fields were attributed to pesticide and fertilizer applications to the fields. The study explains that holding irrigation waters on the fields in order to protect surface water may be allowing more recharge containing the pesticides molinate and thiobencarb to reach shallow groundwater. Another study in the record documents routing of pesticide-contaminated surface runoff from orchards into drainage wells that drain the contaminated runoff into groundwater. Troiano, J, et al., Cal. Dept. of Pesticide Regulation, "Movement of Simazine in Runoff water from Citrus Orchard Row Middles as Affected by Mechanical Incorporation" (1998) ("evidence linked contamination [of groundwater] to movement of [pesticide] residues in orchard runoff water that was directed into drainage wells"). *See also* Ingalls, Charles A., U.C. Davis, pp. 5-10, "Movement of Chemicals to Groundwater," of "Protecting Groundwater Quality in Citrus Production" (1994)).

The USGS study and other studies show that one potential negative environmental impact of a management measure that stores polluted water as a means of protecting surface water quality is an acceleration of the pollutants discharged into groundwater through recharge or existing pathways such as wells. Nevertheless, staff's proposed alternative relying upon regional monitoring efforts is unlikely to identify impacts from implementation of management measures and specific monitoring requirements must be included to prevent redirected impacts of management measures employed to protect surface waters.

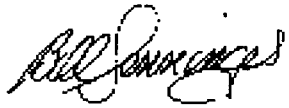
VI. CONCLUSION.

After seven years of the irrigated lands program, the Central Valley Regional Water Quality Control Board still does not know who is actually discharging pollutants, the points of discharge, the constituents discharged, receiving water impacts, whether management measures (or BMPs) have been implemented or if those BMPs have been effective in reducing pollutant discharges. The Board cannot enforce against recalcitrant dischargers because it cannot know who they are and dischargers have little incentive to comply because they know that monitoring far downstream cannot produce the evidence to hold them accountable. The PEIR continues the theme of not providing the Regional Board the necessary information to make a decision that will protect water quality and human health. Staff proposes an alternative that perpetuates the existing program's flaws, including basic compliance with the NPS Policy and Resolution No. 68-

16. On the other hand, CSPA's alternative sets forth a reasonable program that would comply with statutory requirements, protect water quality and, where it is consistent with those two goals, reduce the potential burden on the farming community. CSPA respectfully requests that the Regional Board instruct staff to redraft their recommended program, send the PEIR back to be supplemented with necessary elements and include detailed analysis of an improved staff recommendation, CSPA's recommendation, and other required elements. We appreciate staff's and the Regional Board's consideration of these comments.

Sincerely,

Michael R. Lozeau
Lozeau Drury LLP



Bill Jennings
California Sportfishing Protection Alliance

Encls.

EXHIBIT 2

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

RESOLUTION NO. R5-2011-0017

CERTIFICATION OF THE FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT
FOR
THE LONG-TERM IRRIGATED LANDS REGULATORY PROGRAM

WHEREAS:

1. Resolutions R5-2006-0053 and R5-2006-0054 adopted by the Central Valley Water Board approved two conditional waivers applicable to discharges from irrigated agriculture to surface waters. The waivers were to serve as an interim regulatory program until a long-term program was developed. When the Board approved the conditional waivers, it directed staff to begin developing a long-term irrigated lands regulatory program (ILRP) and also to continue preparation of an environmental impact report pursuant to the California Environmental Quality Act (CEQA) that would evaluate alternatives for the ILRP.

2. In 2007, the California Sportfishing Protection Alliance and San Francisco Baykeeper filed a petition for writ of mandate challenging the Central Valley Water Board's issuance of the waivers. (*California Sportfishing Protection Alliance v. California Regional Water Quality Control Board, Central Valley Region*, Case No. 07CS00807, Sacramento County Superior Court). Without any admission of liability, the Central Valley Water Board consented to the entry of a stipulated action to resolve all of the claims of the action. One of the conditions to the stipulated judgment is that the Regional Board staff shall, by April 8, 2011,[1] present and recommend that the Regional Board certify a final environmental impact report addressing any impacts associated with any action that the Regional Board may take to implement a long-term ILRP.

3. The Central Valley Water Board served as the lead agency under the California Environmental Quality Act (CEQA) for the preparation of the Final Program Environmental Impact Report (Final Program EIR) for a waste discharge regulatory program for irrigated lands within the jurisdictional boundaries of the Central Valley Region.

4. A Notice of Availability (NOA) was circulated that notified interested parties of a 60-day public review and comment period (from 28 July 2010 until 27 September 2010) for the "Irrigated Lands Regulatory Program" Draft Program Environmental Impact Report (Draft Program EIR). Copies of the NOA were transmitted to or made available to all agencies and persons known to be interested in these matters.

5. During the public comment period, the Central Valley Water Board received written comments on the Draft Program EIR. It also received informal feedback at four public workshops held in Chico, Modesto, Rancho Cordova, and Tulare during the public comment period and received additional informal feedback at a September 22 Board

[1] The original deadline was March 31, 2011. However, the parties to the action established a new deadline of April 8, 2011 pursuant to the terms of the stipulated judgment.

Meeting. The Central Valley Water Board has considered the written comments and the informal feedback. It has provided written responses to the written comments received on the Draft Program EIR and has prepared a Final Program EIR.

THEREFORE BE IT RESOLVED, that:

1. Pursuant to § 21080, et seq. of the California Public Resources Code, the Central Valley Water Board, after considering the entire record, including written and oral testimony at the hearing, certifies that:

    a. The Final Program EIR has been completed in compliance with CEQA.

    b. The Central Valley Water Board has reviewed and considered the information in the Final Program EIR.

    c. The Final Program EIR reflects the independent judgment and analysis of the Central Valley Water Board.

CERTIFICATION

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 7 April 2011.

original signed by
PAMELA C. CREEDON, Executive Officer

EXHIBIT 3

Water Quality Coalition Contact Information

8/16/2010

Letter 13 - Att A

Coalition Group Name	Contact Person	Contact Address	Phone Number	Email Address	Brief Watershed Coverage	Regional Board Staff Contact
California Rice Commission	Tim Johnson Roberta Firoved	8801 Folsom Blvd. Suite 172 Sacramento, CA 95826	(916) 387-2264	tjohnson@calrice.org rfiroved@calrice.org	Rice production in the Sacramento River basin (covers Butte, Colusa, Glenn, Placer, Sacramento, Sutter, Tehama, Yolo, and Yuba counties). 500,000 rice acres.	Margaret Wong (916) 464-4857
East San Joaquin Water Quality Coalition	Wayne Zipser (Stanislaus County Farm Bureau) Parry Klassen (CURES)	Stanislaus County Farm Bureau PO Box 3070 Modesto, CA 95353-3070	(209) 522-7278 (559) 646-2224 (559) 288-8125 (cell)	Waynez@stanfarmbureau.org pklassen@unwiredbb.com	Farmlands encompassed by the lower Stanislaus, Tuolumne and Merced River subwatersheds (primary eastside tributaries to the San Joaquin River) and that fall into Stanislaus, Merced, Madera, Calveras, Mariposa and Tuolumne counties. 1,187,000 irrigated acres.	Dania Huggins (916) 464-4843
Goose Lake Water Quality Coalition	Herb Jasper	PO Box 212 New Pine Creek, OR 97635	(530) 946-4196	bry.jasper@oregonstate.edu	Goose Lake watershed: border of northeastern California and south central Oregon at the north, eastern edge of the Great Basin Province. Bounded by Warner Mountain Range in Modoc County.	Ben Letton (530) 224-4129
Pleasant Valley Water Quality Coalition	Rod Stiefvater	2985 Airport Drive Madera, CA 93637	(559) 994-7784	rstiefvater@speccrop.com	Pleasant Valley WQC is bound by Anticline Ridge on the north, the Jacalitos and Kreyenhagen Hills on the west, and the Guijarral and Kettleman Hills to the east. Los Gatos, Wathan, Jacalitos and Zapato Chino Creeks have their headwaters west of the District. 23, 772 irrigated acres.	Brent Vanderburgh (559) 488-4382
Sacramento Valley Water Quality Coalition	Bruce Houdesheldt David Guy (NCWA)	Northern California Water Association 455 Capitol Mall, Suite. 335 Sacramento, CA 95814	(916) 442-8333	bruceh@norcalwater.org	Irrigated Lands within Sacramento River Basin (includes all or portions of Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Lake, Napa, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Solano, Sutter, Tehama, Yolo, and Yuba counties). 2,145,000 irrigated acres. For a list of subwatershed group coordinators, go to: http://www.svwqc.org/pdf/SVWQC subwatershed coordinators.pdf	Mark Cady (916) 464-4654
San Joaquin County & Delta Water Quality Coalition	John Brodie (San Joaquin County RCD) Mike Wackman (San Joaquin County RCD)	3422 W. Hammer Lane Suite A Stockton, CA 95219	(209) 472-7127 ext 118 (916) 684-9359	rvranglr@yahoo.com info@sjdeltawatershed.org michaelkw@msn.com	Includes San Joaquin County and the eastern portion of Contra Costa County, and a small area in the notheastern portion on Alameda County along with a small portion in Calaveras County. There are three major tributaries: the San Joaquin, Mokelumne, and Calaveras rivers. 548,362 irrigated acres.	Chris Jimmerson (916) 464-4859
Southern San Joaquin Valley Water Quality Coalition	David Orth (Kings River Conservation District) Bill Thomas	4886 East Jensen Avenue Fresno, CA 93725	(559) 476-0539 or (559) 237-5567 916-325-4000	dorth@krcd.org william.thomas@bbklaw.com	The SSJVWQ encompasses the entire Tulare Lake Basin (4.4 million acres) and is comprised of 4 subwatershed groups (Kings, Kaweah, Tule, and Kern River Subwatershed Groups). (Fresno, Kings, Tulare, and Kern counties).	Brent Vanderburgh (559) 488-4382
Westlands Water District	Susan Ramos Orvil McKinnis	P.O. Box 6056 Fresno, CA 93703	(559) 241-6215 (559) 241-6242	sramos@westlandswater.org omckinnis@westlandswater.org	Area on the westside of Fresno and Kings counties that encompasses 600,000 acres of farmland located at the base of the Diablo Range of the California Coast Mountain Range from Mendota to Kettleman City.	Brent Vanderburgh (559) 488-4382
Westside San Joaquin River Watershed Coalition	Joseph McGahan (Summers Engineering)	887 N. Irwin Street (P.O. Box 1122) Hanford, CA 93232	(559) 582-9237	jmcgahan@summerseng.com	Area primarily on the west side of the San Joaquin River from the Stanislaus River on the north to 10 miles south of Mendota on the south. This area covers approx. 550,000 acres and includes irrigated agriculture as well as private, state and federal wetlands areas. (Stanislaus, Merced, Madera, and Fresno counties).	Mark Commandatore (916) 464-4624

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September 27, 2010

ILRP Comments
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Re: California Sportfishing Protection Alliance Comments on Draft Irrigated Lands Regulatory Program - Program Environmental Impact Report

Dear Ms. Smith, Ms. Creedon and Mr. Laputz,

On behalf of the California Sportfishing Protection Alliance and California Water Impact Network (collectively "CSPA"), thank you for this opportunity to provide comments on the "Draft Program Environmental Impact Report for the Long-term Irrigated Lands Regulatory Program ("ILRP") within the Central Valley Region" (July 28, 2010) ("PEIR") and the accompanying "Irrigated Lands Regulatory Program Long-Term Program Development Staff Report (July 2010) ("Staff Report") and the "Draft Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program" (July 2010) ("Technical Memo") prepared by ICF International. On 26 May, 2006, CSPA previously submitted comments on the Draft Central Valley Existing Conditions Report released in February 2006 and finalized in December 2008 and on 30 May, 2008 CSPA submitted scoping comments on the Long-term Irrigated Lands Regulatory Program and Associated Programmatic Environmental Impact Report, which are hereby incorporated by reference.

We have prepared these comments with the assistance of EcoNorthwest, SWAPE (Soil/Water/Air Protection Enterprise) and Steven Bond & Associates, Inc. ECONorthwest has reviewed and prepared a critique of the Technical Memo prepared

by ICF International. *See* ECONorthwest, "An Economic Review of the Draft Irrigated Lands Regulatory Program Environmental Impact Report" ("ECONorthwest Review") (Sept. 27, 2010). SWAPE and Steven Bond & Associates have reviewed and prepared comments regarding the proposed monitoring and management practice implementation. Their comments are attached hereto as Exhibits A through C and are incorporated herein in their entirety. The experts' comments require separate responses in the Final EIR.

I. INTRODUCTION.

As the Staff Report acknowledges, "a regulatory program that is lax or allows too much time for compliance can lead to an exacerbation of water quality problems and prolonged impacts on beneficial uses." Staff Report, p. 2. This is in fact the result of the first seven years of the current ILRP. Impacts have been prolonged while staff spends all of its time wrangling with informal coalitions over which the Regional Board has no enforcement authority and which have cornered a vast majority of the fees thus far provided for the ILRP from the regulated dischargers. No improving trend in water quality impacts has been reported. Instead, for seven years, the coalitions have managed to steer the program to focus exclusively regional monitoring while avoiding farm-specific monitoring or information collection. The regional monitoring has further documented the extensive pollution already apparent in November 2000 when CSPA first petitioned the Regional Board to terminate the obsolete and water quality-damaging agricultural waiver from 1982.

Since the inception of the ILRP in 2003, staff and the Regional Board have been reticent in mandating that best practicable controls and technology ("BPTC") be installed and implemented by individual farms, reported to the Board and monitored for their effectiveness. Since 2003, CSPA and numerous experts have stated the obvious – any program that refuses to require dischargers to implement BPTC and confirm its effectiveness is bound to fail or at least delay for a very long time compliance with the Central Valley's water quality standards and antidegradation requirement.

CSPA has now stood by for seven years and observed each of its concerns coming true. After seven years, the Regional Board does not have any idea whether any farms have implemented any specific management measures. Assuming some measures are in place, the Board does not know whether they are working to reduce pollution, comply with applicable water quality standards or qualify as BPTC. And the current program's exclusive reliance on regional monitoring will never inform the Regional Board about the presence or effectiveness of management measures miles upstream.

The various coalitions have produced watershed management plans but, invariably, each of those plans fizzles in its follow-up to enforce implementation of management measures by specific farms. The plans indicate the coalitions will coordinate various meetings with a subset of farms and perhaps do some follow-up visits on site. However, because the coalitions exist in some extra-legal realm, none of their members need to do anything they say. The Board may or may not know about

which farms failed to implement any effective management measures. And it is virtually certain that the Regional Board, having based its entire program on coalitions, would not likely eliminate a coalition for an entire section of the Central Valley.

According to staff, after seven years, the Board is preparing to proceed with a single enforcement action including proposed civil penalties for one recalcitrant discharger. It is CSPA's understanding that enforcement action apparently is based on a tip from a water district and the violations could not have been discovered by the Regional Board based on the information required under the existing coalition-based program.

Now, staff is proposing to build on this record of lack of progress by proposing more of the same. It is clear from the PEIR, the bias evident in the accompanying economic analysis and staff's interpretations of the objectives identified by the coalition-dominated stakeholder group to promote the status quo, that staff is not focused on a program that achieves water quality objectives and protects beneficial uses consistent with the Regional Board's primary mission. Instead, staff is focused on proposing a program that is acceptable to the irrigated lands dischargers. The current program and staff's proposal unfortunately give real meaning to the phrase, "letting the fox guard the hen house." If the Regional Board chooses an ILRP alternative that does not have all individual farms reporting to the Regional Board on their specific management measures, *i.e.*, a farm water quality management plan ("FWQMP"), the Regional Board will not know in a timely manner or perhaps at all what any specific farm is planning on implementing. If the ILRP does not require individual farms to report on what measures they in fact implemented or installed, then the Regional Board will not know in a timely manner or perhaps at all what BMPs have been implemented throughout the Central Valley. And if the Regional Board does not require dischargers to gather water quality data that evaluates the performance of installed management measures, the Regional Board will never know what if any pollution reductions have resulted and whether the measures achieve the BPTC standard.

CSPA's frustration is exacerbated by staff's decision to circulate an environmental impact report that snubs its nose at CEQA's requirements and fails to provide the Regional Board the basic comparative tool to assist it in devising an ILRP that will work to protect water quality while balancing – not pandering – to the possible costs that the agricultural dischargers may have to bear for their pollution. CSPA, however, is not interested in simply critiquing every step that staff takes. CSPA, with the help of its consultants and almost a decade of constructive engagement on the irrigated lands pollution problem, has prepared its own alternative that balances the needs for firm regulatory action while allowing prioritization based on already measured regional pollution problems and basic monitoring needs to balance and alleviate some of the potential costs. We appreciate the Board's and staff's consideration of the following comments and proposals.

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II. CSPA'S PROPOSED (EFFECTIVE, PROTECTIVE AND LEGALLY ADEQUATE) IRRIGATED LANDS REGULATORY PROGRAM.

As is described below in CSPA's comments on the PEIR, the PEIR's proposed alternatives do not evaluate or provide the Regional Board a reasonable range of alternatives to the current ILRP. The following alternative should be included in the PEIR's evaluation. This alternative could be appropriately labeled "Direct Oversight and Prioritized Farm Monitoring," and on the spectrum of alternatives presented in the PEIR falls somewhere between Alternatives 3 and 4 and Alternative 5, depending on the specific component that is being addressed.

1. Individual Growers Covered Not Third Parties: Individual growers would apply for coverage. No third-party applications would be authorized. CSPA generally agrees with the application information outlined in the PEIR. *See* PEIR, p. 3-15.

2. Farm Water Quality Management Plans (FWQMPs): Under this alternative, growers would be required to develop and implement individual FWQMPs in order to minimize discharge of waste to groundwater and surface water from irrigated agricultural lands. FWQMPs for surface water should be completed within 6 months of issuance of the WDR/conditional waiver and submitted to the Board. The groundwater component could be phased to be completed not later than one year from the WDR/conditional waiver issuance date. The contents of the FWQMPs would be consistent with the contents described in the PEIR. PEIR, p. 3-15. Even though each farm would have its own plan, neighboring farms could still agree on joint practices that address multiple farms. As described in PEIR, "[m]anagement practices could be instituted on an individual basis or could be installed to serve a group of growers discharging to a single location." PEIR, p. 3-16. As the State Board's Policy For Implementation And Enforcement of The Nonpoint Source Pollution Control Program (May 20, 2004) ("NPS Policy") states, "[a] first step in the education process offered by these programs often consists of discharger assessment of their lands or operations to determine NPS problems, followed by development of a plan to correct those problems." NPS Policy, p. 11 (emphasis added). The Board already has ignored this first step for the last 7 years. In regard to agriculture, the NPS Policy effectively requires a FWQMP: "MPs must be tailored to a specific site and circumstances, and justification for the use of a particular category or type of MP must show that the MP has been successfully used in comparable circumstances. If an MP has not previously been used, documentation to substantiate its efficacy must be provided by the discharger." NPS Policy, p. 12 (emphasis added).

3. Tiered Approach: This alternative would regulate the discharge of waste to surface water and groundwater using a tiered approach. Fields would be placed in one of three tiers based on their threat to water quality. The tiers represent fields with minimal (Tier 1), low (Tier 2), and high (Tier 3) potential threat to water quality, along the lines proposed in the PEIR for Alternative 4. PEIR, pp. 3-17 – 3-18. The tiers would be used to adjust the monitoring requirements, assist the dischargers in determining the level of management measures necessary to meet BPTC, and assist the Regional Board in prioritizing enforcement inspections.

4. Non-Water Quality Monitoring: As proposed in the PEIR's Alternative 4, all growers would conduct nutrient tracking, pesticide tracking and implemented tracking of management practices. Again, this information is necessary for a discharger or the Regional Board to evaluate the rationale of a discharger's FWQMP. As the NPS Policy emphasizes, "[i]t is important to recognize that development of a plan is only the first step in developing an implementation program that addresses a discharger's NPS pollution discharges. Implementation of the plan, including any necessary iterative steps to adjust and improve the plan and/or implementation must follow the planning stage." NPS Policy, p. 11.

5. Surface Effluent Quality Monitoring: Within areas where Coalitions are currently required to prepare and implement a management plan, all Tier 2 and 3 farms within that management area that are discharging any pollutant which triggered the management plan, must prepare and implement a discharge monitoring plan for the pollutants governed by the management plan as well as basic parameters that serve as indicators of pollution discharges. The basic parameters would include, for example, flow, toxicity, total nitrogen, nitrate-nitrite, total ammonia, total phosphorous, soluble ortho-phosphate, temperature, turbidity, pH, electrical conductivity, coliform if livestock is present and any applied pesticides and metals. If no toxicity is identified in the initial year, toxicity testing could be dropped for several years. The monitoring plan would include monitoring of effluent discharges at a point downgradient of implementation of BMPs. Where possible, monitoring of influent to any BMP also must be included. CSPA agrees with the proposed number of samples per season outlined in the PEIR. PEIR, p. 3-24. However, like Tier 3, sampling by Tier 2 growers should be every year. Only by direct monitoring of site-specific BMPs can the Regional Board comply with the NPS Policy, where it states that "if the program relies upon dischargers' use of MPs, there should be a strong correlation between the specific MPs implemented and the relevant water quality requirements." NPS Policy, p. 11. Likewise, effluent data of BMP effectiveness within areas known already to be degraded is necessary to implement the state

antidegradation requirement, Resolution No. 68-16, in particular its BPTC requirement as well as its nondegradation provision.

6. Groundwater Monitoring: Growers who qualify as Tier 2 or Tier 3 for groundwater pollution should be required to conduct individual monitoring annually as described for the Tier 3 groundwater growers in the PEIR. PEIR, p. 3-25. All farms should do one season of sampling any existing wells on their property to determine their tier level. All farms also should be required to evaluate any existing public water supply data regarding the presence of pesticides or other pollutants in nearby groundwater. Any regional monitoring should be conducted by the Regional Board or its consultants or other qualified governmental research entities and paid for by a portion of the permit fees collected annually from the dischargers.

7. No Agency "Approval" of Plans: Although staff should review FWQMP or monitoring plans in general, this alternative would not require the Regional Board to approve either an FWQMP or monitoring plan. The minimum conditions of the FWQMP should be clearly set forth in the conditional waiver or general WDRs and staff should "review" as part of their enforcement follow-up. By employing the Board's enforcement options to address any violators who, for example, fail to prepare a good faith FWQMP, the Board also would be in a position to recover the staff costs of those enforcement efforts.

8. Coordination With Dischargers Folded Into Prioritized Inspection and Enforcement by Regional Board: Along those same lines, any follow-up or coordination with growers re compliance would be part of the annual inspection effort. Compliance inspections would include appropriate compliance advice and be implemented consistent with State Board's existing enforcement policy. Growers would have to allow the Regional Board access to inspect. Prioritization of inspections and level of enforcement actions would be up to the Regional Board. Prioritization would be much easier because staff would already have farm specific FWQMPs and effluent data within the management areas where problems already have been identified, which data would make it much easier for Board staff to prioritize inspections and possible enforcement.

9. Regional Monitoring By Board Expanded to All Dischargers: There is no reason why WDRs or waivers in the ILRP should incorporate a regional monitoring program. No NPDES permits require all municipalities to conduct regional monitoring as part of their permits (CSPA is not suggesting any changes to receiving water quality monitoring currently required by most major NPDES permittees). The industrial storm water and construction storm water permit also do not include such a component. That being said, all of these dischargers should be

contributing a portion of their permitting fees toward an objective and agency-controlled (not discharger-controlled) regional monitoring program. Fees for all of these permittees should be assessed annually. Regional monitoring, including toxicity monitoring, would be conducted by the Regional Board, its consultants or other governmental research entities. CSPA believes regional monitoring is important to determining the overall health of waterways in the Central Valley. However, its inclusion in permits for irrigated lands dischargers takes away resources that need to be focused on implementing BMPs and evaluating their effectiveness at the points of discharge. It also would be fairer that all sources of pollution to the Valley's ambient waters contribute a proportionate share of the funds necessary to conduct regional monitoring. Lastly, by consolidating that program within the Regional Board and other non-discharger agencies – rather than under the current program with inexperienced coalitions made up of discharger representatives – the objectivity of the program will be maintained. Placing regional monitoring in another program outside of the ILRP will of course free up a vast quantity of time currently spent by staff attempting to track the coalitions' various monitoring efforts.

10. Request Additional Fee Authority: Critical to any alternative selected by the Regional Board is a frank request to the State Board to increase current fees to cover all of the costs of the program. It is unreasonable to base a regulatory program regulating the largest source of pollution to Central Valley waters on the political reluctance of the Board or Administration to assess appropriate fees to support a regulatory program that is capable of enforcing statutory and regulatory requirements. The fees for the irrigated lands dischargers, as well as fees on existing NPDES permittees, including stormwater permittees, should also be adjusted to accommodate a separate regional monitoring program.

The Regional Board's review and selection of the above alternative would address many of the legal flaws that currently hamper staff's proposal as well as most of the PEIR's alternatives, discussed at length below. More importantly, CSPA believes that, unlike staff's proposal or Alternatives 1 through 4 of the PEIR, the above alternative would have a reasonable chance of achieving significant reductions in irrigated lands pollution, achieving water quality standards and improving the region's overall economy and quality of life without any significant impact on the agricultural industry.

III. THE PEIR FAILS TO COMPLY WITH CEQA'S PROCEDURAL AND SUBSTANTIVE REQUIREMENTS.

The PEIR fails as an analytical document under CEQA. Arguably, rather than assist the Regional Board with making the tough decisions required to properly regulate the irrigated farm dischargers and ensure compliance with the high quality waters policy

and water quality standards, the PEIR erects a barrier to objective evaluation. Several flaws are worth noting right up front. First is the PEIR's failure to identify a proposed project or an environmentally superior alternative. These omissions make the PEIR unrecognizable as an EIR under CEQA.

The second most egregious flaw stems from the PEIR's premise that the current waiver (Alternative 1) will lead to implementation of the same best practicable control technologies as, for example, Alternative 5. This is entirely baseless given the fact that seven years into implementing Alternative 1, the Regional Board's staff cannot point to a single piece of evidence documenting the implementation of any management practices. Even the much touted management plans that already have been approved by staff under the existing waiver each address management practices by bobbing and weaving – replacing BPTC implementation and effectiveness monitoring with informal office meetings with groups of growers. Occasional meetings cannot verify the implementation or effectiveness of a management practice on a specific farm.

Similarly, the PEIR assumes that the four alternatives that rely on regional monitoring, rather than farm specific monitoring, will be able to evaluate the implementation of BPTC equally as well as Alternative 5, the one alternative that requires edge of field monitoring. Although as explained above, CSPA does not believe the universal and expansive monitoring proposed by Alternative 5 is necessary to take the program to its next effective level, CSPA believes it is obvious that only by monitoring the effectiveness of a claimed BPTC at its point of discharge can the Regional Board or its staff claim to ensure it is in fact BPTC and know what effect the discharge is having on compliance with water quality objectives. It also is even more evident that a regional monitoring location 10, 20, or 30 miles downstream of a specific farm tells neither the agency, the farm nor the general public about the presence or effectiveness of any management measures that may be installed there and whether they amount to BPTC.

These few concerns are only the highlights of a long list of deficiencies in the PEIR. The following addresses each of CSPA's concerns in turn.

A. General Purposes and Standards Under CEQA.

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report ("EIR") (except in certain limited circumstances). *See, e.g.*, Pub. Res. Code § 21100. The EIR is the very heart of CEQA. *Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652. "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." *Communities for a Better Environment v. Calif. Resources Agency* (2002) 103 Cal.App.4th 98, 109.

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project.

14 Cal. Code Regs. ("CEQA Guidelines") § 15002(a)(1). "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs*. (2001) 91 Cal.App.4th 1344, 1354 ("Berkeley Jets"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and all feasible mitigation measures. CEQA Guidelines § 15002(a)(2) and (3); *See also Berkeley Jets*, 91 Cal.App.4th 1344, 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564. The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced." Guidelines §15002(a)(2). If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." Pub.Res.Code § 21081; CEQA Guidelines § 15092(b)(2)(A) & (B).

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal.App.4th at 1355 (emphasis added), quoting, *Laurel Heights Improvement Assn. v. Regents of University of California*, 47 Cal. 3d 376, 391 409, fn. 12 (1988). As the court stated in *Berkeley Jets*, 91 Cal.App.4th at 1355:

> A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process." (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal. App. 4th 713, 722]; *Galante Vineyards v. Monterey Peninsula Water Management Dist*. (1997) 60 Cal. App. 4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal. App. 4th 931, 946).

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B. The PEIR fails to include a stable project description - indeed, no proposed project is included.

The PEIR does not evaluate a proposed project. The PEIR attempts to portray this omission as a benefit: "Rather than the typical EIR approach of starting with a project and then looking at alternatives to that project, this draft PEIR will be used as a tool to inform decision makers during the selection process." PEIR, p. 2-1. *See also* p. 2-5 ("In this document, … no preferred project has been identified by the Lead Agency from among the considered alternatives"). The drafters overlook, however, that CEQA sets forth the necessary contents of an EIR that can properly serve as a tool to inform the Regional Board. The drafters, staff and the Regional Board do not have any authority to omit a description of the proposed project from the PEIR.

"An accurate, stable and finite project description is the *sine qua non* of an informative and legally adequate EIR." *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192; *Berkeley Jets*, 91 Cal.App.4th at 1354; *Sacramento Old City Assn. v. City Council* (1991) 229 Cal. App. 3d 1011, 1023; *Stanislaus Natural Heritage Project v. County of Stanislaus* (1996) 48 Cal. App. 4th 182, 201. "[A] curtailed or distorted project description," on the other hand, "may stultify the objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental costs, consider mitigation measures, assess the advantage of terminating the proposal (*i.e.*, the "no project" alternative) and weigh other alternatives in the balance." *Id. See also*, CEQA section 15124; *City of Santee v. County of San Diego*, 263 Cal.Rptr 340 (1989). As one commenter has noted:

> The adequacy of an EIR's project description is closely linked to the adequacy of the EIR's analysis of the project's environmental effects. If the description is inadequate because it fails to discuss the complete project, the environmental analysis will probably reflect the same mistake. (Kostka and Zischke, "Practice Under the California Environmental Quality Act," p. 474 (8/99 update).)

A "rigorous analysis" is required to dispose of an impact as insignificant. *Kings County Farm Bureau v. City of Hanford*, 221 Cal.App.3d 692 (1990). Such a rigorous analysis is not possible if the project description is inaccurate, inconsistent, misleading or, in the case of the PEIR, <u>completely absent</u>.

C. The Objectives Borrowed From The Stakeholder Process Attempt To Lend Support To Purported Benefits of Elements of Alternative 1 – Including Its Regional Planning Basis And Lack Of Farm Specific Information of Any Sort – Which Are Its Main Faults.

The PEIR's objectives rely heavily on objectives formulated through the stakeholder process coordinated by the Regional Board's staff. The stakeholder process was dominated by agricultural interests. http://www.swrcb.ca.gov/ centralvalley/water_issues/irrigated_lands/long_term_program_development/advisory_

wrkgrp_member_lst.pdf; *See, e.g.* 11 May 2010 Long-term ILRP Meeting Attendees (http://www.swrcb.ca.gov/centralvalley/water_issues/irrigated_lands/long_term_program_development/11may10_stakeholder_mtg/11may10_sum.pdf). Although CSPA, for example, nominally is identified as one of the stakeholders involved in the process, CSPA was one of many groups that did not have the resources to attend numerous meetings, conduct multiple reviews of numerous documents, and participate actively in the stakeholder process. Possibly as a result of the lack of representation from a broader spectrum of stakeholders, CSPA is concerned with language included in the objectives that biases the selection of an alternative in favor of those that do not address compliance with all water quality objectives throughout the region, that water down the high quality waters policy requirement that implementation of BPTC be ensured, and that include only regional monitoring.

An overly narrow definition of project objectives renders the alternatives analysis inadequate. To narrowly define the primary "objective" of the proposed project itself constitutes a violation of CEQA since such a restrictive formulation would improperly foreclose consideration of alternatives. *See City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438 (holding that when project objectives are defined too narrowly an EIR's treatment of analysis may also be inadequate). As a leading treatise on CEQA compliance cautions, "[t]he case law makes clear that…overly narrow objectives may unduly circumscribe the agency's consideration of project alternatives." (Remy, Thomas, Moose & Manley, Guide to CEQA (Solano Books, 2007), p. 589).

1. The project's objective to restore or maintain "appropriate" beneficial uses qualifies the Regional Board's duty to maintain all existing or designated beneficial uses.

The first objective identified for the ILRP is to "[r]estore and/or maintain <u>appropriate</u> beneficial uses established in Central Valley Water Board water quality control plans by ensuring that all state waters meet applicable water quality objectives." PEIR, p. 1-2. CSPA is concerned with the PEIR's inclusion of the term "appropriate." Neither the Water Code nor the Basin Plan qualify the Regional Boards' or dischargers' obligation to assure attainment of water quality standards by deeming some designated beneficial uses as inappropriate. This language should be revised to clarify that all designated or existing uses must be protected, including those designated by way of the Basin Plan's tributary rule.

2. The objective to encourage implementation of BMPs is inconsistent with Resolution No. 86-16's duty that the Regional Board ensure implementation of all best practicable control technologies.

The second objective is to "[e]ncourage implementation of management practices. . ." PEIR, p. 1-2. The notion that the Regional Board should limit its authority to "encouraging" the implementation of BMPs appears inconsistent with its duties under Porter-Cologne. The Regional Board must establish requirements that implement the

water quality objectives. Water Code § 13263(a) ("[t]he requirements shall implement any relevant water quality control plans. . . ."); § 13269(a) (waivers must be "consistent with any applicable state or regional water quality control plan . . ."). Merely encouraging BMPs will not achieve objectives.

3. The objective to provide incentives to minimize waste discharges cannot be construed to allow less monitoring without any proof that waste discharges have been minimized.

The third objective includes to "[p]rovide incentives (i.e., financial assistance, monitoring reductions, certification, or technical help) for agricultural operations to minimize waste discharge to state waters from their operations." PEIR, p. 1-2. By specifying the incentives, CSPA believes this objective greases the skids for an alternative that trades away important components of any successful program. In particular, by specifically trading away monitoring of specific discharges, the objective directly undermines the Regional Board's ability to implement the high quality waters policy's BPTC requirement as well as the Nonpoint Source Plan's monitoring requirements. CSPA believes an order with clear requirements is incentive enough and this objective merely opens the door to alternatives that violate relevant law and will once again prove ineffective. Any incentives should be based on encouraging growers to pollute less, not, for example, agreeing to give up essential site specific monitoring for participation in a less effective regional monitoring program.

4. If the objective to coordinate with other regional programs means to mimic the regional scope of other ineffective pollution control programs, then this objective is inconsistent with the other three objectives.

The fifth objective is to "[p]romote coordination with other regulatory and non-regulatory programs associated with agricultural operations . . . to minimize duplicative regulatory oversight while ensuring program effectiveness." PEIR, p. 1-2. This objective, although sounding innocuous, is interpreted by staff as favoring alternatives that take a regional perspective like other programs referenced in the objective. *See* Staff Report, p. 103 (Alternatives 1 and 2, "[r]egional configuration for water quality plans and monitoring would facilitate efficient coordination with other programs operating at the regional level" and Alternatives 3-5, "…the farm-level management would not promote this coordination.") Unfortunately, the record is clear that none of the other regional efforts have been successful at preventing the widespread surface water pollution and toxicity from irrigated lands. If coordination with regional programs means that the program must replicate the regional scales of other unsuccessful programs and thus replicate their inability to protect water quality since their inception, then this objective is inappropriate and inconsistent with the objective to restore water quality and meet water quality standards. The objective should be clarified to promote coordination without necessarily copying the ineffective regional programs already in place.

D. The PEIR fails to identify the superior alternative.

By choosing not to propose a project, it is hardly surprising that the PEIR does not identify the superior environmental alternative. One of CEQA's fundamental requirements is that the DEIR must identify the "environmentally superior alternative." CEQA Guidelines §1526.6(e)(2); Kostka & Zischke, *Practice Under the California Environmental Quality Act* §15.37 (Cont. Educ. Of the Bar, 2008). Typically, a DEIR identifies the environmentally superior alternative, which is analyzed in detail, while other project alternatives receive more cursory review.

The lead agency is required to select the environmentally preferable alternative unless it is infeasible. A "feasible" alternative is one that is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. Pub. Res. Code § 21061.1; CEQA Guidelines § 15364. California courts provide guidance on how to apply these factors in determining whether an alternative or mitigation measure is economically feasible.

Since the PEIR fails to identify the environmentally superior alternative, there is not adequate analysis of its impacts or feasibility. *See Burger v. County of Mendocino* (1975) 45 Cal.App.3d 322 (county's approval of an 80 unit hotel project over a smaller 64 unit alternative was not supported by substantial evidence); *County of El Dorado v. Dept. of Transp*. (2005) 133 Cal.App.4th 1376 (agency must consider small alternative to casino project). Here, although suffering from its own defects (*see infra*, Section IV), the economic analysis prepared for the Regional Board indicates that all of the alternatives identified in the PEIR are economically feasible. Indeed, the alternatives with the most regulatory oversight expand the overall economy of the Central Valley. Because the alternatives are all feasible, the PEIR needed to select an environmentally preferable alternative.

E. The PEIR Does Not Provide Meaningful Comparative Analysis of the Selected Alternatives Because the Assumption That All Five Alternatives Would Be Equally Effective at Implementing BPTC and Achieving Standards is Unsupported by Any Evidence

As noted above, the PEIR fails to facilitate the Regional Board's selection of a new ILRP because the PEIR is based on a fiction that any program – no matter how far removed from the discharge locations and no matter how hard it may avoid documenting and measuring the implementation and effectiveness of BMPs – will result in the same level of pollution control. That core fiction does not allow for a meaningful comparative analysis by the Regional Board of the various alternatives.

CEQA requires that an EIR provide a discussion of project alternatives that allows meaningful analysis. *Laurel Heights I,* 47 Cal.3d at 403. The analysis of project alternatives must contain an accurate quantitative assessment of the impacts of the

alternatives. In *Kings County Farm Bureau*, 221 Cal.App.3d at 733-735, the court found the EIR's discussion of a natural gas alternative to a coal-fired power plant project to be inadequate because it lacked necessary "quantitative, comparative analysis" of air emissions and water use.

The PEIR does not attempt to estimate the relative effectiveness of the five alternatives. It generally assumes that they will all lead to sufficient pollution reductions. For example, the PEIR "assume[s] that continuation of the program would result in implementation of a greater number of surface water management practices than are present under baseline conditions, due to continued use of the program's monitoring feedback loops." PEIR, p. 5.7-45. Given the current absence of information about any BMPs actually installed, never mind whether they amount to BPTC, after seven years of implementing Alternative 1, the PEIR's assumption is entirely unsupported. The PEIR also asserts that "[u]nder all program alternatives, when a constituent of concern is identified through monitoring, management practices would be used to reduce the level of that constituent in surface water or groundwater." PEIR, p. 5.7-43. The PEIR repeats that, for each alternative, the "[p]otential impacts related to vegetation and wildlife under Alternative 3 are expected to be as described for Alternative 2. Like Alternative 2, Alternative 3 would implement water quality management plans that would result in a beneficial impact on surface water quality and groundwater quality, which would ultimately benefit both vegetation and wildlife communities." PEIR, p. 5.7-48. By making believe that all of the alternatives will have a beneficial effect on water quality – despite their obvious differences – the PEIR makes no effort to compare the relative effectiveness and certainty of each alternative in meeting standards or reducing pollution.

Obviously, of the flawed alternatives included in the PEIR, some have more certainty of achieving pollution reductions than others. Nothing in the record demonstrates that Alternative 1, seven years after its enactment, has reduced the volume or toxicity of pollution discharges from irrigated lands. There is no evidence in the Regional Board's files or discussed in the PEIR of what, if any, management practices have been or will be installed under the existing program. There is no discussion of evidence of any observable trends in ambient water quality conditions related to the existing program. There is certainly no evidence of any data showing any trends in pollution reductions at the edge of fields based on management measures applied to those fields. As a result, all of the evidence is that implementation of Alternative 1 and the even weaker Alternative 2 will most likely allow increases in pollution.

Contrary to the claims that all of the alternatives are interchangeable from a water quality perspective, one section of the PEIR discussing impacts to fish acknowledges that some alternatives (Alternatives 4 and 5) will "probably be greater." PEIR, pp. 5.8-52-53. Although still sorely lacking in providing the "quantitative, comparative analysis" required by CEQA, the fisheries section does at least

acknowledge that additional monitoring and additional management practices will result in less pollution being discharged.

> given the probability of increased monitoring of individual farms, and especially those at higher risk of generating significant impacts—in addition to wellhead protection, nutrient management plans, tracking of nutrient and pesticide application, and monitoring of individual wells—the positive benefit of Impact FISH1 (improved water quality) would probably be greater under Alternative 4 than under Alternative 2 or Alternative 3.

PEIR, p. 5.8-52. Likewise, contrary to the discussion of water quality, the PEIR does acknowledge in the fisheries discussion that "the positive benefit of Impact FISH1 (improved water quality) probably would be greater under Alternative 5 than under any other alternative." PEIR, p. 5.8-53. These acknowledgements contradict the PEIR's earlier unreasonable assertions that the water quality benefits of each of the alternatives are similar despite their drastic differences in monitoring requirements and management practices oversight. The PEIR's refusal to acknowledge the failure of the existing program to document any BMP implementation or water quality improvements frustrates rather than facilitates the Regional Board's decision-making. A true quantitative comparison of alternatives 2, 3, and 4 incorporating one or more of the main flaws of Alternative 1, including for example reliance solely on regional monitoring to detect and evaluate BMPs, would demonstrate they will prove equally ineffective. CSPA believes the PEIR should be rewritten to include the required comparative analysis on staff's proposed alternative (perhaps with some improvements – *see* Section V below), CSPA's proposed alternative (Section II above), and perhaps one or two other of the existing alternatives.

F. The Regional Board May Not May Not Approve Four Out Of Five Of The Proferred Alternatives Because They Would Conflict With Other Laws, i.e. Porter-Cologne.

A lead agency may not approve a project with significant unavoidable impacts unless it is "otherwise permissible under applicable laws and regulations." CEQA §21002.1(c). Likewise, as the PEIR acknowledges, "[t]o be considered as an alternative under CEQA, ILRP alternatives . . . must . . . meet statutory requirements established in applicable state policy and regulations (e.g., . . ., the State Water Resources Control Board *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* [State Water Board 2004], and the State Antidegradation Policy [State Water Board 1968])." PEIR, p. 2-8.

The PEIR states that all of the alternatives will have a significant unavoidable impact on prime agricultural lands. PEIR, Summary, p. 1-13. CSPA also believes that every alternative considered in the PEIR will have unavoidable impacts to water quality and fisheries, at least in the near term and for several of the alternatives for the indefinite future. As discussed below, Alternatives 1 through 4 all violate the State's antidegradation policy and the Nonpoint Source Control program. Therefore, only one

of the alternatives considered by the Regional Board (at least as currently formulated) can be approved despite any significant unavoidable impacts – Alternative 5.

1. The first four alternatives all violate the state's antidegradation policy.

The State Board's "Statement of Policy With Respect to Maintaining High Quality of Waters in California" provides, in relevant part, that:

> 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) 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.

Resolution No. 68-16 (Oct. 28, 1968) (emphasis added). As Regional Board staff explains, "In determining BPTC, the discharger should compare the proposed method to existing proven technology; evaluate performance data (through treatability studies), compare alternative methods of treatment or control, and consider the method currently used by the discharger or similarly situated dischargers." Staff Report, p. 62 (citing SWRCB Order Nos. WQ 81-5, WQ 82-5, WQ 90-6, and WQ 2000-07)." To comply with Resolution No. 68-16's BPTC mandate, the Regional Board "must require the discharger to demonstrate that the proposed manner of compliance constitutes BPTC." *Id*. (citing SWRCB Order No. WQ 2000-7) (emphasis added). *See also id*. p. 67 ("where degradation is occurring, irrigated agricultural operators must *demonstrate* that any set of practices proposed for implementation represents BPTC and will be required to consider existing water quality data or conduct monitoring in support of this demonstration").

Under the existing program, not one irrigated lands discharger has complied with Resolution No. 68-16's BPTC requirement. The Regional Board is entirely in the dark regarding what, if any, measures have been implemented never mind whether they amount to BPTC. Given that the existing management plans' only map out a series of meetings between coalitions and groups of dischargers to discuss measures the dischargers may have planned, there is nothing in Alternative 1 or its mirror proposal, Alternative 2, that would cure these universal violations of the BPTC requirement. *See* Staff Report, p. 115 ("Alternative 1 would not implement the iterative BPTC and monitoring process for addressing degradation to groundwater").

Alternatives 3 and 4 also succumb to the absurd notion that downstream regional monitoring alone can somehow implement Resolution No. 68-16's BPTC requirement. Although these alternatives both close some of the gap in implementing the BPTC requirement by requiring irrigated lands dischargers to prepare farm-specific Farm Water Quality Management Plans ("FWQMPs"), the omission of monitoring to determine the effectiveness of those measures means the Regional Board will not know whether

the measures are BPTC. Alternative 3 omits any surface or groundwater quality monitoring, essentially erasing the BPTC requirement. *See* Staff Report, p. 116 ("Surface and/or groundwater quality monitoring would not be required under Alternative 3 to determine effectiveness of BPTC and whether degradation is occurring"). Alternative 4, to the extent it allows dischargers to forego farm specific monitoring in exchange for participating in regional monitoring, cannot reasonably be claimed to identify BPTC many miles upstream of the monitoring location. Nor would measurements of pollution downstream at levels below applicable criteria indicate whether or not waters upstream – shallower and perhaps closer to various pollution discharges – were being degraded by irrigated lands discharges. Any resort to regional monitoring without a farm-specific monitoring component cannot meet Resolution No. 68-16's requirement. The Staff Report does not explain how regional monitoring would suffice to determine whether upstream measures are BPTC or the presence and extent of upstream degradation. *See* Staff Report, p. 116.

Of the five alternatives considered in the PEIR, only Alternative 5 is consistent with Resolution No. 68-16. That alternative requires discharges to identify the measures they are installing or implementing and it requires monitoring of the measure's effectiveness (though as CSPA notes below, Alternative 5 is weighted down with too much monitoring).

As the staff acknowledges, "With regard to selection of measures and practices, the Central Valley Water Board and USEPA recognize that there is often site-specific, crop-specific, and regional variability that affects the selection of appropriate management measures, as well as design constraints and pollution-control effectiveness of various practices." Staff Report, p. 66-67. Because BPTC and compliance with the state's antidegradation policy is ultimately a farm specific question, there is no getting around the fact that to implement the policy, one must identify and measure BPTC at the farm level. *See PEIR, p. 3-9* ("The appropriate management practice is typically selected on a site-specific or property-specific basis"). It is simply ridiculous to claim that one can determine that a discharger has installed BPTC by measuring ambient water quality many miles downstream. If that were the case, the regional monitoring that has occurred under Alternative 1 for the last seven years would already allow the Regional Board to evaluate BPTC throughout the region. Of course, the opposite is true. The Regional Board has no idea what, if any, measures have been installed and whether they amount to BPTC. Alternatives that continue the current failure to apply Resolution No. 68-16 to tens of thousands of dischargers of toxic and impairing pollutants and vast swaths of the State's inland waters amount to licenses to degrade water. CSPA agrees that farmers can have flexibility but they have to tell the Boards and the public what they decided to implement and then measure its effectiveness to comply with the BPTC requirement.

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2. Alternatives 1 through 4 violate the NPS Policy

Alternatives 1 through 4 also are inconsistent with the State Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (May 20, 2004) ("NPS Policy"). Any NPS program must be consistent with five key elements of the NPS Policy. Alternatives 1 through 4 are all inconsistent the NPS Policy's element requiring compliance with Resolution No. 86-16. Alternatives 1 and 2, as well as the staff's recommended program, fail to comply with second and fourth key elements as well. Alternatives 3 and 4 also fall short of the second and fourth elements to the extent they call for no water quality monitoring or only regional water quality monitoring. Each of the four relevant elements is discussed in turn.

Key element 1 states that "[a]n 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." NPS Policy, pp. 11-12. As discussed above, Alternatives 1 through 4 do not comply with Resolution No. 68-16. Hence, they also cannot comply with Key Element 1 of the NPS.

Key element 2 provides that: "[a] nonpoint-source control implementation program must include a description of the management practices and other program elements that are expected to be implemented to ensure attainment of the implementation program's stated purpose, the process to be used to select or develop management practices, and the process to be used to ensure and verify proper management practice implementation." NPS Policy, p. 12. "A RWQCB must be convinced there is a high likelihood the MP will be successful." *Id*. In regard to discharges from irrigated lands, this element of the NPS Policy effectively requires farm-based water quality management plans, or their equivalent. "MPs must be tailored to a specific site and circumstances, and justification for the use of a particular category or type of MP must show that the MP has been successfully used in comparable circumstances. If an MP has not previously been used, documentation to substantiate its efficacy must be provided by the discharger." *Id*., p. 12. In this case, the dischargers are the individual farms and the only way to document the efficacy of a specific management practices for their particular lands is for them to tell the Regional Board what they are doing and why. Likewise, in order "to ensure and verify proper management practice implementation" for irrigated lands, the farms must report on their implementation, including pollutant specific monitoring of the BMP's resulting effluent. Because Alternatives 1 and 2 do not include FWQMPs, they cannot comply with key element 2. Likewise, Alternatives 1 and 2 and Alternative 4's reliance on regional monitoring also cannot comply with key element 2's verification requirement. Alternative 3 has no water quality monitoring at all and, thus, in the context of irrigated lands management practices, cannot verify the effectiveness of any management practice.

Key element 3 of the NPS Policy provides that "[w]here the Regional Water Board determines it is necessary to allow time to achieve water quality objectives, the nonpoint-source pollution control implementation program must include a specific time schedule and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements." NPS Policy, p. 13. Although CSPA may not be opposed to reasonable time frames for irrigated lands dischargers to come into compliance with the requirements of a revised program, the PEIR and staff report need to be clarified to acknowledge that the Regional Board may not have authority to include schedules of compliance in either WDRs or conditional waivers because the Central Valley Bain Plan fails to include any such authority in its program to achieve the applicable water quality standards. *See* Water Code § 13242(b) (program to achieve standards must include "[a] time schedule for actions to be taken" – if no time schedule provided in Basin Plan, no authority); Basin Plan, p. IV-16 (compliance schedules only authorized for NPDES permits). The Board's authority appears to be limited to adopting time schedules through enforcement orders. The documents also should be careful to emphasize the NPS Policy's requirement that, assuming such schedules are authorized in the Basin Plan, the schedules "may not be longer than that which is reasonably necessary to achieve an NPS implementation program's water quality objectives."

Key element 4 requires that "[a]n NPS pollution control implementation program must include sufficient feedback mechanisms so that the Regional Water Board, dischargers, and the public can determine whether the program is achieving its stated purpose, or whether additional or different management practices or other actions are required." NPS Policy, p. 13. "In all cases the NPS control implementation program should describe the measures, protocols, and associated frequencies that will be used to verify the degree to which the MPs are being properly implemented and are achieving the program's objectives, and/or to provide feedback for use in adaptive management." *Id*. "[I]f the program relies upon dischargers' use of MPs, there should be a strong correlation between the specific MPs implemented and the relevant water quality requirements." *Id*., p. 12. In the context of irrigated lands, this key element requires reporting and monitoring. It is impossible to describe the management practices that were used and a "strong correlation" between the management practices and water quality standards without FWQMPs and annual reporting. And it is impossible to determine that the management practices are effective without reports from the discharger that they have been properly implemented and monitored to confirm they have reduced pollution. Alternatives 1 through 4 do not achieve this level of comprehensible feedback.

Key element 5 requires that "[t]he Regional Water Board must make clear, in advance, the potential consequences for failure to achieve a nonpoint-source pollution control implementation program's stated objectives." Neither Alternative 1 nor 2 make clear the consequences of any failures by coalitions. No coalition or discharger takes seriously the notion that a coalition will be dissolved for failing to comply with the program's requirements. In essence, the coalition-based alternatives require the Regional Board to dissolve an entire watershed program – with nothing in place to back

it up once it is gone. The Regional Board would appear to punish itself as much as the dischargers under these scenarios. Likewise, as for Alternatives 3 and 4, the consequences of failure also are not clear because the proposals do not include monitoring of the individual dischargers. Although these alternatives have the Regional Board involved (CSPA believes unrealistically) in the development of the FWQMPs, without management practice effluent data and only sporadic site inspections by staff, there are no clear consequences for noncompliance by individual dischargers.

G. The PEIR Fails To Consider a Reasonable Range of Alternatives Because Most of the Alternatives are Weighted Down With Components That Render Them Ineffective.

Because four out of the five alternatives considered in the PEIR are not viable because they violate some of the elemental water quality regulations, the Regional Board is left with only a single feasible alternative – Alternative 5. *See* PEIR, p. 2-8 ("Alternatives must … meet statutory requirements established in applicable state policy and regulations"). This is not a reasonable range of alternatives. Even assuming one additional alternative – Alternative 4 – comes close to being legal and thus feasible, the Board is still left with only two options. The Regional Board should redraft the PEIR to focus on feasible alternatives. These would include in addition to Alternative 5, staff's proposed program (although as discussed below, staff's proposal is also inconsistent with the PS Policy and Resolution No. 68-16), CSPA's proposed alternative above, and at least one other variation that includes FWQMPs and farm-specific monitoring for at least some portion of the discharging farms.

An EIR must describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. "An EIR's discussion of alternatives must contain analysis sufficient to allow informed decision making." *Laurel Heights I*, 47 Cal.3d at 404. An EIR must also include "detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." *Id*. at 405.

In addition to their failure to comply with Resolution No. 68-16 and the NPS Policy, CSPA also believes the alternatives considered in the PEIR suffer from the following defects.

1. The ILRP Should Not Rely on Coalitions to Implement or Comply with Irrigated Lands Program.

What, if any, value the existing coalitions may have brought to the program to facilitate some of the regional monitoring and performing outreach to growers, has now passed. The ILRP, to be effective, must now concentrate on getting individual farmers to take actions necessary to control their pollution discharges and document implementation of BPTC. CSPA's review of the coalitions' management plans approved

by the Regional Board under the existing program shows that the coalitions have no intention of documenting each farm's management measures or their effectiveness. Instead, as their management plans make clear, the coalitions propose to replace various office meetings with groups of growers as a surrogate for documenting each farm's BMPs and their effectiveness. Of course, to confirm the selection, implementation and monitoring of BPTC on each farm, each farm must provide that information. Adding a layer of unofficial bureaucracy with an interest in obscuring information from both the Board and the public does not add any efficiency to the program. In 2003, CSPA pointed out that:

> If one thing is clear, the existing Coalition program has managed to mask from the Regional Board what is going on on-the-ground at most of the farms around the Valley. As several Board members commented and as is painfully evidenced from reviewing the available documents, we still do not have the most basic information about what, if any, BMPs are being applied in the fields, where they're being applied, whether they are working or improving the quality of discharges and what other BMPs might be tried in the future.

Letter from Law Office of Michael R. Lozeau on behalf of Deltakeeper, pp. 5-6 (Nov. 4, 2005). Remarkably, seven years later, the mask erected by the coalitions remains in place. Neither the Board nor the public has any idea what if any management practices have been proposed or implemented by any of the estimated 30,000 farms in the Central Valley. *See e.g.*, Technical Memo, p. 1-2 ("Although Alternative 1 represents the continued implementation of current Central Valley Water Board policies, limited information was available to determine the extent of management practice implementation to date"); *Id*., p. 2-2 ("Conceptually, the best source of this type of information would be growers or grower coalitions. Because this information was not widely available, other sources were used to estimate the existing conditions (NRCS 2005; DWR 2001)"); Staff Report, p. 117 (explaining that only effort to date by coalitions to "track the progress of management practice implementation through the results of periodic surveys sent to growers"). Nor does the informal effort of the coalitions to collect the farm-specific data appear to have changed since the Regional Board's approval of management plans. *See, e.g.* East San Joaquin Water Quality Coalition Web Site ("Properties adjacent to or in close proximity to each waterway sampled by the Coalition are the primary focus of mailings and notices for local workshops that cover BMPs to solve the water quality problem"); San Joaquin County and Delta Water Quality Coalition, 2010 Annual Monitoring Report, p. 4 (March 1, 2010) (focused outreach in three subwatersheds consists of asking growers to complete surveys and then conducting unspecified follow-up with growers). The next phase of the ILRP cannot allow coalitions to continue and further obstruct the Board's collection of <u>discharger</u> information.

The use of coalitions also will continue to undermine the Regional Board's enforcement discretion. As the staff acknowledges, by relying on coalitions, the Board effectively limits the availability of all of its enforcement tools. 'The Central Valley

Water Board does not have any direct enforcement authority over a third-party group that is not responsible for the waste discharge (i.e., the Board cannot take enforcement against the coalition." Staff Report, p. 117. The only option available to the Regional Board to address coalitions' noncompliance is not to enforce the requirements, but to eliminate the entire program within large areas of the Central Valley. Rather than a readily available and precise tool available to the Regional Board, like a notice of violation or an administrative civil liability, a decision to dismantle the ILRP for an entire area would be the least likely response the Board would want to take and would not be commensurate with the scope and seriousness of most of the violations the Board was trying to address. The coalitions also undermine the Board's ability to effectively enforce against individual dischargers as well by failing to collect the necessary data regarding management practices on individual farms and otherwise obstructing or slowing down the review and analysis of that information. *See* Staff Report, p. 140 (discussing Alternative 1, "the Board . . . would not have information regarding the method(s) and practices the operation has or plans to implement to work toward solving identified water quality concerns").

Staff's proposal argues that the presence of coalitions will "take advantage of local knowledge and administrative/cost efficiencies in dealing with a few groups versus thousands of individual operations." Staff Report p. 3. The only administrative/cost efficiencies visible from the record are those realized by the coalitions' successful effort to date to avoid gathering the key information and data that is necessary to implement a successful program – farm-specific management practices and monitoring data to prove they have been implemented and are effective at reducing the pollutants of concern. It makes no sense that establishing an intermediate layer of bureaucracy between the dischargers who have the information and the agency that needs to know the information makes that process more efficient.

Nor do the coalitions bring the local knowledge necessary for a successful ILRP. If anything, the coalitions are preventing local knowledge of each farm from reaching the Board. As far as CSPA can tell, staffing by the coalitions consists of a few staff for each coalition. There is no reason that the Regional Board itself could not provide the same local presence by modestly expanding its staff and gain efficiencies by cutting out the middleman. To the extent any alternative proposes to rely on coalitions who are not themselves dischargers to conduct sampling, gather information, and prepare plans and reports pursuant to a conditional waiver or WDRs, the program will continue to fail to measurably reduce any pollution discharges and perpetuate or worsen the existing pollution discharges from irrigated lands.

2. Alternatives that rely solely on regional monitoring to determine the adequacy of BPTC or enforcement of individual farms are destined to fail and do not meet CEQA's duty to mitigate impacts.

The four alternatives that rely on regional monitoring to determine that the program is reducing, rather than increasing, pollution discharges and that management

practices are installed and equal to BPTC, do not provide for the mitigation of impacts required by CEQA. CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and mitigation measures. CEQA Guidelines § 15002(a)(2) and (3); *See also*, *Berkeley Jets*, 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564. The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced." CEQA Guidelines §15002(a)(2). If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." Pub. Res. Code § 21081; CEQA Guidelines § 15092(b)(2)(A) & (B).

In general, mitigation measures must be designed to minimize, reduce or avoid an identified environmental impact or to rectify or compensate for that impact. CEQA Guidelines § 15370. Where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. *Id.* at § 15126.4(a)(1)(B). A lead agency may not make the required CEQA findings unless the administrative record clearly shows that all uncertainties regarding the mitigation of significant environmental impacts have been resolved. A public agency may not rely on mitigation measures of uncertain efficacy or feasibility. *Kings County Farm Bureau*, 221 Cal.App.3d at 727 (finding groundwater purchase agreement inadequate mitigation measure because no record evidence existed that replacement water was available). "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. CEQA Guidelines § 15364. Mitigation measures must be fully enforceable through permit conditions, agreements or other legally binding instruments. *Id.* at § 15126.4(a)(2).

By not requiring any farm-specific mitigation measures, Alternatives 1 and 2 fail to meet CEQA's mitigation requirements. These two alternatives make no effort to resolve the vast uncertainties surrounding the selection and implementation of management practices on irrigated lands throughout the Central Valley, the very mitigation measures relied upon by the PEIR to find that impacts to water quality will be less than significant. Despite the PEIR's acknowledgement that "[t]he appropriate management practice is typically selected on a site-specific or property-specific basis[,]" Alternatives 1 and 2 do not include any site-specific BPTC requirements that are or will be fully enforceable.

Similarly, Alternatives 3 and 4, although requiring FWQMPs that would require, in the future, individual farms to describe their management practices, the absence of any farm specific and BMP-specific monitoring to confirm their implementation and effectiveness also fails to eliminate the rampant uncertainty regarding BMP implementation and their effectiveness at reducing pollution from specific farms. And, again, making believe that one can monitor for the implementation and effectiveness of

management practices on a specific farm from several miles downstream makes any management practice mitigation unenforceable, never mind fully enforceable.

3. Alternative 3 includes components that begin to address the shortcomings of the current program but is weighed down with odious requirements and illegal delegation of Board responsibilities.

Although flawed, some of the alternatives described in the PEIR include components that CSPA believes are necessary to an effective ILRP. However, in each instance, the PEIR weighs down the effective components with various poison pills and odious requirements that stifle any serious consideration of alternatives that substantially change the current program. Additional comments and flaws in Alternative 3, in addition to the absence of any effluent quality monitoring discussed above, include the following.

Alternative 3 does include the important requirement that all irrigated land dischargers prepare a FWQMP. CSPA believes this requirement is fundamental to a program that will achieve BPTC, achieve water quality standards and allow proper oversight by the Regional Board. However, the 2-year time period for developing a FWQMP should be shortened to 6 months for surface water discharges and one year for groundwater discharges.

Alternative 3's proposal that the Regional Board review and approve every FWQMP is unrealistic and unnecessary. *See* PEIR, p. 3-14 ("Review applications and determine priorities for FWQMP review and approval"); p. 3-16 ("Submit the FWQMP for review and approval by the Central Valley Water Board"). As proposed, the task of reviewing in advance each and every FWQMP is unrealistic. Moreover, such review and approval would be a desk top review of whatever information is included in the FWQMP without the benefit of any field observations. This process would simply repeat the currently inadequate surveys and informal meetings which the coalitions claim can accurately evaluate management practice implementation and effectiveness. Rather than requiring review of and approval of all FWQMPs, the program should specify in sufficient detail the contents of the FWQMP and require them to be submitted under penalty of perjury. CSPA also believes there is a role for an iterative process. The requirements for the FWQMP should include requiring additional management practices wherever effluent data indicates that pollutant discharges are not decreasing or standards are being violated. Any review by the Board staff would be in the context of reviewing for compliance and prioritizing any inspections and enforcement investigations. Staff also could, of course, require additional measures or monitoring for specific problem farms.

Similarly, because such up front review and approval is unnecessary, any resources expended to review proposals by third-parties to take over such review and approval of FWQMPs is also unnecessary. To the extent the Board thought it was

possible to review and approve every FWQMP, farming that task out to third parties would be an illegal delegation of discharge requirements. Water Code § 13223.

CSPA certainly agrees that the Regional Board should prioritize and conduct a significant number of site inspections every year. It is through this oversight and enforcement process that CSPA believes the Regional Board can realistically and accurately review a specific farm's FWQMP to determine its compliance with the program requirements. Likewise, to the extent the Board staff wanted to "coordinate" with a specific farmer or even a group of farmers, such an inspection would be the opportunity for coordination. By including effluent monitoring, the Regional Board would have a better means of prioritizing its inspections and evaluating whether management practices are BPTC. By publicizing through Board meetings and the web site the outcome of these inspections including any "certifications" issued or, equally important, enforcement responses by the Board or staff, CSPA believes that the Regional Board would be taken seriously by a much larger percentage of individual dischargers who would then seek to comply with BPTC and water quality standards.

As discussed in various sections of these comments above, Alternative 3's failure to require any farm-specific water quality monitoring is a fatal flaw. *See* PEIR, p. 3-16 ("unless specifically required in response to water quality problems, owners/operators would not be required to conduct water quality monitoring of adjacent receiving waters or underlying groundwater"). CSPA believes that monitoring of discharged effluent is what needs to be required to determine compliance with both the BPTC requirement and applicable water quality standards. As outlined in CSPA's proposed alternative, such monitoring should be limited to Tier 2 and Tier 3 dischargers within areas covered by management plans and limited to basic parameters plus any pollutants triggering the management plan. CSPA agrees that visual monitoring does have a role but cannot be the only monitoring. CSPA has many years of experience reviewing annual reports and initiating enforcement actions under the Statewide General Industrial Storm Water Permit. The visual monitoring conducted under that permit is of limited value to documenting pollution discharges or BMP effectiveness (though with appropriate photographs, visual monitoring can document the installation of BMPs and their condition).

4. Alternative 4 includes fewer poison pills but its failure to require BMP and effluent monitoring means that it would not achieve water quality objectives or ensure implementation of BPTC.

Alternative 4 also includes a number of components that CSPA believes are key components to a successful ILRP, including FWQMPs and a tiering component to guide both BMP implementation and different levels of monitoring. Alternative 4 proposes the same procedures for preparing, reviewing and approving FWQMPs. CSPA agrees with requiring all dischargers to prepare and implement FWQMPS but CSPA has the same concerns with the FWQMP procedures discussed for Alternative 3 above.

The key difference proposed in Alternative 4 would be the inclusion of a tiering system to guide dischargers on the proper levels of BMPs they should be considering as well as the intensity of monitoring that is required. PEIR, p. 3-17 ("The tiers represent fields with minimal (Tier 1), low (Tier 2), and high (Tier 3) potential threat to water quality. Requirements to avoid or minimize discharge of waste would be the least stringent for Tier 1 fields and the most stringent for Tier 3 fields"). CSPA agrees that a tiering system is important to controlling the costs of implementing and overseeing the program and assuring that limited resources are aimed at potentially significant pollution dischargers. CSPA believes that the three tiers proposed in the PEIR for both surface and groundwater make sense in providing some initial guidance on the selection and implementation of BMPs. However, CSPA believes both Tier 2 and 3 should conduct similar levels of farm-specific water quality monitoring, albeit not as extensive as that proposed for Alternative 5 and, at least theoretically, for Alternative 4. In addition, CSPA also would use the information gleaned from the ambient monitoring and water quality management plans to further prioritize the farms that must conduct effluent water quality monitoring.

Alternative 4's monitoring requirements for both Tier 2 and 3 dischargers fail to implement Resolution 68-16, evaluate management practice effectiveness and assure compliance with water quality standards by allowing regional monitoring by discharger coalitions to replace the outlined farm-specific monitoring. *See* PEIR, p. 3-19. The inclusion of farm specific monitoring is an illusion as every discharger obviously will opt for the cheaper monitoring far away from their activities and effluent. Monitoring required by the ILRP should be focused on effluent monitoring and BMP effectiveness.

Likewise, for groundwater monitoring the Alternative should focus on onsite wells and leave the regional monitoring to the Regional Board and its consultants. Regional monitoring could also be supplemented by use of the California Department of Public Health public drinking water supply database. Use of the database, in selecting for pesticide and nitrate concentrations in Central Valley wells, would allow for an analysis of the effectiveness of the Alternative as implemented. CSPA believes the monitoring of existing wells is a reasonable proposal and should be implemented by both Tier 2 and 3 groundwater dischargers. Most farms will have one or more functional wells already in place. It is a simple step to require nutrient and pathogen monitoring of those existing wells. The data also would be much more relevant (though perhaps initially not sufficient to define the scope of any water quality exceedances) to that particular discharger. Any regional groundwater problem would simply measure in that locale and say little if anything about dischargers several miles away.

The proposed monitoring frequency for Tier 2 dischargers of once every five years is also woefully inadequate, whether considered on a farm-specific or regional basis. It is already difficult enough to make determinations about compliance with standards or implementation of BPTC based on edge of field monitoring four times in a single year. To then wait five more years before the next set of samples would prevent

any determination of trends and any improvements to BMPs for that amount of time or longer. Sampling needs to occur every year, whether a discharger is in Tier 2 or Tier 3.

Although not ideal, CSPA believes the proposed number of sampling events in any given year strikes a proper balance. PEIR, p. 3-24 ("Tailwater discharges during the first discharge of the irrigation season and once mid-season. Storm water discharges during the first event of the wet season (between October 1 and May 31) and once during the peak storm season (typically February). Discharges of subsurface (tile) drainage systems annually"). CSPA incorporates this proposal into its preferred alternative.

Alternative 4 again discloses staff's penchant for encouraging the formation of intermediate bureaucracies and entities over whom they have no enforcement authority by inviting groups of dischargers to form "legal entities that could serve a group of growers who discharge to the same general location and share monitoring locations." PEIR, p. 3-20. CSPA agrees that there exist opportunities for neighboring farms to work together to monitor shared irrigation ditches and implement joint control measures. CSPA does not see any reason for the individual dischargers to have to form a separate entity to accomplish this goal. Each of them could incorporate the measure into their respective FWQMPs and each would simply be jointly and severally responsible for its implementation and effectiveness. The Regional Board could respond to one or all, though obviously any inspection and follow-up would want to be with all of the cooperating farms.

5. Alternative 5's aggressive agency reviews and approvals and expensive monitoring proposals go beyond the reasonable next step but it is the one alternative reviewed in the PEIR that, if implemented would dramatically reduce irrigated lands pollution discharges.

Of the five alternatives described in the PEIR, Alternative 5 is the only one that proposes an effective framework that (1) would comply with Resolution 68-16's requirement that each discharger demonstrate BPTC and prevent degradation, (2) assure the attainment of water quality standards not only miles downstream but in the immediate area of a discharger's effluent, and (3) provide information sufficient for the Regional Board staff to properly prioritize its inspections and enforcement. Alternative 5 is modeled on the successful industrial and construction site storm water permit programs, with a few important exceptions. Unfortunately, in their apparent excitement, the PEIR drafters could not refrain themselves from layering in too many requirements the sole purpose of which appears to be to make the alternative so expensive that it would never be selected. CSPA believes that, although the regulatory framework of Alternative 5 is sound, the monitoring frequency and constituents (at least as defined in the accompanying economic analysis) are excessive and the absence of any tiering that would prioritize the riskier dischargers also misses a reasonable method of reducing costs.

Alternative 5 proposes monitoring that goes well beyond, for example, the storm water general permits' focus on basic parameters and representative metals monitoring. Technical Memo, pp. 2-17 – 2-19. *See* Kings River Coalition Annual Monitoring Report (2010) (according to the Technical Memo, the monitoring constituents are based on the regional samples taken by the Kings River Coalition). This is overkill for site specific monitoring. The frequency of monitoring also is dramatically increased in this Alternative for tailwater discharges. For example, Alternative 5 would require monthly sampling of tailwater as compared to Alternative 4's proposal of twice per irrigation season (albeit with its regional monitoring exception). CSPA believes the extensive and costly monitoring parameters proposed for Alternative 5 go well beyond what is necessary for the Board and a discharger to determine whether they have installed BPTC and are protecting water quality objectives.

The most obvious poison pill in Alternative 5 is the proposal that every farmer drill and install groundwater monitoring wells. Focusing on existing wells would be much more reasonable. Additionally, use of the California Department of Public Health public drinking water supply database would allow for an analysis of the effectiveness of Alternative 5 as implemented. The database could be queried for pesticide and nitrate concentrations in wells in the Central Valley to determine of concentrations are increasing or decreasing. The database could also be used for analysis to determine the role of the Alternative in contributing to trends (*i.e.* what role the Alternative plays in increases or decreases).

As for the FWQMPs, CSPA does not believe there is any basis for allowing dischargers two-years to prepare and implement FWQMPs. PEIR, p. 3-27. They have been on notice for the last seven years that they need to implement management measures. In many areas, management plans that supposedly will not lead to implementation of BMPs have been in place for some time. CSPA believes that all dischargers should prepare and implement FWQMPs within 6 months.

Alternative 5 does drop the proposal to have the Regional Board coordinate with dischargers regarding their FWQMPs and review and approve each plan as well. CSPA believes this is a reasonable omission. However, the FWQMPs need to be submitted to the Regional Board, ideally as pdfs that could be posted on-line. The proposal to have them on-site and available upon the Regional Board's request would eliminate their utility for staff to rely upon them to make decisions about enforcement priorities, undercuts the public's ability to review FWQMPs, precludes other dischargers from reviewing similar dischargers' plans, and sends a message to dischargers that they need not worry until the Board shows up.

Alternative 5 states that Board staff will "[f]ollow up and coordinate with growers to ensure that FWQMPs and implemented management practices are addressing identified water quality problems." PEIR, p. 3-26. The economic analysis presumes that by merely interacting directly with growers, Board staff will have to provide them

technical assistance on their FWQMPs. *See* Technical Memo, p. 2-24 ("Board staff will be required to interact directly with growers and provide technical assistance when requested"). In so presuming, the economic analysis comes up with an estimated staffing level of 356 staff. *Id*. This number completely exaggerates the level of staff necessary to implement this alternative. Indeed, the industrial and construction storm water program covers more than 7,500 facilities throughout the Central Valley. Currently, the Regional Board assigns fewer than a dozen staff to implement and enforce that entire program, which also includes overseeing the 93 Phase I and II municipal stormwater permits. More staff is clearly necessary to more effectively implement that program. Even with those few staff however, it is clear that almost all of the 7,500 facilities have implemented some level of management measures.

Alternative 5 itself does not suggest that Board staff are obliged to act as dischargers' consultants. That notion, expressed in the economic analysis, is entirely improper. Any follow-up by staff should be pursuant to its oversight and enforcement authority. The Regional Board need not add 356 staff to effectively implement this alternative. As CSPA also proposed for Alternatives 3 and 4, the Board should focus its limited resources by using the monitoring data and FWQMPs to prioritize site inspections and distribute the results – providing examples of good compliance and issuing enforcement orders and penalties where compliance falls short.

6. The PEIR fails to consider the true no project alternative – automatic termination of the waiver and implementation of individual WDRs

The PEIR's formulation of the no project alternative is wrong because the PEIR incorrectly treats the existing general waivers as continuing in perpetuity. PEIR, p. 3-4 ("no project alternative" identified as <u>future</u> renewal of existing program and continued implementation) (emphasis added). The PEIR claims that a future extension or renewal of the existing waiver is of a "ministerial nature." *Id*. Both of these assertions are incorrect as a matter of law. If the Board takes no action, the existing waiver terminates on June 30, 2011. Order No. R5-2006-0053, p. 17; Water Code § 13269(a)(2). Any renewal of the existing waiver is not ministerial but discretionary, requiring the Regional Board to hold a hearing and exercise its discretion to determine whether renewing an existing waiver complies with the Basin plan, is in the public interest and includes adequate monitoring. Water Code §§ 13269(a)(2), (f). Hence, the no project alternative is allowing the existing waiver to automatically terminate on June 30, 2011 and what would reasonably be expected to occur once that happens.

The PEIR cites out-of-context a single sentence from the CEQA Guidelines relating to revising a regulatory plan. The PEIR quotes the following sentence from CEQA Guideline § 15126.6(e)(3)(A) – "When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the 'No Project' Alternative will be the continuation of the existing plan, policy, or operation into the future." PEIR, p. 1-3. The PEIR suggests that guidance allows the Regional Board to make believe that

doing nothing somehow magically renews the existing waivers come June 20, 2011. That, of course, is not a "no action" or "no project" alternative. Renewing the waivers would be selecting a discretionary action.

CEQA requires that an EIR consider a no project alternative. CEQA Guidelines § 15126.6(e)(1) ("The specific alternative of "no project" shall also be evaluated along with its impact"). "The purpose of describing and analyzing a no project alternative is to allow decisionmakers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project." *Id*. "The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. CEQA Guidelines § 15126.6(e)(2). "The [no project] description must be straightforward and intelligible, assisting the decision maker and the public in ascertaining the environmental consequences <u>of doing nothing</u>; requiring the reader to painstakingly ferret out the information from the reports is not enough." *Planning & Conservation league v. Dept. of Water Resources* (2000) 83 Cal.App.4th 892, 911 (emphasis added).

The Guidelines note that "[a] discussion of the "no project" alternative will usually proceed along one of two lines . . . CEQA Guidelines § 15126.6(e)(3). The PEIR attempts to rely on the first category, which states in full that:

> When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the "no project" alternative will be the continuation of the existing plan, policy or operation into the future. <u>Typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed</u>. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan.

CEQA Guidelines § 15126.6(e)(3)(A) (emphasis added). However, the existing waiver, unlike a typical land use or general plan (or for example the Regional Board's Basin Plan) that does not expire by a date certain, expires as a matter of law on a date certain, June 30, 2011. The Guidelines make clear that the Regional Board cannot treat one of its alternatives to a proposed project (assuming the PEIR included a proposed project) as a no project alternative:

> After defining the no project alternative . . ., the lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future <u>if the project were not approved</u>, based on current plans and consistent with available infrastructure and community services.

CEQA Guidelines § 15126.6(e)(3)(C). The current relevant plans germane to the PEIR are the existing waivers. If the Regional Board were to do nothing by June 30, 2011, *i.e.*, a true no project alternative, the waivers will automatically expire. The Board cannot assume it will select one of the project's alternatives and pretend it is not approving the project. This methodology was firmly rejected by the Court in *Planning & Conservation League*:

> A no project description is nonevaluative. It provides the decision makers and the public with specific information about the environment if the project is not approved. It is a factually based forecast of the environmental impacts of preserving the status quo. It thus provides the decision makers with a base line against which they can measure the environmental advantages and disadvantages of the project and alternatives to the project. By contrast, the discussion of alternatives is evaluative.

Planning & Conservation League, 83 Cal.App.4th at 917-918. The PEIR fails to project out an actual no project alternative, incorporating the reality that the existing waivers are temporary with only 10 months to live.

The PEIR's assertion that the existing waivers can be ministerially extended or renewed is blatantly incorrect. *See* PEIR, p. 3-29 ("If the Central Valley Water Board fails to take the ministerial action to extend or renew the waiver program, regulation of irrigated agriculture would not cease"); *id*., p. 1-3 ("Given the ministerial nature of the extension or renewal of the ongoing waiver, which would allow continuation of the existing program, Alternative 1 is best characterized as the "No Project" Alternative"). Pursuant to Water Code § 13269, the Regional Board must apply its discretion to adopt or renew a conditional waiver. Water Code §§ 13269(a)(2), (f). *See* CEQA Guidelines §§ 15002(i)(2) ("[w]hether an agency has discretionary or ministerial controls over a project depends on the authority granted by the law providing the controls over the activity"). The initial decision as to whether to renew a waiver or adopt waste discharge requirements or a prohibition are highly discretionary. Assuming the Regional Board chooses to pursue issuance of a conditional waiver, the Regional Board wields considerable discretion in adopting the necessary conditions of the waiver. The Regional Board must employ its discretion to make the fundamental determinations that the conditional waiver will be consistent with the Basin Plan and in the public interest. Lastly, Section 13269 precludes the Regional Board from renewing any waiver without holding a public hearing where it must review the terms of the waiver.

Porter-Cologne's waiver renewal process cannot be equated even remotely with a ministerial action. "'Ministerial' describes a governmental decision involving little or no personal judgment by the public official as to the wisdom or manner of carrying out the project. The public official merely applies the law to the facts as presented but uses no special discretion or judgment in reaching a decision." CEQA Guidelines, 14 CCR § 15369. "A ministerial decision involves only the use of fixed standards or objective

measurements, and the public official cannot use personal, subjective judgment in deciding whether or how the project should be carried out." *Id*. As we are all well aware, having gone through this waiver process several times now, the decisions to be made by the regional Board are loaded with subjective, personal judgment. *See* CEQA Guidelines § 15357 ("'Discretionary project' means a project which requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations"); § 15002(i) ("[a] project subject to . . . judgmental controls is called a 'discretionary project'"). *See also* CEQA Guidelines § 15268(d) ("Where a project involves an approval that contains elements of both a ministerial action and a discretionary action, the project will be deemed to be discretionary and will be subject to the requirements of CEQA").

The PEIR must be revised and recirculated with a properly defined and evaluated no project alternative.

H. The PEIR Ignored CSPA's and Others Scoping Comments.

As the PEIR recognizes, "[i]n accordance with State CEQA Guidelines Section 15123(b)(2), the areas of controversy known to the lead agency, including issues raised by agencies and the public, shall be identified in the EIR." PEIR, p. 1-8. *See* CEQA Guidelines § 15123 ("(a) An EIR shall contain a brief summary of the proposed actions and its consequences. . . . (b) The summary shall identify: . . . (2) Areas of controversy known to the lead agency including issues raised by agencies and the public. . .).

CSPA and others have participated in the development of the EIR from its inception, submitting detailed scoping comments that fully advised the Regional Board of CSPA's long-standing criticisms of the existing ILRP and the need for FWQMPs, farm-specific monitoring and compliance with antidegradation requirements. *See* CSPA/Baykeeper Scoping Comments (May 30, 2008); CSPA et al. Scoping Comments (March 12, 2003). In those comments, CSPA emphasized the main controversies surrounding the ILRP – embellished further by these PEIR comments – that the ILRP and EIR "must directly address and eliminate . . . violations of water quality standards in light of the fact that, under the present program, the Regional Board cannot know who is actually discharging pollutants, what specific pollutants are being discharged, what are the localized water quality impacts in the vicinity of the discharge, who has or has not implemented best management practices (BMPs) and whether any reductions in pollutant loading or improvements in water quality have occurred." CSPA/Baykeeper Scoping, p. 3 (May 30, 2008). CSPA also reiterated the ongoing controversy "that Reports of Waste Discharge and individual farm-based management plans (similar to pollution prevention plans under the industrial or construction stormwater permits) are fundamentally necessary for any meaningful program addressing discharges from irrigated lands." *Id*., p. 4. The scoping comments also highlighted the ongoing controversy that the ILRP, to be successful and comply with Resolution No. 68-16, must

include farm specific water quality monitoring. *See id*., p. 2 ("[EIR] cannot rely on information collected far downstream to adequately address and mitigate upstream adverse impacts to sensitive biological resources, *i.e.*, it must identify localized impacts in the vicinity of actual discharge locations"). Many of these same issues have been raised by CSPA and others in their comments on the previous waivers as well, debated by the Regional and State Boards, and been the subject of previous litigation. *See, e.g.* CSPA et al. Comments (May 23, 2003); Deltakeeper et al. Comments (November 4, 2005).

Despite these well-known areas of controversy, the PEIR fails to include them in the summary as required by CEQA. This blatant omission underscores the bias built-into the PEIR and ultimately informing staff's separate recommendation in its staff report. Indeed, the few controversies listed in the summary are for the most part restricted to those articulated by the coalitions. PEIR, p. 2-9. The PEIR's summary needs to be rewritten to comply with the CEQA Guidelines.

I. The PEIR Overlooks a Number of Important Significant Impacts.

The PEIR opts not to discuss any impacts on at least three issue categories – recreation, aesthetics, public health and cultural impacts – which common sense would indicate will be adversely affected by the Regional Board's selection of an ILRP that is ineffective and fails to significantly reduce pollution discharges from irrigated lands. PEIR, p. 1-8. Since the EIR fails entirely to analyze the impact of the alternatives on these issues, these impacts are subject to the fair argument, rather than the substantial evidence standard. Fair argument standard applies even to EIRs if the EIR fails entirely to analyze a particular impact. *Bakersfield Citizens For Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1208.

Under the "fair argument" standard, an EIR must analyze an impact if *any* substantial evidence in the record indicates that a project may have an adverse environmental effect – even if contrary evidence exists to support the agency's decision. CEQA Guidelines § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 931; *Stanislaus Audubon v. Stanislaus* (1995) 33 Cal.App.4th 144, 150-151 (1995); *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal. App. 4th 1597, 1602. The "fair argument" standard creates a "low threshold" favoring environmental review through analysis in an EIR. *Pocket Protectors*, 124 Cal.App.4th at 928.

1. The PEIR fails to address impacts to Recreation and Aesthetics.

In its scoping comments, CSPA pointed out the need to evaluate the ILRP's alternatives on recreational uses in the Central Valley. *See* CSPA et al. Scoping Comments (March 12, 2003) (EIR should analyze impacts on "recreational, tourism and beneficial uses"). There is clearly a "fair argument" that any version of the ILRP may have significant impacts on both recreation and aesthetics in the Central Valley,

especially within the Delta. By authorizing irrigated lands discharges without FWQMPs or "edge-of-field" effluent quality monitoring, any new ILRP could further exacerbate pollution discharges from irrigated lands. Discharges of both nutrients and pesticides likely would have adverse affects on recreational and aesthetics by continuing to support the growth of nuisance aquatic species, including for example water hyacinth. The growth of water hyacinth in turn results in further water quality impacts to the Delta, including depressed dissolved oxygen levels, increased herbicide spraying, including toxic surfactants, and other pollution concerns. None of these potential impacts were discussed in the PEIR. *See* PEIR, p. 5-11-2 ("It is not anticipated that the program alternatives would substantially increase or decrease the use of recreational facilities, create the need for such facilities, or result in any other foreseeable significant impact on recreational opportunities in the program area"); p. 5.11-1 (no review of impacts to aesthetics).

Discharges of nutrients from farms contribute to the explosive growth of water hyacinth (*Eichhornia* crassipes) and Brazilian elodea (*Egeria densa*) in the Sacramento-San Joaquin River Delta. Both Brazilian elodea *Egeria densa* and water hyacinth *Eichhornia crassipes* "form dense growths that block waterways and destroy natural habitat by slowing water flow and drastically changing water quality. http://www.dbw.ca.gov/PDF/Egeria/WHSciProbsExcerpts.pdf. As the San Francisco Estuary Institute reports, "[d]ense contiguous mats" of water hyacinth "create navigation and safety concerns in waterways, harbors, and marinas." http://legacy.sfei.org/nis/hyacinth.html. Hyacinths "[i]nterfere[] with irrigation and power generation by clogging pumps and siphons." *Id*. Hyacinth "[c]an completely exclude native floating and submerged vegetation, shade habitat, change water temperature [and] … deplete dissolved oxygen." *Id*. As Dr. G. Fred Lee has summarized,

> Delta waters experience excessive growths of aquatic plants such as water hyacinth and *Egeria densa*. These water weeds interfere with recreational use of Delta waters for boating, swimming, water skiing, fishing, etc. The water weeds develop on nutrients added to Delta tributaries from urban, agricultural and wetlands sources in the Delta watershed, and from Delta island discharges. The California Department of Boating and Waterways spends several hundred thousand dollars per year to apply chemicals for controlling water weeds. There is concern about the potential toxic and other impacts of these chemicals on non-target organisms, such as fish food organisms, in the water column and sediments.

Lee, G. Fred and Anne Jones Lee, "Overview of Sacramento-San Joaquin River Delta Water Quality Issues," p. v (June 24, 2004). Because of the significant contribution of nutrients from irrigated lands, there is plainly a fair argument that the Regional Board's authorization of irrigated lands discharges may have a significant impact on recreational boaters and persons recreating in the Delta and observing vast areas of water hyacinth.

Because of the navigational, recreational and aesthetic impacts resulting from excessive water hyacinth growth, the State of California expends resources every year spraying herbicides into Delta waterways. *See* Lee, p. 19 ("large amounts of aquatic herbicides are used in the Delta to control excessive growths of water hyacinth this could be an important issue impacting Delta water quality"). *See* Dept. of Fish & Game, "Acute Toxicities of Herbicides Used to Control Water Hyacinth and Brazilian Elodea on Larval Delta Smelt and Sacramento Splittail (June 8, 2004).

In addition to increasing herbicide discharges to the Delta, water hyacinths also provide habitat for other nonnative crabs and parasites, which ultimately may affect endangered salmon in the Central Valley. As one recent study reports,

> [t]he newfound presence of these crustaceans could have significant ramifications apart from just adding their names to the already lengthy list of non-indigenous species in the Delta. Amphipods and isopods are known to be intermediate hosts of a number of parasites, including acanthocephalan parasites of fish (Nagasawa et al. 1983, Yasumoto and Nagasawa 1996). *Asellus hilgendorfii* has specifically been shown to serve as an intermediate host for numerous species of acanthocephalans that parasitize salmonids and other fish in waters of Japan (Nagasawa and Egusa 1981, Nagasawa et al. 1983, Mayama 1989). Infection occurs when fish prey upon *A. hilgendorfii* that contain acanthocephalan larvae. Adult acanthocephalans parasitize the intestinal tract of the definitive host fish (Nagasawa et al. 1983). Studies have shown that salmonids can have infection levels of 83-100% depending on the season, when *A. hilgendorfii* is only 2.1 % of the total wet weight of food items in the fish diet (Nagasawa et al. 1983). Thus, even though *A. hilgendorfii* occurs in low abundance in the diets of fish in the Sacramento/San Joaquin Delta, it could still potentially infect the entire population of salmonids with acanthocephalan parasites."

Toft, Jason David, "Community Effects of the Non-Indigenous Aquatic Plant Water Hyacinth (*Eichhornia crassipes*) in the Sacramento/San Joaquin Delta, California" (2000). All of these direct and indirect effects must be discussed and analyzed in the PEIR.

In addition, the presence of bacteria in samples collected by the existing ILRP obviates the need to address the affect of PEIR's alternatives and their ability to reduce fecal discharges on recreation, especially swimming, and human health. In CSPA's experience, it is not possible to keep kids from playing in water. As the staff report summarizes:

> The fecal pathogen indicator *E. coli* is the most common parameter with surface water exceedances of water quality objectives in the ILRP; it was detected in 99 percent of all samples. Fecal contamination is a concern

> because certain pathogenic bacteria found in feces can cause gastrointestinal illness.

Staff Report, p. 33. Indeed, 24 and 55 management plans in the Sacramento River and San Joaquin, respectively, have been triggered because of exceedances of E. coli standards in those rivers. Staff Report, p. 26, Table 3. The PEIR makes a passing reference to the fecal coliform problem, noting that "[t]oxicity, and bacteria are also known water quality problems in the Sacrament River Basin." PEIR, p. 5.9-6. The obvious impacts of fecal coliform discharges on recreational uses like swimming and boating in the Delta and other waters of the Central Valley must be addressed in the PEIR.

Lastly, CSPA is aware of numerous individuals who once recreated in and on the Delta and other Central Valley waters who have stopped or reduced such recreation because of fears of contaminants and experiencing health effects that were associated with exposure to Central Valley waters. For example, one of CSPA's members, Linda Forbes, reports:

> I was a frequent visitor to the Delta region for five years, enjoying water skiing, camping, boating and swimming. I experienced several strange skin rashes after weekends of recreation at the Delta, with the severity increasing over time. Two summers ago I began to feel more and more uncomfortable about the risks of pursuing my water sports passion there; I have not gone swimming or skiing in Delta waters for over a year.

E-mail from Linda Forbes to Bill Jennings, CSPA (Sept. 23, 2010). Another example is from Barbara Barrigan-Parrilla, a CSPA member and the Director of Restore the Delta. She tells of her daughter's first swim in the Delta as an infant resulting in an emergency room visit and her refusal to swim in the Delta since that day. E-mail from Barbara Barrigan-Parrilla to Bill Jennings, CSPA (Sept. 25, 2010). Kari Burr, a fisheries biologist, also describes the adverse impacts of agricultural discharges on her professional and recreational activities. E-mail from Kari Burr to Bill Jennings, CSPA (Sept. 26, 2010). *See also* E-mail from Frank T. Rauzi to Bill Jennings (Sept. 26, 2010) (Mr. Rauzi, a lifelong resident and fisherman of the Delta, recounts his refusal to eat fish and concerns about swimming in the Delta). Based on conversations between Bill Jennings and other CSPA members over the years, CSPA does not believe Ms. Forbes,' Ms. Barrigan-Parilla's, Ms. Burr's or Mr. Rauzi's experiences are isolated incidents but unfortunately are shared by numerous people who would recreate in waters of the Central Valley but for the incredible levels of toxic and health-threatening pollution that is discharged from irrigated lands.

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2. PEIR fails to analyze cultural impacts re: traditional uses of salmon or other fish.

The PEIR opts not to evaluate any cultural impacts of the various ILRP alternatives. PEIR, p. 5.3-9. Contaminants affecting Central Valley salmon and contributing to their decline have adverse impacts on Native American culture and religious practices. It is widely acknowledged by scientists and government agencies that agricultural runoff is one of the factors adversely affecting Chinook salmon. *See* PEIR, p. 5.8-22 ("Other factors affecting the fall-run/late fall–run Chinook salmon include . . . pollution (*e.g.*, municipal discharges and agricultural runoff), ... (Moyle et al. 2008:141–143)"). *Id*. at 5.8-39 ("NMFS (2008) concluded that EPA registration of chlorpyrifos, diazinon, and malathion would jeopardize the continued existence of, and destroy or adversely modify critical habitat for, the Central Valley spring-run Chinook salmon ESU, the Sacramento River winter-run Chinook salmon ESU, and the California Central Valley steelhead DPS"); National Academy of Sciences, "A Scientific Assessment of Alternatives for Reducing Water Management Effects on Threatened and Endangered Fishes in California's Bay–Delta," p. 42 (2010) ("It has long been recognized that contaminants are present in the delta, have had impacts on the fishes, and may be increasing (Linville et al., 2002; Davis et al., 2003; Edmunds et al., 1999).

Native American traditional uses and religious ceremonies involving salmon continue on the Sacramento River and, to a lesser degree, the San Joaquin River, and their tributaries. As the United States District Court for the Eastern District of California recently ruled, "salmon have sustained the Winnemem Wintu and have formed the foundation of the Tribe's cultural and spiritual ceremonies and beliefs." Order, p. 88. (May 18, 2010). Judge Wanger specifically recognized the "significant cultural and spiritual interests of the Winnemem Wintu" tied to the health of salmon. *Id*., pp. 88-89. The District Court relied upon the declaration of Gary Hayward Slaughter Mulcahy, the Governmental Liaison and a Tribe member of the Winnemem Wintu Tribe. As Mr. Mulcahy testified to the Court,

> For centuries, the Winnemem Wintu have had a deep cultural and spiritual relationship with the salmon that utilize the Sacramento River and its tributaries. We sing to the salmon and the waters that sustain them. Our history, traditions, ceremonies, and culture are filled with respect, reverence, appreciation, and dependence on the salmon and these waters. Salmon were the staple of the Winnemem Wintu. Salmon are the food necessary to complete and fulfill many of the Winnemen Wintu's very special sacred ceremonies. Salmon are the sustainer of health and life of the Winnemem Wintu. We believe that when the first spirits were choosing what form they would take (i.e., Salmon, Eagle, Bear, Human, etc.), when Human chose to be human, the Grandfather spirit said that these Humans will need lots of help, and each of the other spirits gave something to Humans to help them through life. We believe that Salmon gave us speech and in return we promised to always speak for them. This

> is remembered and celebrated in ceremonies on the McCloud River, Sacramento River, Squaw Creek and at Mt. Shasta several times a year. We believe that if the salmon go, the Winnemem Wintu will also disappear.

Declaration of Gary Hayward Slaughter Mulcahy, ¶ 3 (March 12, 2010). The Tsi-Akim Maidu Tribe conducts a "calling back the salmon" ceremony on the Yuba River. http://www.callingbackthesalmon.com/ceremony.php. The PEIR must gather in and discuss relevant information regarding Native American cultural and religious uses of salmon that may be affected by the Regional Board's proposal to authorize contaminants affecting salmon in the Central Valley.

3. The PEIR fails to address public health impacts of authorizing continued discharges of pesticides and other pollutants from irrigated lands effluent to groundwater.

As early as March 2003, CSPA and others urged the Regional Board to consider human health impacts of authorizing irrigated land discharges in its EIR. CSPA et al. Scoping Comments (March 12, 2003) (EIR must consider "human health throughout the Central Valley and California in terms of both acute and chronic impacts including, but not limited to: - children, including residents and school children - laborers, including farmworkers, farmers, pesticide appliers, etc. – residents – anglers - pregnant women - newborn infants"). Despite that request, the PEIR has opted to ignore potential human health impacts of the various ILRP alternatives approval of continuing irrigated land discharges.

More than two million Californians have been exposed to harmful levels of nitrates in drinking water over the past 15 years and the population of those exposed keeps growing. The PEIR acknowledges the extent of nitrate contamination and includes, as Figure 5.9-17, a map that shows nitrate contamination to be concentrated in the Central Valley. Incredibly, however, the PEIR makes no attempt to analyze how nitrogen-based fertilizer application in the Central Valley results in the exposure of the public to contaminated groundwater, the health impacts of that exposure, or how implementation of any of the five alternatives would reduce exposure, other than to say, for Alternative 1:

> Nutrient management would improve both surface water quality and groundwater quality by improving the use of chemicals and using improved application techniques, and by limiting the use of nutrients as fertilizer that could potentially seep to groundwater and add nitrate to the groundwater table.

PEIR, p. 5.9-14.

The assertion that ongoing nutrient management efforts would somehow improve water quality is not borne out by recent data. In fact, the status quo, as proposed in Alternative 1, has resulted in an increase, statewide, in the number of wells that exceeded the health limit for nitrates, from nine in 1980 to 648 by 2007. http://articles.sfgate.com/2010-05-17/news/20901575_1_nitrate-contamination-water-supply-water-systems. In Tulare County, more than 40% of private domestic water wells exceed the drinking water standard for nitrate. http://www.swrcb.ca.gov/ gama/docs/ekdahl_gra2009.pdf. On the basis of more than 25 years of data, the number of wells that exceed the drinking water standard for nitrate is growing as a percentage of all nitrate detections. http://www.swrcb.ca.gov/gama/docs/ekdahl_gra2009.pdf Clearly the status quo is not working.

Health effects of exposure to nitrates most notably results in methemoglobinemia or "blue baby syndrome." Toxic effects of methemoglobinemia occur when bacteria in the infant stomach convert nitrate to more toxic nitrite, a process that interferes with the body's ability to carry oxygen to body tissues. Infants with these symptoms need immediate medical care since the condition can lead to coma and eventually death. Pregnant women are susceptible to methemoglobinemia and should be sure that the nitrate concentrations in their drinking water are at safe levels. Additionally, some scientific studies suggest a linkage between high nitrate levels in drinking water with birth defects and certain types of cancer. http://www.swrcb.ca.gov/water_issues/ programs/gama/docs/coc_nitrate.pdf.

The PEIR should be rewritten to include an assessment of the potential for the public to be exposed to nitrates in drinking water from agricultural practices in the Central Valley and measures implemented as a result of the ILRP. This is especially important to the extent the Regional Board anticipates the installation of numerous tailwater recovery systems. *See* Technical Memo, p. A-2. The assessment of each alternative should include an estimate of nitrogen loading to fields; nitrogen fate and transport in soil, surface water, and groundwater; nitrogen monitoring; and a summary nitrogen impacts to water supplies. Linking monitoring to measurement of each of the alternatives is critical. An annual assessment of the performance of the alternative that is selected should be required and use of the 10,000-well California Department of Public Health database should be required as a tool for evaluation.

Another potential health impact unaddressed by the PEIR is the potential threats from fecal contamination of wells and surface waters. As the Existing Conditions Report tells us:

> The presence of pathogen indicators, such as fecal coliform and *E. coli*, are ubiquitous in water samples collected throughout the Central Valley and are frequently measured at levels higher than the EPA recommended criterion for *E. coli*. Not all strains of *E. coli* are pathogenic, but the presence of *E. coli* or fecal coliform is an indicator of fecal contamination.

> Several coalitions funded a study to determine the sources of *E. coli* contamination.

Existing Conditions Report, p. 3-11. See also U.S. EPA, "Conceptual Model For Pathogens and Pathogen Indicators in The Central Valley and Sacramento-San Joaquin Delta - Final Report, " p. ES-1 (Aug. 24, 2007) (highest concentrations of E. coli data "were observed for waters affected by urban environments and intensive agriculture in the San Joaquin Valley") (http://www.swrcb.ca.gov/rwqcb5/water_issues/drinking_water_policy/concept_path_indicators/cover_toc_es.pdf). As the California Department of Public Health's health notices explain:

> Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

DPH, Tier 1 Fecal Coliform or E. coli Notice Template (http://www.cdph.ca.gov/certlic/drinkingwater/Documents/Notices/Tier%201%20Fecal%20Coliform%20or%20E%20coli%20Notice.doc). Despite its ubiquitous presence and clear connection to irrigated land discharges, the only mention of pathogens in the PEIR is a passing reference in the Fisheries section. PEIR, p. 5.8-49 ("Pathogens are monitored for potential exceedance of trigger limits in relation to human health. Pathogens of concern to fish may affect fish populations in the program area, but data are insufficient to draw any conclusions about existing effects"). Like nitrates, no effort is made in the PEIR to discuss the obvious human health and recreational impacts that are adversely affected by an ILRP that authorizes coliform discharges from farms.

Lastly, the PEIR fails to consider any human health impacts PEIR associated with discharges of other pollutants, including certain metals, that will be authorized through the ILRP. The Existing Conditions Report acknowledges that irrigated land discharges authorized by the ILRP will mobilize various metals that can pose serious human health risks, including lead and arsenic. Existing Conditions Report, p. 3-55 ("elevated levels of naturally occurring metals that are mobilized and suspended in agricultural return flows are common in these watersheds—such as copper, arsenic, cadmium, boron, nickel, lead, and selenium"). The PEIR also should explore the human health impacts of ILRP-authorized discharges of metals.

J. PEIR's Analysis of Many Key Potential Impacts and the Alternatives' Proposed Mitigations Are Not Supported by Substantial Evidence.

The alternatives, at their core, are projects by which the Regional Board proposes to authorize discharges of polluted effluent from irrigated lands to surface and

groundwater throughout the Central Valley. Each alternative includes various program elements which are the mitigations proposed to purportedly reduce the effect of the Regional Board authorizing the discharge of hundreds of millions of gallons of polluted effluent. The PEIR's discussion of impacts boils down to a discussion of the alternatives' proposed mitigation measures. In addition to those proposed mitigations, the actual dischargers would have to implement site-specific mitigation measures, *i.e.* BPTC, in order to address the impacts of discharging to the State's waters.

The PEIR fails to substantiate or properly analyze the alternatives' programmatic-level mitigation measures, including for example the effectiveness of any FWQMPs and reporting requirements, monitoring requirements, and third party actions. Nor does the PEIR adequately discuss the effectiveness in reducing pollution of any of the BMPs that are listed and which might achieve BPTC. The PEIR leaves out any discussion of numerous management measures that likely will be applied on irrigated lands. Lastly, the PEIR fails to analyze cumulative impacts of the alternatives when considered with numerous other projects in the Central Valley relating to water diversions, dam operations, proposed development, pending pesticide registration proceedings, dredging projects and others that are and will affect water quality, fisheries, and other impacts.

Mitigation measures must be designed to minimize, reduce or avoid an identified environmental impact or to rectify or compensate for that impact. CEQA Guidelines § 15370. Mitigations may be proposed as part of the project but must still be fully discussed and analyzed. "The discussion of mitigation measures shall distinguish between the measures which are proposed by project proponents to be included in the project and other measures proposed by the lead, responsible or trustee agency or other persons which are not included but the lead agency determines could reasonably be expected to reduce adverse impacts if required as conditions of approving the project." CEQA Guidelines § 151126.4(a)(1)(A)

Where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. *Id.*, § 15126.4(a)(1)(B). A lead agency may not make the required CEQA findings unless the administrative record clearly shows that all uncertainties regarding the mitigation of significant environmental impacts have been resolved. A public agency may not rely on mitigation measures of uncertain efficacy or feasibility. *Kings County Farm Bureau*, 221 Cal.App.3d at 727 (finding groundwater purchase agreement inadequate mitigation measure because no record evidence existed that replacement water was available). "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. CEQA Guidelines § 15364.

CEQA requires the lead agency to adopt feasible mitigation measures that will substantially lessen or avoid the Project's potentially significant environmental impacts and describe those mitigation measures in the CEQA document. Pub. Res. Code §§ 21002, 21081(a), 21100(b)(3); CEQA Guidelines § 15126.4. Mitigation measures must be fully enforceable through permit conditions, agreements or other legally binding

instruments. *Id.* at § 15126.4(a)(2). If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed. CEQA Guidelines § 151126.4(a)(1)(D).

1. The analysis of impacts to water quality is flawed because there is no evidentiary support for the assumption that mitigation measures proposed by each alternative would be equally effective.

The most obvious impact of the Regional Board authorizing discharges of waste from irrigated lands to surface or groundwater is impaired water quality. The PEIR, however, takes an entirely cavalier approach to evaluating this obvious impact. No effort is made in the PEIR to discuss the efficacy and uncertainty of the various monitoring and management plans proposed by each alternative. The PEIR makes no effort to quantify or compare the actual pollution reductions that would be likely to occur under each alternative. Nor does the PEIR discuss whether the monitoring proposed or omitted by each alternative would be effective in informing the Regional Board and public about whether irrigated lands pollution in specific areas is increasing or decreasing. Nor does the PEIR compare how long it would take to figure out pollution trends based on the level of monitoring proposed or omitted in each alternative.

As mentioned above, a fundamental flaw in the PEIR is its failure to estimate the relative effectiveness of the five alternatives. It generally assumes that they will all lead to sufficient pollution reductions. This flaw is magnified in the discussion of impacts to water quality. In addressing water quality impacts, the PEIR assumes that surface water quality improvements under Alternative 1 would be the same as all of the other alternatives, including Alternative 5. As for groundwater, the PEIR makes a similar assumption – that Alternatives 2 through 5 will be equally effective at reducing pollution to groundwater (the PEIR does acknowledge that not addressing groundwater at all would be less effective).

Thus, for Alternative 1, the PEIR states that "[i]t is expected that existing water quality conditions, such as the surface water quality impairments detailed in the environmental setting section above and in the ECR, would improve over time as the program would continue to implement surface water management practices and management plans." PEIR, p. 5.9-14. The same is said for Alternatives 2 and 3, even though the former reduces water quality monitoring and the latter eliminates water quality monitoring. *Id*, pp. 5.9-16 ("Under Alternative 2, existing water quality impairments are expected to improve over time as third parties develop and implement surface water and groundwater quality management plans"), 5.9-17 ("Alternative 3, existing surface water quality and groundwater quality impairments are expected to improve over time as the FWQMPs are developed and implemented"). The same unexplained expectation is stated for Alternatives 4 and 5, simply incorporating the assertion made for Alternative 2. Id., p. 5.9-18 (Alternative 4) ("Potential impacts to water quality and hydrology under Alternative 4 would be similar to those described for

Alternative 2"); p. 5.9-18 ("Potential impacts to water quality and hydrology under Alternative 5 would be similar to those described for Alternative 2").

These expectations are unsupported by any evidence in the record. The Regional Board cannot point to anything in its current record that "clearly shows that all uncertainties" of the mitigations set forth in each alternative will eliminate the well-documented significant environmental impacts of allowing irrigated lands to discharge waste to surface and ground water.

The PEIR's simplistic and conclusory assertions fail to assist the Regional Board or the public in discerning the real life differences in pollution discharge rates that the different mitigations incorporated into each of the proposed alternatives will have. For example, in regard to FWQMPs, it is simply not realistic to assume that the two alternatives that do not require FWQMPs – Alternatives 1 and 2 – will be as effective at identifying and implementing measures as the alternatives that do require dischargers to prepare FWQMPs and, at least for two of them, require them to be submitted to the Regional Board. Likewise, for the alternatives that require FWQMPs, there would have to be some difference in effectiveness and pollution reductions between the two alternatives (3 and 4) that would have the Regional Board review and approve FWQMPs and Alternative 5's provision that FWQMPs not be reviewed or approved. Conversely, if the proposal to have the Regional Board approve every FWQMP before they go into effect slows down their implementation, then there would undoubtedly be an impact during the term the Board did not act on any FWQMPs. Until the PEIR can remove the uncertainty of how the Regional Board can assure BPTC is implemented without requiring FWQMPs, the Regional Board may not rely on alternatives that do not propose FWQMPs.

In terms of monitoring, no evidence could support the PEIR's assumption that Alternative 3's omission of any water quality monitoring for surface or groundwater discharges could somehow be as effective as any of the alternatives that do provide some water quality monitoring. And as between Alternative 5's farm-specific monitoring requirement and Alternatives 1, 2 and in effect 4's proposal to rely on regional monitoring, no evidence could support the PEIR's assertion that the regional monitoring measures will tell the Board or anyone whether a particular dischargers' management measures in fact reduce any pollution discharges and would address specific dischargers' pollution problems as promptly as a measure that required them to monitor their discharges. Until the PEIR sufficiently discusses and eliminates the obvious uncertainty of a regional monitoring mitigation measure to evaluate the effectiveness of an on-site management measure miles upstream, the Regional Board cannot rely on alternatives relying on such regional monitoring.

As noted above, the PEIR's assumption that the monitoring required by each of the proposed alternatives is equally effective, is inconsistent with the PEIR's acknowledgment in its discussion of fisheries that more farm-specific monitoring results in more pollution reductions and fewer impacts. PEIR, p. 5.8-52 ("given the probability

of increased monitoring of individual farms, and especially those at higher risk of generating significant impacts—in addition to wellhead protection, nutrient management plans, tracking of nutrient and pesticide application, and monitoring of individual wells—the positive benefit of Impact FISH1 (improved water quality) would probably be greater under Alternative 4 than under Alternative 2 or Alternative 3"); *Id*., p. 5.8-53 (Alternative 5) ("Given the emphasis on monitoring of individual farms, wellhead protection, nutrient management plans, tracking of nutrient and pesticide application, monitoring of individual wells, and potential installation of monitoring wells, the positive benefit of Impact FISH1 (improved water quality) probably would be greater under Alternative 5 than under any other alternative"). Although as discussed below, these analyses also must be better analyzed, the general observation is obvious and the PEIR's failure to discuss these differences in the water quality section renders it inadequate.

Nor is there any attempt in the water quality discussion to quantify the effectiveness of management measures that will likely be employed by individual farms. The PEIR lists a handful of likely measures. This list is incomplete, omitting numerous measures that one can find by reviewing some of the management plans that have been developed. Of particular note is the complete omission in the PEIR of any discussion of integrated pest management options to reduce the use or rate of pesticide applications. Until the Regional Board can sufficiently discuss the available management measures and whether any of them, alone or in combination will effectively eliminate the significant impacts of the Board authorizing waste discharges from irrigated lands, then the Board cannot rely on them.

2. The analysis of impacts to fisheries is flawed because there is no evidentiary support for the assumption that all alternatives would be equally effective at protecting fisheries

The PEIR's handling of impacts to fisheries suffers from flaws similar to those described in the discussion of water quality above. The PEIR's discussion of fisheries impacts, again without any evidence or common sense, simply assumes that the same level of management measures and surface water pollution control effectiveness will result with implementation of any of the alternatives, with or without FWQMPs and without regard to how far away some water quality monitoring may (or may not) be occurring. PEIR, p. 5.8-50 ("Under this alternative, management practices would be implemented to reduce the levels of identified constituents of concern below the baseline conditions. Monitoring and management plan requirements of Alternative 1 are expected to result in further implementation of management practices by growers") As for groundwater, the same is true with the exception of Alternative 1.

The PEIR's assertion that Alternative 1 will improve surface water quality is entirely unsupported by any evidence. Alternative 1, now in its seventh year of implementation, has failed to result in the Regional Board documenting the installation of a single management measure anywhere in the Central Valley. Nor is there any evidence of a trend that the rampant violations of water quality standards throughout the

Central Valley resulting from irrigated lands discharges are on the mend. Nevertheless, the PEIR asserts that "[i]mprovements to surface water quality from implementation of management practices [under Alternatives 1] in impaired water bodies receiving inputs from lands in the program area are likely to benefit fish (e.g., by reducing contaminant loads and decreasing sedimentation and total suspended solids)." PEIR, p. 5.8-50. The PEIR makes the same assertion for Alternative 2. *Id*., p. 5.8-52. As discussed above, the coalitions' current plans are to have informal meetings with some farms to discuss BMPs. *See supra*, Section F.1. The coalitions have no legal authority to require implementation of any BMPs by any of their members. What, if any, BMPs may result from the proposed meetings is anybody's guess. And, without FWQMPs, whether or not the Regional Board would even be aware of a specific farmer's installation of measures is not clear. The PEIR's cavalier assertion that Alternatives 1 and 2, despite omitting any FWQMPs or farm-specific monitoring could somehow lead to the certain implementation of pollution reduction measures, does not resolve the uncertainties that coalitions and regional monitoring will resolve irrigated land's water pollution impacts.

Although the PEIR does acknowledge some relevant benefit from the mitigations included in Alternatives 4 and 5 farm-specific monitoring proposals, coupled with the farm-specific plan requirements, the discussion is still insufficient to remove uncertainties about the efficacy of Alternative 4's proposal. *See* PEIR, pp. 5.8-52; 5.8-53. Specifically, because a discharger may opt out of farm-specific monitoring in exchange for participation in regional monitoring, it is uncertain whether any discharger will conduct farm-specific water quality monitoring. As a result, and as discussed above, there is no certainty that the Regional Board will be able to determine that any measures installed on that farm will amount to BPTC or assure compliance with water quality standards. In addition, the PEIR's discussion of the relative benefit to water and additional pollution reductions one should expect from requiring FWQMPs coupled with farm-specific monitoring is not specific enough for the Regional Board to compare those benefits to the other alternatives.

Even assuming all of the alternatives may have some benefit on water quality, the PEIR also makes no effort to determine the time frames within which any such improvements would be realized under the various alternatives. Given the frames of reference in each alternative, it appears clear that some, for example, Alternative 5, would result in measures being installed faster and hence pollution reductions being achieved more quickly, as compared to any other alternative.

The PEIR cannot succeed in achieving the goals of CEQA if it shies away from frankly addressing the mitigations proposed in each alternative and comparing their ability or inability to reduce pollution that will be discharged to surface and groundwater from irrigated lands.

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3. The PEIR fails to discuss numerous cumulative impacts to water quality and fisheries habitat currently plaguing the Delta and other areas of the Central Valley.

The PEIR attempts to pass on evaluating the cumulative impacts of the ILRP. PEIR, p. 6-1 ("Because of the unidentified location of potential impacts, the Lead Agency has not identified any projects or programs adequately similar in nature, location, and type to result in a meaningful comparative analysis"). The notion that either the geographic area or obvious water quality and fisheries impacts of allowing discharges of irrigated lands waste is unknown is patently incorrect, as the preceding sections of the PEIR make clear despite their obvious flaws. The PEIR recognizes a number of specific categories of actions in the Central Valley that are contributing to impacts to fisheries and water quality, in addition to discharges from agricultural lands. Of particular note is the operation of the massive state and federal water projects, which are having obvious cumulative impacts to fish in the Central Valley by killing massive numbers of fish at their respective pumping facilities. *See* http://www.swr.noaa.gov/ocap/Executive_summary_to_NMFS'_CVP-SWP_operations_BO_RPA.pdf; 5.8-17 ("water projects have adversely modified [longfin smelt's] habitat, distribution, food supply, and probably abundance"); *See* NMFS Biological Opinion Regarding Proposed Long-Term Operations of the Central Valley Project And State Water Project (June 4, 2009) (http://www.swr.noaa.gov/ocap/NMFS_Biological_and_Conference_Opinion_on_the_Long-Term_Operations_of_the_CVP_and_SWP.pdf). Both EPA's registration of various pesticides that the National Marine Fisheries Service has determined will jeopardize the continued existence of listed salmon must be considered, especially considering NMFS's proposed mitigation requirements prohibiting pesticide application on irrigated lands within 1000 feet of water. PEIR, p. 5.8-39 ("NMFS (2008) concluded that EPA registration of chlorpyrifos, diazinon, and malathion would jeopardize the continued existence of, and destroy or adversely modify critical habitat for, the Central Valley spring-run Chinook salmon ESU, the Sacramento River winter-run Chinook salmon ESU, and the California Central Valley steelhead DPS"); NMFS Biological Opinion on the Effects of the U.S. Environmental Protection Agency's Proposed Registration of Pesticide Products (Nov. 18, 2008) (http://www.nmfs.noaa.gov/pr/pdfs/pesticide_biop.pdf).

The proposed Peripheral Canal being pursued by various agencies also is a reasonably foreseeable project that will enormously exacerbate water quality and fisheries impacts within the Delta. *See* Bay Delta Conservation Plan, Status Update 3 (June 2010). Likewise, the Regional Board is in the best position to evaluate the cumulative impacts of the hundreds of discharge permits it has issued to dischargers throughout the Central Valley. *See* Central Valley Regional Board Web Site, Adopted Orders (http://www.swrcb.ca.gov/centralvalley/board_decisions/adopted_orders/index.shtml). The PEIR also should evaluate, for example, cumulative bacterial issues resulting from rampant sewage overflows from municipalities throughout the Valley in combination with the bacteria coming from farms. http://www.waterboards.ca.gov/water_issues/programs/sso/sso_map/sso_pub.shtml (accessed September 27, 2010).

These and other cumulative impacts must be addressed in the PEIR. Recognizing that several projects may together have a considerable impact, CEQA requires an agency to consider the "cumulative impacts" of a project along with other projects in the area. Pub. Resources Code §21083(b); CEQA Guidelines §15355(b). It is vital that an agency assess "'the environmental damage [that] often occurs incrementally from a variety of small sources . . .'" *Bakersfield Citizens*, 124 Cal.App.4th at 1214. This requirement flows from CEQA section 21083, which requires a finding that a project may have a significant effect on the environment if "the possible effects of a project are individually limited but cumulatively considerable. . . . 'Cumulatively considerable' means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." CEQA Guidelines §15355(a). "[I]ndividual effects may be changes resulting from a single project or a number of separate projects." CEQA Guidelines § 15355(a).

"The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." *Communities for a Better Environment v. Cal. Resources Agency ("CBE v. CRA")* (2002) 103 Cal.App.4th 98, 117. A legally adequate cumulative impacts analysis views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the project at hand.

As the court recently stated in *CBE v. CRA,* 103 Cal. App. 4th at 114:

> Cumulative impact analysis is necessary because the full environmental impact of a proposed project cannot be gauged in a vacuum. One of the most important environmental lessons that has been learned is that environmental damage often occurs incrementally from a variety of small sources. These sources appear insignificant when considered individually, but assume threatening dimensions when considered collectively with other sources with which they interact.

In *Kings County Farm Bureau v. City of Hanford,* 221 Cal.App.3d at 718, the court concluded that an EIR inadequately considered an air pollution (ozone) cumulative impact. The court said: "The [ ] EIR concludes the project's contributions to ozone levels in the area would be immeasurable and, therefore, insignificant because the [cogeneration] plant would emit relatively minor amounts of [ozone] precursors compared to the total volume of [ozone] precursors emitted in Kings County. The EIR's analysis uses the magnitude of the current ozone problem in the air basin in order to trivialize the project's impact." The court concluded: "The relevant question to be addressed in the EIR is not the relative amount of precursors emitted by the project

when compared with preexisting emissions, but whether any additional amount of precursor emissions should be considered significant in light of the serious nature of the ozone problems in this air basin."[1] The *Kings County* case was recently reaffirmed in *CBE v. CRA,* 103 Cal.App.4th at 116, where the court rejected cases with a narrower construction of "cumulative impacts."

Similarly, in *Friends of Eel River v. Sonoma County Water Agency,* (2003) 108 Cal. App. 4th 859, the court held that the EIR for a project that would divert water from the Eel River had to consider the cumulative impacts of the project together with other past, present and reasonably foreseeable future projects that also divert water from the same river system. The court held that the EIR even had to disclose and analyze projects that were merely proposed, but not yet approved. The court stated, CEQA requires "the Agency to consider 'past, present, and probable future projects producing related or cumulative impacts . . . .' (Guidelines, § 15130, subd. (b)(1)(A).) The Agency must interpret this requirement in such a way as to 'afford the fullest possible protection of the environment.'" *Id.*, at 867, 869. The court held that the failure of the EIR to analyze the impacts of the project together with other proposed projects rendered the document invalid. "The absence of this analysis makes the EIR an inadequate informational document." *Id.,* at 872.

The court in *Citizens to Preserve the Ojai v. Bd. of Supervisors* (1985) 176 Cal.App.3d 421, held that an EIR prepared to consider the expansion and modification of an oil refinery was inadequate because it failed to consider the cumulative air quality impacts of other oil refining and extraction activities combined with the project. The court held that the EIR's use of an Air District Air Emissions Inventory did not constitute an adequate cumulative impacts analysis. The court ordered the agency to prepare a new EIR analyzing the combined impacts of the proposed refinery expansion together with the other oil extraction projects.

As the PEIR notes, water quality standards already are not being met in locations throughout the Delta. As the National Academy of Sciences report and a plethora of other reports and agency decisions make clear, fisheries and water quality already are adversely affected by the massive water diversions of the State and Federal water projects and flow reductions caused by dams throughout the Valley. As NMFS makes clear, pesticide use currently approved by EPA registrations throughout the Valley is

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[1] *Los Angeles Unified v. City of Los Angeles*, 58 Cal.App.4th at 1024-1026 found an EIR inadequate for concluding that a project's additional increase in noise level of another 2.8 to 3.3 dBA was insignificant given that the existing noise level of 72 dBA already exceeded the regulatory recommended maximum of 70 dBA. The court concluded that this "ratio theory" trivialized the project's noise impact by focusing on individual inputs rather than their collective significance. The relevant issue was not the relative amount of traffic noise resulting from the project when compared to existing traffic noise, but whether any additional amount of traffic noise should be considered significant given the nature of the existing traffic noise problem.

threatening salmon with extinction throughout the Central Valley. In short, the need for a cumulative impact analysis of water quality, fisheries, and other related impacts like human health, cultural, recreational, air quality, and aesthetic cannot be seriously questioned. It is plain that massive cumulative impacts from water diversions, pesticide use approvals and, with the ILRP, massive pollution from irrigated lands are occurring throughout the Central Valley and particularly in the Delta.

4. The PEIR's discussion of possible agricultural impacts is inadequate because it relies on a flawed economic analysis.

CSPA retained the economic consulting firm ECONorthwest to evaluate and comment on the economic analysis accompanying the PEIR. *See infra*, Section IV. The PEIR's consideration of agricultural impacts relies almost exclusively on the economic analysis. PEIR, p. 5.10-1 ("The catalyst for these impacts is the cost of achieving and maintaining compliance with the alternatives as discussed in *Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program* (ICF International 2010) (Draft ILRP Economics Report), incorporated herein by reference"). Because the economic analysis is not reliable, as is discussed in detail below and in the accompanying ECONorthwest Review, the PEIR's discussion of asserted impacts to agricultural production is unsupported by substantial evidence.

IV. THE ECONOMIC ANALYSIS RELIED UPON BY THE PEIR AND STAFF REPORT IS SUBSTANTIALLY DEFICIENT AND BIASED TOWARD THE LEAST EFFECTIVE AND COALITION-PREFERRED ALTERNATIVES.

Both the PEIR, especially in its discussion of potential agricultural impacts, and the Staff Report rely extensively on ICF International's Technical Memo. A review of that analysis by ECONorthwest, a firm exclusively dedicated to expert economic consulting, reveals fundamental errors and biases. Because of the following errors, any reliance on the Technical Memo by the Regional Board and its staff would be an abuse of discretion. The Regional Board cannot substantiate a finding under Resolution No. 68-16 or the federal antidegradation policy that under a newly adopted ILRP, "the highest water quality consistent with maximum benefit to the people of the State will be maintained." Resolution No. 68-16 (emphasis added). Similarly, to the extent the Board intends to rely on any conditional waivers to implement the next version of the ILRP, a finding by the Regional Board pursuant to Water Code § 13269 that such waiver is in the public interest also would not be supported by substantial evidence.

The ECONorthwest Review discloses the following fundamental errors in the preparation of the Technical Memo.

1. **The Analytical Objectives and Approach**: ECONorthwest demonstrates that the Technical Memo ignores generally accepted guidelines for this type of analysis, including for example guidelines prepared by the California Department

of Water Resources, an agency with, of course, considerable experience interfacing with California's agricultural community. Because of this failure, ECONorthwest concludes that the Technical Memo "provides decision-makers and stakeholders with biased and unreliable descriptions of the economic outcomes likely to materialize if the Board were to implement any of the alternatives in the EIR." ECONorthwest Review, pp. 1, 2-5.

2. **Baseline**: ECONorthwest's review establishes that ICF International's analysis "does not compare the alternatives against an appropriate baseline that describes potential future conditions absent implementation of each alternative" further biasing its conclusions. Hence, it provides an incomplete, biased representation of the alternatives' economic consequences. ECONorthwest Review, pp. 1, 5-7.

3. **Management Practices**: ECONorthwest's review discloses that ICF International only considered a truncated range of the more expensive management practices in determining projected costs of the various alternatives and excluding the less expensive and more efficient practices. ECONorthwest Review, pp. 1, 7-9. As a result, "the EIR and *Technical Memo* provide an incomplete and biased representation of the choices that realistically are available to the [Regional] Board." *Id*., p. 1.

4. **Costs and Benefits**: ECONorthwest's review shows that the Technical Memo incorrectly calculates the costs of adopting practices that improve water quality and completely overlooks major categories of economic costs and benefits, once again skewing its conclusions to support the less rigorous and coalition-preferred alternatives. *See* ECONorthwest Review, pp. 1, 9-11.

5. **Risk and Uncertainty**: ECONorthwest also criticizes the Technical Memo for failing to provide information and analysis of the risks and uncertainty facing irrigators and others from each proposed alternative. The omission of this standard component of any complete economic analysis of a program such as the IRLP is a fatal flaw in the Technical Memo. *See* ECONorthwest Review, pp. 1, 11.

6. **Regional Impacts**: Lastly, ECONorthwest's review demonstrates that the Technical Memo's discussion of regional impacts "emphasize[s] negative outcomes and ignore[s] the analytical assumptions that overstate costs and the resulting negative outcomes." ECONorthwest Review, p. 1. Even with this built-in bias, the Technical Memo still must acknowledge the improvement to the Central Valley's economy by implementation of Alternatives 3 through 5. An accurate economic analysis likely would further support the economic benefit of the alternatives that incorporate farm specific measures.

Because of these fundamental flaws, the Technical Memo, as well as the portions of the PEIR and Staff Report that rely upon it, must be redone and recirculated in order to provide the Regional Board with substantial evidence upon which it may rely.

V. THE STAFF REPORT FAILS TO ACKNOWLEDGE THE LEGAL AND POLLUTION CONTROL SHORTCOMINGS OF THE CURRENT ILRP

The Staff Report disingenuously seeks to justify a predetermined and environmentally non-protective course of action by misrepresenting the present program and carefully crafting a needlessly expensive and overly bureaucratic strawman to reject alternatives that would better protect water quality. Water quality problems and the adverse impacts resulting from the continuing discharge of agricultural pollutants are largely ignored while the Staff Report focuses on potential impacts to farmers from having to comply with water quality standards.

A. Rather Than Keep Its Eye On The Regional Board's Primary Mission To Protect Water Quality, Staff's Analysis And Proposed Alternative Make Believe The Serious Flaws In The Current Program Are Actually Benefits.

The "elements" from each of the alternatives selected by Regional Board staff to be included in the long-term irrigated lands program (or recommended alternative) are flawed and represent the continuation of a program that has failed to protect water quality.

There can be no doubt that, after seven years, the ILRP has not demonstrated any success at protecting or even reducing the rampant pollution of Central Valley waters by irrigated land dischargers. According to the *Revised Draft of the 2007 Review of Monitoring Data for the Irrigated Lands Conditional Waiver Program*, 12 July 2007, between 2003 and 2007, agricultural coalitions and the U.C. Davis Irrigated Lands Monitoring Project collected data from 313 sites throughout the Central Valley. Coalitions or individual water agencies monitored 148 sites and U.C. Davis monitored the remaining 165 sites. While the adequacy of monitoring (*i.e.*, frequency and comprehensiveness of monitoring) varied dramatically from site to site, the report presents a dramatic panorama of the epidemic of pollution caused by the discharge of agricultural wastes. Toxicity to aquatic life was present at 63% of the sites monitored for toxicity (50% were toxic to more than one species). Pesticide water quality standards were exceeded at 54% of sites monitored for pesticides (many for multiple pesticides). One or more metals violated criteria at 66% of the sites monitored for metals. Human health standards for bacteria were violated at 87% of sites monitored for coliform. More than 80% of the locations reported exceedances of general parameters (dissolved oxygen, pH, salt, TSS). It would be difficult for anyone reading the Surface Water Summary (p. 23-44) of the Staff Report to appreciate the extent of pollution caused by irrigated agriculture. An Examination of the Draft 2007 Review of Monitoring Data, Irrigated Lands Condition Waiver Program, CSPA, p. 1-2. The PEIR

Staff Report discussion of surface water quality also fails to describe and discuss the monitoring results from other programs (i.e., NPDES, SWAMP, etc.).

After seven years of the irrigated lands program, the Central Valley Regional Water Quality Control Board still does not know who is actually discharging pollutants, the points of discharge, the constituents discharged, receiving water impacts, whether management measures have been implemented or if those measures are BPTC that are effective in reducing pollutant discharges. The Board cannot enforce against recalcitrant dischargers because it cannot know who they are and dischargers have little incentive to comply because they know that monitoring far downstream cannot produce the evidence to hold them accountable.

The irrigated lands waiver adopted by the Central Coast Regional Board in 2004 is illustrative. The Central Coast Board conditional waiver is substantially more rigorous than the waiver adopted by Region 5. The Central Coast Board had hopes that, because there were fewer irrigated lands dischargers in the region, they would be able to see significant water quality improvements within the first term of the waiver. The Central Coast waiver requires farmers to enroll with the Board, prepare individual farm management plans, attend water quality education courses and participate in a third-party watershed monitoring program. Yet, it has proved incapable of protecting water quality, even in that smaller region, because it fell short of requiring farm-specific monitoring. If that more robust program in a smaller region could not protect water quality, the less stringent program currently in place and proposed to be continued by staff for the much larger Central Valley will certainly fall even further short of protecting water quality.

Unlike the Central Valley staff's report, the Central Coast staff frankly addressed their existing program's shortcomings . As the Central Coast *Preliminary Draft Staff Recommendations For An Agricultural Order* (February 2010) puts it, "[t]he current Conditional Waiver . . . lacks clarity and does not focus on accountability and verification of directly resolving the known water quality problems" and "[c]urrently, the Water board and the public have no direct evidence that water quality is improving due to the 2004 Conditional Waiver." Central Coast Staff Report, p. 6. It goes on to note, "[t]he current watershed monitoring program only indicates long-term (multi-year), receiving water changes without measuring: 1) if individual agricultural dischargers are in compliance with Conditional Waiver conditions or water quality standards, or 2) if short-term progress towards water quality improvements on farms or in agricultural discharges is occurring" and "[c]urrently, information that provides evidence of on-farm improvements and reductions in pollutant loading from farms is not required, and therefore probably does not exist for most farms. The public, including those who are directly impacted farm discharge, and the Water Board, do not have the necessary evidence of compliance or improvements. This is unacceptable given the magnitude and scale of the documented water quality impacts and the number of people directly affected. At a minimum, we continue to observe that agricultural discharges continue to severely impact water quality." *Id.*, 7.

Acknowledging the failure of its present program (i.e., "Most of the same areas that showed serious contamination from agricultural pollutants five years ago are still seriously contaminated," (*id.* Page 11), Central Coast Board staff has recommended a revised program where dischargers must; 1) enroll to be covered by the order, 2) develop and implement a farm plan that includes management practices, 3) eliminate non-storm water discharges, or use source control or treatment such that non-storm water discharges meet water quality standards, 3) demonstrate through water quality monitoring that individual discharges meet certain basic water quality targets (that are or indicate water quality standards that protect beneficial uses), 4) demonstrate through water quality monitoring that receiving water is trending toward water quality standards that protect beneficial uses or is being maintained at existing levels for high quality water and 5) farm operation must support a functional riparian system and associated beneficial uses. *Id.*, p. 20. Individual monitoring is in addition to the watershed monitoring program. *Id.*, p. 23.

Inexplicably, Central Valley Board staff persists in the illusion that inserting an unaccountable bureaucracy between the Board and actual dischargers and relying upon a monitoring program that ignores numerous waterways and collects ambient data far removed from the point of actual discharges will somehow protect water quality. Right from the opening paragraphs, the Staff Report predetermines its analysis by conjuring up five "[e]lements of the long-term ILRP alternatives found to best achieve evaluation measures are summarized below." Staff Report, p. 2. Four out of five of these elements are baseless. Staff boldly asserts that unaccountable coalitions' "local knowledge" and claimed efficiencies somehow trump the Regional Board taking a lead role in implementing an ILRP; that regional monitoring is more effective at implementing measures than farm-specific monitoring; that providing incentives is better than requiring; and that in order to coordinate with other failed regional programs, the ILRP must also avoid focusing on individual dischargers and only address problems from a distance. As is discussed above in CSPA's comments on the PEIR, these are not attributes of an effective or legal program. Staff's generalizations dramatically conflict with the Central Coast Regional Board staff's more objective and frank assessment. Contrary to Central Valley staff's blind optimism that doing less equals more, the evidence in the record demonstrates that the staff's recommendation will not be able to document any improvements in water quality, the effectiveness of applied management measures or compliance with water quality standards by individual dischargers.

1. Staff cannot continue to pretend that relying on discharger coalitions conducting regional monitoring and management plans with no plan to require BMPs by dates certain will implement BPTC on individual farms and achieve standards in a timely manner.

The first element that staff claims best achieve its "evaluation measures" is the reliance on "[t]hird-party lead or coalitions groups, as opposed to Central Valley Board lead, to take advantage of local knowledge and administrative/cost efficiencies in dealing with a few groups versus thousands of individual operations."

There is no evidence coalition groups have successfully used their purported "local knowledge" to secure and verify implementation of management measures at the farm level and quantitatively reduce the mass loading of agricultural contaminates. *See supra*, Section G.1. Nor is there any evidence of cost efficiencies that would materialize if coalitions actually instituted a comprehensive program that successfully complied with regulatory requirements and held farmers accountable for implementing management measures and reducing pollutant loading.

Other Central Valley Board regulatory programs with inadequate resources have been far more successful in protecting water quality than the irrigated lands program. For example, the Board has less than a dozen staff to manage a stormwater program that oversees more than 7,500 industrial and construction operations and more than 93 Phase I and Phase II municipal permits. *State of the Central Valley Region*, slide 32, presentation by Executive Officer Pamela Creedon at the Central Valley Water Board meeting of August 2007. The stormwater program requires industrial and construction program applicants to submit a Notice of Intent, develop a comprehensive Stormwater Pollution Prevention Plan (SWPPP), implement BMPs, monitor individual discharges, revise BMPs, iteratively install new BMPs as needed and submit annual reports. Municipal permits are complicated, resource draining and consume the majority of staff time. However, CSPA has reviewed the files of literally hundreds of industrial and construction program permittees and found that the severely understaffed program (the program has less than 12% of needed staff, *Id.*) has been able to routinely review annual reports, conduct many routine site evaluations, send corrective and enforcement notices to numerous facilities. The relative successes of the stormwater program stand in stark contrast to the black hole of the irrigated lands program that remains unable to document any implementation of management measures or reduction of pollutant mass loading. For staff to claim still unproven coalitions as a key element to success is contrary to the available evidence.

2. Staff cannot protect water quality by making believe that regional monitoring results in clear expectations for dischargers or by putting reducing paperwork ahead of protecting water quality.

The next key element to success identified by the Staff Report is to rely upon "[r]egional surface and groundwater quality management plans, as opposed to individual water quality management plans, to minimize paperwork/administrative burdens while clearly defining the expectations and approach for addressing water quality problems." Staff Report, p. 2. Again, staff cannot cite to any evidence that this statement is reliable. Avoiding paperwork is simply a euphemism for not collecting information. At some point, staff has to acknowledge that the Board cannot claim to regulate 30,000 farms without at some point gathering information from them about their pollution discharges. The notion that the requisite information becomes less bureaucratic and involves less paperwork by inserting fictitious entities – with their own layers of management and paperwork – between the Regional Board and the dischargers is nonsensical. And staff has no explanation as to how plans devised on a

regional basis can clearly define expectations of all relevant dischargers in that area. Especially where, as the PEIR acknowledges, "[t]he appropriate management practice is typically selected on a site-specific or property-specific basis." PEIR, p. 3-9. Even the Staff Report admits that "[w]ith regard to selection of measures and practices, the Central Valley Water Board and USEPA recognize that there is often site-specific, crop-specific, and regional variability that affects the selection of appropriate management measures, as well as design constraints and pollution-control effectiveness of various practices." Staff Report, p. 66-67. Only by addressing site-specific measures that are at least BPTC and assure compliance with standards can expectations and water quality measures be clearly defined. To rely exclusively on regional management plans rather than FWQMPs, the Board will only continue to maintain the existing fog that obscures individual farm's actions or, more likely, inactions. *See supra*, Section F-2.

3. Staff cannot protect water quality by making believe that repeating the regional scale of other monitoring efforts that have not curtailed irrigated lands' pollution dischargers will miraculously characterize effluent quality and BPTC implementation at individual farms.

Staff continues to regulate in a dream state by claiming a third element to achieve success is that "[r]egional surface and groundwater quality monitoring, as opposed to individual or no water quality monitoring, to take advantage of cost efficiencies in coordinating with other monitoring efforts while providing sufficient information to characterize water quality." Once again, staff's claim that regional monitoring miles downstream from a farm's discharge location would characterize that discharger's water quality is absurd. It is not clear what monitoring efforts staff is referring to, but there is no evidence that any regional monitoring effort to date has reduced any irrigated lands pollution in the Central Valley. For example, the Rice Pesticide Program has not succeeded in reducing pesticide discharges from rice fields by relying on regional monitoring. Rice farmers monitor specific fields before releasing their irrigation waters. As discussed above, like the absence of FWQMPs, allowing farm dischargers to rely solely on regional monitoring to determine water quality impacts occurring near their discharge locations or to evaluate whether their management measures are BPTC defies common sense. *See supra*, Sections F.1 - .2, G.2. No current monitoring program is monitoring only farm discharges. Nor has any existing program, including even the current ILRP regional monitoring, reduced the massive pollution from irrigated farms. Any "cost efficiencies" claimed by staff are simply another way of saying they do not want the most relevant information necessary to implement BPTC and achieve water quality standards.

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B. The "Goals and Objectives" selected by a stakeholder group dominated by agriculture protect the regulated community more than they protect water quality, in contrast to virtually every other regulatory program.

As discussed in Section III.C above, CSPA is concerned with the language of the objectives selected by the coalition-dominated stakeholder process. CSPA's concerns are heightened by the further spin placed on the objectives by staff's interpretations of those objectives applied in the staff report. Invariably, staff's interpretation of each objective favors the status quo and avoiding any site specific regulation of farms and trumping resolution 68-16.

Staff restates the PEIR's goals and objectives. Staff Report, pp. 98-99. The objectives, other than the objectives of restoring and/or maintaining beneficial uses, ensuring that all state waters with the Central Valley meet applicable water quality objectives and ensuring that irrigated agricultural discharges do not impair Central Valley communities' and residents' access to safe and reliable drinking water are flawed. In fact, the other four objects work against the successful attainment of restoring beneficial uses and meeting standards. Yet, invariably, the non-water quality or public safety objectives are the hooks which staff uses to propose an ineffectual ILRP recommendation.

For example, the goal of maintaining the economic viability of agriculture in California's Central Valley is highly subjective because it contains no yardsticks by which to measure impacts to irrigated agriculture and is buttressed by a seriously deficient economic analysis. Retirement of some farmland may be an overall economic benefit where overproduction has depressed commodity prices. Retirement of lands because of an inability to continue externalizing adverse costs of production benefits farmers who internalize those costs and comply with regulatory requirements. Economic viability of agriculture cannot be considered in a vacuum where the costs of agricultural pollution are simply transferred to other economic sectors, *i.e.*, recreation, commercial fishing, public health, municipalities, etc. It is unreasonable to establish a program goal of maintaining the economic viability of agriculture at the expense of other sectors of society who comply with requirements to protect water quality.

Also for example, the objective of maintaining "appropriate" beneficial uses ignores mandates to protect all identified beneficial uses. Encouraging "implementation of management practices that improve water quality in keeping with the first objective without jeopardizing the economic viability for all sizes of irrigated agriculture" ignores the fact that discharging pollutants is a privilege allowable only so long as measures are implemented to reduce or eliminate conditions of pollution. Likewise, providing "incentives for agricultural operations to minimize waste discharge to state waters" ignores that this is a mandated requirement. The objective to coordinate with other programs, such as the Grasslands Bypass Project, TMDLs, CV-Salts and WDRs for dairies is simply a non sequitur as none of those programs have been effective in cleaning up polluted waterways. For example, the Central Valley Board recently

extended the compliance schedule for the Grasslands Bypass Project to more than 20 years. To "promote coordination with other regulatory and non-regulatory programs associated with agricultural operations" is simply an attempt to replicate other regional programs that have failed to protect water quality. The Central Valley Board has apparently forgotten the failures of the Management Agency Agreement with the Department of Pesticide Regulation (DPR), where after the five-year agreement had expired, DPR claimed it didn't have the authority to implement the measures it had agreed to.

The last four objectives simply provide Regional Board staff the rationale to avoid rigorously implementing what staff believes to be a politically unpalatable program that would meet the first objective of maintaining beneficial uses and meeting water quality standards. Consequently, staff dismisses individual edge-of-field monitoring because it would be expensive, *i.e.*, subject farmers to the same requirements applicable to every other segment of society that discharges pollutants to waters of the state. However, without individual discharger monitoring, the Board will never know the impacts of individual discharges or whether implemented management measures are effective.

Direct Regional Board administration is rejected because it would require the Regional Board to candidly acknowledge the politically unpalatable need to assess additional fees to provide sufficient staff to regulate 30,000 plus farms spread over eight million acres. In 2002-05, Regional Board staff estimated that 40 to 70 staff would be needed to effectively implement the program. This seems to be a reasonable estimate based upon the stormwater program.

C. Staff's Recommended Alternative Continues The Existing Flaws Of The Existing Program.

1. The "recommended alternative" cannot identify sources of pollution, localized water quality impacts, the implementation of Best Management Practices (BMPs) or the effectiveness of BMPs.

The reality is that the regional monitoring approach embraced by staff has been woefully inadequate, as revealed by even a cursory review of coalition monitoring reports. What staff characterizes as cost efficiencies is simply insufficient monitoring that is incapable of characterizing all receiving waters, let alone identify specific sources or quantify the effectiveness of management measures. Coalition monitoring only represents a small percentage of irrigated acres. For example, review of recent monitoring reports submitted to the Regional Board by coalitions representing irrigated lands that discharge into the Sacramento-San Joaquin Delta estuary or waters tributary to the estuary shows that:

The San Joaquin County and Delta Water Quality Coalition comprises approximately 609,134 acres of irrigated land. SJCDWQC Annual Monitoring Report

2010, p. 6. Between October 2008 and March 2009, the Coalition monitored 10 sites and six sites from April 2009 through December 2009. In addition, three sites were monitored for Management Plan monitoring. *Id.*, p. 1. The report observes, "…water quality is still not protective of beneficial uses across most of the Coalition." *Id.*, p. 4. Rough calculations reveal that irrigation season monitoring represented approximately one site for every 60,000 plus acres.

The East San Joaquin Water Quality Coalition comprises approximately 919,730 acres of irrigated land. ESJWQC Annual Monitoring Report 2010, p. 5. Between October 2008 and December 2009, the Coalition monitored 20 sites and eleven additional sites were monitored for Management Plan monitoring. *Id.*, p. 1. Fourteen sites were monitored during the 2009 irrigation season and 12 sites were monitored during the 2009 wet season. *Id.*, p. 23-24. The report observes, "…water quality is still not protective of beneficial uses across most of the Coalition." *Id.*, p. 4. Rough calculations reveal that irrigation season monitoring represented approximately one site for every 54,000 plus acres.

The Westside San Joaquin River Watershed Coalition comprises approximately 460,500 acres. Westside Coalition Semi-Annual Report, 15 June 2010, p. 3. The Coalition monitors 17 discharge sites during the irrigation and wet seasons. *Id.*, Table 3, p. 5. This represents approximately one site for every 27,000 acres.

The Sacramento Valley Water Quality Coalition comprises approximately 27,000 square miles and contains over a million acres of farms. SVWQC Annual Monitoring Report 2009, March 2010, p. 3. Apparently, the Coalition monitored 32 sites, of which 18 were sampled during the irrigation season. *Id.*, Table 5, Planned Annual Sampling Frequency, p. 19. This would represent irrigation season monitoring of one site for approximately every 55,000 acres.

Monitoring a downstream point draining thousands of acres accomplishes little other than long-term trend analysis. And trend analysis requires a program that consistently monitors the same set of constituents over many years. Most coalition sites are not monitored every year for the same parameters and, consequently, existing coalition monitoring programs are unreliable even for trend analysis. In any case, trend analysis of downstream monitoring points can never establish whether an individual upstream discharger is in compliance with water quality standards or implementing BPTC.

Staff has apparently forgotten that the 2003 waiver originally required coalitions to yearly monitor all major drainages, 20% of intermediate drainages on a yearly rotating basis and minor drainages where downstream problems are identified. Those requirements have been substantially relaxed and currently large areas of the Central Valley are not monitored and have never been monitored, despite identification of serious downstream water quality problems.

Monitoring of actual discharge points is important because upstream waterways are disproportionally important as their increased energy inputs, higher invertebrate production, spawning, nursery and rearing habitat and lower discharge make these smaller aquatic systems vital to the overall health of the aquatic system. Larval fish and their food supplies found in these areas also are particularly vulnerable to adverse impacts of pesticides and other pollutants. Monitoring at the edge-of-field is crucial for evaluating the presence of BPTC and determining if recommended management practices are being implemented properly or if benefits from adopted practices are actually being realized.

2. The "recommended alternative" cannot ensure that dischargers will demonstrate that they have implemented Best Practical Treatment and Control (BPTC) or prevent degradation of water quality.

The Staff Report states, "… the Regional Water Board still must require the discharger to demonstrate that the proposed manner of compliance constitutes BPTC (SWRCB Order No. WQ 2000-7)." Staff Report, p. 62. And that, "…implementation of the program must work to achieve site-specific antidegradation requirements through implementation of BPTC and representative monitoring to confirm the effectiveness of the BPTC measures in preventing or minimizing degradation. Any regulatory program adopted will rely on implementation of practices and treatment technologies that constitute BPTC, based to the extent possible on existing data, and require monitoring of water quality to ensure that the selected practices in fact constitute BPTC where degradation of high quality waters is or may be occurring." *Id.*, p. 66
However, staff's recommended alternative abandons any effort to implement staff's own admonition. *See supra*, Section C.2.

3. The "recommended alternative" cannot ensure that the Regional Board can enforce program requirements.

As discussed above, any enforcement efforts by the Regional Board will be hampered by staff's recommendation. *See supra*, Section F.2. Staff's concept that enforcement will be vigorous by not having information available in the form of FWQMPs and individual monitoring data to assist in prioritizing inspections and enforcement cannot be rationalized. Without this information, staff's enforcement efforts will be as nominal as we have seen for the last seven years. Instead of enforcing water quality requirements, staff will be lead down a well-papered path of regional coalition monitoring – none of which will identify a single potential violator.

4. The "recommended alternative" is clearly inconsistent with the state's Non-Point Source Control Policy.

For the same reasons discussed above, staff's recommendation fails to comply with the NPS Policy. *See supra*, pp. Section F.2. Like the PEIR's first four alternatives,

staff's recommendations falls well short of all five key elements required by the NPS Policy. *Id*.

5. The "recommended alternative" cannot be in the public interest.

Staff continues to treat irrigated agriculture as a privileged sector by allowing farmers to externalize adverse production impacts by transferring the costs of pollution from the polluter to the general public. The recommended alternative does not serve the interests of California's 35 million residents. It arguably does not even serve the interests of the discharger's it seeks to immunize from monitoring, reporting and permitting requirements applicable to everyone else.

Central Valley fisheries are experiencing catastrophic collapse. The team of federal and state scientists investigating the decline of fisheries has identified toxic pollutants as one of the three major suspected causes of the collapse of the Delta's pelagic fishery. This collapse has cost the recreational and commercial fishing communities tens upon tens of millions of dollars.

The degraded aquatic ecosystem in the Delta threatens the reliability of the delivery system that supplies water to 23 million Californians. Polluted waters have forced municipalities to spend hundreds of millions of dollars on increased wastewater and drinking water treatment. Degraded waters threaten public health and have diminished the aesthetic and recreational enjoyment of millions of individuals.

Central Valley agriculture is a relatively small part of the California community. According to the July 2010 (revised) employment data by the California Employment Development Department, total employment in the 34 Central Valley counties under the ILRP and analyzed in the PEIR's economic analysis is 3,509,620, of which farm labor comprises 237,000 or 6.758%. EDD, Employment by Industry Data at: http://www.labormarketinfo.edd.ca.gov/?pageid=166. Statewide, the agriculture production and processing industry directly accounts for approximately 4.3% of the state output, 3.8% of the jobs, 2.5% of labor income and 2.9% of value added in the state. The Measure of California Agriculture, 2006, Agricultural Issues Center, University of California, Chapter 5, Table 5.5, p. 10.

The PEIR's severely deficient economic analysis with its unrealistic assessment of the cost impacts of potential management measures, acknowledges that Alternative 5, despite being burdened with absurd administrative and monitoring requirements, would be of negligible cost to the overall economy. In fact the economic analysis predicts that, under Alternative 5: 1) jobs in the Central Valley would increase, 2) personal income and industrial output would increase in the Tulare Lake Basin, 3) personal income would only decrease by 0.013% in the Sacramento River Basin and by 0.019% in the San Joaquin River Basin and 4) industrial output would only decrease by 0.045% in the Sacramento River Basin and by 0.043% in the San Joaquin River Basin. And the economic analysis inexplicably failed to analyze the cost benefits of reduced pollution. Had the advantages of better water quality been evaluated, implementation of

Alternative 5 would be shown to result in significant economic benefit across the spectrum for the entire Central Valley.

The recommended alternative will not reduce agricultural pollution any time in the near future. Nothing in the recommended alternative precludes agricultural dischargers from continuing the historic trend to discharging wastes into the foreseeable future. At its core, the recommended alternative will perpetuate substantial discharges of wastes from thousands of farms to impaired waters throughout the Central Valley, causing irreversible and substantial harm to degraded and stressed ecosystems, threatening public health and imposing increased costs to millions of Californians.

It cannot be in the public interest to exempt one small segment of the California economy from regulatory requirements applicable to everyone else. It clearly cannot be in the public interest, as the recommended alternative does, to exempt farmers from having to monitor their discharges in order to establish compliance with water quality standards and BPTC requirements.

6. **CSPA agrees ILRP must restrict groundwater pollution but unfortunately staff's proposed reliance upon regional efforts is unlikely to be more successful than existing programs that have chaperoned groundwater degradation.**

Groundwater pollution is a serious problem and relying upon regional efforts is unlikely to address site-specific sources of groundwater pollution. The staff alternative of requiring farmers to participate in a regional groundwater program once every five years ignores the obvious protective step of requiring individual farms to monitor their own wells to evaluate groundwater pollution. The staff recommendation also contains no specific measures to identify and prevent contamination of groundwater from management measures implemented to prevent surface water pollution.

The California Department of Water Resources (DWR) has concluded that water from California's groundwater basins "has been the most important single resource contributing to the present development of the state's economy." Between 25% and 40% of California's water supply comes from groundwater. That figure can rise to as much as two-thirds during critically dry years. Fifty percent of California's population depends upon groundwater for all or part of their drinking water. Data from the waterboards, USGS, Department of Health, DPR and others, demonstrate that groundwater has been severely degraded. DWR has stated that three-fourths of the impaired groundwater in California was contaminated by salts, pesticides, and nitrates, primarily from agricultural practices. Thousands of public drinking water wells have been closed because of pollution. Many of California's more than 71,000 agricultural irrigation wells are degraded or polluted. USGS data collected over a ten-year period in Fresno County showed that some 70% of the wells sampled exceeded the secondary MCL and agricultural goal for total dissolved solids. Kings County was even worse, with 87% exceeding criteria. Even the State Board's own data indicates that more than one third of the areal extent of groundwater assessed in California is so polluted that it

cannot fully support at least one of its intended uses, and at least 40 percent is either impaired by pollution or threatened with impairment.

For example, a study conducted by the United States Geological Survey documented extensive contamination of groundwater by pesticides applied to rice fields. Dawson, B., USGS, "Shallow Ground-Water Quality Beneath Rice Areas in the Sacramento Valley, California 1997" (2001). Pursuant to an existing Basin Plan prohibition, rice growers are required to hold their irrigation waters for up to 30 days in order to facilitate the breakdown of toxic pesticides. Rice fields are typically flooded from April to September with some significant portion also flooded during winter months to help break down leftover straw. Detections of pesticides and nitrites in groundwater beneath rice fields were attributed to pesticide and fertilizer applications to the fields. The study explains that holding irrigation waters on the fields in order to protect surface water may be allowing more recharge containing the pesticides molinate and thiobencarb to reach shallow groundwater. Another study in the record documents routing of pesticide-contaminated surface runoff from orchards into drainage wells that drain the contaminated runoff into groundwater. Troiano, J, et al., Cal. Dept. of Pesticide Regulation, "Movement of Simazine in Runoff water from Citrus Orchard Row Middles as Affected by Mechanical Incorporation" (1998) ("evidence linked contamination [of groundwater] to movement of [pesticide] residues in orchard runoff water that was directed into drainage wells"). *See also* Ingalls, Charles A., U.C. Davis, pp. 5-10, "Movement of Chemicals to Groundwater," of "Protecting Groundwater Quality in Citrus Production" (1994)).

The USGS study and other studies show that one potential negative environmental impact of a management measure that stores polluted water as a means of protecting surface water quality is an acceleration of the pollutants discharged into groundwater through recharge or existing pathways such as wells. Nevertheless, staff's proposed alternative relying upon regional monitoring efforts is unlikely to identify impacts from implementation of management measures and specific monitoring requirements must be included to prevent redirected impacts of management measures employed to protect surface waters.

VI. CONCLUSION.

After seven years of the irrigated lands program, the Central Valley Regional Water Quality Control Board still does not know who is actually discharging pollutants, the points of discharge, the constituents discharged, receiving water impacts, whether management measures (or BMPs) have been implemented or if those BMPs have been effective in reducing pollutant discharges. The Board cannot enforce against recalcitrant dischargers because it cannot know who they are and dischargers have little incentive to comply because they know that monitoring far downstream cannot produce the evidence to hold them accountable. The PEIR continues the theme of not providing the Regional Board the necessary information to make a decision that will protect water quality and human health. Staff proposes an alternative that perpetuates the existing program's flaws, including basic compliance with the NPS Policy and Resolution No. 68-

16. On the other hand, CSPA's alternative sets forth a reasonable program that would comply with statutory requirements, protect water quality and, where it is consistent with those two goals, reduce the potential burden on the farming community. CSPA respectfully requests that the Regional Board instruct staff to redraft their recommended program, send the PEIR back to be supplemented with necessary elements and include detailed analysis of an improved staff recommendation, CSPA's recommendation, and other required elements. We appreciate staff's and the Regional Board's consideration of these comments.

Sincerely,

Michael R. Lozeau
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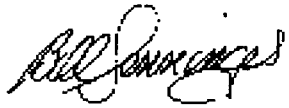

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SUPERIOR COURT FOR THE STATE OF CALIFORNIA

IN AND FOR THE COUNTY OF ALAMEDA

CALIFORNIA SPORTFISHING PROTECTION ALLIANCE, a non-profit corporation; CALIFORNIA WATER IMPACT NETWORK, a non-profit corporation, Petitioners and Plaintiffs, vs. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL VALLEY REGION, a State agency; and DOES I – X, inclusive, Respondents and Defendants.	Case No. VERIFIED PETITION FOR PEREMPTORY WRIT OF MANDATE AND COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF (California Environmental Quality Act, Pub. Res. Code § 21000, et seq.; Code of Civil Procedure §§ 1094.5, 1085) Dept.: CEQA CASE
CALIFORNIA RICE COMMISSION, a State statutory organization; EAST SAN JOAQUIN WATER QUALITY COALITION, an unincorporated association; GOOSE LAKE WATER QUALITY COALITION, an unincorporated association; SACRAMENTO VALLEY WATER QUALITY COALITION, an unincorporated association; SAN JOAQUIN COUNTY & DELTA WATER QUALITY COALITION, an unincorporated association; SOUTHERN SAN JOAQUIN VALLEY WATER QUALITY COALITION, an unincorporated association; WESTLANDS WATER DISTRICT, a water district; WESTSIDE SAN JOAQUIN RIVER WATERSHED COALITION, an unincorporated association; and ROES I–X, inclusive, Real Parties in Interests.	

Petitioners and Plaintiffs CALIFORNIA SPORTFISHING PROTECTION ALLIANCE, a non-profit corporation; and CALIFORNIA WATER IMPACT NETWORK, a non-profit corporation, (collectively "Petitioners" or "CSPA") petition this Court on their own behalf, on behalf of their members, on behalf of the general public and in the public interest pursuant to Code of Civil Procedure § 1094.5, Water Code § 13330, and Public Res. Code § 21168, or, in the alternative, pursuant to Code of Civil Procedure § 1094.5, Water Code § 13330, Code of Civil Procedure §1085 and Public Res. Code § 21168.5, for a writ of mandate, and for declaratory and injunctive relief, directed to Respondent CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD – CENTRAL VALLEY REGION, a State agency ("Respondent" or "Regional Board"), and by this verified petition and complaint, allege as follows:

1. Petitioners bring this action to challenge the unlawful action of Respondents in 1) adopting Resolution No. R5-2011-0017 certifying and relying on the Final Program Environmental Impact Report ("PEIR") for the Long-Term Irrigated Lands Regulatory Program ("ILRP") in violation of the requirements of the California Environmental Quality Act ("CEQA"), Public Resources Code § 21000 *et seq*., and the CEQA Guidelines, title 14, California Code of Regulations, § 15000 et seq., and, 2) improperly adopting Resolution No. R5-2011-0032, approving the Short-term Renewal of the Coalition Group Conditional Waiver of Discharge Requirements for Discharges from Irrigated Lands, Regional Board Order No. R5-2006-0053, for an additional 24 months ("Renewed Waiver" or "Project") without complying with CEQA and inconsistent with state policy for water quality control, including the State of California's antidegradation policy or "Statement of Policy With Respect to Maintaining High Quality of Waters in California," Resolution 68-16 (Oct. 28, 1968) ("Antidegradation Policy"), the State Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (May 20, 2004) ("NPS Policy"), Water Code § 13269, and the public interest.

2. Respondent's PEIR falls well below CEQA's minimum standards. The PEIR fails to include any stable project description, including a description of the Renewal Project. The PEIR fails to identify or adequately analyze numerous significant impacts of the project, including impacts to recreation and aesthetics, cumulative impacts to water quality and fisheries, cultural impacts

regarding traditional uses of salmon and other fish, agricultural impacts, and perhaps most critically, the public health impacts of authorizing continued discharges of pesticides and other pollutants from irrigated lands' effluent to groundwater. The PEIR also fails to analyze a meaningful range of alternatives to the proposed Project, and fails to support the alternatives' proposed mitigations with substantial evidence. The failure to properly analyze alternatives is particularly critical to the Renewal Project, as Respondents purported to approve the Renewal Project as a Project alternative described in the PEIR as Alternative 1. These and other violations of CEQA were carefully documented during administrative proceedings on the Project, but were never rectified by the Regional Board.

3. The Renewed Waiver extends for an additional two years the existing Coalition Group Conditional Waiver of Waste Discharge Requirements for Discharges From Irrigated Lands, Order R5-2006-00536 ("Waiver"), initially adopted by the Regional Board in 2006. The Waiver became effective on July 1, 2006, and expired on June 30, 2011. The Renewed Waiver is intended by the Regional Board to serve as an interim irrigated lands regulatory program until a long-term program is developed. The Waiver exempts tens of thousands of irrigated agricultural operations that are discharging substantial pollution to public waterways throughout the Central Valley from having to comply with the reporting and permitting requirements that otherwise would apply to these discharges of pollutants under the Porter-Cologne Water Quality Control Act, Water Code § 13000 et seq. ("Porter-Cologne").

4. Since its adoption, the Waiver has failed to significantly improve water quality in the waters of the Central Valley and has failed to identify the installation of water pollution control measures by dischargers from irrigated lands throughout the Central Valley. As a result, the Central Valley's waters continue to fail to meet applicable water quality objectives and, in many instances, are toxic to aquatic life.

5. The Antidegradation Policy requires that any activity which may produce a waste discharged to existing high quality waters "will be required to meet waste discharge requirements which will result in the best practicable treatment or control ["BPTC"] of the discharge necessary to assure that (a) 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." To determine BPTC, a discharger must evaluate monitoring data from their existing treatment or control measures and compare those results and the controls to other controls currently used by similar discharges. The Renewed Waiver is not supported by any evidence of any measures that have been implemented by irrigated lands dischargers throughout the region governed by the Renewed Waiver. Substantial expert testimony submitted to the Regional Board demonstrates that it is not feasible to determine the presence of BPTC based solely on regional water quality monitoring – the only monitoring required by the 2006 Waiver and the Renewed Waiver. The Renewed Waiver also is inconsistent with the Antidegradation Policy because it fails to address discharges from irrigated lands to groundwater.

6. The Renewed Waiver is inconsistent with the State Board's NPS Policy for a number of reasons. A valid NPS control implementation program "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." NPS Policy, pp. 11-12. The record evidence indicates that irrigated land discharges to surface and ground waters pursuant to the Waiver violate water quality objectives and the Antidegradation Policy. The Renewed Waiver fails to identify a process by each discharger to select or develop management practices and to ensure and verify their implementation by each discharger. The Renewed Waiver does not contain any specific time table and corresponding quantifiable milestones to measure progress toward achieving water quality objectives. The Renewed Waiver does not include any requirement for dischargers to monitor their discharges or report their management practices to the Regional Board in order to determine whether the Waiver is proving successful or additional measures are required. The Renewed Waiver's use of informal coalitions fails to include any meaningful potential consequences to individual dischargers for failing to achieve water quality objectives.

7. In order to adopt the Renewed Waiver, the Regional Board was required make certain findings under Water Code § 13269 that the Renewed Waiver is consistent with the Basin Plan, including the applicable water quality objectives, and that it is in the public interest. The Renewed Waiver is inconsistent with the public interest and Water Code § 13269 because it fails to identify best management practices or their efficacy, fails to identify the location of polluting discharges, fails

to monitor the effectiveness of BMPs, continues to fail to prevent chronic toxicity throughout large portions of the Central Valley, fails to address groundwater pollution from irrigated lands, and relies on an informal bureaucracy of "coalitions" that obscure key discharger information necessary for an effective regulatory program. The Regional Board's findings that the Renewed Waiver is consistent with the Central Valley Basin Plan and the public interest are not supported by the weight of the evidence or are contrary to law.

8. Respondents prejudicially abused their discretion in certifying the PEIR and approving the Renewed Waiver in reliance on that defective PEIR. Respondents also abused their discretion or proceeded in a manner inconsistent with law in determining that the Renewed Waiver was consistent with the Antidegradation Policy and the NPS Policy. Accordingly, Respondents' certification of the PEIR and approval of the Renewed Waiver must be set aside.

PARTIES

9. Petitioner and Plaintiff CALIFORNIA SPORTFISHING PROTECTION ALLIANCE ("CSPA") is a non-profit, public benefit fishery conservation organization with its main office in Stockton, California. Incorporated in 1983, CSPA works for the restoration and conservation of the state's fishery resources and their aquatic ecosystems. CSPA works to ensure these fishery resources are conserved and managed on a sustainable basis to enable their use by the sportfishing public now and in the future. CSPA has approximately 2,000 members from over a dozen affiliated fishing organizations who live, recreate, and work in and around waters of the State of California, including waters of the San Joaquin River, Sacramento River, the Delta and their tributaries. The interests of CSPA and its members have been, are, and will continue to be directly, adversely, and irreparably affected by Respondents' failure to comply with the requirements of CEQA and Porter-Cologne in approving the Project.

10. Petitioner and Plaintiff CALIFORNIA WATER IMPACT NETWORK ("C-WIN") is a non-profit, tax exempt California Corporation that advocates for equitable and environmentally sensitive use of California's waters, including instream uses. C-WIN's goals include ensuring adequate fresh water flows through the Delta and in upstream rivers to protect and restore public trust resources such as open water ecosystems and salmon fisheries; stopping poor irrigation practices

from poisoning land, wetlands, rivers, streams, and wildlife; and ensuring that decisions about water allocation are transparent, just, and in accord with principles of environmental protection. C-WIN members reside, recreate, work in and around, and otherwise use and enjoy the waters of the State of California, including in particular waters of the Central Valley. The interests of C-WIN and its members have been, are, and will continue to be directly, adversely, and irreparably affected by Respondents' failure to comply with the requirements of CEQA and Porter-Cologne in approving the Project.

11. Petitioners and their members have a direct and beneficial interest in Respondents' compliance with laws bearing upon approval of the Project. These interests will be directly and adversely affected by Respondents' certification of an inadequate PEIR and related approval of the Project, which violates provisions of law as set forth in this Petition and will cause substantial harm to the natural environment and the quality of life in the surrounding community. The discharge of pesticides and other pollutants from agricultural operations throughout the Central Valley into the Valley's rivers and streams has impaired the beneficial uses identified in the preceding paragraphs and, consistent with the coalition-based system continued under the Renewed Waiver, will continue to impair those beneficial uses in the future. Pursuant to the inadequate PEIR and the Waiver, agricultural operations' discharges of pesticides and other pollutants have significantly contributed to unacceptably high levels of pesticides and other pollutants in the San Joaquin River, Sacramento River, Delta, their tributaries, and other waters of the Central Valley and will contribute impairing levels of those pollutants in the future. The maintenance and prosecution of this action will confer a substantial benefit on the public by assuring that the environmental impacts of the Project are fully considered by the Regional Board and other agencies, and additional mitigations and pollution control conditions are considered by the Regional Board to protect the public from the environmental and other harms alleged herein. CSPA and its members actively participated in public hearings of the Regional Board on the PEIR and the Project. CSPA and its members also submitted extensive written comments to Respondents objecting to and commenting on the Project and the PEIR.

12. Respondent and Defendant CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD – CENTRAL VALLEY REGION ("Regional Board") is the State agency

authorized to issue water pollution control permits and to waive certain reporting and permitting requirements when it is in the public interest and consistent with applicable water quality control plans. Respondent Regional Board is the lead agency responsible under CEQA for evaluating the environmental impacts of the Project.

13. Petitioners do not know the true names and capacities, whether individual, corporate, associate, or otherwise, of Respondents Doe 1 through Doe 10, inclusive, and therefore sue said Respondents under fictitious names. Petitioners will amend this Petition to show their true names and capacities when the same have been ascertained. Each of these respondents is the agent and/or employee of Respondent Regional Board, and each performed acts on which this action is based within the course and scope of such Respondent's agency and/or employment.

14. Real Party in Interest and Defendant CALIFORNIA RICE COMMISSION ("CRC") is a state commission that represents 2,500 family rice farmers and handlers who farm and process rice produced in California by engaging in regulatory, research and education programs. CRC functions as a lead entity representing growers (owners of irrigated lands, wetland managers, nursery owners, and/or water districts) in administration of the current ILRP. The CRC has been approved as a third-party by the Regional Board to administer the Coalition Group Waiver on behalf of rice growers in California.

15. Real Party in Interest and Defendant EAST SAN JOAQUIN WATER QUALITY COALITION ("ESJWQC") is a group of agricultural interests and growers formed to represent dischargers who own or operate irrigated lands east of the San Joaquin River within Madera, Merced, Stanislaus, Tuolumne and Mariposa Counties and portions of Calaveras County. ESJWQC has been approved by the Regional Board as a certified coalition authorized to administer the Coalition Group Waiver.

16. Real Party in Interest and Defendant GOOSE LAKE WATER QUALITY COALITION ("Goose Lake Coalition") is a group of agricultural interests and growers formed to represent dischargers who own or operate irrigated lands in and around the Goose Lake watershed, located in northeastern California. Goose Lake Coalition has been approved by the Regional Board as a certified coalition authorized to administer the Coalition Group Waiver.

17. Real Party in Interest and Defendant SACRAMENTO VALLEY WATER QUALITY COALITION ("Sacramento Valley Coalition") is a group of agricultural interests and growers formed to represent about 8,600 farmers and wetlands managers encompassing over 1.3 million irrigated acres throughout the Sacramento Valley region. The Sacramento Valley Coalition has been approved by the Regional Board as a certified coalition authorized to administer the Coalition Group Waiver.

18. Real Party in Interest and Defendant SAN JOAQUIN COUNTY & DELTA WATER QUALITY COALITION ("San Joaquin Delta Coalition") is a group of agricultural interests and growers formed to implement the Coalition Waiver in San Joaquin County, Calaveras County and Contra Costa County. The San Joaquin Delta Coalition has been approved by the Regional Board as a certified coalition authorized to administer the Coalition Group Waiver.

19. Real Party in Interest and Defendant SOUTHERN SAN JOAQUIN VALLEY WATER QUALITY COALITION ("Southern San Joaquin Coalition") is a group of agricultural interests and growers formed to represent landowners controlling about 4,400,000 acres of irrigated land in Fresno, Tulare, Kings, and Kern Counties, and represents about 1,268,596 acres of land that may discharge or have the potential to discharge. The Southern San Joaquin Coalition has been approved by the Regional Board as a certified coalition authorized to administer the Coalition Group Waiver.

20. Real Party in Interest and Defendant WESTLANDS WATER DISTRICT ("Westlands") is a water district that encompasses approximately 600,000 acres of farmland in western Fresno and Kings counties. Westlands, through an association it has identified as the Westlands Water District Coalition, has been approved by the Regional Board as a certified coalition authorized to administer the Coalition Group Waiver.

21. Real Party in Interest and Defendant WESTSIDE SAN JOAQUIN RIVER WATERSHED COALITION ("Westside Coalition") is a group of agricultural interests and growers formed to represent farmers with irrigated cropland within the regional watershed of the northwest San Joaquin Valley. The Westside Coalition has been approved by the Regional Board as a certified coalition authorized to administer the Coalition Group Waiver.

22. Petitioners do not know the true names and capacities, whether individual, corporate, associate, or otherwise, of Real Party in Interests Roe 1 through Roe 10, inclusive, and therefore sue said Real Parties in Interest under fictitious names. Petitioners will amend this Petition to show their true names and capacities when the same have been ascertained.

JURISDICTION AND VENUE

23. Pursuant to California Code of Civil Procedure section 1085 (alternatively section 1094.5) and Public Resources Code sections 21168.5 (alternatively section 21168) and 21168.9, this Court has jurisdiction to issue a writ of mandate to set aside Respondents' decision to certify the PEIR and approve the Renewed Waiver. Pursuant to Water Code § 13330, this Court has jurisdiction to issue a writ of mandate to set aside Respondents' issuance of the Renewed Waiver. The Court has jurisdiction to issue declaratory relief pursuant to Code of Civil Procedure § 1060 and injunctive relief pursuant to Code of Civil Procedure § 525 *et seq*. and Water Code § 13361(c).

24. Venue is proper in this Court pursuant to Water Code § 13361(b) because a portion of the waste discharges addressed by the Renewed Waiver occur in Alameda County. Venue is proper in this court pursuant to Code of Civil Procedure § 401, because Respondents include "the State, or a department, institution, board, commission, bureau, officer or other agency thereof," and the action therefore may be filed in the County of Sacramento. As a result, pursuant to Code of Civil Procedure § 401, the action may be commenced and tried in any city in which the California Attorney General has an office. The Attorney General has an office in Oakland, California. The Attorney General represents the Regional Board.

25. This action is timely filed under Public Resources Code section 21167(b), CEQA Guidelines section 15112(c)(1) and Water Code § 13330. On May 18, 2012, Petitioners, Respondent and each of the Real Parties in Interest entered into a tolling agreement extending the statute of limitations deadline.

26. Petitioners have complied with the requirements of Public Resources Code section 21167.5 by serving a written notice of Petitioners' intention to commence the CEQA claims included in this action on the Regional Board on May 24, 2012. Copies of the written notice and proof of service is attached hereto as Exhibit A.

27. Pursuant to Public Resources Code section 21167.6(b), Petitioners have elected to prepare the record of proceedings in this matter, and are simultaneously filing their notice of intent to prepare said record of proceedings with this complaint. A true and correct copy of Petitioners' Notice of Intent to Prepare Record is attached hereto as Exhibit B.

STATEMENT OF FACTS

28. Discharges from agricultural lands include irrigation return flow; flows from tile drains; and storm water runoff from fields, managed wetlands, nurseries, and water districts that accept agricultural discharges. These discharges can affect water quality by transporting pollutants including pesticides, sediment, nutrients, salts (including selenium and boron), pathogens, and heavy metals from cultivated fields into surface waters. Many surface water bodies in California are impaired because of pollutants from agricultural sources. Groundwater bodies also have suffered serious pesticide, nitrate, and salt contamination.

Surface Water Pollution

29. According to the *Revised Draft of the 2007 Review of Monitoring Data for the Irrigated Lands Conditional Waiver Program*, 12 July 2007, between 2003 and 2007, agricultural coalitions and the U.C. Davis Irrigated Lands Monitoring Project collected data from 313 sites throughout the Central Valley. Coalitions or individual water agencies monitored 148 sites and U.C. Davis monitored the remaining 165 sites. Toxicity to aquatic life was present at 63% of the sites monitored for toxicity (50% were toxic to more than one species). Pesticide water quality standards were exceeded at 54% of sites monitored for pesticides (many for multiple pesticides). One or more metals violated criteria at 66% of the sites monitored for metals. Human health standards for bacteria were violated at 87% of sites monitored for coliform. More than 80% of the locations reported exceedances of general parameters (dissolved oxygen, pH, salt, TSS).

30. Section 303(d) of the Federal Water Pollution Control Act, 33 U.S.C. § 1313(d), requires States to identify all waters that are not achieving water quality standards and protecting beneficial uses. In California, the 303(d) list identifies some 730 pollutant/waterbody combinations in the Central Valley that are impaired. Agriculture is the largest identified source of that impairment responsible for impairing 269 segments covering 1,572 waterway miles plus 96,147 acres of open

water. By comparison, urban runoff and municipal point sources have caused or contributed to 55 or 7.5% of impairments.

31. Of the 257 impaired segments attributable to unknown sources, the majority are in agricultural areas. Pollutants common to agricultural activities cause 225 of these impairments. For example, Spring Creek in Colusa County is identified as impaired by aldicarb, chlorpyrifos, diazinon, dissolved oxygen, salinity, sediment toxicity and unknown toxicity but sources are unidentified. The map shows this segment is an agricultural area. Indeed, 64 segments comprising over 1,600 miles and over 40,000 acres are identified as impaired for unknown toxicity by unknown sources. Most of these lie in agricultural areas.

32. Agricultural pollution causes 37% of all impairments and 57% of impairments where sources are identified. Subtracting resource extraction (primarily mercury from historic mining activities that is difficult, if not impossible to control), agriculture is responsible for 80% of impairments from identified sources that can be reasonably controlled.

Groundwater Pollution

33. Data from the State and Regional Boards, the United States Geological Survey, California Department of Health, California Department of Pesticide Regulation ("DPR") and others, demonstrate that groundwater in the Central Valley has been severely degraded. California Department of Water Resources ("DWR") has stated that three-fourths of the impaired groundwater in California was contaminated by salts, pesticides, and nitrates, primarily from agricultural practices. Thousands of public drinking water wells have been closed because of pollution. Many of California's more than 71,000 agricultural irrigation wells are degraded or polluted. USGS data collected over a ten-year period in Fresno County showed that some 70% of the wells sampled exceeded the secondary MCL and agricultural goal for total dissolved solids. Kings County was even worse, with 87% exceeding criteria. Even the State Board's own data indicates that more than one third of the areal extent of groundwater assessed in California is so polluted that it cannot fully support at least one of its intended uses, and at least 40 percent is either impaired by pollution or threatened with impairment.

34. Studies show that one potential negative environmental impact of a management measure that stores polluted water as a means of protecting surface water quality is an acceleration of the pollutants discharged into groundwater through recharge or existing pathways such as wells. Nevertheless, the Renewed Waiver fails to address these pollution discharges from irrigated lands. *See* Staff Report, p. 115 ("Alternative 1 [the Renewed Waiver] would not implement the iterative BPTC and monitoring process for addressing degradation to groundwater").

35. DWR has concluded that water from California's groundwater basins "has been the most important single resource contributing to the present development of the state's economy." Between 25% and 40% of California's water supply comes from groundwater. That figure can rise to as much as two-thirds during critically dry years. Fifty percent of California's population depends upon groundwater for all or part of their drinking water.

The Renewed Waiver of Waste Discharge Requirements for Polluted Discharges from Irrigated Lands

36. Resolution No. R5-2011-0032 renews and extends for two-years a conditional waiver adopted by the Regional Board in 2006 known as the *Coalition Group Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands*. The Resolution made some changes to the 2006 Waivers monitoring provisions but, generally left the provisions of the 2006 waiver unchanged.

37. The Renewed Waiver conditionally waives waste discharge requirements ("WDRs") and reports of waste discharge for discharges of waste from irrigated lands to surface waters within the Central Valley Region.

38. The Renewed Waiver relies upon the creation of voluntary organizations dubbed "Coalition Groups" comprised of irrigated lands dischargers and other interested entities. Rather than regulating the dischargers directly through a general waiver or WDRs, the Regional Board opted to recognize and establish requirements for the coalitions. The coalitions themselves are not dischargers. A Coalition Group can be any group of dischargers, participants, and/or organizations that form to comply with the Conditional Waiver. Coalition Groups can be organized on a geographic basis or can be groups with other factors in common such as commodity groups. Most

appear to be set up as informal associations, rather than as non-profit corporations or governmental entities. The Coalition Groups are not responsible for enforcing the Water Code.

39. Under the Renewed Waiver, individual dischargers may enroll their facility in a Coalition in order for their discharges to be covered by the Waiver. Dischargers may comply with the Water Code by participating in a Coalition Group, by filing for coverage under the Individual Discharger Conditional Waiver, by filing a RWD to obtain individual or general WDRs, or by ceasing to discharge.

40. Coalition Groups wishing to operate pursuant to the Renewed Waiver must file a Notice of Intent ("NOI") with the Regional Board. The NOI is required to include, among other things, an electronic list of landowners and/or operators of irrigated lands that discharge waste to waters of the State, who are knowingly participating in the Coalition Group. In addition to the owners and operators' names, the list must identify the parcel number and size and mailing address.

41. Once an NOI is submitted, the Coalition Groups then submit a General Report. The General Report must identify the lead agencies and/or organizations that will develop a watershed or sub-watershed program, the key contact(s), a description of the watershed, a commitment to work with the Water Board to satisfy the conditions of the Waiver, and funding mechanisms. The General Report also must provide a detailed map of the area included within the Coalition Group identifying individual parcels and/or districts participating in the Coalition Group.

42. Once the NOI is approved by the Regional Board's Executive Officer, the Executive Officer issues a Notice of Applicability ("NOA") extending coverage to the Coalition Group under the Conditional Waiver.

43. Upon receipt of an NOA, a Coalition Group must submit and implement a Monitoring and Reporting Program ("MRP") Plan as specified in Coalition Group MRP Order No. R5-2005-0833, as amended. The purposes of the MRP Plan include, but are not limited to, the following: 1) to determine whether the discharge of waste from irrigated lands within the Coalition Group boundaries causes or contributes to exceedances of applicable water quality standards or causes nuisance; 2) to provide information about the Coalition Group area characteristics, including but not limited to, land use, crops grown, and chemicals used; 3) to monitor the effectiveness of management practices

implemented to address exceedances of applicable water quality standards; 4) to determine which management practices are most effective in reducing wastes discharged to surface waters from irrigated lands, 5) to specify details about monitoring periods, parameters, protocols, and quality assurance, 6) to support the development and implementation of the Conditional Waiver, 7) to verify the adequacy and effectiveness of the Conditional Waiver's conditions, and 8) to evaluate the Coalition Group's compliance with the terms and conditions of the Conditional Waiver.

44. Although one of the purported purposes of the MRP Plan is to monitor the effectiveness of management practices, the Renewed Waiver does not require a MRP Plan to identify any specific discharger's management practices or their specific location. The Renewed Waiver does not require any direct monitoring of the effectiveness of any management practice. The only monitoring required and included in a MRP Plan as of the date the Regional Board issued the Renewed Waiver were of downstream locations unfocused on any specific discharger.

45. When a Coalition Group or dischargers determine, based on their ambient monitoring programs, that a discharge is causing or contributing to an exceedance of an applicable water quality standard, the Coalition Group or Discharger shall promptly notify the Central Valley Water Board in writing. Upon the subsequent written notice of the Executive Officer, the Coalition Group must submit a "Management Plan" to the Regional Board. A Management Plan also must be submitted when there has been more than one exceedance of a water quality standard in three years, unless the Executive Officer determines that the exceedance is not likely to be remedied or addressed by a Management Plan.

46. The Management Plan is required to evaluate the effectiveness of existing management practices in achieving applicable water quality standards, identify additional management practices or education outreach that the Coalition Group and/or its Participants propose to implement to achieve applicable water quality standards, and identify how the effectiveness of those additional actions will be evaluated. The Management Plan must include a waste specific monitoring plan and a schedule to implement additional management practices to achieve applicable water quality standards.

47. Several Management Plans were prepared prior to the Regional Board's issuance of the Renewed Waiver. Despite the feasibility of Coalition Groups and dischargers to identify the type, location and effectiveness of management practices, no such information was gathered by the Regional Board or otherwise submitted to the administrative record for the Renewed Waiver.

48. Each approved Coalition Group had to submit an electronic map showing both participants and non-participants, including their (a) assessor parcel number; (b) parcel size; (c) parcel owner or operator name; (d) parcel owner or operator mailing address, and (e) whether the owner or operator of the parcel is knowingly participating in the Coalition Group.

49. The Renewed Waiver generally requires that dischargers who are participating in a Coalition Group shall implement management practices, as necessary, to achieve best practicable treatment or control of the discharge to reduce wastes in the discharges to the extent feasible and that will achieve compliance with applicable water quality standards, protect the beneficial uses of waters of the state, and prevent nuisance. However, in issuing the Renewed Waiver, the Regional Board did not review individual dischargers' management practices. Nor does the Renewed Waiver provide any mechanism for the Regional Board to identify individual dischargers' management practices and determine whether such measures achieved the best practicable treatment or control at the time the Renewed Waiver was issued.

50. The Renewed Waiver generally prohibits dischargers who are participating in a Coalition Group from discharging any waste not specifically regulated by the Conditional Waiver, causing new discharges of wastes from irrigated lands that impair surface water quality, or increasing discharges of waste or add new wastes that impair surface water quality not previously discharged by the discharger. However, the administrative record for the Renewed Waiver does not include any evidence of the pollutants that individual dischargers currently are discharging. The Renewed Waiver does not require an individual discharger to sample or disclose the pollutants they have discharged or will discharge.

51. The Renewed Waiver generally requires that Dischargers shall not cause or contribute to an exceedance of any applicable water quality standard. However, the administrative record for the Renewed Waiver does not include any evidence of the levels of any pollutants that individual

dischargers currently are discharging. The Renewed Waiver does not require an individual discharger to sample and analyze the pollutants they discharge.

52. The various Coalition Groups do not have any enforcement authority over discharges. Individual dischargers do not have to allow any Coalition Group representative to inspect their property. An individual discharger is not required to report any management practices to a Coalition Group. Individual dischargers often do not report changes to their management practices to a Coalition group. An individual discharger need not conduct any sampling. An individual discharger need not allow a Coalition Group representative to take a sample of a waste discharge from its property. A Coalition Group cannot mandate that an individual discharger implement or install any specific management practice. A Coalition Group does not have the authority to approve the sufficiency of an individual discharger's management practices to achieve water quality standards. A Coalition Group may only recommend management practices. Individual dischargers that are members of a Coalition implement management practices on a voluntary basis.

53. For individual dischargers that choose not to join a Coalition Group, the Regional Board has determined that individual farm reports describing the management practices and farm-specific monitoring are necessary to implement the Water Code. A non-Coalition discharger must submit a Farm Evaluation Report to the Regional Board. The Farm Evaluation Report shall include: 1. The discharger's name, address and phone number (owner and/or operator); 2. Map(s) of irrigated lands generating the discharge to surface waters, including points of discharge (surface or subsurface discharges); 3. Crops commonly grown; 4. Chemicals (pesticides, fertilizers, etc.) commonly applied in a manner that may result in the material coming in contact with irrigation water or storm water; 5. Management practices utilized for reducing or eliminating adverse discharges of constituents of concern; 6. Identification of water bodies receiving the discharge(s); and 7. Description of any subsurface drainage collection system.

54. A non-Coalition discharger also must submit a Monitoring and Reporting Program ("MRP") Plan including 1. a summary of the water quality historical data for the farm; 2. Monitoring site(s); 3. Land Use description; 4. Monitoring periods and start date of monitoring program; 5. Monitoring parameters, including minimum and site specific; 6. A Quality Assurance Project Plan

("QAPP"); 7. Documentation of monitoring protocols including sample collection methods and laboratory quality assurance manual; and, 8. Management Practice monitoring elements to determine effectiveness in meeting the conditions of the Waiver. A non-Coalition discharger also must submit an annual report.

LEGAL BACKGROUND

California Environmental Quality Act

55. CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report ("EIR") (except in certain limited circumstances). *See, e.g.*, Pub. Res. Code § 21100. The EIR is the very heart of CEQA. *Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652. "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." *Communities for a Better Environment v. Calif. Resources Agency* (2002) 103 Cal. App. 4th 98, 109.

56. CEQA requires that a lead agency prepare and certify an EIR for any discretionary project that may have a significant adverse effect on the environment. Pub. Res. Code §§ 21002.1(a), 21100(a), 21151(a); 14 Cal. Code Regs. ("CEQA Guidelines") §§ 15064(a)(1), (f)(1), 15367 ("lead agency" is the "public agency which has the principal responsibility for carrying out or approving a project").

57. CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 Cal. Code Regs. § 15002(a)(1). "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs*. (2001) 91 Cal.App.4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

58. Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and all feasible mitigation measures. CEQA Guidelines § 15002(a)(2) and (3); *See also Berkeley Jets*, 91 Cal.App.4th 1344, 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564. The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced." Guidelines §15002(a)(2). If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." Pub.Res.Code § 21081; CEQA Guidelines § 15092(b)(2)(A) & (B).

59. "An accurate, stable and finite project description is the *sine qua non* of an informative and legally adequate EIR." *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192; *Berkeley Jets*, 91 Cal.App.4th at 1354; *Sacramento Old City Assn. v. City Council* (1991) 229 Cal. App. 3d 1011, 1023; *Stanislaus Natural Heritage Project v. County of Stanislaus* (1996) 48 Cal. App. 4th 182, 201. "[A] curtailed or distorted project description," on the other hand, "may stultify the objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental costs, consider mitigation measures, assess the advantage of terminating the proposal (*i.e.*, the "no project" alternative) and weigh other alternatives in the balance." *Id. See also*, CEQA § 15124; *City of Santee v. County of San Diego*, 263 Cal.Rptr 340 (1989).

60. CEQA requires that an EIR consider a no project alternative. CEQA Guidelines § 15126.6(e)(1) ("The specific alternative of 'no project' shall also be evaluated along with its impact"). "The purpose of describing and analyzing a no project alternative is to allow decisionmakers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project." *Id*. "The 'no project' analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with

available infrastructure and community services." CEQA Guidelines § 15126.6(e)(2). "The [no project] description must be straightforward and intelligible, assisting the decision maker and the public in ascertaining the environmental consequences of doing nothing; requiring the reader to painstakingly ferret out the information from the reports is not enough." *Planning & Conservation league v. Dept. of Water Resources* (2000) 83 Cal.App.4th 892, 911.

Porter-Cologne Water Quality Control Act

61. Porter-Cologne has the explicit goal to protect all California waters for use and enjoyment by the people of the State. Porter-Cologne maintains "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 ...." Water Code § 13000.

62. The highest level of water quality that is reasonable within the Central Valley is set forth in the Basin Plan. Pursuant to Porter-Cologne, the Regional Boards must develop basin plans to "ensure the reasonable protection of beneficial uses" of waters and setting forth "water quality conditions that could reasonably be achieved...." Water Code § 13241. The beneficial uses of Central Valley waters that must be protected include, but are not limited to, drinking water use, recreational use, and aquatic habitat use. Among other water quality objectives necessary to protect these uses, the Basin Plan prohibits "toxic substances in concentrations that produce detrimental physiologic responses in human, plant, animal, or aquatic life." Basin Plan, p. III-8.aa.

63. Porter-Cologne authorizes Respondent to issue permits, or waste discharge requirements ("WDRs"), for any discharge to the state's waters by prescribing requirements to meet water quality objectives in order to protect the beneficial uses of those waters. Water Code § 13263(a).

64. The Regional Board may only waive reports of waste discharge ("RWDs") and/or WDRs if the agency determines, after a hearing, that "the waiver is consistent with any applicable state or regional water quality control plan and is in the public interest." Water Code § 13269(a).

65. Respondent's waiver authority is limited to waiving only two requirements: the filing of RWDs and the issuance of WDRs. Water Code section 13269 does not authorize Respondents to

waive compliance with any water quality objectives and policies or the state and federal anti-degradation policies.

Anti-degradation Policy

66. Pursuant to California's anti-degradation policy, as set forth in State Board Resolution No. 68-16 and as adopted in the Basin Plan, the state is required to maintain existing high quality water conditions. Existing high quality waters include all waters that were of higher quality than applicable water quality objectives as of October 28, 1968. Respondent's actions must ensure the maintenance of water quality from water found upstream or up-gradient of the discharge, unaffected by other discharges. State Board Resolution No. 68-16 provides: " ... 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."

67. Resolution No. 68-16 requires specific steps to protect high quality waters, including mandating the use of WDRs through specified technology-based effluent limitations. Resolution No. 68-16, ¶ 2. The Antidegradation Policy provides, in relevant part, that:

> 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 ["BPTC"] of the discharge necessary to assure that (a) 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.

Resolution No. 68-16 (Oct. 28, 1968).

68. "In determining BPTC, the discharger should compare the proposed method to existing proven technology; evaluate performance data (through treatability studies), compare alternative methods of treatment or control, and consider the method currently used by the discharger or similarly situated dischargers." *See* Irrigated Lands Regulatory Program Long-Term Program Development Staff Report (July 2010) ("Staff Report"), p. 62 (citing SWRCB Order Nos. WQ 81-5, WQ 82-5, WQ 90-6, and WQ 2000-07).

69. To comply with Resolution No. 68-16's BPTC mandate, the Regional Board "must require the discharger to demonstrate that the proposed manner of compliance constitutes BPTC." Staff Report, p. 62 (citing SWRCB Order No. WQ 2000-7) (emphasis added). *See also id*. p. 67 ("where degradation is occurring, irrigated agricultural operators must demonstrate that any set of practices proposed for implementation represents BPTC and will be required to consider existing water quality data or conduct monitoring in support of this demonstration").

Non-Point Source Policy

70. On May 20, 2004 the State Board adopted the Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program. Porter-Cologne mandates that the Regional Board shall comply with state policy for water quality. Water Code § 13146, 13247.

71. Any NPS program must be consistent with five key elements of the NPS Policy.

72. Key element 1 states that "[a]n 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." NPS Policy, pp. 11-12.

73. Key element 2 of the NPS Policy provides that: "[a] nonpoint-source control implementation program must include a description of the management practices and other program elements that are expected to be implemented to ensure attainment of the implementation program's stated purpose, the process to be used to select or develop management practices, and the process to be used to ensure and verify proper management practice implementation." NPS Policy, p. 12. "A RWQCB must be convinced there is a high likelihood the MP will be successful." *Id*. "MPs must be tailored to a specific site and circumstances, and justification for the use of a particular category or type of MP must show that the MP has been successfully used in comparable circumstances. If an MP has not previously been used, documentation to substantiate its efficacy must be provided by the discharger." *Id*., p. 12.

74. Key element 3 of the NPS Policy provides that "[w]here the Regional Water Board determines it is necessary to allow time to achieve water quality objectives, the nonpoint-source pollution control implementation program must include a specific time schedule and corresponding

quantifiable milestones designed to measure progress toward reaching the specified requirements." NPS Policy, p. 13. However, the Regional Board has no authority to include schedules of compliance in either WDRs or conditional waivers because the Central Valley Basin Plan does not include any such authority in its program to achieve the applicable water quality standards. *See* Water Code § 13242(b) (program to achieve standards must include "[a] time schedule for actions to be taken" – if no time schedule provided in Basin Plan, no authority); Basin Plan, p. IV-16 (compliance schedules only authorized for NPDES permits). The Board's authority is limited to adopting time schedules through enforcement orders.

75. Key element 4 requires that "[a]n NPS pollution control implementation program must include sufficient feedback mechanisms so that the Regional Water Board, dischargers, and the public can determine whether the program is achieving its stated purpose, or whether additional or different management practices or other actions are required." NPS Policy, p. 13. "In all cases the NPS control implementation program should describe the measures, protocols, and associated frequencies that will be used to verify the degree to which the MPs are being properly implemented and are achieving the program's objectives, and/or to provide feedback for use in adaptive management." *Id*. "[I]f the program relies upon dischargers' use of MPs, there should be a strong correlation between the specific MPs implemented and the relevant water quality requirements." *Id*., p. 12.

76. Key element 5 requires that "[t]he Regional Water Board must make clear, in advance, the potential consequences for failure to achieve a nonpoint-source pollution control implementation program's stated objectives."

Procedural Background, Environmental Review, and Approval

77. The irrigated lands regulatory program was initiated on January 1, 2003 with the Regional Board's December 5, 2002 adoption of the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands within the Central Valley Region ("Conditional Waiver").

78. On February 19, 2003, the Regional Board issued a notice of preparation of an environmental impact report addressing its agricultural waste discharge program. The notice

contemplated issuance of a draft EIR by June 1, 2004 and completion of an EIR by February 2005. Petitioners submitted comments on the scope of the contemplated EIR.

79. On July 10, 2003, the Regional Board adopted an order that rescinded its previous decisions in December 2002 adopting the Waiver. On July 11, 2003, the Regional Board issued a revised Waiver.

80. A revised Conditional Waiver was adopted in July 2006.

81. On May 26, 2006, CSPA submitted written comments on the Draft Central Valley Existing Conditions Report, released in February 2006 and finalized in December 2008.

82. In 2007, CSPA and Baykeeper filed a petition for writ of mandate challenging the 2006 Waivers and Regional Board's adoption of a Negative Declaration. The parties entered into a stipulated judgment requiring Regional Board staff to present the final PEIR to the Regional Board for certification by April 8, 2011.

83. On May 30, 2008 CSPA submitted scoping comments on the Long-term Irrigated Lands Regulatory Program and Associated Programmatic Environmental Impact Report.

84. A Notice of Availability of the Draft EIR was circulated for a 60-day public review and comment period from July 28, 2010 until September 27, 2010.

85. On September 27, 2010, Petitioners submitted extensive written comments to the Regional Board identifying numerous deficiencies in the Draft EIR's analysis of alternatives, significant impacts, and cumulative impacts, among other issues. The comments were prepared with the assistance of expert economists and expert soil and water quality consultants, and identified widespread surface water pollution and toxicity from pollution and pesticide discharges from irrigated lands.

86. On March 21, 2011, Petitioners submitted written comments on Regional Board Staff's Recommended Irrigated Lands Regulatory Program Framework ("ILRP Framework"), which proposed to weaken existing ILRP regulations of dischargers. Petitioners' comments identified minimum changes to the existing irrigated lands program necessary for the Regional Board to comply with the State's Antidegradation Policy (SWRCB Resolution No. 68-16), the State's Nonpoint

Source Policy, and the Regional Board's mandate to implement regulatory programs that comply with the applicable water quality objectives.

87. The Final PEIR was released in March 2011. The Final PEIR failed to adequately respond to public comments on the Draft EIR, including those of Petitioners, and failed to correct the deficiencies identified in those comments.

88. On April 7, 2011, the Regional Board held a public hearing and adopted Resolution No. R5-2011-0017 approving the Final PEIR. Petitioners submitted written and oral comments at the April 7, 2011 hearing opposing the adoption and certification of the PEIR.

89. At the April 2011 meeting, the Board also directed Staff to develop Orders to address discharges from irrigated lands to groundwater and surface water. Staff determined that completing this process will take up to two years. In the interim, because the existing Waiver would expire on June 30, 2011, the Board determined that the Waiver must be renewed.

90. On June 9 and 10, 2011, the Regional Board held a hearing on the Renewed Waiver, and proposed its adoption, relying on the recently certified PEIR to evaluate Project impacts. Petitioners submitted written comments explaining that the Regional Board could not rely upon the PEIR to comply with CEQA for the proposed Waiver renewal because the PEIR is legally and factually deficient. The comments identified, inter alia, the following PEIR deficiencies:

a. the PEIR fails to include a stable project description - indeed, no proposed project is included;

b. the defined objectives are inadequate;

c. the PEIR fails to identify the superior alternative;

d. the PEIR does not provide meaningful comparative analysis of the selected alternatives because the assumption that all five alternatives would be equally effective at implementing BPTC and achieving standards is unsupported by any evidence;

e. the PEIR's range of alternatives is inadequate because the Regional Board may not approve four out of five of the proferred alternatives because they would conflict with other laws, i.e. Porter-Cologne;

f. the PEIR fails to consider a reasonable range of alternatives because most of the alternatives are weighted down with components that render them ineffective;

g. the PEIR overlooks a number of important significant impacts, including impacts to recreation and aesthetics; cultural impacts re: traditional uses of salmon or other fish; the public health impacts of authorizing continued discharges of pesticides and other pollutants from irrigated lands' effluent to groundwater, and; the environmental impacts of authorizing continued discharges of metals to surface and groundwater.

h. the PEIR's analysis of many key potential impacts and the alternatives' proposed mitigations are not supported by substantial evidence including the analysis of impacts to water quality and fisheries are flawed because there is no evidentiary support for the assumption that mitigation measures proposed by each alternative would be equally effective at addressing those impacts;

i. the PEIR fails to discuss numerous cumulative impacts to water quality and fisheries habitat currently plaguing the Delta and other areas of the Central Valley;

j. the PEIR's discussion of possible agricultural impacts is inadequate because it relies on a flawed economic analysis. The economic analysis relied upon by the PEIR and staff report is substantially deficient and biased toward the least effective and coalition-preferred alternatives.

91. In addition to identifying Petitioners' concerns with the validity of the PEIR, Petitioners also provided extensive comments that the Renewed Waiver is not supported by evidence and inconsistent with State and Federal antidegradation policies, the NPS Policy, and Water Code Section 13269.

92. At the conclusion of the June 10, 2011 meeting, the Regional Board voted to adopt Resolution No. R5-2011-0032 approving the Renewed Waiver, in reliance on the Final PEIR.

93. Pursuant to Public Resources Code § 21152, on June 15, 2011, the Regional Board filed a notice of determination with the Office of Planning and Research.

94. On July 8, 2011, Petitioners filed a petition with the State Board seeking review of Resolution No. R5-2011-0017 and Resolution No. R5-2011-0032. On August 1, 2011, the State

Board provided notice that the petition for review was complete. The State Board's August 1, 2011 notice also required the Regional Board to provide the administrative record of its decision to the State Board within 30-days. At the request of the Regional Board, the State Board extended the deadline for the Regional Board to submit the administrative record until September 14, 2011. The Regional Board submitted a complete administrative record to the State Board on or about September 14, 2011. The administrative record was submitted electronically on two compact disks.

95. On April 26, 2012, the State Board dismissed the petition for review.

96. On May 18, 2012, Petitioners, Real Parties and the Regional Board entered into a tolling agreement. The tolling agreement effectively extends the deadline for Petitioners to file a petition for writ of mandate challenging Resolution No. R5-2011-0017 and Resolution No. R5-2011-0032 until approximately November of 2012.

97. Petitioners, other agencies, interested groups, and individuals participated in the administrative proceedings leading up to Respondent's approval of the Project and certification of the PEIR, either by participating in hearings thereon or by submitting letters commenting on Respondent's Notice of Preparation, Draft PEIR, Final PEIR, or proposed Renewed Waiver Project. Petitioners attempted to persuade Respondent that its environmental review and approvals did not comply with the requirements of CEQA and Porter-Cologne, to no avail. Respondent's approval of the Project and certification of the PEIR is not subject to further administrative review by Respondent and the State Board. Petitioner has availed itself of all available administrative remedies for Respondent's violations of Porter-Cologne and CEQA.

98. Petitioners have no plain, speedy, or adequate remedy in the ordinary course of law within the meaning of Code of Civil Procedure § 1086, in that Respondents' approval of the Project and associated PEIR is not otherwise reviewable in a manner that provides an adequate remedy. Accordingly, Petitioners seek this Court's review of Respondent's approval of the Renewed Waiver and certification of the PEIR, to rectify the violations of CEQA and Porter-Cologne.

99. Unless enjoined, Respondents will implement the Renewed Waiver despite their lack of compliance with CEQA and Porter-Cologne. Petitioners will suffer irreparable harm by Respondent's failure to take the required steps to protect the environment. Declaratory relief is

appropriate under Code of Civil Procedure § 1060, injunctive relief is appropriate under Water Code § 13361(c) or Code of Civil Procedure § 525 *et seq*. and a writ of mandate is appropriate under Code of Civil Procedure § 1085 *et seq*. and 1094.5 *et seq.* and under Public Resources Code § 21168.9, to prevent irreparable harm to the environment. Under Water Code § 13361(c), injunctive relief may be ordered by the Court without alleging or proving any irreparable harm or that the remedy at law is inadequate.

100. Under Porter-Cologne, pursuant to § 13330(d), in its review of findings in a Regional or State Board order, "the Court shall exercise its independent judgment on the evidence." Section 1094.5(c) of the CCP provides that in cases such as under Porter-Cologne "in which the Court is authorized by law to exercise its independent judgment on the evidence, abuse of discretion is established if the Court determines that the findings are not supported by the weight of the evidence."

101. For cases under CEQA, abuse of discretion is established if the agency has not proceeded in a manner required by law or if the determination or decision is not supported by substantial evidence. Public Resources Code § § 21168.5. Substantial evidence is defined as "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." 14 CCR § 15384(a). Substantial evidence includes facts, reasonable assumptions predicated on facts, and expert opinion supported by facts; however, it does not include argument, speculation, or unsubstantiated opinion or narrative. §§ 21080(e), 21082.2(c).

102. Respondents are threatening to proceed with implementation of the Renewed Waiver in the near future, including permitting existing dischargers to continue agricultural operations subject to the deficient requirements of the existing Waiver. Implementation of the Project will irreparably harm the environment in that dischargers will commence and/or continue to release pollution and pesticides into waters of the State without sufficient management practices in place, resulting in aesthetic, biological resource, water quality, cultural, and other environmental impacts to Petitioners and their members. A temporary restraining order and preliminary and permanent

injunctions should issue restraining Respondents from proceeding with the Project relying upon the PEIR.

FIRST CAUSE OF ACTION
(Violations of CEQA; PEIR Does Not Comply With CEQA)

103. Petitioners hereby reallege and incorporate all of the above paragraphs as if fully set forth herein.

104. CEQA requires the lead agency for a project to prepare an EIR that complies with the requirements of the statute. The lead agency also must provide for public review and comment on the project and associated environmental documentation. An EIR must provide an adequate project description and sufficient environmental analysis such that decision-makers can intelligently consider environmental consequences when acting on proposed projects.

105. Respondent violated CEQA by certifying a PEIR that is inadequate and fails to comply with CEQA, and by approving the Renewed Waiver in reliance on a deficient EIR. Among other things, Respondent:

a. Failed to provide an adequate, stable and consistent description of the Project – indeed, no proposed project is included in the PEIR;

b. Failed to adequately define the Project's objectives;

c. Failed to identify the environmentally superior alternative;

d. Failed to provide meaningful comparative analysis of the selected Project alternatives because the PEIR's assumption that all five alternatives would be equally effective at implementing best practicable treatment or control ("BPTC") and achieving water quality standards was unsupported by substantial evidence;

e. Failed to provide an adequate range of alternatives because four out of five of the proferred alternatives in the PEIR conflict with other laws, including the Porter-Cologne Water Quality Control Act, Water Code § 13000 et seq.;

f. Failed to consider a reasonable range of alternatives because most of the alternatives are weighted down with components that render them ineffective;

g. Overlooked a number of important significant environmental impacts, including impacts to recreation and aesthetics; cultural impacts regarding traditional uses of

salmon or other fish, the public health impacts of authorizing continued discharges of pesticides and other pollutants from irrigated lands' effluent to groundwater, and; the environmental impacts of authorizing continued discharges of metals to surface and groundwater.

h. Failed to support the analysis of many key potential impacts and the alternatives' proposed mitigations with substantial evidence. For example, the PEIR's analysis of impacts to water quality and fisheries are flawed because there is no evidentiary support for the assumption that mitigation measures proposed by each alternative would be equally effective at addressing those impacts;

i. Failed to discuss numerous cumulative impacts to water quality and fisheries habitat currently plaguing the Delta and other areas of the Central Valley; and

j. Failed to provide an adequate discussion of possible agricultural impacts because the PEIR relies on a flawed economic analysis. The economic analysis relied upon by the PEIR and staff report is substantially deficient and biased toward the least effective and coalition preferred alternatives.

106. As a result of the foregoing defects, Respondent prejudicially abused its discretion by certifying an EIR that does not comply with CEQA and by approving the Renewal Project in reliance thereon. Accordingly, Respondent's certification of the EIR and approval of the Project must be set aside.

SECOND CAUSE OF ACTION
(Violations of CEQA; Inadequate Findings)

107. Petitioners hereby reallege and incorporate all of the above paragraphs as if fully set forth herein.

108. CEQA requires that a lead agency's findings for the approval of a project be supported by substantial evidence in the administrative record. CEQA further requires that a lead agency provide an explanation of how evidence in the record supports the conclusions it has reached.

109. Respondent violated CEQA by adopting findings that are inadequate as a matter of law in that they are not supported by substantial evidence in the record, including, but not limited to, the following:

a. The determination that certain impacts would be less than significant and/or that adopted mitigation measures would avoid or lessen the Project's significant effects on the environment, including but not limited to impacts on recreational, tourism, and beneficial uses, cultural impacts regarding traditional uses of salmon and other fish, public health impacts of authorizing continued discharges of pesticides and other pollutants from irrigated lands effluent to groundwater, impacts to fisheries including cumulative impacts, and possible agricultural impacts;

b. The determination that alternatives to the Project and proposed mitigation measures that would have avoided or lessened the significant impacts of the Project were infeasible, including but not limited to the no-Project alternative;

c. The determination that overriding economic, legal, social, technological, or other benefits of the Project outweighed its significant impacts on the environment

110. As a result of the foregoing defects, Respondents prejudicially abused their discretion by making determinations or adopting findings that do not comply with the requirements of CEQA and approving the Project in reliance thereon. Accordingly, Respondent's certification of the EIR and approval of the Project must be set aside.

THIRD CAUSE OF ACTION
(Porter Cologne – Inconsistent With Antidegradation Policy)

111. Petitioners hereby reallege and incorporate all of the above paragraphs as if fully set forth herein.

112. The Regional Board shall comply with state policy for water quality. Water Code § 13146, 13247.

113. The Regional Board's finding that the Renewed Waiver complies with Resolution No. 68-16's BPTC requirement is not supported by the weight of the evidence. The Regional Board's administrative record does not contain any evidence regarding what, if any, measures have been implemented by any dischargers or whether such measures amount to BPTC.

114. The Renewed Waiver relies on downstream regional monitoring to determine whether irrigated lands dischargers will implement Resolution No. 68-16's BPTC requirement. The absence of any farm-specific treatment controls and the omission of any farm–specific surface or groundwater quality monitoring to determine the effectiveness of those measures means the Regional Board does

not know and will not know whether any measures installed by any discharger are BPTC. Numerous expert commenters submitted testimony to the administrative record confirming that it is not feasible for the Regional Board or any other person to determine based on ambient downstream monitoring whether upstream dischargers have installed BPTC levels of treatment. *See* April 7, 2011 presentations of former Regional Board staff Jo Anne Kipps, Richard McHenry and Steven Bond; Comments of Matt Hagemann, P.G. (Sept. 27, 2010), attached hereto under Exhibit 1; Comments of G. Fred Lee, Ph.D., *et al*. (Sept. 25, 2010); Comments of Steven Bond, P.G., C.E.G., C.H.G. (Sept. 27, 2010). The Regional Board does not explain how regional monitoring would suffice to determine whether upstream measures are BPTC or the presence and extent of upstream degradation. *See* Staff Report, p. 116.

115. By renewing the Waiver, the Regional Board continues its failure to apply Resolution No. 68-16 to tens of thousands of dischargers of toxic and other pollutants that are impairing vast swaths of the State's inland waters. Rather than comply with Resolution No. 68-16, the Renewed Waiver amounts to a Valley-wide license to degrade water. The Regional Board's determination that the Renewed Waiver is consistent with Resolution No. 68-16 is not supported by the weight of the evidence. The Regional Board's failure to implement Resolution No. 68-16 in issuing the Renewed Waiver is contrary to law by violating its duties under both Water Code § 13146 and § 13247.

FOURTH CAUSE OF ACTION
(Porter Cologne – Inconsistent with Nonpoint Source Policy)

116. Petitioners hereby reallege and incorporate all of the above paragraphs as if fully set forth herein.

117. The Regional Board shall comply with state policy for water quality. Water Code §§ 13146, 13247.

118. The Regional Board's finding that the Renewed Waiver complies with the NPS Policy is not supported by the weight of the evidence. The Regional Board's administrative record does not contain any evidence that the Renewed Waiver is consistent with all five key elements of the NPS Policy.

119. The Regional Board failed to demonstrate with the weight of the evidence that the Renewed Waiver is consistent with Key element 1 of the NPS Policy. The weight of the evidence

does not demonstrate that the Renewed Waiver addresses irrigated lands discharges in a manner that achieves and maintains water quality objectives and beneficial uses and complies with the Antidegradation Policy.

120. The Regional Board failed to demonstrate with the weight of the evidence that the Renewed Waiver is consistent with Key element 2 of the NPS Policy. The Renewed Waiver does not include a description of the management practices and other program elements that are expected to be implemented to ensure attainment of the implementation program's stated purpose, the process to be used to select or develop management practices, and the process to be used to ensure and verify proper management practice implementation. The weight of the evidence is insufficient for the Regional Board to make a determination that there is a high likelihood the identified management practices will be successful. There is no evidence for the Regional Board to show that management practices are tailored to specific irrigated farms. Nor is there any evidence that management practices being implemented, or to be implemented have been successfully implemented in comparable circumstances. No dischargers have provided any evidence to the Regional Board documenting the efficacy of any management practices implemented by specific dischargers.

121. Although acknowledging by its terms that irrigated lands dischargers would not achieve water quality objectives in the foreseeable future, the Regional Board failed to include specific time schedules for compliance with the objectives in the Renewed Waiver as required by Key element 3 of the NPS Policy. The Renewed Waiver makes no effort to establish a specific time schedule for irrigated lands dischargers to come into compliance with applicable water quality objectives. The Renewed Waiver also does not include any quantifiable milestones to implement any reasonable schedule of compliance.

122. The Regional Board failed to demonstrate with the weight of the evidence that the Renewed Waiver is consistent with Key element 4 of the NPS Policy requiring sufficient feedback mechanisms so that the Regional Board, dischargers, and the public can determine whether the program is achieving its stated purpose, or whether additional or different management practices or other actions are required. Because the Renewed Waiver does not generally require identifying and monitoring specific management practices on specific irrigated lands, the Renewed Waiver does not

describe the management practices that are being used. Likewise, neither the Renewed Waiver nor the weight of the evidence describes a "strong correlation" between the management practices and achieving water quality standards. There is no evidence that the Regional Board, a discharger or the public can determine that a management practice is effective without reports from the discharger that the management practice has been properly implemented and monitoring to confirm the management practice has reduced pollution.

123. Because the Renewed Waiver continues to rely on non-discharger coalitions, and does not require individual dischargers to report on or monitor their individual management practices, the Regional Board failed to demonstrate with the weight of the evidence that the Renewed Waiver is consistent with Key element 5 of the NPS Policy. Rather than make clear in advance the potential consequences of an entire geographic area's failure to achieve water quality objectives, the Renewed Waiver obfuscates the consequences to individual dischargers who join a coalition but refuse to implement effective management practices. There are no clear consequences of any failures by coalitions. No coalition or discharger takes seriously the notion that a coalition will be dissolved for failing to comply with the program's requirements. In essence, the coalition-based alternatives require the Regional Board to dissolve an entire watershed program – with nothing in place to back it up once it is gone. Likewise, the consequences of failure to any actual discharger are not clear because the Renewed Waiver does not include monitoring of the individual dischargers. Without management practice effluent data and only sporadic site inspections by staff, there are no clear consequences for noncompliance by individual dischargers.

FIFTH CAUSE OF ACTION
(Porter Cologne –Findings Under Water Code § 13269)

124. Petitioners hereby reallege and incorporate all of the above paragraphs as if fully set forth herein.

125. The Regional Board may only waive reports of waste discharge ("RWDs") and/or WDRs if the agency determines, after a hearing, that "the waiver is consistent with any applicable state or regional water quality control plan and is in the public interest." Water Code § 13269(a). The Regional Board failed to demonstrate with the weight of the evidence that the Renewed Waiver is consistent with Basin Plan, including the Antidegradation Policy and NPS Policy.

126. The Regional Board failed to demonstrate with the weight of the evidence that the Renewed Waiver is consistent with the public interest.

127. The Regional Board relied upon five key elements to success in support of the agency's findings required by Section 13269. None of the five elements are supported by the weight of the evidence in the record.

128. The first element relied upon by the Regional Board is that "[t]hird-party lead or coalitions groups, as opposed to Central Valley Board lead, … take advantage of local knowledge and administrative/cost efficiencies in dealing with a few groups versus thousands of individual operations." There is no evidence coalition groups have successfully used their purported "local knowledge" to secure and verify implementation of management measures at the farm level and quantitatively reduce the mass loading of agricultural contaminates. Nor is there any evidence of cost efficiencies that would materialize if coalitions actually instituted a comprehensive program that successfully complied with regulatory requirements and held farmers accountable for implementing management measures and reducing pollutant loading.

129. The second element relied upon by the Regional Board is that a irrigated lands discharge program can effectively rely upon "[r]egional surface and groundwater quality management plans, as opposed to individual water quality management plans, to minimize paperwork/administrative burdens while clearly defining the expectations and approach for addressing water quality problems." Staff Report, p. 2. There is no evidence to support this conclusory statement. Avoiding paperwork is simply a euphemism for not collecting information. There is no evidence that the Board can regulate 30,000 farms without at some point gathering information from them about their pollution discharges. The notion that the requisite information becomes less bureaucratic and involves less paperwork by inserting fictitious entities – with their own layers of management and paperwork – between the Regional Board and the dischargers is nonsensical. And there is no explanation as to how plans devised on a regional basis can clearly define expectations of all relevant dischargers in that area. The PEIR acknowledges that "[t]he appropriate management practice is typically selected on a site-specific or property-specific basis." PEIR, p. 3-9. The Regional Board's Staff Report admits that "[w]ith regard to selection of measures

and practices, the Central Valley Water Board and USEPA recognize that there is often site-specific, crop-specific, and regional variability that affects the selection of appropriate management measures, as well as design constraints and pollution-control effectiveness of various practices." Staff Report, p. 66-67. Only by addressing site-specific measures that are at least BPTC and assure compliance with standards can expectations and water quality measures be clearly defined. To rely exclusively on regional management plans rather than farm-specific management plans, the Board will only continue to obscure individual discharger's actions or, more likely, inactions.

130. The third element relied upon by the Regional Board is that a program is beneficial if it relies upon "[r]egional surface and groundwater quality monitoring, as opposed to individual or no water quality monitoring, to take advantage of cost efficiencies in coordinating with other monitoring efforts while providing sufficient information to characterize water quality." The weight of the evidence does not demonstrate that regional monitoring miles downstream from a farm's discharge location would characterize that discharger's water quality. The weight of the evidence does not demonstrate that any regional monitoring effort to date has reduced any irrigated lands pollution in the Central Valley. The weight of the evidence demonstrates that monitoring of actual discharge points is necessary to achieve water quality objectives and protect the public interest because upstream waterways are disproportionally important as their increased energy inputs, higher invertebrate production, spawning, nursery and rearing habitat and lower discharge make these smaller aquatic systems vital to the overall health of the aquatic system. Larval fish and their food supplies found in these areas also are particularly vulnerable to adverse impacts of pesticides and other pollutants. Monitoring of irrigated lands at the edge-of-field is crucial for evaluating the presence of BPTC and determining if recommended management practices are being implemented properly or if benefits from adopted practices are actually being realized.

131. The Regional Board's findings under Section 13269 are not supported by the weight of the evidence because the Regional Board completely ignores irrigated land discharges adverse impact on groundwater.

132. In making the findings required by Section 13269, the Regional Board relied upon rationales that are contravened by the weight of the evidence. As a result, the findings must be vacated and remanded to the Regional Board.

WHEREFORE, Petitioner prays for judgment as hereinafter set forth.

PRAYER

WHEREFORE, petitioner prays for the following relief:

1. For a stay of Respondents' decisions certifying the PEIR and approving the Renewed Waiver pending trial.

2. For a temporary restraining order and preliminary injunction restraining Respondent from taking any action to carry out any site-specific projects relying in whole or in part upon the Renewed Waiver or the PEIR pending trial.

3. For a peremptory writ of mandate, permanent injunction and declaratory relief directing:

   a. Respondents to vacate and set aside its Resolutions certifying the PEIR for the Renewed Waiver and approving the Renewed Waiver.

   b. Respondent to suspend all activity under the certification of the PEIR and approval of the Renewed Waiver that could result in any change or alteration to the physical environment until Respondents have taken actions that may be necessary to bring the certification and project approval into compliance with CEQA and Porter-Cologne.

   c. Respondent to prepare, circulate, and consider a new and legally adequate PEIR and otherwise to comply with CEQA in any subsequent action taken to approve the Renewed Waiver.

4. For the costs of suit.

5. For an award of attorney fees pursuant to Code of Civil Procedure § 1021.5 and any other applicable provisions of law or equity.

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6. For any other equitable or legal relief that the Court considers just and proper.

Dated: May 25, 2012 LOZEAU DRURY LLP

Michael R. Lozeau
Attorney for Petitioners and Plaintiffs

EXHIBIT A

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May 24, 2012

BY U.S. MAIL

Mr. Karl E. Longley, Chair
Central Valley Regional Water Quality Control
Board, Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114

RE: Notice of Intent to File Suit Under the California Environmental Quality Act and Porter-Cologne Water Quality Act Regarding Final PEIR for the Long-Term Irrigated Lands Regulatory Program and Short-term Renewal of the Coalition Group Conditional Waiver of Discharge Requirements for Discharges from Irrigated Lands

Dear Chair Longley:

I am writing on behalf of California Sportfishing Protection Alliance and California Water Impact Network ("CSPA") concerning (1) the Central Valley Regional Water Quality Control Board, Central Valley Region's ("Regional Board") adoption of the Final Program Environmental Impact Report ("PEIR") for the Long-Term Irrigated Lands Regulatory Program ("ILRP"), (2) and adoption of Resolution No. R5-2011-0032, approving the Short-term Renewal of the Coalition Group Conditional Waiver of Discharge Requirements for Discharges from Irrigated Lands, Regional Board Order No. R5-2006-0053, for an additional 24 months ("Renewed Waiver") (collectively, "Project").

Please take notice, pursuant to Public Resources Code ("PRC") § 21167.5 as well as Paragraph 3 of the Tolling Agreement entered into by the regional Board and various interested parties, that CSPA intends to file a Verified Petition for Peremptory Writ of Mandate and Complaint for Declaratory and Injunctive Relief ("Petition"), under the provisions of the California Environmental Quality Act ("CEQA"), Public Resources Code § 21000 et seq. and the Porter-Cologne Water Quality Control Act, California Water Code §§ 13000 et seq.,, against Respondent and Defendant Regional Board in the Superior Court for the County of Alameda, challenging the unlawful actions taken by the Regional Board on April 7, 2011 in (1) adopting Resolution No. R5-2011-0017 certifying and relying on the Final PEIR for the ILRP in violation of the requirements of CEQA and the CEQA Guidelines, title 14, California Code of Regulations, § 15000 et seq., and on June 10, 2011 in (2) improperly adopting Resolution No. R5-2011-0032, approving the Renewed Waiver without complying with CEQA and inconsistent with state policy for water quality control, including the State of California's antidegradation policy or "Statement of Policy With Respect to Maintaining High Quality of Waters in California," Resolution 68-16 (Oct. 28, 1968) ("Antidegradation Policy"), the State Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (May 20, 2004) ("NPS Policy"), Water Code § 13269, and the public interest.

The petition being filed will seek the following relief:

1. For a stay of the Regional Board's decisions certifying the PEIR and approving the Renewal Project pending trial.

2. For a temporary restraining order and preliminary injunction restraining the Regional Board from taking any action to carry out any site-specific projects relying in whole or in part upon the Renewal Project or the PEIR pending trial.

3. For a peremptory writ of mandate, permanent injunction and declaratory relief directing the Regional Board to:

   a. vacate and set aside its Resolutions certifying the PEIR for the Renewal Project and approving the Project.

   b. suspend all activity under the certification of the PEIR and approval of the Renewal Project that could result in any change or alteration to the physical environment until Respondents have taken actions that may be necessary to bring the certification and project approval into compliance with CEQA and Porter-Cologne.

   c. prepare, circulate, and consider a new and legally adequate PEIR and otherwise to comply with CEQA in any subsequent action taken to approve the Renewed Waiver.

4. For the costs of suit.

5. For an award of attorney fees pursuant to Code of Civil Procedure § 1021.5 and any other applicable provisions of law or equity.

6. For any other equitable or legal relief that the Court considers just and proper.

CSPA urges the Regional Board to rescind its approval of the PEIR and Resolutions Nos. R5-2011-0017 and R5-2011-0032, and all other related Renewed Waiver approvals, and prepare the adequate and appropriate CEQA documents for this Project as required by law and require reports of waste discharge and issue waste discharge requirements or waivers consistent with Porter-Cologne.

Sincerely,

Michael R. Lozeau
Attorneys for CSPA and C-WIN

PROOF OF SERVICE

I, Tony Stearns, declare as follows:

I am a resident of the State of California, and employed in Oakland, California. I am over the age of 18 years and am not a party to the above-entitled action. My business address is 410 12th Street, Suite 250, Oakland, California, 94607.

On May 24, 2012, I served a copy of the foregoing document(s) entitled:

Notice of Intent to File Suit Under the California Environmental Quality Act and Porter-Cologne Water Quality Act Regarding Final PEIR for the Long-Term Irrigated Lands Regulatory Program and Short-term Renewal of the Coalition Group Conditional Waiver of Discharge Requirements for Discharges from Irrigated Lands

on the following parties:

Mr. Karl E. Longley, Chair
Central Valley Regional Water Quality Control Board, Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114

California Rice Commission; Northern California Water Association on Behalf of Sacramento Valley Water Quality Coalition; and San Joaquin Valley Drainage Authority on Behalf of Westside San Joaquin River Watershed Coalition
c/o Theresa A. Dunham, Esq.
Somach Simmons & Dunn
500 Capitol Mall, Suite 500
Sacramento, CA 95814

San Joaquin County Resource Conservation District on Behalf of the San Joaquin County and Delta Water Quality Coalition
c/o Jennifer L. Spaletta, Esq.
Herum / Crabtree
5757 Pacific Avenue, Suite 222
Stockton, CA 95207

Southern San Joaquin Valley Water Quality Coalition; Arvin-Edison Water Storage District; Wheeler Ridge-Maricopa Water Storage District; and Semitropic Water Storage District
c/o William Thomas, Esq.
Best Best & Krieger
500 Capitol Mall, Suite 1700
Sacramento, CA 95814

California Farm Bureau Federation
c/o Kari Fisher, Esq.
2300 River Plaza Drive
Sacramento, CA 95833

Central Valley Regional Water Quality Control Board
c/o Alex P. Mayer, Esq.
State Water Resources Control Board, Office of Chief Counsel
1001 I Street, 22nd Floor
Sacramento, CA 95814

☒	**BY MAIL. By placing the document(s) listed above in a sealed envelope with postage thereon fully prepaid for First Class mail, in the United States mail at Oakland, California addressed as set forth above.**

I declare under penalty of perjury under the laws of the State of California that the foregoing

is true and correct, and that this declaration was executed May 24, 2012 at Oakland, California.

Tony Stearns

EXHIBIT B

Michael R. Lozeau (Bar No. 142893)
Richard T. Drury (Bar No. 163559)
Christina M. Caro (Bar No. 250797)
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Attorneys for Petitioners and Plaintiffs

SUPERIOR COURT FOR THE STATE OF CALIFORNIA

IN AND FOR THE COUNTY OF ALAMEDA

CALIFORNIA SPORTFISHING PROTECTION ALLIANCE, a non-profit corporation; CALIFORNIA WATER IMPACT NETWORK, a non-profit corporation, Petitioners and Plaintiffs, vs. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL VALLEY REGION, a State agency; and DOES I – X, inclusive, Respondents and Defendants.	Case No. PETITIONERS' NOTICE OF INTENT TO PREPARE RECORD (Public Resources Code section 21167.6(b)(2)) Dept.: CEQA CASE
CALIFORNIA RICE COMMISSION, a State statutory organization; EAST SAN JOAQUIN WATER QUALITY COALITION, an unincorporated association; GOOSE LAKE WATER QUALITY COALITION, an unincorporated association; SACRAMENTO VALLEY WATER QUALITY COALITION, an unincorporated association; SAN JOAQUIN COUNTY & DELTA WATER QUALITY COALITION, an unincorporated association; SOUTHERN SAN JOAQUIN VALLEY WATER QUALITY COALITION, an unincorporated association; WESTLANDS WATER DISTRICT, a water district; WESTSIDE SAN JOAQUIN RIVER WATERSHED COALITION, an unincorporated association; and ROES I–X, inclusive, Real Parties in Interests.	

Pursuant to Public Resources Code section 21167.6(b)(2), Petitioners and Plaintiffs CALIFORNIA SPORTFISHING PROTECTION ALLIANCE, a non-profit corporation; and CALIFORNIA WATER IMPACT NETWORK, a non-profit corporation, (collectively "Petitioners" or "CSPA") hereby notify all parties that Petitioners will prepare the record or proceedings ("administrative record") relating to the above-captioned action regarding Respondent and Defendant's CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD – CENTRAL VALLEY REGION, a State agency ("Respondent" or "Regional Board") unlawful adoption of Resolution No. R5-2011-0017 certifying and relying on the Final Program Environmental Impact Report ("PEIR") for the Long-Term Irrigated Lands Regulatory Program ("ILRP") in violation of the requirements of the California Environmental Quality Act ("CEQA"), Public Resources Code § 21000 *et seq*., and the CEQA Guidelines, title 14, California Code of Regulations, § 15000 et seq., and, 2) improperly adopting Resolution No. R5-2011-0032, approving the Short-term Renewal of the Coalition Group Conditional Waiver of Discharge Requirements for Discharges from Irrigated Lands, Regional Board Order No. R5-2006-0053, for an additional 24 months ("Renewed Waiver") without complying with CEQA and inconsistent with state policy for water quality control, including the State of California's antidegradation policy or "Statement of Policy With Respect to Maintaining High Quality of Waters in California," Resolution 68-16 (Oct. 28, 1968) ("Antidegradation Policy"), the State Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (May 20, 2004) ("NPS Policy"), Water Code § 13269, and the public interest.

Respondents, Real Parties in Interest and Defendants are directed not to prepare the administrative record for this CEQA action and not to expend any resources to prepare said administrative record.

Dated: May 25, 2012

LOZEAU DRURY LLP

Michael R. Lozeau
Attorney for Petitioners and Plaintiffs

VERIFICATION

I am Michael R. Lozeau, attorney for petitioners in this action. I am verifying this Petition pursuant to Code of Civil Procedure section 446. Petitioners are absent from the County of Alameda, in which I have my office. I have read the foregoing petition and complaint. I am informed and believe that the matters in it are true and on that ground allege that the matters stated in the petition and complaint are true.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Date: May 25, 2012

Michael R. Lozeau
Attorney for Petitioners and Plaintiffs

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March 21, 2011 Via e-mail

Regional Water Quality Control Board, Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670
Attn: Adam Laputz
AWLaputz@waterboards.ca.gov

Re: California Sportfishing Protection Alliance Comments on the Recommended Irrigated Lands Regulatory Program Framework

On behalf of the California Sportfishing Protection Alliance and California Water Impact Network (collectively "CSPA"), thank you for this opportunity to comment on staff's "Recommended Irrigated Lands Regulatory Program Framework." The proposed ILRP Framework is a wholesale retreat from any meaningful changes to the existing failed irrigated lands program. In the Framework, staff proposes to authorize the continued degradation of Central Valley waters by the agricultural industry without any meaningful fear of Regional Board interference. Rather than acknowledge the obvious shortcomings of the existing irrigated lands program and propose changes to the program modeled on existing successful regulatory programs implemented in California, including the industrial and construction storm water program and others, staff has chosen to mirror the dischargers' concerns that it may cost time and money for them to reduce their gross discharges of pollutants. The Regional Board cannot solve the Central Valley's irrigated lands pollution problems by continuing to avoid regulating the dischargers responsible for the pollution. That avoidance approach has not worked for the last seven years since the current program was instituted. It certainly did not work for the twenty years prior to that when the Regional Board let the agricultural industry manage its water quality impacts itself and, as a result, caused the massive impairments that continue to be generated by agricultural discharges every year.

CSPA's previous comments on the initial staff report and draft PEIR outlined the minimum changes to the existing irrigated lands program that are necessary for the Regional Board to comply with the State's Antidegradation Policy (SWRCB Resolution No. 68-16), the State's Nonpoint Source Policy and the Regional Board's mandate to implement regulatory programs that comply with the applicable water quality objectives. None of CSPA's reasonable proposals are included in the vague Framework produced by staff. Staff's new Framework actually weakens staff's previous proposal and, if adopted, will only create a program that plainly violates each of the applicable

requirements and policies. The Regional Board should reject staff's recommended Framework and instead adopt a program that incorporates the following components.

1. Third Party Coalitions Must Be Eliminated.

Third party coalitions add bureaucracy, obfuscate information the Regional Board needs to collect and evaluate, create permanent lobbies to weaken or undermine any true regulation of farm dischargers (the proposed Framework being a case in point), and cannot be effectively enforced. The Regional Board has the duty to implement Porter-Cologne and to assure that farm dischargers do not unreasonably degrade and pollute the Central Valley's waters. *See* Water Code §§ 13146, 13247. The perpetuation of fictional coalition groups is a primary reason the Regional Board has failed to carry out its duties over the last seven years to protect water quality from irrigated agriculture waste discharges. Staff acknowledges that the existing coalitions have not succeeded in demonstrating any implementation of farm management practices designed to protect water quality and the regional data collected to date shows wide spread and prolonged violations of water quality objectives and no discernable progress in bringing the Central Valley waters into compliance. *See* Staff Report, p. 10 ("a number of factors that are not well known, including (1) the extent to which growers have already implemented management practices to protect water quality; [and] (2) whether the third-party framework will be successful or greater direct Board oversight will be required. . .").

Staff's Framework relies on a number of fallacies regarding the existing coalitions and entirely unrealistic premises about the Regional Board's ability to adjust to coalition shortcomings. For example, a typical head-in-the-sand proposal included in the Framework includes that "[a]ny requirements or conditions not fulfilled by the third party are the responsibility of the individual discharger participant to fulfill." Framework, p. A-10. This is almost meaningless in the context of a framework that does not require anything of individual dischargers, instead gearing its requirements and conditions to the coalitions. Even assuming some requirements apply to individual growers, staff cannot identify and has not exhibited any practicable ability to follow through on this notion and hold any individual grower accountable under a coalition-based program. The only actual response that staff could take is to eliminate a coalition when it fails and that is not a realistic outcome given that the entire program is proposed to continue to be based on abstract coalitions.

The absurdity of the Framework's reliance on coalitions is highlighted by staff's strained effort to make believe notices of violation passed on to some individual, unknown, coalition members by the coalition itself somehow stands in for a rational enforcement mechanism. *Id*., p. A-10. This abdication of regulatory responsibility is not a reasonable or effective method to enforce the pervasive water quality violations already afflicting the Central Valley. Staff even envisions adding another layer of non-discharger entities to the mix, suggesting in the Framework to "[e]nsure that any activities conducted on behalf of the third party by a subsidiary group (e.g., subwatershed group) meet Board requirements" and that "[t]he third party must assume responsibility for any activities conducted on the third party's behalf." *Id*., A-12. In other

words, another layer of unidentified, non-dischargers for the Board to peel away in order to address actual dischargers. One has to ask; can this scheme be any less enforceable?

2. <u>All Agricultural Dischargers Must Prepare an Individual Farm Water Quality Management Plan (FWQMPs) Available to the Regional Board and the Public</u>.

Instead of proposing a scheme that would eliminate the veil of secrecy erected by the Coalitions over what, if anything, their members have been up to over the last seven years, staff pays lip service to individual farm management plans, proposing that a watered down plan be prepared only if the discharger happens to be in a Tier 3 watershed and only "if the Central Valley Water Board determines that adequate progress in the implementation of the regional GQMP or SQMP has not been made." Framework, p. A-16. This is another way of saying there will be no farm specific management plans. The Executive Officer and Board already have this authority and it has never been used. The Regional Board already is lacking, even after seven years, any evidence that any progress has been made by any coalition group members to implement in any significant way any pollution control measures.

The Regional Board should cut to the chase and not warrant another decade of delay waiting (or more accurately wishing) the dischargers will save the Board from its own duty to act. There is no reason that the Regional Board should not require all farm dischargers to prepare a farm-specific FWQMP. Nor should the Regional Board allow a farm discharger to prepare a plan and then delay for five years before determining whether the plan should be changed or improved. See *Framework*, p. A-16. And, although CSPA initially agreed it may make sense to allow FWQMPs to remain on the farm, and available to the Regional Board and the public, upon request, CSPA now believes that a copy of all the FWQMPs should be submitted to the Regional Board electronically (e.g., through an online database system similar to SMART, which serves the industrial and construction stormwater regulatory program). Given staff's proposal, it is clear to CSPA that any expectation that the Regional Board itself might follow-up on ascertaining the contents of a significant number of FWQMPs is unlikely and only by making this essential information about what is actually happening in the field readily available to the public, especially researchers and advocacy groups, will assure that the dischargers prepare effective FWQMPs consistent with appropriate criteria.

The State Board's Policy For Implementation And Enforcement of The Nonpoint Source Pollution Control Program (May 20, 2004) ("NPS Policy") reliance on individual discharger's assessment of their pollution contribution is worth repeating: "[a] first step in the education process offered by these programs often consists of discharger assessment of their lands or operations to determine NPS problems, followed by development of a plan to correct those problems." NPS Policy, p. 11 (emphasis added). The Policy continues, emphasizing that "[management practices] must be tailored to a specific site and circumstances, and justification for the use of a particular category or type of MP must show that the MP has been successfully used in comparable

circumstances. If an MP has not previously been used, documentation to substantiate its efficacy must be provided by the discharger." NPS Policy, p. 12 (emphasis added). The Regional Board has to stop putting off this first step and require FWQMPs be prepared by every discharger within 6 months of the termination date of the current waiver.

Staff's proposed farm evaluations are not sufficient to identify the implementation of best practicable treatment or control (BPTC) or assure adequate protection of water quality. It would appear from the sparse description of the evaluations' proposed contents and the proposed use of templates that the evaluations will be cursory and not provide details about specific measures and the rationale, if any, behind them. Framework, p. A-16. The evaluations should be elevated to full FWQMPs with sufficient detail for Board staff or any third party reviewer to determine whether the described measures are adequate for the type and size of farm being addressed. Although further details should be provided, the outline of the FWQMP contents proposed by staff appear to be a good start and should be required of all dischargers without contingencies. *See* Framework, p. A-32.

3. The Three Tiers Should Be Identified Now.

CSPA does not have any objection to the Regional Board using a tiered system. We agree that the tiers are a rational mechanism to: adjust monitoring requirements; assist farm dischargers in determining the level of management measures necessary to protect water quality and, where waters are of high quality, meet BPRC; and assist the Regional Board in prioritizing inspections and enforcement actions. However, the information to specifically designate appropriate tiers is available now. Namely, any waterbody already subject to a Regional Water Quality Management Plan is already impaired and should be designated Tier 3. The Board also has sufficient information to specify the other two tiers of watersheds as well. *See* PEIR, pp. 3-17 – 3-18.

4. Non-Water Quality Monitoring.

Our review of the recommended Framework turns up no mention of any scheme to track in any detail whether any management practices are being implemented and maintained, especially on a farm-specific basis. Nor does the Framework provide basic information about nutrients and pesticides being applied by specific farms for the Board to evaluate whether any installed measures are appropriate. The Framework makes no improvement on the current program, which has left the Regional Board and the public entirely naïve about what, if any, measures have been implemented by irrigated agriculture throughout the Central Valley. The proposed Framework resorts to vagaries that make it impossible for anyone to comment intelligently on its merits. Rather than think through and propose specific requirements for tracking the implementation of management practices, staff throws up its hands and simply proposes to let the coalitions tell us in a few years time. Framework, p. A-28.

CSPA believes that the PEIR Alternative 4 gets this piece correct by calling for the tracking of nutrients, pesticides, and implemented management practices by each

farmer. Again, the NPS Policy underscores the need for each discharger to track implementation of his/her management practices, "[i]t is important to recognize that development of a plan is only the first step in developing an implementation program that addresses a discharger's NPS pollution discharges. Implementation of the plan, including any necessary iterative steps to adjust and improve the plan and/or implementation must follow the planning stage." NPS Policy, p. 11. Leaving it entirely to the coalitions to devise this piece of the Framework will assure that the Regional Board remains in the dark about what management practices have actually been implemented in the Central Valley.

5. Regional Monitoring of Surface Water Quality, By Itself, Will Not Assure The Implementation of BPTC or Tell The Board or Public Whether Any Management Practice is Proving Effective.

If irrigated agriculture discharges waste that affects or has the potential to affect the quality of waters of the state, they like every other discharger in the state, should be required to characterize and monitor what they are discharging and be able to show that their discharge is not creating or contributing to a condition of pollution and degrading beneficial uses, whether the waters are flowing immediately adjacent to their fields or miles downstream. Staff's Framework proposes a license to pollute that, like the current program, does not mandate that any farmer reduce or eliminate a single molecule of pollution in their discharges. Instead, it resorts to wishful thinking and window dressing – producing very limited surface water quality monitoring collected by discharger representatives, miles away from the pollution sources and without a prayer of informing anyone about the merits or demerits of any management practices implemented by any specific dischargers upstream. This non-monitoring scheme is not designed to drastically curb the gross pollution that continues to impair the beneficial uses of Central Valley waters. It is designed to prolong the status quo as long as possible.

The Framework calls for a vague proposal that coalitions in their regional management plans describe the coalition's "approach for determining the effectiveness of the management practices implemented…." Framework, p. A-28. Likewise, the Framework says coalitions will "[d]evelop and implement plans to track and evaluate the effectiveness of management practices and provide timely and complete submittal of any plans or reports required by the Board." *Id*., p. A-11. The Framework also hints at coalitions "conduct[ing] required water quality monitoring and assessments and reporting the results to the Board. *Id*. *See also* p. A-20. The lack of any detail makes these generic proposals impossible to evaluate.

The Framework mentions possible field studies of some representative sites or somehow linking implementation of practices to changes in water quality. *Id*. Although some studies to evaluate management practice effectiveness would be welcome by CSPA, such isolated studies do not serve as a reasonable stand-in for measuring what is actually being implemented and achieved in the field. Even if a well thought through pilot study showed a management practice could be effective, that study says nothing about whether that practice is being implemented and maintained in any given field. As

for attempting to determine the effectiveness of a management practice by monitoring downstream receiving waters, given the regional nature of the monitoring proposed by staff, CSPA does not see how anyone could ever draw such a connection to a specific management measure. Even in those rare instances under the proposed Framework where a FWQMP may be required, staff still doesn't require any monitoring by individual dischargers. Framework, p. A-32. The only way to truly evaluate the effectiveness of a particular management practice in the real world is to monitor discharges from a sufficient number of representative farms that have implemented the practice, including pre-implementation and post-implementation samples, along with appropriate monitoring of receiving waters upstream and downstream of the area of farm discharge.

As CSPA proposed in its previous comments, within areas where Coalitions are currently required to prepare and implement a management plan, all farms within that management area that are discharging any pollutant which triggered the management plan, must prepare and implement a discharge monitoring plan for the pollutants governed by the management plan as well as basic parameters that serve as indicators of pollution discharges. The basic parameters would include, for example, flow, toxicity, total nitrogen, nitrate, total ammonia, total phosphorous, soluble ortho-phosphate, temperature, turbidity, pH, electrical conductivity, fecal coliform (if livestock is present or the land receives applications of animal manure), and any applied pesticides and metals. If no toxicity is identified in the initial year, toxicity testing could be dropped for several years. The monitoring plan would include monitoring of end-of-farm discharges at a point downgradient from areas where best management practices (BMPs) are implemented. Where possible, monitoring of surface water run-on to areas where BMPs are implemented also must be included. CSPA agrees with the proposed number of samples per season outlined in the PEIR. PEIR, p. 3-24. However, like Tier 3, sampling by Tier 2 growers should be every year. Only by direct monitoring of site-specific BMPs can the Regional Board comply with the NPS Policy, where it states that "if the program relies upon dischargers' use of MPs, there should be a strong correlation between the specific MPs implemented and the relevant water quality requirements." NPS Policy, p. 11. Likewise, discharge data of BMP effectiveness within areas known already to be degraded is necessary to implement the State Antidegradation Policy, in particular its BPTC requirement as well as its nondegradation provision. The Framework does not come close to implementing these key requirements and policies.

Even the regional monitoring proposed in the Framework falls well short of achieving staff's stated goals. Monitoring only every three years will hardly be capable of discerning trends in any reasonable period of time. Given the shifts in agricultural production and pesticide use, such an infrequent monitoring interval will not provide adequate data to detect any trends and any resulting conclusions will always be subject to debate.

As CSPA recommended in its comments on the draft Framework, there is no good reason that the irrigated lands program should be responsible for regional monitoring. No other dischargers in the region are individually responsible for conducting regional monitoring. All of the Region's dischargers should be contributing a

portion of their permitting fees toward an objective and agency-controlled (not discharger-controlled) regional monitoring program, conducted by the Regional Board and its consultants. CSPA agrees that regional monitoring is important to determining the overall health of waterways in the Central Valley. However, its inclusion in permits for irrigated lands dischargers takes away resources that need to be focused on implementing BMPs and evaluating their effectiveness at the points of discharge. It also would be fairer that all entities that discharge pollutants to Central Valley waters contribute a proportionate share of the funds necessary to conduct regional monitoring. Lastly, by consolidating that program within the Regional Board and other non-discharger agencies – rather than under the current program with inexperienced coalitions made up of discharger representatives – the objectivity of the program will be maintained. Placing regional monitoring in another program outside of the ILRP will of course free up a vast quantity of time currently spent by staff attempting to track the coalitions' various regional monitoring efforts which have failed to demonstrate the implementation of a single BPTC-level of management practices on any farm and have not established any meaningful trend that the irrigated lands program is improving water quality anywhere in the Region.

6. <u>Groundwater Monitoring</u>.

Again, the Framework resorts to vague suggestions rather than any specific proposals that the public can reasonably comment upon. For example, the Framework states that "[m]onitoring and other collected information would be used to assess the effectiveness of management practices and whether the BPTC or best efforts standard has been achieved. Additional practices/monitoring may be necessary, in an iterative process, to address water quality concerns." Framework, p. A-18. The Framework should specify that growers who qualify as Tier 2 or Tier 3 for groundwater pollution should be required to conduct individual monitoring annually as described for the Tier 3 groundwater growers in the PEIR. PEIR, p. 3-25. All growers should be required to sample all existing functional wells on their property and provide that information to the Regional Board within six months of Framework adoption to determine their tier level. The Regional Board should incorporate this data with information from the counties or Department of Public Health to identify tier areas. As for surface water monitoring, the Regional Board should take charge of regional groundwater trend monitoring, not the dischargers' coalitions.

7. <u>Compliance Schedules Are Inappropriate</u>.

Staff proposes another three years to allow third-party coalitions yet another opportunity to show that whatever they are doing is resulting in implementation of effective management practices and improved water quality. Framework, p. A-3. The dischargers already have had seven years to show whether this awkward third-party scheme would work. They have failed to demonstrate any meaningful progress. Prior to the current program, growers had at least 20 years where they claimed they were not degrading water quality. Of course, the data collected over the years proved the very opposite. Enough is enough. The Board should abandon the coalitions and establish

clear requirements for individual growers, including implementation of BPTC where appropriate to protect high-quality waters and BMPs elsewhere to protect water quality, as well as farm-specific monitoring now without any schedules of compliance. Either the coalitions have done what they said they were going to do seven years ago, and they can readily show that their members have all implemented BPTC or BMPs, or they failed, and no such measures have generally been implemented. The fact that staff is now proposing another three years is just another way of acknowledging the program has failed. Staff should hold the dischargers responsible and not give them yet another three years to begin even the basic improvements necessary to effectively address the impairment of Central Valley waters caused by irrigated agriculture.

Staff's leisurely pace for existing coalition members to indicate that they will remain enrolled under the new requirements underscores the inefficiency created by vague, third-party coalitions. Why should it take three months for coalitions to tell their existing members of the new requirements? And why would it possibly be necessary to wait an entire year for existing members to reconfirm their membership? Two and a half years to attract a few new members also is extremely long. Given the failure of the coalition approach, the Regional Board should eliminate legally fictitious middlemen and issue individual or general WDRs that require all irrigated lands dischargers to immediately implement best management practices that are protective of Central Valley waters.

On top of an unreasonable program level compliance delay, staff then further proposes to delay compliance by each of the discharger categories by another five to ten years. Framework, pp. A-24-25. Of course, staff's anticipation that every discharger will need up to another decade to comply with any reasonable requirements is another plain admission that the coalition-based program to date is an utter failure. The dischargers should be held to the guarantees made by their representatives seven years ago – that they would be effective at reducing the impacts to Central Valley waters from irrigated agriculture discharges. No additional schedule of compliance is necessary or warranted.

Staff also introduces yet another vague concept linking those very long compliance schedule recommendations to "primary focus" waters. *Id*. This appears to suggest that non-primary focus waters would be subject to even longer or open-ended compliance schedules. The program should apply to all Central Valley waters.

8. <u>Staff's Proposed Framework Fails To Comply With The NPS Policy</u>.

Like its earlier strawman proposal, staff's new proposed Framework still fails to comply with the NPS Policy. Most importantly, staff has not placed the Regional Board in a realistic position to make the most fundamental determination required by the NPS Policy: "Before approving or endorsing a specific NPS pollution control implementation program, a RWQCB must determine that there is a high likelihood the implementation program will attain the RWQCB's stated water quality objectives." NPS Policy, p. 10. There is absolutely no evidence that an irrigated lands program relying upon third party

coalition groups has any likelihood, never mind a ***high*** likelihood of ever achieving any water quality objectives. Staff proposes a few small tweaks to the existing program, many of which, including the monitoring proposals, weaken the existing waivers. The existing program, after seven years of oversight by the Regional Board, has failed miserably. The Board staff cannot point to a single farm that has implemented BPTC. Staff certainly cannot describe or quantify the farm management practices, if any, that have been implemented throughout the Central Valley. The data collected during that seven-year period shows water quality continuing to be degraded throughout large areas of the Central Valley. Further weakening an already ineffective program does not provide the Regional Board any basis to determine that there is a high likelihood staff's Framework will achieve the program's objectives, especially meeting water quality objectives.

As the NPS Policy states, "[f]or implementation programs developed by non-regulatory parties, factors such as availability of funding, ***a demonstrated track record or commitment to NPS control implementation***, and a level of organization and group cohesion that ***facilitates NPS control implementation*** are among the critical factors that must be taken into account." NPS Policy, p. 11 (emphasis added). As for the Central Valley's coalitions, there simply is no track record of implementation of control measures. No evidence of any implementation has been provided by the coalitions or presented by staff. Similarly, although the coalitions have shown cohesion in slowing down implementation of the program and added some additional ambient monitoring to the mix, the coalitions have shown no organizational effort or cohesion ***facilitating implementation of controls*** as is required by the NPS Policy. These abject failures of the existing program and coalitions to achieve these ***critical factors*** demonstrate that the Regional Board should develop and implement the irrigated lands regulatory program into one much like the industrial and construction storm water programs.

Key Element 1.

Staff's Framework does not comply with Key Element 1 of the NPS Policy. In addition to meeting the goals of the program itself, the NPS Policy requires that the irrigated lands program's "[i]mplementation 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." NPS Policy, p. 12 (emphasis added). No such manner of addressing farm pollution is found in staff's Framework. It is clear that staff has no idea if the program will ever be effective in achieving water quality objectives and protecting beneficial uses. Indeed, they propose to extend compliance, albeit with what requirements is anyone's guess, out by another eight to 13 years. No reasonable person can project or assure compliance that far in the future. Indeed, the need to articulate such a lengthy compliance period is evidence that staff has no idea whether continuing the coalition model will ever work. Certainly, the Board cannot determine that staff's proposal for the Regional Board to continue the existing unsuccessful model for three years will assure the achievement and maintenance of water quality objectives. Seven years of failure proves otherwise.

Key Element 2.

Staff claims their proposed Framework complies with Key Element 2 of the NPS Policy. Staff claims that "[i]mplementation of the ILRP Framework requires identification of specific practices that will be used to address constituents of concern and requires tracking of management practice implementation. Proper implementation of practices will be tracked through required monitoring and evaluation." Framework, p. 27. The problem with each of these examples is that any identification and evaluation is only shared between the discharger and their relevant coalition group. The only information about measures that the Framework requires to be submitted to the Board is a presumably area-wide discussion of management measures that may be generally appropriate and a summary of the evaluations. There is no clear requirement in the proposed Framework that would assure that the Regional Board will know where and what management measures exist, nevermind their effectiveness. As for monitoring of measures, there is none. The regional monitoring will not measure the presence or effectiveness of any specific discharger implemented management measures. Without farm-specific monitoring, staff cannot reasonably be claiming to track implementation and effectiveness of practices.

The NPS Policy provides that:

> MPs [management practices] must be tailored to a ***specific site and circumstances***, and justification for the use of a particular category or type of MP must show that the MP has been successfully used in comparable circumstances. If an MP has not previously been used, documentation to substantiate its efficacy must be provided by the discharger. A RWQCB must be convinced there is a high likelihood the MP will be successful. A schedule assuring MP implementation and assessment, as well as adaptive management provisions must be provided."

NPS Policy, p. 12 (emphasis added). Nothing in the Framework tailors any management practices to specific sites or shows what, if any, management practices have been successfully used on farms in the Central Valley. To date, ***no documentation*** has been provided by any ***discharger***. Given staff's complete ignorance about what, if any, management practices have been implemented in the Central Valley, they are in no position to convince the Regional Board there is a high likelihood those unidentified practices will be successful.

Key Element 3.

Staff also is incorrect that extending compliance timelines out for another decade or more despite having already provided the coalitions seven years to demonstrate their ability to meet standards is consistent with the NPS Policy. "The time schedule may not be longer than that which is reasonably necessary to achieve an NPS implementation program's water quality objectives." NPS Policy, p. 14. The Regional Board cannot determine, based on any evidence, that additional time is reasonably necessary for

apparently recalcitrant dischargers who choose not to implement meaningful management practices to some day implement BPTC and meet the applicable water quality objectives.

Key Element 4.

Staff's description of Key Element 4 attempts to refocus this important Element on an overall program and deletes the NPS Policy's reference to specific management practices. Staff paraphrases Key Element 4 as requiring an NPS program to "include feedback mechanisms so that the Board, regulated operations, and the public can determine whether the program is effective." Framework, p. 27. The NPS Policy actually focuses much more on whether management practices are effective: "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***." NPS Policy, p. 13 (emphasis added). Staff claims that management practices will be tracked and their effectiveness evaluated. Framework, p. 27. But almost all of the information, except for what small amount may be requested by the Executive Officer, will not be available to the public. Given the vagueness of staff's Framework, it is impossible to tell whether the referenced evaluations will provide any useful information (quantitative or otherwise). The only monitoring that will occur under the Framework is regional monitoring every three years. Framework, p. A-22. Downstream monitoring on such a long interval will not assure the effectiveness of any management measures. Had such ambient monitoring provided an effective feedback tool for the public and Regional Board to evaluate management measures, the public and the Board already would be able to know what measures were in place now and what if any reductions in pollutants they may have achieved. The Board and the public (and we would surmise the coalitions themselves) obviously do not know anything about the overall presence of management practices in the Central Valley never mind their effectiveness.

Key Element 5.

CSPA is unaware of any consequences that would possibly result to a farmer who did absolutely nothing for the last seven years as long as they could say they were enrolled in a coalition. As for the coalitions, the only consequences that have resulted from their missing deadlines or not achieving any measurable water quality benefits are receiving additional extensions of time or weakening of requirements. Staff's Framework continues this tradition. Staff's list of possible consequences bears no resemblance to the actual implementation to date of the irrigated lands program. Staff claims that "the individual irrigated land operations are responsible for compliance should the third party fail to fulfill its obligations." Framework, p. 28. This is what the Regional Board indicated in the previous waivers for the last seven years. The coalitions have not complied with the requirement to meet water quality objectives. Nevertheless, not one coalition member has been called to task by the Regional Board. Although it should be, this is not a realistic consequence of staff's Framework. Staff,

like in previous waivers, again states that "failure of regional planning efforts will result in the requirement to develop and implement individual farm plans." *Id*. The coalition planning efforts already have failed and this consequence should have been triggered already. And, if the possible farm plans are parked on a shelf in the field, there will be no effective way of knowing again whether it was implemented or, if it was, whether it was adequate. Third, staff states that, "growers who do not comply under a third-party Order will be regulated individually." If the seven-year dance with the coalitions and staff's proposed Framework have made anything clear, it is that staff has no intention of regulating individual growers. In any event, this consequence also is not likely given that the Board will not have the information readily available to take action against coalition members. The only way farm dischargers will recognize any consequences of not complying with conditions of an irrigated lands program is for the Regional Board to remove the coalitions from the equation and regulate the dischargers directly.

9. <u>The Proposed Framework Guarantees Degradation Will Continue To Occur As It Has For The Last Seven Years</u>.

As CSPA emphasized in its original comments, it is not realistic for staff to assume that regional monitoring, by itself, will implement the high quality waters policy's BPTC requirement or be able to address degradation in the hundreds of miles of waterways left unmonitored by such regional schemes. Staff sticks to its desire for regional monitoring based on its assertion that such monitoring will allow them and others to determine compliance with the BPTC requirement. Framework, p. 28. The simple fact is that the regional monitoring performed to date is incapable of accomplishing the results claimed by staff. Regional monitoring does not achieve BPTC. Indeed, contrary to staff's claim, the monitoring to date has not identified one farm's management practices and whether those practices amount to BPTC. *See* Framework, p. 28. Likewise, the simple farm evaluations proposed by staff and which will be largely unavailable to staff, as well as some unidentified monitoring of measures (presumably special studies referred to elsewhere in the Framework), are so vague that they will not provide any useful information about a particular farm's effort to achieve BPTC.

Nor does staff's reliance on regional monitoring take into account the ever-changing cropping patterns and chemical applications made by farmers based on market conditions and evolving technology. These changes in crops and chemical applications often lead to adverse impacts and increased water quality degradation. One clear example is grower's observed switch to cheaper and more toxic pyrethroids, which bind to sediments. The coalition approach and regional monitoring lack mechanisms to identify and address these evolving problems. Staff's focus on regional monitoring at three year intervals assumes that agriculture is static and that ambient water quality is always linked to improvements in BMPs when in fact it could be simply measuring pollutants that have been abandoned in favor of new, equally toxic, chemicals. Regional monitoring also focuses on certain commodities, waterways and watersheds and essentially ignores others. Additionally, agricultural pollutants are often discharged during episodic events as pulse flows. The low frequency of regional

monitoring frequently fails to capture these pulses of pollutants in ambient waters. The Board cannot address the Region's widespread degradation if staff does not know what is being applied and discharged by specific farms.

The program already is replete with ineffective regional management plans that fail to provide any information about BPTC. Staff should acknowledge that failure and jump to the next step they state is appropriate to respond to that failure – individual water quality management plans with farm specific monitoring. *Id.*, p. 29. Only then will staff be able to review a specific farm and determine whether BPTC is in place and whether its discharges are degrading adjacent waters.

10. <u>The Board Has No Authority To "Extend" The Existing Irrigated Lands Waivers</u>.

The Framework proposes that the Regional Board "extend the existing irrigated lands coalition group waiver until the new Orders are issued." Framework, p. A-3. However, by its terms and as a matter of law, the existing waiver terminates as of June 30, 2011. *See* Water Code § 13269(f) ("[p]rior to renewing any waiver . . ., the regional board shall review the terms of the waiver policy at a public hearing"); 13269(a)(2) ("A waiver may not exceed five years in duration, but may be renewed by the . . . regional board"); Coalition Waiver, p. 17 ("[t]his Order . . . expires on 30 June 2011 unless rescinded or renewed by the Central Valley Water Board"). The Regional Board can only renew the waiver if the waiver still meets the criteria set forth in Section 13269 and is consistent with the Basin Plan, including the NPS Policy and antidegradation provisions. *See also* Water Code §§ 13146, 13247. As discussed above and in CSPA's previous comments, the existing waiver falls far short of the waiver criteria, is allowing discharges that are violating applicable water quality objectives, is inconsistent with the NPS Policy, and cannot meet the High Quality Waters Policy's requirement to implement BPTC. For all of these reasons, renewing the existing waiver is not in the public interest. In addition, reliance by the existing waiver on third party groups not subject to the state and local public records laws and requiring the Regional Board to request information in order for the public to access information required by the waiver is contrary to the public's right to know about discharges of pollution to the state's waters and the implementation of the waiver.

Thank you again for this opportunity to comment on staff's proposed framework. CSPA urges the Regional Board to direct staff to implement an irrigated lands program

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adhering to CSPA's recommendations and begin at last to directly address the largest source of pollutants and toxicity to the Central Valley's waters.

Sincerely,

Michael R. Lozeau
Lozeau Drury LLP
Attorneys for CSPA

Bill Jennings, Executive Director
CSPA

Letter 13 - Att E

An Economic Review of the Draft Irrigated Lands Regulatory Program Environmental Impact Report

September 27, 2010

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ECONorthwest specializes in the economic and financial analysis of public policy. ECONorthwest has analyzed the economics of resource-management, land-use development, and growth-management issues for municipalities, state and federal agencies, and private clients for more than 30 years.

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I. INTRODUCTION

The Central Valley Water Board (Board) authorized the preparation of an Environmental Impact Report for the Irrigated Lands Regulatory Program (ILRP). The ILRP regulates water discharges from irrigated agricultural lands. ILRP goals include preventing agricultural discharges from impairing receiving waters. At the Board's direction, consultants prepared the *Draft Irrigated Lands Regulatory Program Environmental Impact Report (Draft EIR)*. Appendix A to the *Draft EIR* is the *Draft Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program* (*Technical Memo*).

Michael Lozeau of Lozeau Drury LLP, contracted with ECONorthwest (ECONW) to review and provide preliminary comments on the *Technical Memo*. Specifically, he asked that we review the economic analysis described in the *Technical Memo*, including the analytical approach, simplifying assumptions, data, analyses and conclusions, to determine if it provides reliable information on which the Board can base decisions regarding the alternatives described in the *Draft EIR*. In this report we describe our preliminary findings to date. If we are asked to review additional information, or address additional topics, we may revise our critique and findings.

II. OVERVIEW OF RESULTS

The following discussion substantiates our conclusion that the *Technical Memo* developed in support of the *Draft EIR* has serious errors of omission and commission that violate the generally accepted standards of practice that apply to this type of economic analysis. Because of these errors, the report does not provide a reliable basis for understanding the full potential economic consequences of each the five alternatives the *Draft EIR* considers. It also does not fully depict the differences in potential economic consequences among the five alternatives. The various errors are interrelated but, to facilitate our discussion of them, we separate them into these six categories:

A. **The Analytical Objectives and Approach**: The study's analytical objectives and approach do not follow generally accepted guidelines. The analysts ignored standards and procedures developed by the California Department of Water Resources specifically for this type of economic analysis. The resulting analysis is flawed and incomplete, and, hence, it provides decision-makers and stakeholders with biased and unreliable descriptions of the economic outcomes likely to materialize if the Board were to implement any of the alternatives in the *Draft EIR*.

B. **Baseline**: The economic analysis described in the *Technical Memo* does not compare the alternatives against an appropriate baseline that describes potential future conditions absent implementation of each alternative. Hence, it provides an incomplete, biased representation of the alternatives' economic consequences.

C. **Management Practices**: The management practices considered in the *Draft EIR* and *Technical Memo* do not reflect the full range of options available to irrigators. They particularly exclude low-cost, high-benefit options. Hence, the *Draft EIR* and *Technical Memo* provide an incomplete and biased representation of the choices that realistically are available to irrigators or the Control Board.

D. **Costs and Benefits**: The analysis described in the *Technical Memo* incorrectly calculates the costs of adopting practices that improve water quality. The analysis also overlooks major categories of economic costs and benefits that would be affected by the alternatives. Hence, it provides an incomplete, biased representation of the alternatives' economic costs.

E. **Risk and Uncertainty**: The *Technical Memo* provides no information on how each of the five alternatives would affect the risks and uncertainty facing irrigators and others. Economic analyses of the scale and scope described in the *Technical Memo* typically include analyses of risk and uncertainty as a matter of course. The analysts' failure to comply with this generally accepted standard of practice gives decision-makers and stakeholders incomplete descriptions of the economic significance of the alternatives' outcomes.

F. **Regional Impacts**: The *Technical Memo* provides a biased and incomplete description of the regional impacts of the alternatives. The conclusions in this section emphasize negative outcomes and ignore the analytical assumptions that overstate costs and the resulting negative outcomes.

We describe each category in the following sections.

III. Analytical Objectives and Approach

The study's analytical objectives and approach do not follow generally accepted guidelines. In particular, the analysts ignored standards and procedures developed by the California Department of Water Resources specifically for this type of economic study. The resulting analysis is flawed and incomplete, and provides decision-makers and stakeholders with biased and unreliable descriptions of the economic outcomes likely to materialize if the Board were to implement any of the five alternatives in the *Draft EIR*.

The *Technical Memo* gives this description of its analytical objectives and approach:

> "The analysis of economic (and fiscal) effects for the long-term Irrigated Lands Regulatory Program (ILRP) focuses on addressing the following three analytical questions.
>
> - "How much currently is being spent annually by growers, landowners, and administering entities in the Central Valley on compliance with the ILRP pollution control implementation program?

- "What are the expected additional costs, both to growers and administering entities, of compliance with the long-term ILRP alternatives?
- "How is imposition of these additional costs expected to affect the economic viability of farming in the Central Valley? (*Technical Memo* p. 1-1)

By focusing on just these three questions, the study's authors restricted their analysis to a subset of the economic issues the Board must consider to satisfy its obligations. Hence, the *Technical Memo* cannot provide an adequate basis for the Board's consideration of these issues. The Board's responsibilities extend well beyond the narrow set of costs described in the *Technical Memo*. For example, the Board's website describes its mission as, "To preserve, enhance, and restore the quality of California's water resources, and ensure their proper allocation and *efficient use* for the benefit of present and future generations."[1] [emphasis added] The Board can assess the extent to which the *Draft EIR's* alternatives promote efficient water use only if it weighs all of their relevant economic costs and benefits, not just those that are the focus of the *Technical Memo*.

The Board's website also lists the strategic goals for California's nine water boards, including the Central Valley Board. These goals include:

- "Goal 1 - The Boards' organizations are effective, innovative and responsive."
- "Goal 2 – Surface waters are safe for drinking, fishing, swimming, and support healthy ecosystems and other beneficial uses."
- "Goal 3 – Groundwater is safe for drinking and other beneficial uses."
- "Goal 6 – Water quality is comprehensively measured to evaluate protection and restoration efforts."[2]

From an economic perspective, the analysis described in the *Technical Memo* is neither effective nor innovative given the study's limited and incomplete focus relative to the generally accepted guidelines for these types of economic analyses. We describe these guidelines below. For example, the study ignores the economic benefits of the *Draft EIR's* alternatives on drinking water, fishing, swimming, ecosystems and other beneficial uses. A comprehensive assessment of the changes in water quality brought about by the *Draft EIR* alternatives would include these and other relevant costs and benefits.

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[1] California Water Boards web site http://www.swrcb.ca.gov/centralvalley/about_us/water_boards_structure/index.shtml, accessed September 22, 2010.

[2] California Water Boards web site http://www.swrcb.ca.gov/centralvalley/about_us/water_boards_structure/index.shtml, accessed September 22, 2010.

Specific to the study at issue, the *Existing Conditions Report (Existing Conditions)* referenced throughout the *Technical Memo,* describes the regulatory setting for the economic analysis and notes the purpose of water quality regulations in California:

> "Water quality regulation and permitting processes are designed to limit the discharge of pollutants to the environment in an effort to achieve the highest surface water and groundwater quality, protect fish and wildlife and their habitats, and protect other beneficial uses (e.g., domestic and agricultural water supply and recreational resources)." (*Existing Conditions* p. 2-1)

The study's analytical approach focuses on a narrow subset of the full range of potential economic outcomes of the *Draft EIR's* alternatives, and, hence, provides limited and biased information regarding the proposed regulations' overall economic costs and benefits. Board members and others interested in furthering the Board's goals will find little useful information in the economic analysis described in the *Technical Memo*. This study does not serve these groups well.

Those interested in an unbiased and comprehensive assessment of the economic outcomes of adopting the *Draft EIR* alternatives will find the study's deficiencies especially troubling, given the fact that the study area includes a large part of California. It also includes the majority of the state's irrigated land. The study leaves uncounted many of the economic costs and benefits that would occur throughout much of the state with the adoption of the *Draft EIR* alternatives. The *Existing Conditions* describes the geographic extent of the Board's responsibilities.

> "The jurisdiction of the California Regional Water Quality Control Board, Central Valley Region … extends from the Oregon border to the northern tip of Los Angeles County and includes all or part of 38 of the State's 58 counties. … The three basins [major watersheds included in the study area] cover about 40% of the total area of the State and approximately 75% of the irrigated acreage [citation omitted]." (*Existing Conditions*, page ES-1)

An economic study of this magnitude should conform to generally accepted analytical guidelines. Many such guidelines apply here.[3] The California Department of Water Resources' *Economic Analysis Guidebook* (*Guidebook*), is particularly relevant, given the study area and topic. The *Guidebook* notes,

> "… the Department of Water Resources (DWR) has a policy that all economic analyses conducted for its internal use on programs and projects be fundamentally consistent with the federal *Economics and Environmental*

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[3] Examples include: California Department of Water Resources. 2008. *Economic Analysis Guidebook*, January; U.S. Army Corps of Engineers. 1983. *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies*. March—and 2009 Draft Update; U.S. Environmental Protection Agency. 200. *Guidelines for Preparing Economic Analyses*. EPA 240-R-00-003. September.

> *Principles and Guidelines for Water and Related Land Resources Implementation Studies* (P&G) …
>
> "It is also DWR policy to adopt, maintain, and periodically update its own Economics Analysis Guidebook, which is consistent with the P&G but can also incorporate innovative methods and tools when appropriate."
>
> "*The Economic Analysis Guidebook* (Guidebook) was developed to assist DWR economists in performing economic analyses …"(*Guidebook*, p. vii)

Comparing the approach described in the *Technical Memo* with the *Guidebook's* recommended approach shows the extent of the study's analytical deficiencies. For example, the *Guidebook* describes generally accepted methods of conducting economic analyses of public policies that affect water. The *Guidebook* describes three methods of economic analysis (*Guidebook* p. 12):

- A cost-effectiveness study identifies the least cost method of achieving the stated goals. The analysis in the *Technical Memo* is not a cost-effectiveness analysis because, as the *Memo* states, the analysis did not include information on the effectiveness of the management practices in the *Draft EIR* alternatives.
- A benefit-cost (B-C) analysis compares the social benefits of a proposed action with the social costs. The economic analysis at issue is not a B-C analysis because it considered only a subset of relevant costs and benefits. This narrow focus yields a biased and incomplete description of the direct or initial economic outcomes of adopting the *Draft EIR* alternatives.
- A socioeconomic impact (SI) analysis describes a broader set of impacts than a B-C study because it considers regional or indirect impacts in addition to direct benefits and costs. Given that an SI analysis is more comprehensive than a B-C analysis, the economic analysis in the *Technical Memo* falls far short of the generally accepted standards for SI analyses.

The approach described in the *Technical Memo* does not satisfy the *Guidebook's* standards. The *Technical Memo's* description of analytical methods also lacks foundation or citation to relevant economic literature that supports the approach.

IV. Baseline Conditions

The *Technical Memo* does not compare the alternatives against an appropriate baseline that describes potential future conditions absent implementation of each alternative. Hence, it provides an incomplete, biased representation of the alternatives' economic consequences.

Generally accepted standards applicable in this context include establishing a baseline against which analysts compare the economic outcomes of policy alternatives. Analysts calculate the amount of economic change attributed to a policy by comparing economic conditions that would result with the policy against baseline economic conditions. A properly defined baseline takes into

account economic changes that will occur for reasons other than the policy alternative. Analyses that lack a baseline, or use an improperly defined baseline, yield biased results because costs or benefits that would have otherwise occurred are mistakenly attributed to the policy alternative. The *Guidebook* describes the importance of establishing a baseline using a *with* and *without* analytical approach.

> "The objective of economic analysis is to determine if a project represents the best use of resources over the analysis period …:
>
> > The test of economic feasibility is passed if the total benefits that result from the project exceed those which would accrue without the project by an amount in excess of the project costs. It is important that the comparison be *with* and *without* rather than *before* and *after* because many of the after effects may even occur without the project and can thus not properly be used in project justification. …" (*Guidebook* p. 5)

The *Technical Memo* lacks a clear and concise description of baseline conditions. The available information indicates that analysts did not control for factors other than the *Draft EIR's* alternatives that can affect irrigators' costs of managing water quality. For example, the analysis incorrectly attributes costs of management practices previously implemented to the future costs of adopting the *Draft EIR's* alternatives. This overstates the costs of adoption.

> "Although Alternative 1 represents the continued implementation of current Central Valley Water Board policies, limited information was available to determine the extent of management practice implementation to date. Further, the existing conditions information used as a baseline for analysis dates from the early 2000s. As a result, changes from Alternative 1 relative to existing conditions do not capture implementation that has already occurred at the time of this report, and thus likely overstate the impacts of further implementation of Alternative 1." (*Technical Memo* p. 1-2)

The analysis also incorrectly attributes adoption costs to the *Draft EIR's* alternatives in cases where growers adopt management practices for reasons other than the alternatives. The authors recognize the importance of accounting for costs attributable to other factors:

> "Existing conditions corresponds to the level of water quality management practices that are in the baseline. It is acknowledged that most practices are not implemented to improve water quality but rather to provide for another agronomic or economic need. … Therefore adjustments were made to best capture costs attributable only to improvements in water quality. …."(*Technical Memo* p. 2-2)

Here they describe the adjustment:

> "Potential cost savings or other benefits from the irrigation system changes also were considered. These included estimates of savings in grower's costs for water, fertilizer, and labor and revenue increases resulting from improved crop yield and quality. These benefits were subtracted from the implementation cost of the irrigation system or management changes, so the analysis considered only the net cost to growers of implementing a change." (*Technical Memo* p. 3-1)

This "adjustment," however, ignores the fact that the management practices at issue were adopted for reasons *other than* the *Draft EIR* alternatives. Such changes belong in the baseline conditions and not the *Draft EIR* alternatives. The authors provide no citations to economic literature or other relevant sources that support such an adjustment. The resulting adjusted costs overstate the true costs of the alternatives.

Our critique of the *Technical Memo's* treatment of the alternatives' costs (see below) notes that the analysts selected some of the most expensive management alternatives available. Assuming for the sake of argument that we agree with the described adjustment—which we do not—using more realistic adoption costs would yield lower or negative "net" costs of adopting the practices in the *Draft EIR* alternatives.

Had the analysts used a *with* vs. *without* analytical approach they could have isolated the extent to which irrigators adopt management practices that have water-quality impacts, but were adopted for other reasons. For example, they may change irrigation practices from flood to drip or sprinkler systems not to improve water quality but to reduce their fertilizer and pesticide costs. The analysts acknowledge the likelihood that irrigators make such changes for purposes other than to accomplish the Board's water-quality goals. But they then do not account for these changes in a manner that yields an accurate, unbiased representation of the costs of the alternatives being considered by the Board.

A similar conclusion applies to the *Technical Memo's* treatment of various laws that affect irrigators' behavior. Chapter 2 of the *Existing Conditions* report, for example, notes that the Federal Endangered Species Act (ESA) could affect future irrigation practices. The *Technical Memo*, however, makes no provision for the potential impacts of the ESA or other laws and regulations on irrigation methods and costs. Instead, it attributes all future irrigation changes and costs to the *Draft EIR* alternatives. A *with* vs. *without* analytical approach would acknowledge that regulations other than the *Draft EIR* alternatives can influence irrigators' practices and costs in the future.

V. Management Practices

The management practices considered in the *Draft EIR* and *Technical Memo* do not reflect the full range of options available to irrigators. Instead, they consider seven practices that emphasize high-cost options and exclude low-cost, high-

benefit options. Hence, the *Draft EIR* and *Technical Memo* provide an incomplete and biased representation of the choices that realistically are available to irrigators and the Control Board.

The *Technical Memo* identifies the management practices in the analysis but provides no justification for how the analysts selected these practices.

> "Although a wide variety of management practices could be used to reduce impacts on water quality, this suite [the seven practices selected and listed in Table 2-1] of management practices is deemed sufficient from a programmatic point of view to encompass all flow path and management needs that must be addressed to reduce impacts on water quality." (*Technical Memo* p. 2-2)

The *Technical Memo* provides no assessment of how these practices were "deemed sufficient" for the analysis. More fundamentally, the authors provide no discussion of selection criteria they applied to reach their conclusion. Without this information, the Board, other decision-makers and stakeholders cannot assess the appropriateness of the selected practices. This is especially important given that, as we describe in our critique of adoption costs, the selected practices are some of the most expensive available.

As described in the *Existing Conditions* report, over 100 practices exist with proven potential to improve water quality.

> "This section provides a summary of the management and hardware actions that have been proven to provide a water quality benefit. … The single most comprehensive reference for individual management practices is the NRCS [citation omitted]. This website lists over 100 proven practices, that provide information for physical actions that apply to several of the management measure categories. Although the NRCS guides were developed for general use, they contain sufficient guidance for local implementation." (*Existing Conditions* p. 5-5)

Without information on the "deemed sufficient" selection criteria, the choice of management practices appears arbitrary, and lacks analytical rigor.

The *Technical Memo* also provides no information on the effectiveness of the management practices in the analysis.

> "Management practices were assumed to be 100 percent effective." (*Technical Memo* p. 2-1)

Assuming complete effectiveness strays outside the bounds of rational expectations. The analysts make this assumption without support or citation to relevant studies. The assumption thus appears arbitrary and devoid of analytical veracity.

Given these considerations, the standard analytical approach applicable to the *Draft EIR* and *Technical Memo* would entail describing the full range of options before the Board and their respective consequences. The *Draft EIR* and *Technical Memo* exhibit neither of these characteristics. Consequently, they do not (and cannot) provide a reliable basis for the Board to make decisions that will satisfy its obligations to "preserve, enhance, and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations".[4]

VI. Costs

The *Technical Memo* incorrectly calculates the costs associated with irrigators adopting practices that reduce their impacts on water quality. The analysis also overlooks major categories of economic costs and benefits that the *Draft EIR* alternatives would affect. Hence, it provides an incomplete, biased representation of the alternatives' overall economic costs.

The *Technical Memo* describes that the management practices in the *Draft EIR* alternatives are "relatively expensive." The report provides no information about the criteria the authors used to reach this judgment, no evaluation of the extent to which the projects included in the *Draft EIR* are more expensive than those excluded from it, and no justification for why those who constructed the alternatives selected the more expensive projects. The inclusion of more expensive projects and exclusion of less expensive ones has an important impact on the economic analysis and biases its conclusions, insofar as the large majority of the acres in the study produce field, forage, grain, and other crops whose value is lower than crops in other categories. By selecting more expensive projects, the analysis also increases the number of acres that growers take out of production as operating costs increase.

> "Some key analytical assumptions and data limitation contributed to the relatively large estimated change in acreage.
>
> "More importantly, management practices assumed to be implemented for the analysis are relatively expensive, especially for lower-revenue crops … As a result, crops such as irrigated pasture, hay, and some small grains would have difficulty supporting such costs. The analysis indicated large reductions in their acreages in the regions where those costs were incurred. "
>
> "Irrigated pasture, hay, and other field corps … accounted for more than 95 percent of the acreage reductions shown in Table 3-7. To the extent growers of these crops could identify less-expensive ways to comply, such as avoiding

[4] California Water Boards web site http://www.swrcb.ca.gov/centralvalley/about_us/water_boards_structure/index.shtml, accessed September 22, 2010.

> the use of certain pesticides, the acreage and revenue impacts would be substantially reduced." (*Technical Memo* p. 3-8, 3-9)
>
> "… acreage revenue and net income changes were *relatively sensitive to the implementation cost assumptions*. The same general conclusion applies to the results for all alternatives. If growers can identify and implement more cost-effective methods to comply with ILRP requirements, impacts on production and income can be reduced substantially, especially for lower-value field and forage crops." [emphasis added] (*Technical Memo* p. 3-19)

With this conclusion, the authors, themselves, acknowledge the underlying flaws and biases in the *Technical Memo.* These characteristics render it and its findings unsuitable as a basis for decision-making by the Board, or any other entity.

The analysts who conducted the economic work described in the *Technical Memo* apparently ignored existing models that describe economic outcomes of changes in water quality. The *Guidebook* describes two such models specific to water-quality assessments in California:

> "The maintenance of good water quality is an important project objective [and the focus of the study at issue in our critique]. The State Water Resources Control Board (SWRCB) and the Metropolitan Water District of Southern California (MWD) in cooperation with the US Bureau of Reclamation (Bureau) and other agencies have developed economic models to assess the impacts of changes in water quality." (*Guidebook* p. 37)
>
> - SWRCB Lost Beneficial Use Value Calculator estimates the lost benefits attributed to diminished water quality.
>
> - MWD Salinity Economics Impacts Model estimates regional economic impacts of changes in salinity of water sold by the Metropolitan Water District of Southern California. (*Guidebook* p. 37)

The analysis in the *Technical Memo* also overlooks major categories of costs and benefits that the *Draft EIR* alternatives will affect. Given the Board's mission and goals (which we cite above) regarding efficient use of water and protecting beneficial water uses, this omission constitutes a fatal deficiency in the study.

Improving water quality may increase irrigators' costs relative to baseline conditions—though, as we note above, the analysis in the *Technical Memo* grossly overstates these costs—but it will also generate economic benefits for other water users by lowering the costs they incur from water polluted by farm runoff. The current analysis ignores these benefits. For example, improving water quality can reduce filtration costs for downstream users. Recreational-water users, including sport and commercial fishing interests, can also benefit from improved water quality. Board members and other interested parties will find no information in the *Technical Memo* on these economic benefits of the *Draft EIR* alternatives.

Readers can look no further than the Central Valley Region's own Water Quality Control Plan (Plan) for information on the significance of beneficial water uses. Chapter II of the Plan describes these uses.

> "Beneficial uses are critical to water quality management in California. State law defines beneficial uses of California's waters that may be protected against quality degradation to include (and not be limited to) '…domestic; municipal; agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources of preserves' [citation omitted]. Protection and enhancement of existing and potential beneficial uses are primary goals of water quality planning."[5]

The *Technical Memo* provides a biased and incomplete assessment of the economic outcomes of adopting any of the *Draft EIR* alternatives. This is especially true regarding the economic benefits of the alternatives. Consideration of these benefits is essential, given the "primary goal" of water quality planning, as described by the Central Valley Region. Because of these flaws, Board members cannot not rely on the analysis and conclusions in the *Technical Memo* for a balanced, comprehensive, or informed assessment of the relevant economic outcomes of the *Draft EIR* alternatives.

VII. Risk and Uncertainty

The *Technical Memo* provides no information on how each of the five alternatives would affect the risks and uncertainty facing irrigators and others. Economic analyses of the scale and scope described in the *Technical Memo* typically include analyses of risk and uncertainty as a matter of course. The analysts' failure to comply with this generally accepted standard of practice gives decision-makers and stakeholders incomplete descriptions of the economic significance of the alternatives' outcomes.

The *Guidebook* describes the importance of accounting for risk and uncertainty in economic analyses of policies that affect water management.

> "Although it is impossible to account for all sorts of uncertainty and risk in a planning study, there are techniques that can be used to acknowledge their existence and to assign some quantitative importance to them in the analysis. These techniques include …." (*Guidebook*, p. A-17)

The economic analysis described in the *Technical Memo* violates generally accepted standard by not assessing how the *Draft EIR* alternatives affect the risks and uncertainty that irrigators and other water users face.

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[5] California Regional Water Quality Control Board Central Valley Region. 2009. The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region Fourth Edition. Page II-1.00.

VIII. Regional Impacts

The *Technical Memo* provides a biased and incomplete description of the regional impacts of the alternatives. The conclusions in this section emphasize negative outcomes and ignore the analytical assumptions that overstate costs and the resulting negative outcomes.

In spite of the fact that the analysis described in the *Technical Memo* overestimates the costs of adopting the alternatives in the ILRP, Alternatives 3, 4, and 5 yield *net positive* impacts on employment and personal income. According to the *Technical Memo*, total personal income and total regional employment would *increase* with the adoption of Alternatives 3, 4, or 5. (*Technical Memo* p. 4-35)

The Conclusions subsection of the Regional Impacts portion of the *Technical Memo* describes reasons why the analysis likely underestimated the net adverse effects of the alternatives, which overstates the positive impacts on employment and personal income. A more balanced summary of this portion of the analysis would also comment on the reasons why the analysis likely overstates—perhaps significantly—the estimated costs of the alternatives.

The analysts present their IMPLAN assessment of regional impacts without disclosing the limitations of these types of multiplier models, or the implications of these limitation for their conclusions. For example, IMPLAN and other input-output models assume a static economy, or an economy that cannot respond to economic forces and trends, e.g., increasing market pressure to improve irrigation efficiency by switching from flood to sprinkler irrigation. In this example, the IMPLAN limitation compound the deficiencies associated with the study's baseline, which we describe above.

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27 September 2010

Bill Jennings, Executive Director
California Sportfishing Protection Alliance
3536 Rainier Avenue
Stockton, CA 95204

Subject: Monitoring Requirements for Compliance with the Irrigated Lands Regulatory Program.

You've asked me my opinion in the form of several questions about water quality monitoring. These questions are within the context of the irrigated lands regulatory program that deals with farmland and the water runoff from these lands into receiving waters in the State of California.

I am a professional geologist specializing in water chemistry, water quality, groundwater, and engineering geology. I hold professional licenses and certifications issued by the State of California for these practices, and operate a private consulting business providing these services. I have more than twenty-five years experience evaluating natural and contaminant water chemistry problems and issues. Eleven of those years were working for the California State Regional Water Quality Control Board on water quality issues related to the impacts and remedies of water pollution from industrial and cultural activities. My experience includes the development, preparation, and review of hundreds of water quality monitoring programs involving surface water as well as groundwater systems. A true and correct copy of my curriculum vita is attached.

You asked if it is possible to protect the beneficial uses of waters of the State without monitoring those waters. The answer is a simple no. Protection of beneficial uses of waters of the State is function of the ability to monitor those waters to determine their quality. This done to verify their conformity to water quality standards and goals as defined in the Basin Plan.

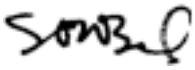
You asked if it was possible to evaluate the effectiveness of a water treatment system or of a management practice at a farm without monitoring the discharge. My answer is no. Evaluating the effectiveness of a technology or a practice requires that the change in water quality attributable to the specific practice or technology be verified. To do that a reference sample from the point of discharge and then a comparison sample taken from the same location after the technology or practice is implemented must be collected and analyzed. In actual practice, multiple samples over range of operating conditions must be collected to verify positive changes.

You also asked if it was possible to evaluate the effectiveness of a water treatment system or of a management practice at a farm from a distant downstream monitoring location. The basic answer is no. In such a case, before the samples are collected, the discharge is mixed and diluted in the receiving water with other sources of pollution from other farms. Any changes in water quality that may occur at the discharge are masked within this soup of waters and pollution and the performance of the technology or practice are essentially unknowable.

You asked if the downstream water quality of a complex watershed composed of multiple sub-watersheds, is a valid measure of the water quality in any or all of the individual sub-watersheds. My answer is no. While gross average conditions may be observed downstream, the conditions of individual upstream sub-watersheds will remain unknown. Between the downstream monitoring station and the various upstream watersheds, mixing and dilution occurs and the conditions at any upstream point are obscure to the downstream location.

I've attached a 26 May 2003 letter from me to the Chairman of Central Valley Regional Water Quality Control Board on the subject of the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands within the Central Valley Region. This letter also addresses many of the issues associated with water quality monitoring of irrigated lands.

Sincerely



Steve Bond PG, CEG, CHG
Principal, Steven Bond and Associates

Attachments

Letter 13 - Att F

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26 May 2003

Mr. Robert Schneider
Chairman, Central Valley Regional Water Quality Control Board
3443 Routier Road, Suite A
Sacramento, CA 95827-3003

Subject: Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands within the Central Valley Region, 24 April 2003

Chairman Schneider and Members of the Board.

I have reviewed the proposed Monitoring and Reporting Programs (MRP) for the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands within the Central Valley Region which was prepared for the 24 April 2003 Regional Board hearing. I prepared this letter on 23 May 2003 but was unable to transmit because I lacked various information available only on the Regional Water Quality Control Board Web Site, which was unavailable at that time. I was informed today that the deadline for comments was extended due to technical problems with that web site. I am submitting this letter on behalf of the DeltaKeeper and Water Keepers of Northern California.

I find that the proposed MRP and associated Quality Assurance Project Plan are impressive documents with many positive elements to offer for the protection of water quality. However, in certain respects the proposed MRP is too general and provides loop holes that may result in less than adequate monitoring data.

I am a professional geologist specializing in water chemistry, water quality, groundwater, and engineering geology. I hold professional licenses and certifications issued by the State of California for these practices, and operate a private consulting business providing these services. I have eighteen years experience evaluating natural and contaminant water chemistry problems and issues. Eleven of those years were working for the California State Regional Water Quality Control Board on water quality issues related to the impacts and remedies of water pollution from industrial and cultural activities. My experience includes the development, preparation, and review of hundreds of water quality monitoring programs involving surface water as

well as groundwater systems. A true and correct copy of my curriculum vita is attached.

The decades of growth and development of the Central Valley and its agricultural industry has coincided with the decline of the quality of the Central Valley waterways. Although this decline is a matter of record, discharges and runoff from irrigated agriculture and other agricultural operations have contributed to this decline in ways that are often difficult to quantify. They are not easily quantified because because critical monitoring programs were not in place to require the collection of essential data.

Water Quality Monitoring Fundamentals

Monitoring is the central supporting element of water quality protection and conservation. All actions to protect and safeguard our water resources rely on what the monitoring informs us about the conditions of the water bodies. Monitoring programs are like the physical senses; they are the faculties which we perceive the conditions of the water bodies. Without monitoring, we are blind to all but the grossest conditions in our rivers, streams, and lakes. Further, a poor or inadequate monitoring program provides us with questionable information and ambiguous clues to guide us in making intelligent decisions regarding water quality control.

A valid monitoring program usually begins as a well-reasoned plan. It will include an assessment of water flow onto and off of an area of possible or potential pollution, and contaminants. It will include an assessment of all the potential sources of pollution and contamination and identify the elements and constituents associated with the sources. The elements can include individual constituents as well as possible adverse effects of combinations of individual constituents and or conditions. These effects will be measured as toxicity. The well-reasoned plan will address the representativeness of sample collection by the method and timing of sample collection and measurement.

A well-reasoned water-quality monitoring plan is based on a thorough understanding of flow paths and physical and chemical quality of the water moving through a watershed. This will include an understanding of the variability of the flow and quality of the water over time, and at different locations within the watershed. This understanding of the watershed becomes the standard by which subsequent monitoring data can be measured or judged. Definition of existing conditions within a

watershed will require, at a minimum, the monitoring of a full annual cycle of climatic changes. However, multiple years of data are needed to address variations in the annual cycles.

A good understanding of a watershed (existing-conditions) is highly desirable; it is usually essential. Lacking good understanding of the existing-conditions, the only option left is to measure the quantity and quality of water before (background) it enters the critical area of the watershed (project area), and then conduct identical monitoring of water as it passes from the project area. In this latter case, the background water quality becomes the standard, or benchmark which the down-river water quality can be measured and judged.

Monitoring Point Locations

Valid monitoring data can only be collected from logical points of monitoring placed within the flow path of the discharges from the potential sources of pollution (the agricultural lands) into the receiving waters; the waters of the State.

Monitoring Parameters

A reasonable water-quality monitoring program will track physical and chemical constituents of interest (constituents of concern) specific to the discharge from a source and, will define the mass of contaminants discharging from the source. The constituents of concern will include each constituent reasonably expected to come from the agricultural operation. Constituents of concern will also have the potential to impair the beneficial uses of the receiving waters, or they will be indicators or surrogates of such pollutants.

Sample Collection Timing

Sample collection must coincide with the most likely period of time that discharge of pollutants would occur. In many cases pesticide and fertilizer application occurs only at certain times of the year and these times vary depending on the crop. Consequently a valid plan will address these variables.

Monitoring Cost Estimates

A wide range of alternative technologies exist to assist the responsible parties in efficient and cost conscious data collection. When attempting to assign a dollar cost to monitoring project, it is not reasonable to assume the that the most labor intensive sampling and analytical techniques should be used.

Monitoring Station versus Watershed Area

The proposed MRP is excessively lenient where it indicates that 20 square kilometers (5000 acres) of watershed will be a maximum area allotted per monitoring point. This language will tend to encourage dischargers to design monitoring plans around this figure and in doing so will undermine the quality of monitoring data.

For example, a monitoring plan with a large watershed and few monitoring points will inevitably have a number of small tributary water bodies located between a single monitoring point and a potential source of pollution. These small tributaries will alter the character and quality of the water and the sampled water will not be representative of the water quality impairment immediately down stream of a particular discharge. Such a program will deliver misleading and incomplete information with respect to receiving-water water quality conditions. This will result in contradictory or ambiguous conclusions with respect to the performance of any mitigation measures, or lack thereof, at the project area.

Emphasis should be placed on the requirement that each discharge point be monitored and that each sample collected be representative of the discharge water quality. The size of an area represented by a monitoring station should be a function of the number of discharges from a specific agricultural operation.

Summary

An adequate monitoring program is a valid program. It will assess the impacts to the state's waters from agricultural operations and it will require monitoring stations at the point(s) of discharge. A valid monitoring program will monitor for all constituents of concern as well as toxicity. It will assess the total mass of pollutants discharging from individual agricultural operations and it will also include a comprehensive ambient (background) monitoring program.

Sincerely

Steve Bond
Principal, Steven Bond and Associates, Inc.

Attachment

STEVEN R. BOND

Curriculum Vita

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Profile

Geologist / Engineering Geologist / Hydrogeologist / Aqueous-geochemist /

- More than twenty-five years applied experience in groundwater and engineering geology.
- Twenty years practical experience defining hydrogeologic flow systems in crystalline, fractured rock systems, and porous sedimentary aquifers.
- More than twenty years practical experience evaluating natural and contaminant water chemistry problems and issues.
- Eighteen years applying geochemical techniques to hydrogeologic situations in humid, and semiarid hydrogeologic regimes, including water supply, and contaminant fate and transport analyses.
- More than twenty years experience investigating and evaluating geologic and hydrogeologic hazards related to slope stability, seismic hazards, hazardous materials, mine wastes, and soil and groundwater contamination.
- Five years experience defining and modeling stream and river flow, flooding analyses, and sediment transport systems.
- Ten years experience evaluating industrial impacts to water quality

Professional Licenses	Registered Geologist, *California, USA*	# 5411
	Certified Engineering Geologist, *California, USA*	# 1841
	Certified Hydrogeologist, *California, USA*	# 0238

- Eleven years regulatory experience implementing California and U. S. water quality laws and regulations.

Professional Experience

January 1999 to Present

Steven Bond and Associates, Santa Cruz, CA, President, Principal Geologist

Conducted investigations and assessments of geologic hazards, threats to surface water and groundwater quality from various industrial and natural sources, and groundwater supply investigations. Performed litigation support in cases involving potential impacts of geologic hazards, groundwater supply and pollution, surface water pollution, and State water quality policy review. Examples of such activities and projects include the following:

- *Engineering Geology*: Conducted investigations of geologic hazards, foundation studies, liquefaction potential assessments, fault trace analyses, slope stability assessments and prepared the associated engineering geology investigation reports for development and industrial projects in Monterey, San Mateo, Mendocino, and Santa Cruz Counties. ◊ Conducted foundation suitability study, seismic evaluation, and fault trace study for resort development, Big Sur (Monterey Co.) ◊ Conducted analysis of debris-slide hazard potential of properties near Loma Mar (San Mateo Co.) ◊ Did technical analysis of slope stability and soil erosion potential of timber harvest operations, and evaluated surface-water monitoring practices (Humboldt Co.) for permitting dispute. ◊ Evaluated landslide activation hazard analysis of cliff side development in Brisbane (San Mateo Co.) ◊ Evaluated potential erosion hazards and drafted technical remedies from impacts of extrajudicial logging activities (Mendocino, Co.) ◊ Prepared engineering geologic reports for various residential development projects (Santa Cruz Co. , San Mateo Co.).
- *Groundwater Investigations, Modeling, and Remediation System Design:* Designed and implemented original subsurface investigation technics, and remediation systems for a complex hydrogeologic environment of

volcanic sediments, for Sierra Nevada Mt. community drinking water contamination (Volcano, CA). ◊ Did aquifer analysis and computer simulation (Modflow) of contaminant flow and remediation system design (groundwater extraction) for MTBE site in Turlock, CA. ◊ Did groundwater transport and pollutant fate analysis of landfill for litigation support. (Colma, CA)

- *Groundwater Supply:* Conducted groundwater use sustainability study for Sonoma Valley winery (Valley of the Moon). ◊ Did evaluation of sustainability potential and impacts from groundwater extraction in Sierra Valley (Sierra and Plumas Counties) for litigation support.
- *Policy Review and Regional Studies:* Conducted technical review and analysis of CA State water policy (State Implementation Plan, California Toxics Rule) for litigation support. ◊ Technical consultant and committee member for San Francisco Bay Copper-Nickel TMDL impairment studies (north and south).
- *Storm Water:* Conducted technical reviews, and did litigation support in cases of storm water pollution regarding the adequacy of monitoring programs, BMPs, and treatment technology application (Alameda, Humboldt, Placer, Sacramento, San Joaquin, San Mateo, San Francisco, Sonoma, Yuba counties) for the following types of industry: aggregate, cement, asphalt, metal fabrication, metal forging, steel casting, recycling, ship breaking, wood treatment, sawmills, CAFOs, vehicle maintenance, auto wrecking, POTW, precious and heavy metal mines, landfills, fueling facilities, and port loading facilities for ammonia, fertilizer and petroleum coke.
- *Mining Projects:* Evaluated drinking water quality hazards posed to confined prisoners at an operating copper mine (United Nations ICTY, Bosnia-Herzegovina). ◊ Evaluated geochemical potential to produce acid and release arsenic from re-activated gold mine (Sutter Ck. CA), acid mine drainage water quality impacts. ◊ Evaluated WQ pollution potential from abandoned mercury and gold mines (Coastal Mts, central & north CA, Sierra Nev. Mts) for litigation purposes.
- *Land Discharge Projects:* Evaluated compliance with CCR Title 23, Title 22, Chapter 15 (CA) regulations for Winery wastes (Amador County), dredging spoils disposal (Port of Stockton), Class III landfill (San Mateo Co., Shasta Co., Lake Co.). Designed monitoring programs and budgets.

March 1998 - January 1999

Fall Creek Engineering, Inc., Santa Cruz, CA, Principal Geologist

Evaluated the risk from surface and groundwater contamination to public groundwater supplies (Big Sur); performed computer simulations of flow and geochemistry of ground and surface water interaction using Modflow, Minteq. Did hydrologic studies to evaluate the flood stages, water surface profiles, and erosion potentials; constructed a computer -based hydraulic model of the river using HEC-RAS (Salinas River, Monterey Co.); prepared water quality and flood control management plans (Pajaro River). Designed and conducted soil and groundwater sampling analysis programs at various sites in Monterey and Santa Cruz Counties (leaky underground fuel tanks, wastewater disposal systems).

March 1997 - January 1998

Water For People, Denver Colorado, Consulting Hydrogeologist

Conducted a synoptic hydrogeological survey of the Bay Islands, Honduras, Central America for the Bay Island Environmental Project. Conducted a study of the islands' resources and made recommendations for a comprehensive water supply investigation of the three main islands comprised primarily of fractured metamorphic rock. Conducted local interviews, literature review and a reconnaissance level survey, field trued geology in selected areas. Evaluated island-available drilling technology, characterized water quality and supply issues for several of the island communities, prepared investigative criteria for future work, wrote report.

December 1986 - May 1998

California Regional Water Quality Control Board, Sacramento, CA. Associate Engineering Geologist

Conducted investigations of all aspects of pollutant transport in the vadose zone and groundwater and surface water. Reviewed and evaluated the geologic, hydrogeologic, geochemical, and geophysical content of professional reports. Evaluated thoroughness of surface and groundwater investigations, the completeness of remedial efforts, and validity of monitoring programs. Provided expert technical assistance to State and local agen-

cies on issues of geochemical fate and transport of pollutants, well-head protection strategies, abandoned mine investigation and remediation methods, and contaminated groundwater and soil cleanup technics. Examples of such projects include the following:

- Analysis of groundwater impacts from organic solvents and fuels in sedimentary and fractured rock terrain. Evaluated investigative methods including drilling techniques, soil, water, and vapor sampling methods, and in situ and ex-situ remedial technologies using vapor transport, groundwater capture, extraction and treatment. Did deterministic computer modeling. Technical advisor and regulator for hundreds of facilities under authority of Federal and State underground tank statutes in the counties of Alpine, Amador, El Dorado, Calaveras, Lake, Napa, Mariposa, Placer, Sierra, Solano, Stanislaus, and Tuolumne California, and in Yosemite National Park.
- Analysis of groundwater flow and pollutant transport characteristics of polluted, high density waste water (industrial acids and heavy-metals) at Davis, CA. Evaluated water quality impacts, effectiveness of groundwater extraction schemes using numerical modeling methodologies for flow, and chemical fate and transport. Co-developed in situ leaching methods of contaminated soils to accelerate cleanup rates.
- Analysis of the underlying, geochemical causes of acid mine drainage at the Penn Mine in Calaveras Co., CA. Identified and evaluated groundwater flow paths in a faulted crystalline-rock aquifer and the applicability of water quality and hazardous waste laws to the toxic discharges. Conducted a geologic and fracture mapping project and developed conceptual flow groundwater model. Evaluated acid-mine and acid-rock drainage remedial alternatives and made recommendations for their use. Developed and composed work plan for the investigation of fractured-rock hydrogeological transport, and aquatic geochemical fate of heavy metals from Penn Mine to the adjacent Camanche reservoir. Authored numerous reports and a series of successful grant proposals, prepared annual budget and obtained funding for detailed groundwater and remedial waste rock investigations.
- In companion project to the above mine waste project, developed a conceptual model for the transport mechanisms of heavy-metal laden sediment in the Camanche water-supply reservoir, developed the conceptual methodology of investigation, and managed the project. Assembled a team of limnologists from the University of California at Davis and fluid mechanical engineers specializing in sediment resuspension from University of California at Santa Barbara. Wrote a successful Federal Clean Lakes Grant proposal, and implemented the investigation at Camanche reservoir, California.

May 1986 - September 1986

U.S. Army Corps of Engineers, Sacramento, California, Engineering Geologist.

Conducted geologic and hydrogeologic investigations preparatory to the design of Deer Creek Water Supply Reservoir, Utah. Drafted groundwater investigation plan. Conducted geologic mapping. Designed monitoring wells, supervised drilling crews and well construction, conducted aquifer pumping tests.

October 1983 - September 1984

Dames and Moore, Los Angeles, California, Sedimentary Petrologist.

Conducted sedimentological investigation of near-shore sediments in western Arabian Gulf. Characterized sediment transport systems in the Arabian Gulf area of United Arab Emirates for Abu Dabi National Oil Company.

May 1982 - April 1983

U.S. Army Corps of Engineers, Portland, Oregon, Engineering Geologist.

Conducted geologic, geophysical and hydrogeologic investigations in the Columbia Gorge near Bonneville, Oregon. Conducted geophysical borehole investigation of Bonneville New Navigation Lock. Did detailed mapping of landslides, and drill core logging. Designed passive de-watering systems, and monitoring wells. Supervised drilling crews and the construction of water supply wells and monitoring wells; conducted and interpreted aquifer pumping tests.

June 1981 - December 1981

XCO, Denver Colorado, Petroleum Field Geologist (Mud logger)

Did drill core logging, conducted field screening of chemical composition of drill cores, interpreted geologic strata, and prepared drilling reports in several depositional basins in North Dakota, Colorado, and Oklahoma.

September 1976 - September 1977

U. S. Geological Survey, Menlo Park, California. Geologic Field Assistant.

Conducted geologic mapping and did geochemical sampling for Continentally Unified Strategic Assessment Program.

Education & Training

Master of Science (ABT) in Hydrogeology, Special Studies Program, California State University, Chico, California, 1985-1986

Bachelor of Arts in Geology, Humboldt State University , California, 1979 - 1981

Annual NWWA courses in Aqueous Geochemistry, Fluid Flow through Fractured Rock, In situ Fluid Extraction Systems, Ground-Water Isotope Geochemistry. 1987-1991.

Computer Modeling. EPA CEAM: MINTEQ geochemical speciation, 1990, 1991; WASP surface water flow and transport, 1991. General Sciences Corp.: SESOIL vadose zone pollutant transport, 1994, 1996; AT 123D groundwater pollutant transport, 1994, 1996; NWWA: Visual Modflow, Flowtrans, groundwater flow and transport, 1996. WHI: Modflow 2000, MTD3, groundwater and contaminant transport, 2002.

Constructed Wetlands Workshop and Seminar Series, Humboldt State University, California, 2002.

Soil Slope Stabilization, Embankment Design, National Highway Institute, Vail, CO, 2007

40 hour OSHA Health and Safety for Hazardous Waste Operations and serial 8 hour refresher courses.

Evaluated economic potential of proposed Federal Wilderness areas and abandoned mines including the Kalmiopsis Wilderness of southwestern Oregon; an ophiolite suite and recent volcanic terrain.

Professional Associations

Association of Engineering Geologists; Groundwater Resources Association of California
Northern California MTBE and Fuel Oxygenates Committee

Non-Profit Affiliations

Valley Air Trust, Central Valley, Stockton California, Board Member 1993 - 1997
BayKeeper San Francisco Bay -Sacramento Delta, Technical Advisory Committee Member 1996 - present.
California Sportfishing Protection Alliance, Technical Advisory Committee Member 2000 - present
The Abandoned Mine Alliance, Sierra City, California, Board Member 2005 - present

Expert Testimony

- Before the United States Northern District of California Court, on issues of storm water pollutants associated with industrial ammonia and urea fertilizer production and storage operations in the case of California Sport Fishing Protection Alliance vs California Ammonia Company, September 2006.

Expert Testimony cont.

- Before the United States Northern District of California Court, on issues of surface water pollution associated with logging practices in the case of EPIC vs Pacific Lumber Company, May 2006.
- Before the United States Northern District of California Court, on issues of groundwater and storm water pollution associated with lumber milling and wood treatment operations in the case of Ecological Rights Foundation vs Sierra Pacific Industries, April, October, 2002.
- Before the United States Eastern California District Court, on issues of storm water pollution, confined animal feeding operations and industrial activities in the case of WaterKeeper of Northern CA. vs L. Vandhoef, Chancellor, University of California, Davis, June, August 2001.
- Before the CA State Water Resources Control Board hearing on the Appeal of Regional Water Quality Board's Actions regarding Pacific Lumber and the Elk Creek Timber Harvest Monitoring, July 2001.
- Before the United States Northern District of California Court, on issues of storm water pollution and ship-breaking in the case of WaterKeepers of Northern CA. et al, vs U.S. Dept. of Navy and Astoria Metals Corporation, June, August 2000.
- Before the California Superior Court on issues of groundwater pollution and crude oil in the case of Thompson Chevrolet vs Chevron Corporation et al., January, July, and November 1996.
- Before the California Superior Court on issues of acid mine drainage, water pollution, and groundwater flow through fractured crystalline rock in the case of California Sportfishing Protection Alliance vs State Water Resources Control Board, June 1994.
- Before the California Senate Natural Resource and Wildlife Committee Investigative Hearing on Conflicts of Interest in the California Environmental Regulatory System, June 1992.
- Before the California Senate Natural Resource and Wildlife Committee Investigative Hearing on Acid Mine Drainage, Water Pollution, and the California Regulatory Environment, Jan. 1992.
- Before the California State Water Resources Control Board hearing on the Appeal of Regional Water Quality Boards Actions regarding the Penn Mine, October 1991.

Public Speaking and Presentations

Presentations before the State Water Resources and Regional Water Quality Control Boards.

- Presented testimony and briefs before the State and Regional Boards on specific cases of regulatory enforcement actions, (1990 - 2007)
- Mediator of formal discussions regarding disputed technical issues about groundwater quality between responsible parties, (1988 - 1998)

Workshop Presentations before professional societies, and local and State regulatory agencies:

- The application and interpretation of discreet groundwater sampling methods and data collection.
- The use and interpretation of computer modeling simulations for vadose transport and mineral equilibria
- The effects and determination of vertical gradients on pollutant transport in groundwater.
- Contaminated soil cleanup criteria based on California State Water Code, regulations and policies.
- Acid Mine Drainage issues: the geology, mineralogy, and chemistry, the environmental effects, remediation, policies, and politics.

Writings
Author of scores of reports for private organizations, NGO's, Federal, State and local Agencies, on the subjects of (a. organic and inorganic pollutant transport in surface and groundwaters, (b. polluted groundwater remediation, (c. the investigation and analysis of the potential transport of soil contamination (metals, fuels, solvents) through the vadose zone, (d. unsaturated zone characterization including vapor-phase transport and cleanup technologies, (e. acid mine drainage causes, fate, and mitigation, (f. the logical elements of water quality monitoring, (g. regulatory compliance of state and federal environmental laws by federal, state and private parties, (h. metal mobility and mineral equilibria, (i. net-vertical transport of groundwater pollutants, (j. general surface water and groundwater resource protection, (k. water budget accounting in mixed geologic environments with multiple density fluid interfaces, (l. groundwater supply evaluations, (m. reconciliation of threats to water resources and risks to human health, (n. engineering geology, geological hazard analysis.

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September 27, 2010

Mr. Michael Lozeau
Lozeau | Drury LLP
1516 Oak Street
Alameda, California 94501

Subject: Comments on the Draft Program Environmental Impact Report for the Long-term Irrigated Lands Regulatory Program

Dear Mr. Lozeau:

I have reviewed the "Draft Program Environmental Impact Report (PEIR) for the Long-term Irrigated Lands Regulatory Program (ILRP) within the Central Valley Region" ("PEIR") (July 28, 2010). I have also reviewed the "Irrigated Lands Regulatory Program Long-Term Program Development Staff Report (July 2010) and the "Draft Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program" (July 2010). I have prepared comments on the PEIR that address proposed surface water and groundwater monitoring and management practices.

1. The Alternatives are not Adequately Evaluated

The PEIR does not evaluate the relative effectiveness of the five alternatives in the control of contaminated discharges from agricultural operations in the Central Valley. Furthermore, the PEIR provides no quantitative analysis of the amount of contaminant loading to surface water and groundwater that would result from implementation of the alternatives. These are fundamental flaws of the PEIR that leave the reader with no basis to judge the merits and shortcomings of the alternatives. Because contaminant loads are not quantified, the cumulative impact to water quality cannot be predicted, as discussed in Comment (2) below. Finally, the PEIR fails to provide a basis to determine best practicable control or technology (BPTC) as required by Resolution No. 68-16 (Oct. 28, 1968).

Our brief qualitative analysis of the alternatives is as follows.

Alternative 1, because it is the status quo would fail to reduce contaminant loads and improve water quality and, because it relies on regional or watershed scale monitoring, would not allow for a determination of BPTC. To determine BPTC, monitoring and data comparison is necessary upgradient and downgradient of points of control, i.e., where measures are implemented in the field. Because of the reliance on current management practices and because only regional monitoring is to be used, Alternative 1would not result in measureable improvement to water quality and in fact foster further degradation of water quality.

Alternative 2, which includes some groundwater management practices, would not demonstrably reduce contaminant loads and improve water quality. The groundwater management practices include only token wellhead protection measures involve only the placement of dirt in berms adjacent to the wellhead to prevent movement of surface water to the wellhead. These minor improvements are already required under Title 3, California Code of Regulations Division 6 (effective May 27, 2004) for areas where pesticides are mixed, rinsed and stored. (http://www.cdpr.ca.gov/docs/emon/grndwtr/gwregsinfo0702.pdf) Implementation of these measures more broadly, i.e., at all farms, is not likely to result in significant water quality gains because the berms would only marginally protect against pesticide and nitrate transport in stormwater in the areas where wellheads are located and would not address subsurface transport of pesticides and nitrates.

No farm-scale monitoring requirements are included under Alternative 2 and therefore, a determination of BPTC is not possible. Because only token wellhead protection measures are to be undertaken, Alternative 2, like Alternative 1, would not result in measureable water quality improvements and may be just as likely to result in water quality degradation.

Alternative 3 requires farm plans that use a tiered approach to address water quality concerns. This alternative is an improvement and may result in some gains in water quality; however, because no surface water or groundwater monitoring is required, the implementation of this alternative would not result in measureable improvement to water quality and the lack of monitoring does not allow for BPTC determinations.

Alternative 4 provides for nutrient management and regional or individual monitoring under a tiered hierarchy. Whereas use of tiering is acceptable in determining the intensity of monitoring, the option to participate in regional scale monitoring would not allow for the determination of BMP effectiveness nor BPTC. Costs under Alternative 4 could also be reduced by incorporating groundwater quality information from public water supply systems into a database to compliment the data obtained from Tier 2 and Tier 3 farms that would be required to participate in regional groundwater monitoring. As with Alternative 3, Alternative 4 may provide some gains in water quality; however, those gains would not be measurable because only regional monitoring is required.

Alternative 5 requires surface water and groundwater monitoring at individual farms and would likely be most protective of water quality. Because discharger-scale monitoring

would be required, BMP effectiveness could be evaluated and a determination of BPTC could be made. As monitoring data from BMPs are evaluated, BPTC can be determined and deployed in the field.

The monitoring under this alternative, however, is duplicitous and overly burdensome. Instead, use of a tiering scheme (i.e., to reduce monitoring at low risk farms in low risk environments) would reduce costs as would better coordination between farms in fulfilling monitoring requirements. For example, if groundwater wells were to be installed, groundwater monitoring at neighboring farms could be coordinated with one farm's downgradient well serving as the adjacent farm's upgradient location. Alternative 5, while inefficient, would result in the greatest potential for water quality gains because of the monitoring that would be required at farms.

To properly evaluate the five alternatives, a quantitative estimate of the contaminant loads to surface water and groundwater needs to be integrated into Chapter 3 of the PEIR, Program Description. Additionally, consideration of each alternative's capability to meet BPTC needs to be incorporated into Chapter 3, including specification of monitoring at a scale that allows for the determination of BPTC.

2. Cumulative Impacts on Downstream Ecologic Receptors are not Assessed

The PEIR fails to consider cumulative impacts of the alternatives on ecologic receptors downstream of the agricultural discharges in the Central Valley, namely the Delta and the San Francisco Bay and Estuary. Wildlife in the Delta and the Bay at risk include, for example, special-status fish species such as the Delta Smelt and anadromous fish such as Chinook Salmon and Steelhead Trout. Clearly, contaminant loading of pesticides and nutrients to upstream waters impacts habitat for these fish and their prey yet no consideration of these or any individual species is given in Section 6, Cumulative and Growth-Inducing Impacts. The PEIR states only in Chapter 6:

> Because many of the existing effects discussed in the section "Existing Effects of Impaired Water Quality on Fish" are cumulative, it is difficult to determine the relative contribution of irrigated lands and other sources. For example, low DO in the Stockton Deepwater Ship Channel is a result of contamination from upstream nonpoint sources (possibly including agricultural runoff) and discharges from the Stockton sewage treatment plant (Lehman et al. 2004; Central Valley Water Board 2005). Application of pesticides to non-agricultural lands such as urban parks and the resultant contaminant runoff also cumulatively contribute to impacts of inputs from irrigated lands.

This level of analysis is insufficient and provides no basis for comparison of the cumulative impacts that would result from the five alternatives. Section 6 should be re-written to estimate and incorporate contaminant loads from agricultural practices on irrigated lands to both surface water and groundwater under each alternative. The contaminant loads should be compared to other contaminant loads (other agricultural operations (e.g, dairies) and industrial discharge (e.g., treated sewage discharges) that are

contributed to downstream water bodies, including the Delta and the San Francisco Bay, to predict cumulative impacts from Central Valley irrigated agricultural operations.

Cumulative effects are essential to consider, given the impact of poor water quality on downstream ecologic receptors. For example, pelagic organisms such as the delta smelt are in decline in the upper San Francisco Estuary. The decline is not only because of direct smelt mortality from entrainment at pump intakes but also because of exposure of smelt and smelt prey to toxics and nitrogen. (http://www.sciencedaily.com/releases/2010/05/100517161144.htm and http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/pelagic_organism/docs/pod_ieppodmt_2007synthesis_011508.pdf) Studies have also shown that contaminants, including pesticides, have been linked to the decline of striped bass in the Upper Sacramento River http://www.sciencedaily.com/releases/2008/12/081209100940.htm. Cumulative impacts are also important to consider in the decline of anadromous fish, where contaminants are one factor contributing to significant population reductions (see, for example PEIR p. 5.8-20)

Cumulative impacts are also important to consider in impacts on recreation. For example, the growth of water hyacinth (Eichhornia crassipes) in the Sacramento-San Joaquin River Delta as a result of increased nutrient loads (nitrogen and phosphorus). (http://www.dbw.ca.gov/PDF/Egeria/WHSciProbsExcerpts.pdf) The rapid growth of water hyacinth has resulted in impacts to boating and recreational use by impeding waterway navigation and swimming.

Despite these and other well-known and significant impacts, the PEIR fails to discuss cumulative impacts to water quality, fisheries, and recreation from implementation of the five alternatives. The failure to consider cumulative impacts stems from the fact that contaminant and nutrient loads were not quantified in the PEIR, by alternative, as noted in Comment 1. The PEIR needs to conduct a thorough assessment of cumulative impacts that will include consideration of contaminant contributions from irrigated agricultural lands to surface water and groundwater under each alternative.

3. Surface Water Monitoring Required under Alternatives 4 and 5 is Vague

The PEIR lacks fundamental detail regarding those alternatives where farm-scale surface water monitoring may be conducted (i.e., Alternatives 4 and 5). The PEIR describes Tier 2 and Tier 3 monitoring for Alternative 4 as follows (p. 3-19):

> Tier 2: Individual tailwater, stormwater, tile drainage monitoring for constituents of concern 1 year of every 5 years
>
> Tier 3: Individual tailwater, stormwater, tile drainage monitoring for constituents of concern

The PEIR describes surface water monitoring under Alternative 5 as follows:

> Under Alternative 5, each operation would be required to conduct the following monitoring and tracking for each field and submit the results to the Central Valley Water Board annually.
>
> - Discharge monitoring for constituents of concern
> - Tailwater discharges monthly.
> - Storm water discharges during the first event of the wet season (between October 1 and May 31) and once during the peak storm season (typically February).
> - Discharges of subsurface (tile) drainage systems annually. (PEIR, p. 3-28)

The PEIR is vague on how surface water monitoring practices and resultant data would be reviewed stating only that the Regional Board would review and approve monitoring plans of third parties and legal entities and would review monitoring reports (PEIR, p. 3-21). The PEIR does not specify criteria that would define acceptable practices for monitoring including use of appropriate QA/QC, use of state-certified laboratories, methodology for selection of constituents of concern, and required locations for stormwater sampling (i.e., upgradient/downgradient, pre- and post BMP). We understand the PEIR is a programmatic EIR; however, some level of detail is needed in a revised PEIR to evaluate the effectiveness of the farm-scale surface water monitoring that is proposed in Alternatives 4 and 5.

4. Public Health Impacts from Exposure to Contaminated Groundwater is not Considered

More than two million Californians have been exposed to harmful levels of nitrates in drinking water over the past 15 years and the population of those exposed keeps growing. The PEIR acknowledges the extent of nitrate contamination and includes, as Figure 5.9-17, a map that shows nitrate contamination to be concentrated in the Central Valley. Incredibly, however, the PEIR makes no attempt analyze how nitrogen-based fertilizer application in the Central Valley results in significant exposure of the public to contaminated groundwater, the health impacts of that exposure, or how implementation of any of the five alternatives would reduce or increase exposure, other than to say, for Alternative 1:

> Nutrient management would improve both surface water quality and groundwater quality by improving the use of chemicals and using improved application techniques, and by limiting the use of nutrients as fertilizer that could potentially seep to groundwater and add nitrate to the groundwater table. (PEIR, p. 5.9-14)

The assertion that ongoing nutrient management efforts would somehow improve water quality is not borne out by recent data. In fact, the status quo, as proposed in Alternative 1, has resulted in an increase, statewide, in the number of wells that exceeded the health limit for nitrates, from nine in 1980 to 648 by 2007. (http://articles.sfgate.com/2010-05-17/news/20901575_1_nitrate-contamination-water-supply-water-systems) Of 13,153 wells sampled statewide, 1,077 active and standby drinking water wells have

concentrations of nitrate above the drinking water standard of 45 mg/L. (http://www.swrcb.ca.gov/water_issues/programs/gama/docs/coc_nitrate.pdf) In Tulare County, more than 40% of private domestic water wells exceed the drinking water standard for nitrate and statewide, the majority of nitrate exceedences appear to be in the Central Valley. (http://www.swrcb.ca.gov/gama/docs/ekdahl_gra2009.pdf) On the basis of more than 25 years of data, the number of wells that exceed the drinking water standard for nitrate is growing as a percentage of all nitrate detections. (http://www.swrcb.ca.gov/gama/docs/ekdahl_gra2009.pdf) Clearly the status quo is not working and implementation of Alternatives 1 and 2 would likely lead for further increases in nitrate drinking water violations in the Central Valley.

Health effects of exposure to nitrates most notably results in methemoglobinemia or "blue baby syndrome." Toxic effects of methemoglobinemia occur when bacteria in the infant stomach convert nitrate to more toxic nitrite, a process that interferes with the body's ability to carry oxygen to body tissues. Infants with these symptoms need immediate medical care since the condition can lead to coma and eventually death. Pregnant women are susceptible to methemoglobinemia and should be sure that the nitrate concentrations in their drinking water are at safe levels. Additionally, some scientific studies suggest a linkage between high nitrate levels in drinking water with birth defects and certain types of cancer. (http://www.swrcb.ca.gov/water_issues/programs/gama/docs/coc_nitrate.pdf)

The PEIR should be rewritten to include an assessment of the potential for the public to be exposed to nitrates in drinking water from agricultural practices in the Central Valley. The assessment of each alternative should include an estimate of nitrogen loading to fields; nitrogen fate and transport in soil, surface water, and groundwater; nitrogen monitoring; and a summary nitrogen impacts to water supplies. Linking monitoring to measurement of each of the alternatives is critical. An annual assessment of the performance of the alternative that is selected should be required and use of the 13,000-well California Department of Public Health database should be required as a tool for evaluation of nitrate trends.

Sincerely,

Matt Hagemann, P.G.

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33141 E. Lerdo Highway
Bakersfield, CA 93308-9767

PARAMOUNT
FARMING COMPANY

Bus: (661) 399-4456
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July 17, 2012

VIA E-MAIL

Attn: Adam Laputz
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114
awlaputz@waterboards.ca.gov

Re: Comments Regarding the Tentative WDRs for the Eastern San Joaquin River Watershed

Dear Mr. Laputz and Members of the Board:

The Central Valley Regional Water Quality Control Board recently released for public review the tentative Waste Discharge Requirements General Order for Growers Within the Eastern San Joaquin River Watershed That Are Members of the Third Party Group ("Tentative Eastside Order") . Paramount Land Company, LLC and Paramount Pomegranate Orchards, LLC ("Paramount") own New Columbia Ranch, located along the northeastern border of the San Joaquin River, just upstream from the Mendota Pool and downstream from the historic Whitehouse Gauging Station. Paramount Farming Company, as Paramount's representative, submits the below comments on the Tentative Eastside Order.

To date, Paramount has met the requirements of the existing Irrigated Lands Regulatory Program ("ILRP") by enrolling all of its New Columbia Ranch irrigated acreage with the Westside San Joaquin River Watershed Coalition ("Westside Coalition"). A significant portion of the New Columbia Ranch is within the Columbia Canal Company service area, which is a member of the San Joaquin River Exchange Contractors Water Authority ("Exchange Contractor"). All Exchange Contractor irrigated acreage is enrolled through the Westside Coalition as well. Paramount has found significant benefits in having the whole of its New Columbia Ranch enrolled in the Westside Coalition for purposes of regulatory compliance and seeks to ensure the all ILRP compliance programs, including the Eastside Order, developed by the Central Valley Water Board allow for compliance by growers with the least amount of administrative burden possible. As such, Paramount requests revised language in the Tentative Eastside Order that excludes irrigated acreage that previously received coverage under the Westside Coalition and will continue to be covered under the Westside Coalition or the third-party representative designated for the Westside San Joaquin River Watershed Order or that enrolls for coverage under the Westside San Joaquin River Watershed Order. Section 3, paragraph 2 of the Tentative Eastside Order reads: 1

"There are some locations within the Eastern San Joaquin River Watershed where it may be more effective for owners and operators of irrigated lands that are not 'Members' to enroll under an irrigated lands regulatory program (ILRP) Order that recognizes a different third-party

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representative. In these locations, the boundaries of the third-party area overlap with boundaries of a third-party area recognized by a different ILRP Order. Growers are only required to obtain coverage under one ILRP order."

To clarify this issue, we recommend that the second paragraph of Section 3 be revised as follows:

"There are some locations within the Eastern San Joaquin River Watershed where it may be more effective for owners and operators of irrigated lands that are not 'Members,' to enroll under an irrigated lands regulatory program (ILRP) Order that recognizes a different third-party representative and for owners and operators of irrigated lands that are currently enrolled and receiving program coverage under the Westside San Joaquin River Watershed Coalition to remain covered under the ILRP Order that governs the Westside San Joaquin River Watershed. Growers are only required to obtain coverage under one ILRP Order. Irrigated acreage covered by enrollment with a third-party representative under another ILRP Order will be excluded from this Order." 1

The ILRP should be a well thought-out, meaningful endeavor that regulates those actually discharging, not that merely creates further regulation and cost. Any ILRP should properly evaluate the cost and benefits of the reporting and monitoring requirements and provide measurable goals for each level of regulation that if obtained, results in a defined, decreased level of future reporting and monitoring. Such goals provide an incentive for action and properly align program costs and benefits. The Central Valley Regional Water Quality Control Board's development and implementation of the ILRP falls short and has been a piecemeal effort to meet deadlines that has failed to engage in a meaningful cost-benefit analysis and has lacked a collaborative stakeholder process. 2

Additionally, Paramount hereby joins in and incorporates those comments submitted by the Southern San Joaquin Valley Water Quality Coalition, the Westside Coalition and the Kern River Watershed Coalition Authority.

Thank you for taking these comments into consideration. We would be happy to discuss further at your convenience.

Sincerely,

William D. Phillimore
Executive Vice President

cc: State Water Resources Control Board