3.3.20 Letter 43—Pesticide Watch, Dana Perls, Community Organizer

Comment Letter IL43

Pesticide Watch Education Fund

369 Broadway, Suite 200
San Francisco, CA 94133

415-622-0036 (ph)
415-622-0016 (fx)

info@pesticidewatch.org
www.pesticidewatch.org

Ms. Megan Smith
630 K Street, Suite 400
Sacramento, CA 95814

September 22, 2010

Dear Ms. Smith,

In response to the Modesto public information hearing on Sept 9, I am formally submitting my comments about the Draft EIR for the Irrigated Lands Regulatory Program for ICF's incorporation. I am writing on behalf of Pesticide Watch Education Fund, a state-wide non-profit which advocates on behalf of pesticide reform, and responsible governmental regulations for pesticide use.

We applaud the Regional Water Quality Control Board's focus on groundwater contamination. However, we believe this program needs to be stronger with its pesticide monitoring and reduction plans, and are concerned that this program, as it stands, is not strong enough to reduce pesticide pollution of the San Joaquin Valley's water resources. 43-1

This new program must ensure that the basic information on fertilizer and pesticide application on farms is shared by the Department of Pesticide Regulation (DPR). This information is necessary to establish a baseline to evaluate how much pesticide contamination there is and how to measure improvements in water quality and reductions in application. It will also help evaluate which farms are complying. However, there may currently not be an efficient mode of communication whereby this information will be shared. 43-2

The areas of the Valley which are already at high risk of groundwater contamination should have farm management plans which address how they will avoid exacerbating the pollution problem. This means farmers should receive assistance from groups such as UC Cooperative Extension to assess what type of treatment their farm actually needs, and how to use integrated pest management practices appropriate for their particular crop. 43-3

The program needs to have much stronger enforcement plans. We need to ensure there are concrete enforcement mechanisms which will help with stronger results. 43-4

Lastly, the proposed timeline for groundwater quality improvement is too long. People who are drinking contaminated groundwater cannot wait another ten years to see improvements.

This program EIR needs to work from the knowledge that already thousands of people in the Central Valley cannot use their local groundwater because of contamination from agriculture. The EIR needs to highlight this to ensure there are safeguards in place for farmers to be responsible for preventing further contamination, especially in areas where water is still safe. 43-5

Thank you for incorporating these suggestions into the Draft EIR. If you have any specific questions, please contact me at dana@pesticidewatch.org or 925-705-1074.

Sincerely,

Dana Perls, MCP, Community Organizer

cc: Paul Towers, Pesticide Watch

3.3.20.1 Responses to Letter 43

43-1

The comment's support will be considered in development of the Long-term ILRP. See Comment Letter 47, Response 2 and Comment Letter 5, Response 1.

43-2

See Comment Letter 99, Responses 1 and 40; Comment Letter 123, Response 67; Comment Letter 114, Response 110; and Comment Letter 96, Responses 11 and 12.

43-3

See Comment Letter 111, Responses 33 and 34 and Comment Letter 123, Response 5.

43-4

See Comment Letter 40 Response 2 and Comment Letter 123, Response 20.

43-5

See Comment Letter 14, Response 1; Comment Letter 111, Response 14; and Comment Letter 95, Response 2. Also see Master Response 7.

3.3.21 Letter 113—Sacramento Amador Water Quality Alliance, Rebecca Waegell, Coordinator

Comment Letter IL113

September 23, 2010

ILRP Comments
Ms. Megan Smith
ICF International
630 K Street, Suite 400
Sacramento, CA 95814

SUBJECT: Comments on the Draft Program Environmental Impact Report for the Central Valley Irrigated Lands Regulatory Program

Dear Ms. Smith:

As the coordinator for the Sacramento Amador Water Quality Alliance I would like to provide the following comments on the Draft Programmatic Environmental Impact Report (PEIR) for the Long Term Irrigated Lands Regulatory Program (LTILRP).

The PEIR does not analyze the preferred alternative. Given that the preferred alternative appears to have been developed by taking portions of the five alternatives it is difficult to assess the actual impact that the program might have. This concerns me given the broad range of economic impacts of the 5 alternatives. Why wasn't the preferred alternative analyzed as part of the PEIR document? 113-1

The PEIR indicates that habitat loss from the implementation of management practices would be significant, but implementation of BI0-MM-2 would reduce this impact to less than significant. Who would be responsible for paying for the cost of mitigation? Was this included in the economic analysis and if not, why not? 113-2

The Economic Analysis indicates that field crops, grain, hay, irrigated pasture and rice will suffer the greatest losses of acreage due to implementation of the LTILRP. These particular types of irrigated cropland have significant habitat benefits for a number of bird species including State-listed Swainson's hawk and Greater Sandhill crane and numerous migratory waterfowl covered under the Migratory Bird Treaty Act. Loss of agricultural lands was not analyzed in Chapter 5: Environmental Impacts and Mitigation Measures. Why was this impact not analyzed? 113-3

The Staff Report identifies extensive water quality monitoring and protection programs already in place. Additional monitoring seems redundant and unnecessary. We would encourage the Board to utilize existing data and only require additional monitoring when all other data sources have been reviewed and data gaps clearly identified. 113-4

We encourage the adoption of Alternative 2 as the most cost effective means of achieving improved water quality. We also support the views of the Sacramento Valley Water Quality Coalition, and Somach, Simmons and Dunn. 113-5

Sincerely,

Rebecca Waegell
Coordinator
Sacramento Amador Water Quality Alliance

3.3.21.1 Responses to Letter 113

113-1

See Master Responses 3 and 4.

113-2

See Master Responses 6 and 17. The cost of compliance with state and federal regulatory schemes such as the state and federal Endangered Species Acts and Clean Water Act are the obligation of the grower.

113-3

Impacts to agriculture resources are discussed in the Draft PEIR, Chapter 5, Environmental Impacts and Mitigation Measures, Section 5.10 Agricultural Resources, beginning at page 5.10-5. Also see Master Response 14.

113-4

See Comment Letter 45, Response 20.

113-5

The support for Alternative 2 will be considered in the development of the Long-term ILRP.

3.3.22 Letter 106 and 124—San Joaquin County and Delta Water Quality Coalition, Mike Wackman

Comment Letter IL106

San Joaquin County and Delta Water Quality Coalition

3422 W. Hammer Lane, Suite A
Stockton, California 95219
209-472-7127 ext 125

September 27, 2010

Ms. Megan Smith
630 K Street, Suite 400
Sacramento, CA 95814

RE: Comments on Draft Program Environmental Impact Report and Staff Recommended Alternative

The San Joaquin County and Delta Water Quality Coalition represents farmers and ranchers within San Joaquin County, Calaveras and Contra Costa County. As a water quality coalition that has been implementing the current Irrigated Lands Regulatory Program (ILRP), we have been able to experience first hand how the ILRP works and what needs to be improved. With this knowledge, we strongly urge the Regional Board to consider adopting Alternative 2 of the Long Term Irrigated Lands Draft Program Environmental Impact Report. This alternative is a workable solution to address water quality issues both in surface water and ground water. 106-1

We are extremely concerned about the staff recommended alternative being presented as the preferred alternative. This alternative puts extraordinary burdens on agriculture without truly addressing water quality. 106-2

The following are some major issues that could be extremely detrimental to agriculture in San Joaquin County, Contra Costa County, Calaveras County and the Delta.

1. **The assumption by the Regional Board that all irrigation is a discharge of waste thus causing the degradation of groundwater or surface water regardless of soil and/or climatic conditions**

The assumption in the staff recommended alternative that the act of irrigating a crop is considered a discharge to groundwater thus causing the degradation of groundwater is not provable or plausible in many areas of the State. Many areas throughout the state are irrigated and do not cause a degradation groundwater or transport constituents of concern to the groundwater. While a blanket determination that all irrigated agriculture creates a discharge of waste may be convenient for regulatory authority purposes, it is an inaccurate presumption with no evidentiary support. Presuming all irrigated agriculture creates a discharge of waste simply because some irrigated agriculture may potentially or could possibly affect water quality is entirely inappropriate and does not fall within the Regional Board's authority to regulate only those irrigation practices that result in a "discharge of waste." 106-3

Within the staff recommended alternative farmers and ranchers must prove to the Regional Board that their operation does not create a discharge of waste to the ground or surface water by conducting expensive studies and research. Otherwise, farmers and ranchers would be required to implement expensive and potentially unnecessary management practices. This assumption institutes a guilty until proven innocent within the regulation. Water Code section 13267 authorizes the Regional Board to require reports from those who discharge waste, but requires that the Regional Board "provide the person with a written explanation with regard to the need for the reports" and "identify the evidence that supports requiring that person to provide the reports." In contrast, the Draft Staff Report makes a broad assumption that all irrigated agriculture creates a discharge of waste, subjecting operations to various reporting requirements without providing a written explanation or supporting evidence, even while acknowledging that some of those operations do not create a discharge of waste.

106-3 cont'd

2. **Definition of groundwater to be protected**.

Groundwater is defined as the first encountered groundwater within the DEIR and the staff recommended alternative. In many areas throughout the state the first encountered ground water does not have any true beneficial use. It is assumed in the staff recommended alternative that first encountered groundwater will need to be protected even though there are areas where first encountered groundwater is not and has never been usable water for drinking, municipal or agriculture. Also, the assumption that if a constituent is detected at first encountered groundwater, then that constituent will move downward into the other stratus of the groundwater is not based on scientific evidence of how groundwater moves through the aquifer. Depending on the aquifer, water can move laterally as well as both upward and downwards in the water profile. Also, many aquifers are separated by layers of clay or impermeable layers that prevent the water from the upper aquifer from moving into the lower aquifer and vice-a-versa. So assuming that a detection of a constituent in the first encountered groundwater will move into aquifers being used by domestic or municipal wells thus causing a discharge of waste is not necessary plausible in many areas of the state.

106-4

3. **Duplication of Regulations**.

The Regional Board proposes a new program to regulate groundwater when many programs already exist. Many areas already have or are developing groundwater management plans that address water supply and water quality at the local level. Alternative 2 within the DPEIR has a more common sense approach using local agencies to address groundwater issues. The staff recommended alternative does not address the complexity of groundwater by recognizing the different soils and climatic conditions throughout the state, or even within individual counties. Many organizations have been studying groundwater to determine how and where it moves, the effects of not only pumping but recharge areas and aspects that affect the quality of the water. These programs can be used as a basis to develop programs that can address water quality concerns.

106-5

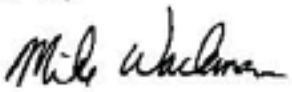
4. Staff recommended alternative was not fully analyzed or recognized by the DPEIR

The DPEIR analyzes five proposed alternatives. Staff has combined elements of many of these alternatives to develop a sixth alternative, which staff is now recommending for approval. As the recommended alternative, the staff-developed alternative has become the proposed project. However, the DPEIR does not analyze this project *at all*. While the elements of the staff-recommended alternative have been cherry-picked from the other alternatives, the DPEIR does not make any attempt to analyze the environmental impacts that would result if these elements were combined with each other, which is how they would be implemented if the alternative were selected.

106-6

Again, the San Joaquin County and Delta Water Quality Coalition considers alternative 2 of the Draft Program Environmental Impact Report a workable solution to address water quality concerns in the Central Valley. The staff recommended alternative is based on assumptions that have not been scientifically researched or scientifically proven.

Sincerely,



Mike Wackman
San Joaquin County and Delta Water Quality Coalition

3.3.22.1 Responses to Letter 106

Note: Comment Letter 124 is part of Comment Letter 106.

106-1

The support for Alternative 2 will be considered in the development of the Long-term ILRP.

106-2

The Central Valley Water Board has considered carefully the impacts of potential regulatory obligations the ILRP may place upon the regulated community. The extensive public outreach effort undertaken by the Board solicited input from the agricultural community. The program alternatives have been developed in an effort to balance those concerns with the Board's obligations to protect water quality. See Comment Letter 56, Response1.

106-3

See Master Response 12.

106-4

See Master Responses 18 and 12 and Comment Letter 9, Response 14.

106-5

See Comment Letter 45, Response 20. The support for Alternative 2 will be considered in the development of the Long-term ILRP.

106-6

See Master Responses 3 and 4.

3.3.23 Letter 109—San Joaquin County Resource Conservation District, Molly Watkins, President

Comment Letter IL109

SAN JOAQUIN COUNTY
RESOURCE CONSERVATION DISTRICT

3422 WEST HAMMER LANE, SUITE A STOCKTON, CA 95632 209-472-7127 EXT. 125
WWW.SJCRCD.ORG

September 27, 2010

Ms. Megan Smith
630 K Street, Suite 400
Sacramento, CA 95814

RE: Comments on Draft Program Environmental Impact Report and Staff Recommended Alternative

The San Joaquin County Resource Conservation District (SJCRCD) serves as the lead agency for the San Joaquin County and Delta Water Quality Coalition (Coalition). As such, SJCRCD has been implementing the current Irrigated Lands Regulatory Program (ILRP). We have experienced first-hand how the ILRP works and what should be improved. With this knowledge, we strongly urge the Central Valley Regional Water Quality Control Board (Regional Board) to consider adopting Alternative 2 of the Long Term Irrigated Lands Draft Program Environmental Impact Report. This alternative is a workable solution that addresses water quality issues for both surface water and ground water. 109-1

SJCRCD Board members and Coalition contractors and staff are extremely concerned about the Regional Board staff recommended alternative being presented as the preferred alternative. This alternative puts extraordinary burdens on agriculture without truly addressing water quality. 109-2

The following are some major issues that could be extremely detrimental to agriculture in San Joaquin County in particular and the other counties in the Coalition area.

1. **The assumption by the Regional Board that all irrigation is a discharge of waste, thus causing degradation of groundwater and/or surface water regardless of soil and/or climatic conditions**

109-3

The assumption in the Regional Board staff recommended alternative that the act of irrigating a crop is considered a discharge to groundwater thus causing degradation of groundwater is neither provable nor plausible in many areas of the State. Several areas throughout the state are irrigated but do not cause a degradation groundwater nor transport constituents of concern to the groundwater. While a blanket determination that all irrigated agriculture creates a discharge of

waste may be convenient for regulatory purposes, it is an inaccurate presumption with no scientific proof. Presuming all irrigated agriculture creates a discharge of waste simply because some irrigated agriculture might potentially affect water quality is inappropriate and does not qualify under the Regional Board's authority to regulate only those irrigation practices that result in a "discharge of waste."

Within the regional Board's staff recommended alternative, farmers and ranchers must prove that their operations do not create a discharge of waste to the ground or surface water by conducting expensive studies and research. Otherwise, farmers and ranchers would be required to implement expensive and potentially unnecessary management practices. This assumption institutes a guilty until proven innocent provision within the regulation. Water Code section 13267 authorizes the Regional Board to require reports from those who discharge waste, but requires that the Regional Board "provide the person with a written explanation with regard to the need for the reports" and "identify the evidence that supports requiring that person to provide the reports."

109-3 cont'd

In contrast, the Draft Regional Board Staff Report makes a broad assumption that all irrigated agriculture creates a discharge of waste, thus subjecting farming operations to various reporting requirements without providing either a written explanation or supporting evidence, even while acknowledging that some of those operations do not create a discharge of waste.

2. **Definition of groundwater to be protected**.

Groundwater is defined as the first encountered groundwater within the DEIR and the staff recommended alternative. In many areas throughout the state, the first encountered ground water has no true beneficial use. It is assumed in the staff recommended alternative that first encountered groundwater must be protected even though there are areas where first encountered groundwater is not and has never been usable water for drinking, municipal or agriculture. Also, the assumption that if a constituent is detected at first encountered groundwater, then that constituent will move downward into the other stratus of the groundwater is not based on scientific evidence of how groundwater moves through the aquifer. Depending on the aquifer, water can move laterally as well as both upward and downwards in the water profile. Also, many aquifers are separated by layers of clay or impermeable layers that prevent the water in the upper aquifer from moving into the lower aquifer and vice-a-versa. Assuming that a detection of a constituent in the first encountered groundwater will move into aquifers being used by domestic or municipal wells thus causing a discharge of waste is simply incorrect in many areas of the state.

109-4

3. **Duplication of Regulations**.

The Regional Board proposes a new program to regulate groundwater when many such programs already exist. Many groundwater management plans that address water supply and water quality at the local level already exist while others are under development. Alternative 2 within the DPEIR has a more common sense approach using local agencies to address groundwater issues. The staff recommended alternative does not address the complexity of groundwater by recognizing the different soils and climatic conditions that exist up and down the Central Valley,

109-5

2

or even variations within individual counties. Several organizations have been studying groundwater to determine how and where it moves, the effects of not only pumping but recharge areas and aspects that affect the quality of the water. These programs can be used as a basis to develop programs that can address water quality concerns.

109-5 cont'd

4. Staff recommended alternative was not fully analyzed or recognized by the DPEIR

The DPEIR analyzes five proposed alternatives. Staff has combined elements of many of these alternatives to develop a sixth alternative, which staff is now recommending for approval. As the recommended alternative, the staff-developed alternative has become the proposed project. However, the DPEIR does not analyze this project *at all*. While the elements of the staff-recommended alternative have been cherry-picked from the other alternatives, the DPEIR does not make any attempt to analyze the environmental impacts that would result if these elements were combined with each other, which is how they would be implemented if the Regional Board staff alternative is selected.

109-6

Again, the San Joaquin County Resource Conservation District considers alternative 2 of the Draft Program Environmental Impact Report a workable solution to address water quality concerns in the Central Valley. The Regional Board staff recommended alternative is based on assumptions that have neither been scientifically researched nor scientifically proven.

Sincerely,

Molly Watkins
President

3

3.3.23.1 Responses to Letter 109

109-1

The support for Alternative 2 will be considered in the development of the Long-term ILRP.

109-2

The Central Valley Water Board has considered carefully the impacts of potential regulatory obligations the ILRP may place upon the regulated community. The extensive public outreach effort undertaken by the Board solicited input from the agricultural community. The program alternatives have been developed in an effort to balance those concerns with the Board's obligations to protect water quality. See Comment Letter 56, Response1.

109-3

See Master Response 12.

109-4

See Master Responses 18 and 12 and Comment Letter 9, Response 14.

109-5

See Comment Letter 45, Response 20. The support for Alternative 2 will be considered in the development of the Long-term ILRP.

109-6

See Master Responses 3 and 4.

3.3.24 Letter 88—San Joaquin River Exchange Contractors Water Authority, Steve Chedester, Executive Director

Comment Letter IL88

SAN JOAQUIN RIVER EXCHANGE CONTRACTORS WATER AUTHORITY
CCID • CCC • FCWD • SLCC

Consisting of 240,000 acres on the Westside of the San Joaquin Valley

P.O. Box 2115
541 H Street
Los Banos, CA 93635
(209) 827-8616
Fax (209) 827-9703
e-mail: jtoscano@sjrecwa.net
Website: www.sjrecwa.net

September 27, 2010

Via Email: ILRPcomments@icfi.com
ILRP Comments
Ms. Megan Smith
630 K Street, Suite 400
Sacramento, California 95814

RE: ***Comments on the Draft Program Environmental Impact Report for the Central Valley Irrigated Lands Regulatory Program***

Dear Ms Smith:

These are the comments of the San Joaquin River Exchange Contractors Water Authority and its members Central California Irrigation District, San Luis Canal Company, Firebaugh Canal Water District, and Columbia Canal Company (Exchange Contractors) regarding the Draft Program Environmental Impact Report for the Central Valley Irrigated Lands Regulatory Program (DPEIR) the Draft Staff Report, the Recommended Program Alternative (RPA), and the Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program (Economic Analysis). The Exchange Contractors are concerned with the fundamental errors made in developing these documents.

We concur and support the comments of the joint agricultural interests and incorporate those comments by reference. However, we would like to highlight two fundamental flaws of the DPEIR. First, the document does not properly define the "No Project" alternative. Second, the document fails to analyze the staff recommended alternative. These two fatal flaws make the DPIER wholly insufficient. Given the nature of these flaws, the DPEIR provides little to no meaningful information for the Central Valley Regional Board to use in considering the development of a long-term irrigated lands regulatory program. 88-1

The DPEIR Relies on an Improper "No Project" Alternative 88-2

The DPEIR's mischaracterization of Alternative 1 as the "No Project" alternative results in an incorrect analysis throughout the document. The DPEIR correctly cites California Environmental Quality Act (CEQA) guidance at Title 14 California Code of Regulations (CCR) Section 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." However on pages 1-3 and 3-4 the DPEIR goes on to state "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." This statement is completely incorrect and contrary to state law.

The Regional Boards decision to extend or renew the existing waiver is not ministerial. California Water Code (CWC) Section 13269(a)(2) states in part, "A waiver may not exceed five years in duration, but may be renewed by the state board or regional board…." (Emphasis added) Furthermore, CWC 13269(f) states, "Prior to renewing any waiver for a specific type of discharge established under this section, the state board or a regional board shall review the terms of the waiver policy at a public hearing. At the hearing, the state board or a regional board shall determine whether the discharge for which the waiver policy was established should be subject to general or individual waste discharge requirements.

88-2 cont'd

CCR Title 14, section 15369 defines Ministerial as:

> " "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. 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. Common examples of ministerial permits include automobile registrations, dog licenses, and marriage licenses. A building permit is ministerial if the ordinance requiring the permit limits the public official to determining whether the zoning allows the structure to be built in the requested location, the structure would meet the strength requirements in the Uniform Building Code, and the applicant has paid his fee."

Given the discretionary language "may" used in CWC 13269(a)(2) and the language of CWC section 13269(f) requiring the regional board to consider specific policy consideration at a public hearing before renewing a waiver, it is clear that the regional board's decision to renew a waiver is not ministerial but instead requires substantial policy considerations requiring significant personal judgment by the regional board. The DPEIR characterization of the renewal of a waiver as "ministerial" defies common sense and is contrary to state law. Considering that the renewal of the existing conditional waiver would not be a ministerial act, Alternative 1 should be analyzed as an alternative and a true "No Project" alternative should be developed that consists of the regulatory framework that would remain if the existing conditional waiver were to expire at the end of its current term on June 30, 2011.

The DPEIR Fails to Analyze the Staff Recommended Alternative

The comments of the joint agricultural interests document the legal deficiencies in the decision not to analyze the staff preferred alternative and the Exchange Contractors concur with those legal conclusion. However, the practical considerations of ignoring this important analysis also dictate that a more complete analysis must be conducted. If the final environmental impact report is intended to be used by the regional board to determine which regulatory alternative it will adopt it would be very useful to analyze the staff recommended alternative in the EIR. A complete analysis of the staff recommendation would allow the board to make a more informed decision. Accordingly the board should expand the DPEIR to include an analysis of the staff recommended alternative.

88-3

Conclusion

The Draft Program Environmental Impact Report for the Central Valley Irrigated Lands Regulatory Program, the Draft Staff Report, the Recommended Program Alternative, and the Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program are all insufficient and must be revised in order to better inform the regional board regarding the adoption of a long-term irrigated lands regulatory program. The Exchange Contractors request that the DPEIR be revised consistent with the comments of the joint agricultural interests and with these comments. The landowners within our boundaries have fully engaged in the existing conditional waiver program and do not want misguided changes to that program to jeopardize the progress they have made in addressing agriculturally related water quality concerns.

88-4

Very truly yours,

Steve Chedester

Steve Chedester
Executive Director

3.3.24.1 Responses to Letter 88

88-1

The comment's support of previously received comments is noted and will be considered in development of the Long-term ILRP. Also see Master Responses 2 and 4.

88-2

See Master Response 2.

88-3

See Master Response 4.

88-4

This comment urges that the Long-term ILRP build upon the gains achieved by the existing ILRP in addressing agriculturally related water quality concerns. This suggestion will be considered in the development of the Long-term ILRP.

3.3.25 Letter 117—Shasta County Cattlemen's Association, Steve Moller, President

Comment Letter IL117

SHASTA COUNTY CATTLEMEN'S ASSOCIATION
P.O. BOX 492401
REDDING, CALIFORNIA 96049-2401

September 16, 2010

Ms.Megan Smith
630K Street, Suite 400
Sacramento, Ca 95814
ILRPcomments@icfi.com

Dear Ms. Smith,

The Shasta County Cattlemen's Association has reviewed the PEIR for the Long Term Irrigated Lands Regulatory Program. Members have attended scoping meetings as well as the Public Meeting in Chico. Based on the review and the meetings, we offer the following comments.

We are glad that the Water Quality Staff has been listening to the agriculture industry's concerns regarding the costs of continued monitoring of the waters for contamination. The Shasta County Cattlemen have supported water quality and have in fact had tests conducted for e-coli and D.O. prior to the implementation of the current ILRP. A number of our members have installed catch basins or done other improvements to limit any runoff from irrigation directly into the streams.

Although there are some statements in the PEIR indicating that the waters are continuing to be degradated by agriculture operations (Section 3.7.1, page 3-29), we do not believe that to be true, particularly in Shasta County. As stated previously, our members have instituted management practices without any requirements and it would be expected that they will continue to do so without any monitoring program. In addition, in the past 5 years of testing, except for e-coli and DO, no contaminants have been found in Shasta County. The test conducted by UC Davis determined that the e-coli detected were not from agriculture sources. The DO can easily be explained because the tested streams have minimal to no flow during the late spring and summer months, thus DO is naturally going to be low. 117-1

Based upon studies conducted by the Shasta County Cattlemen's Association and the work that agriculture producers have done to enhance the waters in Shasta County, we do not believe a monitoring program is warranted.

If there is going to be a continued requirements for monitoring, then the Shasta County Cattlemen's Association embraces the Staff Recommended Alternative in the PEIR. The one exception that we do not believe is warranted in the Staff Recommended Alternative or any of the other alternatives is for ground water testing in the foothills, as there are no identified water basins, nor any basis that any of the water is contaminated by agriculture operations. Most of our members have well or spring water so they are naturally concerned about their own drinking water safety. If the surface waters do not show contamination, it would be less likely that any ground water would be contaminated, as there is little leaching in those areas. 117-2

In reality, it would take the testing of hundreds of wells to get any idea of contamination. Trying to determine its source would be extremely difficult. 117-2 cont'd

We understand that during the development of the orders, that ground water could be eliminated as a needed test for geographic areas such as the foothills where there are no ground water basins. In addition, during the development of the orders, we believe that testing for e-coli and DO needs to be eliminated until a better protocol is developed to determine the source of the e-coli and streams need to be evaluated as to their tendencies to have low DO naturally. 117-3

Sincerely,

Steve Moller, President
Shasta County Cattlemen's Association

3.3.25.1 Responses to Letter 117

117-1

See Comment Letter 5, Response 1 and Comment Letter 50, Response 8.

The tier system described in Alternative 6 would provide the flexibility to further evaluate areas such as Shasta County, and work to tailor monitoring and management requirements commensurate with the types of waste discharge. In geographic areas that do not have water quality problems, reduced monitoring and management requirements would apply. In areas where agriculture contributes to the water quality problems, additional monitoring and management requirements would be imposed to address and monitor progress towards solving the water quality concern.

117-2

See Comment Letter 100, Response 41.

117-3

See Comment Letter 100, Response 41 and Comment Letter 111, Response 21.

3.3.26 Letter 89—South Delta Water Agency, John Herrick

Comment Letter IL89

SOUTH DELTA WATER AGENCY
4255 PACIFIC AVENUE, SUITE 2
STOCKTON, CALIFORNIA 95207
TELEPHONE (209) 956-0150
FAX (209) 956-0154
E-MAIL jherrlaw@aol.com

Directors:
Jerry Robinson, Chairman
Robert K. Ferguson, Vice-Chairman
Natalino Baccheeni
Jack Alvarez
Mary Hildebrand

Engineer:
Alex Hildebrand
Counsel & Manager:
John Herrick

September 27, 2010

Via E-Mail ILRPcomments@icfi.com

ILRP Comments
Ms. Megan Smith
830 K Street, Suite 400
Sacramento, CA

Re: DPEIR Irrigated Lands Regulatory Program

Dear Ms. Smith:

On behalf of the South Delta Water Agency ("SDWA") I am submitting the following comments to the above referenced draft PEIR. On behalf of SDWA, I participated extensively in the development and implementation of the current waiver program. I am on the steering committee for the San Joaquin Delta Water Quality Coalition, and also a board member of the San Joaquin County Resource Conservation District which is the parent organization for that coalition. I have not participated to the same degree in the recent efforts which have led to the PEIR or the accompanying recommended alternative set forth in the Staff Report.

With that said, there are a number of significant concerns/issues associated with the above referenced document. First and foremost is the addition of ground water to the program. Of course the issue of whether or not we seek to maintain and protect good water quality in our groundwater basins is not at issue. Everyone wants to have good water quality in both surface and ground water supplies. This is especially true given that most all users rely on groundwater during times of drought. However, the method of addressing ground water concerns is certainly important. 89-1

As proposed, the addition of ground water to local coalition responsibilities is untenable. Our coalition and the lands contained therein provides good examples as to why this is true. As part of the San Joaquin County Eastern Groundwater Banking Authority (a JPA containing

various interests and the County of San Joaquin), we have spent significant amounts of time and money evaluating the eastern County groundwater basin. Part of that evaluation included new and ongoing testing in cooperation with the USGS. Some of the results of those studies indicated a previously unimaginably complicated system in our area. One sample of a relatively shallow well indicated water with an age of 25,000+ years. Another, within a mile of the first and at a ***lower*** depth contained water that was less than 40 years old [these are not necessarily the exact numbers from the report, but are representative of what was found).

The conclusion drawn from these data are that understanding the groundwater system presents a difficult if not insurmountable challenge. As applied to the proposed ILP, it indicates that the first step of the program, to characterize the basin, is virtually impossible. How could one develop a system of wells and tests to fully understand an area where neighboring groundwaters have age differences of 25,000 years? How could one determine if agricultural drainage might potentially affect these radically different waters, or even if it currently was affecting them? The answer is that the scope of the testing program would far exceed the current budget of the coalition. Regardless of the Regional Board's mandates and preferences, the end result is that adoption of such a program as outlined in the PEIR and Staff Report would cause our coalition to fall apart as the radical increase in "voluntary contributions" would not be accepted by the paying participants.

89-1 cont'd

Further, the proposed program appears to take a much too naive approach in addressing any groundwater problem. It seems to assume that simple adaptations in application of chemicals and irrigation practices can fully address water quality concerns. This is of course incorrect. Although better oversight and enforcement of application rates should be pursued, a farmer cannot simply decided to apply less fertilizer and still be profitable. The amount calculated to produce a certain yield and maintain plant health has limits; less applied results in less yield. Similarly, the Staff Report seems to assume that a farmer can adjust the amount of water applied to a crop to the point where there is no "excess" water to become tail water or seepage into the groundwater. Such assumptions ignore the physics of crop growth. Although it may be hypothetically possible to apply only such an amount of water in a certain way such that the plant uses all of that water, in practice that can never be done. In many if not most areas, the amount of water applied includes an amount necessary to flush the root zone of constituents such as salts. Applying less results in the buildup of those constituents in the soil to the detriment of current of future yields and crop health.

89-2

Given these sorts of practical limitations, any assumption that BMP's can be identified and implemented are unjustified. This leads to my next comment, dealing specifically with the Delta, a portion of which includes SDWA. Much of the Delta includes shallow groundwater. At the southern extremes, this ground water is just above, at, or slightly below sea level, and connected to the channel flows. The extent to which this groundwater moves, or is flushed out is

largely unknown. The data that does exist indicates that only under high flow events is the "groundwater" flushed out.

In addition, this groundwater's quality is a result of now over 50 years of CVP (with the help of the SWP) impacts on the San Joaquin River. The CVP reduced flows in the River, and by importing millions of toms of salt to the San Joaquin valley, caused high salt (imported, not naturally occurring) concentrations. The result is 50 years of salt buildup in the shallow groundwater in the southern Delta. When surface water is applied, the accompanying salts must be flushed out of the root zone. However, those flushed out salts do not exist the system (again, except in high flow events) and accumulate in the soil just below (most) of the root zones. Typically, the groundwater simply remains at its shallow level rising and falling with the tides, collecting and concentrating various constituents.

Since this ground water is directly connected to the surface waters, it could be described as potentially affecting the waters of the state under the proposed program. As such, characterizing this ground water, and developing a plan to monitor and improve it might be required. Such a result presents the southern Delta farmers with no viable options. Someone else ruined their water supply, which ruined their shallow ground water, but they must now address the problem on their own. Although such a course of action may comport with the SWRCB's efforts to destroy agriculture in the Delta in order to protect exports, it does not result in any improvement in water quality; the goal of the Regional Board.

89-2 cont'd

Hence, the proposed addition of groundwater monitoring not only presents impossible tasks for the coalitions, but as conceived will not result in improved water quality. I assume staff's response will be that in developing WDR's or other regulatory guidelines for each coalition, these issues will be resolved. However, the history of the current waiver program suggests this will not occur. The ability of local users to convince the Regional Board staff that certain groundwater basins can or cannot be characterized, or that they pose no threat to the waters of the state is and will continue to be minimal. That is to say, it is extremely unlikely that our area will be able to convince staff that anything other than monitoring and improvement is required.

In addition to the above concerns, I would like to mention a few other, general concerns. The first is that the proposed program assumes that more "efficient irrigation" can address many water quality concerns. However, the PEIR makes no mention and contains no analysis of how decreases in runoff (or seepage) affects surface flows. Since the San Joaquin River is mostly runoff during many times (especially summers), encouraging farmers to apply less water will result in decreased flows not only on the mainstem, but also in many of the smaller drainages feeding the system. This trade-off may offset the supposed benefits by simply causing streams to run dry.

89-3

Other proposals for BMP's include using cover crops. At a time when the water supplies of the State are insufficient for current and future needs, the use of cover crops should be closely examined, as they by definition result in increased consumption of water. 89-4

I would also like to note that the PEIR does not mention the fish doubling requirements under the CVPIA when it lists federal fishery obligations. I also did not see any discussion of what the current (or proposed) nitrate objectives will be, or how meeting them relates to potential adverse impacts to the Delta food chain. I recall a recent study which concluded that the Delta food chain appeared to need additional nutrients in order to be healthy. I recall that the current San Joaquin contribution to Delta nutrient loads was being siphoned off by the export projects. 89-5

Finally, we would like to join in the comments being submitted on behalf of the other coalitions.

Very truly yours,

JOHN HERRICK

3.3.26.1 Responses to Letter 89

89-1

The expressed concern that coalitions will not be viable under Long-term ILRP alternatives with groundwater requirements is an important issue for the Central Valley Water Board. However, it is clear that irrigated agricultural operations can and have impacted groundwater quality; therefore, the ILRP must implement requirements to protect groundwater.

See Comment Letter 50, Response 14.

89-2

See Master Response 12.

89-3

The Draft PEIR determined that the potential slight alterations in surface water hydrologic patterns that may occur with implementation of one of the six analyzed ILRP alternatives would not result in a significant impact (Draft PEIR, Chapter 5, Section 5.9, beginning at page 5.9-15). Also see Comment Letter 1, Response 53.

89-4

Comment noted.

89-5

This comment will be considered in development of the Long-term ILRP.

3.3.27 Letter 111, 112, and 136—Southern San Joaquin Valley Water Quality Coalition, David Orth, Steering Committee Coordinator

Comment Letter IL111

SOUTHERN SAN JOAQUIN VALLEY WATER QUALITY COALITION

Kaweah River Sub-Watershed
Kern River Sub-Watershed
Kings River Sub-Watershed
Tule River Sub-Watershed
4886 E. Jensen Avenue
Fresno, California 93725
(559) 237-5567

September 27, 2010

VIA ELECTRONIC MAIL

ILRP Comments Ms. Megan Smith 630 K Street, Suite 400 Sacramento, CA 95814 Joe Karkoski California Regional Water Quality Control Board, Central Valley 11020 Sun Center Drive, Suite 200 Rancho Cordova, CA 95670-6114	Katherine Hart, Chair Cheryl K. Maki, Vice Chair Julian C. Isham, Board Member Karl E. Longley, Board Member Sandra O. Meraz, Board Member Dan Odenweller, Board Member Robert G. Walters, Board Member California Regional Water Quality Control Board, Central Valley 11020 Sun Center Drive, Suite 200 Rancho Cordova, CA 95670-6114

RE: SSJVWQC RESPONSE TO IRRIGATED LANDS PROGRAM DRAFT PEIR

Dear Ms. Smith, Mr. Karkoski, Board Chair Hart and Board Members Maki, Isham, Longley, Meraz, Odenweller and Waters:

The 2000+ page CEQA alternative document is long, unclear, disjointed, repetitive and has its meaningful components totally camouflaged by voluminous content. The document analyzes the five alternatives that have been identified for over a year and which captured the broad extent of options for the long-term Irrigated Lands Regulatory Program (ILRP). These alternatives have been analyzed, vetted through the interested parties and have become familiar to Board members. The five alternatives have also been evaluated under an economic analysis, unfortunately an analysis with significant flaws, to determine the economic impact of each alternative. The CEQA review did not evaluate what has become the preferred staff alternative. Similarly, the Economic Analysis[1] also did not evaluate the recently developed staff alternative. The staff preferred alternative is actually a misnomer as it was not even referenced in either

111-1

[1] ICF Jones and Stokes, 2010, *Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program.* Prepared for the Central Valley Regional Water Quality Control Board.

82231.0000\5365586.1

the CEQA or Economic Analysis, but instead was merely attached thereto as an appendix. As discussed below we believe that is improper because the staff is trying to reverse this entire process and focus only on the staff preferred alternative, we will therefore commence these comments addressing the staff preferred alternative and then discuss the Draft Programmatic Environmental Impact Report (DPEIR). 111-1 cont'd

I. Long-Term Irrigated Lands Regulatory Program Staff Report / Recommended Program Alternative

Notwithstanding the extensive environmental review and lengthy period of analysis, the Regional Board staff has recently come forward with what it envisions is their regulatory program to be included under the long-term ILRP. In recent weeks staff has concentrated its efforts on what was first known as a "staff straw proposal." The staff straw proposal has been offered in multiple iterations during its short life and is now presented in ILRP Long-Term Program Development Staff Report (Report) as the Recommended Program Alternative (RPA) – even though it is not one of the five alternatives analyzed under the DPEIR. When it first emerged as a straw proposal, the agricultural, agribusiness, and agricultural water quality coalitions were in strong opposition to this late-arriving alternative, and in particular voiced significant opposition to consideration of this proposal if it was not going to be subjected to a full CEQA analysis. Notwithstanding this strong opposition, Regional Board staff has persisted in their efforts to implement this staff straw proposal by selectively mixing and matching elements from identified alternatives to arrive at the RPA. This approach circumvents CEQA and violates the due process and public notice rights of landowners and agricultural operations subject to the regulations. The law does not allow a lead agency to avoid CEQA analysis by belatedly developing a program alternative by arbitrarily choosing and mixing certain elements from EIR proposed alternatives. 111-2

A. Groundwater

1. Staff seeks to have the long-term ILRP program expand to include not only the existing surface water waiver, but also the very complex area of groundwater. The Report wrongfully asserts that virtually all irrigated agricultural lands, including those that do not drain to surface waters of the state, shall be considered as discharging to groundwater. (Report at p. 143 et seq.) As coalition representatives have pointed out many times, this is simply factually incorrect. By example, lands that are farmed many hundreds of feet above groundwater and use drip irrigation constituting only a few inches of irrigation water during the summer months coupled with annual winter rainfall of less than ten inches have absolutely no percolation or discharge to groundwater whatsoever, much less have the capability of carrying a contaminant from the surface many hundreds of feet to underlying underground water, which itself may be decades or hundreds of years old, and may have originated dozens of miles away. 111-3

a. Attached to these comments are documents from water engineering experts in the southern sectors of the region that point out that there are considerable areas with deep underlying groundwater (hundreds of feet below) which have no reasonable risk from overlying efficiently irrigated crops in this desert region. (See Exhibit I.)

b. This expert evaluation points out that the staff preferred alternative/report predicates this extreme position on several unfounded assumptions, which are either improper or yet to be established. It concludes that the Regional Board should adopt Alternative 2, without such extreme unestablished assumptions and then set about to study the complex area of percolation to groundwater in the Tulare Lake Basin.

111-3 cont'd

2. The incorrect position that all irrigated lands discharge to groundwater leads to the erroneous conclusion that the Regional Board has jurisdiction over all lands and under that alleged jurisdiction the Regional Board has regulatory authority over all irrigators. This assertion of jurisdiction and the requirement that all irrigators must comply with ILRP restrictions ignores the limitations on Regional Board authority to discharges that affect the water quality of waters of the state. (Wat. Code § 13000 et seq.) This assumption of discharge attempts also to shift the burden of proof from the Regional Board to the farm owner or land operator to disprove the erroneous postulation (that all irrigated lands discharge waste to groundwater). This is also inconsistent with the burden expressly outlined in California Water Code section 13267, which states that the Regional Board "shall provide a written explanation of the need for such reports and shall identify the evidence that supports requiring reports." (Wat. Code, § 13267, subd. (b)(1).)

3. A fundamental limitation on the Regional Board's authority to regulate irrigation practices is that the activity must result in a "discharge of waste" that impacts water quality. Simply because it would be "difficult to determine" whether individual irrigated lands are creating a discharge of waste does not eliminate the Regional Board's statutory obligation to only regulate activities that actually create a discharge of waste. The general notion of groundwater vulnerability is not a surrogate to establishing jurisdiction and cannot be used as the basis for (1) assuming discharge to groundwater aquifers or (2) placing virtually all parcels in Tier 2. To do so would be unreasonable because landowners would be faced with the burden of trying to "prove" a negative, which if achievable at all, could only be done at unreasonably great expense.

111-4

4. The RPA indicates that the Regional Board anticipates that the authority to regulate discharges to groundwater would increase their regulatory jurisdiction over an additional two million acres. This is certainly an incorrect number as there are more than two million additional irrigated acres in the Southern San Joaquin

111-5

Valley Water Quality Coalition alone, none of which drain to surface water. This error is indicative of the failure of the Report to accurately address the realities of groundwater or reflect the actual impacts of the RPA. 111-5 cont'd

5. The Regional Board has the regulatory obligations to: (1) advance a factually correct ILRP, and not merely allege improper facts just to satisfy a zeal for regulation; and (2) carry the burden to clarify for those who have had no previous connection to the ILRP, that they may now have an exposure to this new long-term ILRP. The RPA also fails to comply with the Porter-Cologne requirement of notifying the person potentially discharging. (Wat. Code, § 13263(f).) By not developing and publishing evidence or an applicable standard (as to whether groundwater discharges occur) concerning the lands potentially affected under the new proposed long-term ILRP, there has not been effective regulatory notice, nor the required CEQA notice. (Pub. Resources Code, § 21092, subd. (b)(1); CEQA Guidelines, § 15072, subd. (f)(1)-(6).) 111-6

6. In the RPA, first encountered groundwater is identified as the basis by which tiers will be assigned. However, first encountered groundwater is an improper standard to use when evaluating water quality impacts. It should not be used to judge water quality impacts because the term does not accurately reflect groundwater conditions in the Central Valley. First encountered groundwater in most areas is not and has never been of suitable quality for either drinking or agriculture use. 111-7

7. The approach to evaluate groundwater, as proposed in the staff Report, fails to take into account the assimilative capacity of soil. There is considerable treatment of water that occurs as the water makes its way through the soil profile. In many areas it can be reasonably expected that there will be significant dilution and attenuation of constituents prior to reaching any groundwater extraction point. In addition, the Report fails to consider that the assimilative capacities of lands covered under the program varies greatly. Indiscriminately using first encountered zone measurements may produce inconsistent and inaccurate results. Because there is a significant possibility that a dilution of constituents will occur before discharge reaches the level at which it is put to beneficial use, and a substantial likelihood that groundwater data collected at the first encountered zone will bear little relationship to the actual impact on beneficial uses in that area, determining compliance with water quality objectives in the first encountered zone is inappropriate. 111-8

B. Grandfather Status

1. In the many meetings with Regional Board staff and with those responsible for crafting the DPEIR and the RPA, it has been indicated that existing grower participants in the coalitions would be grandfathered in and not have to reapply under the new long-term ILRP. It has also been agreed to in principal that the long-term ILRP would begin with the existing coalitions (should the coalitions continue to be 111-9

willing to implement the ILRP on behalf of the Regional Board). The long-term ILRP program as presented in the RPA does express that current participants would be grandfathered in (Report at p. 144), but it fails to put in writing, what has been stated to us, that the long-term ILRP would commence with the existing coalitions. We find this language to be problematic especially when contrasted with the language that the Regional Board staff believes there will be 8 to 12 new orders. (Report at p. 145) This would not be consistent with the five major coalitions in existence today.

111-9 cont'd

2. In contrast to the treatment of the existing coalitions, the Report recommends that greenhouses and entities with operational spills (water districts) will be jettisoned from ILRP coverage. (Report at pp. 142-156.) This provision will have a major impact on greenhouse operations and it does not appear that these amendments have yet been vetted back to greenhouse operators. Water districts have also been eliminated from coverage under the long-term ILRP without suitable replacement coverage.

111-10

3. The Report also confirms that managed wetlands (including federal refuges) are expressly covered by the ILRP. However, this is a change from how the Regional Board currently deals with refuges. Northern refuges participate in the coalitions and are covered under the existing ILRP, but the southern refuges are not. Regional Board staff should take appropriate steps to have a uniform policy regarding these managed wetlands.

111-11

4. The Southern San Joaquin Valley Water Quality Coalition (SSJVWQC) does not have extensive water quality issues. The Report indicates that there are 686 waste water combination exceedances that have resulted in management plans across the region. The Report discusses total exceedances in the Central Valley and across the Tulare Lake Basin. It points out that there have been only a total of 12 exceedances in the entire Tulare Lake Basin, and only five of those exceedances are attributed to agriculture. Specifically, even though it is the largest of the coalitions, the SSJVWQC has only two required management plans of the 686 across the entire region. The Report also indicates that across the entire SSJVWQC, there is only one water segment having a 303d listing. (Report at p. 20.) This data is supportive of the argument that the current ILRP is working and that coalition participants are entitled to be grandfathered into any new program and that any new regulatory requirements applicable to the Tulare Lake Basin be moderate.

111-12

5. The Report states that most coalition groups have no regulatory authority over members. (Report at p. 9.) This is an inaccurate statement in respect to the SSJVWQC that is largely managed by water districts and water experts. Member water districts have a certain amount of regulatory authority over the delivery of water and discharge of water in their districts. As an important example, our member districts

111-13

have been very aggressive in removing agricultural drains to control discharges. This is the most direct way to control problematic discharge and has been imposed by these districts – this is not a regional requirement, but demonstrates both commitment and the importance of local control.

111-13 cont'd

C. Unreasonable Timelines

1. In respect to timelines, the RPA indicates that (a) within the first three months of adoption there would have to be a declaration of involvement, (b) by 12 months the Regional Board would issue responses or approvals and (c) within 30 months all that are to be required to do so would be enrolled.

2. These are unreasonable timelines. The regulatory expansion to include groundwater issues will require each coalition to struggle with and determine if they can possibly implement the terms of the long-term ILRP. This evaluation process will certainly take more than three months to understand all the issues and ramifications. Thirty months is extremely optimistic for the coalition to be able to convince growers who have never been part of the waiver, that they may have to become part of the ILRP if, in fact, there is a demonstrable potential that their irrigation water may percolate to groundwater.

111-14

3. Implementation of the long-term ILRP will be further impeded and delayed because of the complexity associated with the proposed mix of general waste discharge requirements (WDR) and waivers, a mix between groundwater and surface water regulations, a mix of low and high priority (Tier 1, Tier 2) areas, and the expansion of all these provisions to groundwater.

111-15

4. The Report appropriately indicates that Porter-Cologne authority allows some reasonable degradation of waters if the purpose behind the discharge has an over-riding "maximum benefit to the people of the State." (Report at p. 66.) Clearly, agriculture is an important economic engine of the State and certainly of the Central Valley. Therefore, the significant and important public benefits associated with agriculture need to be factored in when assessing exceedances and developing timelines for achieving water quality objectives. For the reasons stated above, the program implementation timelines and the timelines for achieving objectives included in the RPA are unreasonable.

111-16

D. Internal Inconsistencies

1. The Report indicates that a coalition could be comprised of a mix of high and low priority areas. This mix would be based on exceedances and risks, and could vary independently between surface water and groundwater. Yet, there is one reference that indicates that if there is a mix of high and low priority that the area would

111-17

be deemed "high priority" for all purposes. (Report at p. 151.) This seems to be internally inconsistent, and also inconsistent with the overall notion that low priority areas will have less regulatory rigor.

111-17 cont'd

2. The three year phase-in referenced on page 143 seems to be in direct conflict with other stated timelines of 18 and 30 months. (See point "C" above.)

111-14 cont'd

E. Prohibition of Discharge

1. The Report advances the regulatory option that there would be a "prohibition of any discharge" if a farmer is not appropriately signed up under the ILRP. Such a prohibition is essentially a death penalty not just to that farm operation, but any other farm operation situated down gradient that might rely on tail water from the targeted farm. Consequently, such a prohibition would in most every instance be a very inappropriate remedy. The problem is compounded when associated with the regulatory expansion to groundwater, which raises the likelihood that it is going to take a multi-year process to convince even those growers that may actually have a potential to percolate to closely associated groundwater to sign up under the waiver, and there is very little chance to get those who have no such potential (and are therefore outside the jurisdictional scope of the Porter-Cologne), to subject themselves to this regulation. Consequently, it is easy to anticipate that there are going to be many farmers in this category, particularly relative to groundwater.

111-18

2. This also raises a second issue, how does the Regional Board intend to impose the remedy of a prohibition to discharge if the alleged discharge is by percolation to groundwater.

F. Low Threats to Water Quality

1. The Report indicates on page 149 that there would be a separate category for areas that have no or little impact to state water. Further, the Report references the Existing Conditions Report which expressly indicates that there are areas that have no such impact. This raises the possibility of a no threat or low threat component. It seems that some areas with isolation from surface water and having no reasonable connection to groundwater would qualify under this provision. This would also be true of mountain valley areas with limited agriculture that have either no, or very limited, potential impact to surface water. Therefore, it seems such areas need only advance to the Regional Board very modest monitoring proposals. This is expressly provided in Water Code § 13269(3), which states the Regional Board may waive monitoring requirements for discharges that do not pose a significant threat to water quality.

111-19

G. Tiering

82231.0003\5365586.1

1. SSJVWQC representatives understand the RPA proposes to categorize lower risk areas as Tier 1 and higher risk areas as Tier 2. Presumably, Tier 2 will be limited only to areas which have management plan requirements. The relevant question is how will the determination between areas be made and what is the process to determine the extent of those categories. In order to be able to appropriately evaluate the RPA, SSJVWQC representatives need the opportunity to sit down with the Regional Board staff and determine the isopleths of what would be regarded as the nitrate groundwater area and the impact areas leading to our groundwater and affecting our two management plans. The designations between Tier 1 and Tier 2 classifications should be clearly defined in the RPA. 111-20

a. The RPA should also be clarified to specify whether general water constituents such as dissolved oxygen, electrical conductivity, pH, and other pathogens possibly unrelated to agricultural irrigation would be utilized to classify lands into Tier 2. We believe they should not be equally treated with contaminant issues. These problems are not directly tied to agriculture and not likely to be resolved by agricultural management practices. 111-21

2. Under the long-term ILRP Prioritization Scheme Example set forth in Figure 23 (Report p. 161), it appears as though very few if any areas will be Tier 1. In the portion of the diagram marked "Area A" it refers to exceedances without distinguishing if these are irrigated agricultural related exceedances, which trigger management plan requirements, as it does in the "Area B" diagram. It simply says "Surface Water Objectives exceeded" and "trending degradation of surface water attributable to." First, this reverses what should be the regulatory burden – that an area be categorized as Tier 1 unless a demonstrated problem moves it to Tier 2. Under this scenario multiple fecal coliform exceedances resulting from a wastewater treatment plant would still compel a determination as a Tier 2 area. 111-22

H. Monitoring

1. Attachment C of the Report deals with groundwater management plans and requires groundwater monitoring and the evaluation of the effectiveness of any management practices that are employed to address an impairment. The RPA, however, does not make any attempt to clarify the level and intensity of such monitoring, nor how monitoring would be designed to track the effectiveness of management practices where problem constituents many have been applied in prior decades. The lack of detail on this major requirement is a fatal flaw in the RPA. 111-23

2. The Report indicates that Tier 2 groundwater monitoring would include establishment of baseline and trend data and evaluation of changes in management practices. The Report is silent on how Regional Board staff believes this could possibly be achieved. In addition, the Economic Analysis omits any discussion of 111-24

the requirement of groundwater monitoring which will involve significant cost. 111-24 cont'd

3. The Report indicates that groundwater monitoring would be required, however, it is completely silent as to what would be considered an acceptable level of monitoring, therefore this provision is impossible to evaluate. Additionally, the Economic Analysis did not evaluate the cost or number of new monitoring wells that would be compelled by this provision. The Report is unclear as to the specifics of groundwater monitoring itself. It indicates that baseline, trend and impairment monitoring would all be required, particularly in respect to nitrates and pesticides, but does not state how this would be accomplished. In order to evaluate both the impact and the cost associated with the RPA, the Regional Board has to bring clarity to these questions regarding the adequacy of existing monitoring in each specific area, and what additional monitoring would have to be implemented. Implementation cannot be left to a "trust us" basis. 111-25

4. The RPA goes on to indicate consequences if there is "insufficient progress." The Report discussed under item 3 above, is unclear as to what would constitute sufficient or insufficient monitoring. The lack of clarity results in an inability to properly assess the economic impacts of the RPA, and further demonstrates the insufficiency of the Economic Analysis. Additionally, the inherent uncertainty does not allow the Report to provide reasonable regulatory notice.

5. Appendix B of the Report suggests that there needs to be some means by which to identify the source of nitrate problems. It expressly recognizes that any leaching of nitrates can be significantly influenced by irrigation methods, rainfall, soil composition, depth of groundwater, etc., and is not exclusively related to the amount of nitrogen applied. These realities need to be reflected in the long-term ILRP requirements. 111-26

6. Appendix B of the Report discusses nitrate impacted areas, and expressly evaluates Kern County (Appendix B at p. B-25). On page 33, it states that only two of 17 wells in Kern County had exceeded nitrate standards, and also indicates on page 34 that the Tulare study of nitrates shows exceedances of the nitrate maximum contaminant level (MCL). The Report also states that the Tulare study is presently being reevaluated. Therefore, further clarification on the impact of these monitoring results is needed.

7. Appendix B on page B-43 sets forth the extreme position that up to 50% of nitrate applications can reach groundwater, but indicates that experts are highly divided in this area, therefore no particular conclusion can be reached. Consequently, this discussion should be deleted from the Report. 111-27

I. State Anti-Degradation Policy

1. The Report references the State anti-degradation policy on page 57, and discusses its application to high quality waters of the State. However, the Report fails to address the many foundational issues associated with the policy before it determines how it will be applied. In place of a meaningful analysis the Report simply states that "[g]iven the complexity of determining baseline quality in the long-term ILRP context…any antidegradation analysis…will assume that at least some of the waters into which agricultural discharges occur are high quality waters because unpermitted degradation has occurred since 1968." (Report at p. 61.) This assumption is conclusory and lacks factual support. 111-28

2. Specifically, the Report implies that application of the antidegradation policy is triggered merely because the long-term irrigated lands program will authorize the continuation of agricultural discharges to surface and groundwater. (Report at p. 63.) However, application of the State's antidegradation policy in this manner is improper. The antidegradation policy is triggered when Regional Board action may cause degradation to high-quality waters. It is not triggered when Regional Board action does not cause degradation.

3. The Report also seeks to apply the best practical treatment or control (BPTC) of a discharge under a WDR. This attempt to force additional regulatory requirements on dischargers fails in application because even though the upper elevation source of some Central Valley waters may be of high quality, the waters receiving agricultural discharges are not high quality waters as the term is used in State Water Resources Control Board Resolution No. 68-16. The Report attempts to redefine "high quality waters" using the concept of "baseline condition." (Report at p. 60.) There is no legal basis for this approach. The Report admits as much when it states the "term 'baseline' is not used in the state or federal antidegradation policies but is a significant concept for application of the anti-degradation law" under the RPA. (Report at p. 60.)

4. The antidegradation policy of the ILRP must be consistent with SWRCB Resolution No. 68-16 in its application to high quality waters of the state. Regulatory requirements concerning discharges to lower quality and impacted waters must reflect a different standard. 111-29

5. Further, even if BPTC of a discharge is required there are limitations to its application. The BPTC approach to pollution control is based on adopting the best technology for pollution control available at a reasonable cost and operable under normal conditions. BPTC is derived from the phrase "best practical control technologies" referred to in Sections 301(b) and 304(b) of the Clean Water Act (which does not extend to agricultural non-point waters). In these sections, best practical control technologies is referred to when discussing the control of point source effluent from private operations. In application, BPTC refers to the best practical control

technology currently available. The staff proposal on page 152 indicates that existing management objectives on Tier 1 lands will be considered as BPTC. Accordingly, The Report needs to clearly define the term and recognize that even though BPTC is the preferred approach, it has significant limitations on its application. 111-29 cont'd

6. The associated tributary rule which has applicability in many other regions of the state has limited application in SSJVWQC area because regional waters are tributary only to the valley floor sinks which are not sources of municipal water. (Water Quality Control Plan for the Tulare Lake Basin at p. II-4.) 111-30

J. Groundwater Management Plans

1. The Report recognizes that in many areas current groundwater quality programs are already in place (e.g., SB 1938, AB 3030, Integrated Regional Water Management Plans (IRWMP), etc.). (Report at p. 88.) However, the Report also calls for new local groundwater management plans to be developed within 18 months. (Report at p. 154). This, like other timelines addressed above in section C, is wholly unreasonable. The SSJVWQC is largely covered by such plans which the Legislature has codified in statute as being the means by which groundwater quality should be addressed. Therefore, the development of new groundwater management plans may be unnecessary in most of the SSJVWQC area. At most, the upgrade of existing plans would be all that is needed to fully conform to any new water quality program. Based on SSJVWQC participant experience in developing SB 1938 and IRWMPs, it is very clear that 18 months is a wholly insufficient time frame. Any Regional Board ILRP should be consistent with these existing provisions of law and be based on local groundwater control and have realistic time frames for compliance. 111-31

2. It remains somewhat unclear if the Regional Board has the authority to go beyond the statutorily created multi-jurisdictional local plans (SB 1938 and IRWMPs) in its water quality efforts. If the proposition holds that the Regional Board does have some additional authority, some of the items discussed immediately below will need to be included as part of the RPA. Any additional provisions required under the long-term ILRP program will certainly take more than 18 months to complete, given the multi-disciplinary and multi-agency steps necessary to make amendments to these existing plans (which took years to develop).

K. Nutrient Budgeting and Irrigation Efficiency

1. The Report states that under certain situations groundwater programs would require nutrient budgeting and irrigation efficiency. (Footnote 60 of the Report, at p. 154.) It is uncertain, whether the Regional Board has the authority to demand specific on-farm practices. The Regional Board is not the agronomic or fertilizer agency of the State as that authority is vested expressly in the California Department of 111-32

Food and Agriculture. The application of fertilizer is a necessary agronomic feature, and is entirely distinct from the dairy program which involves applying a waste product to the land, and, thus, offers a jurisdictional nexus to the Regional Board.

By way of example, the Regional Board is without authority to tell Chevron how to operate a refinery or a high tech firm how to manufacture or clean their equipment. Using the same line of reasoning the Regional Board does not have authority to dictate to a farmer what to grow or how to grow it. The Regional Board's jurisdictional authority starts at the discharge point.

2. Beyond these legal and jurisdictional questions, the Report does not define nor explain how (1) regulatory nutrient budgeting would occur or (2) how irrigation efficiency would be determined or how a particular irrigation practice would be either prohibited or mandated (Report at p. 154). The environmental effects from just these two major uncertain actions in the RPA were not addressed under any alternative evaluated under the DPEIR. Correspondingly, the economic impacts from these major actions may be substantial (hundreds of millions), but were not evaluated whatsoever in the Economic Analysis.

3. In respect to nitrogen, the Report identifies the total tonnage of nitrogen fertilizer applied by agriculture in California. However, this gross number is meaningless without: (1) limiting tonnage to that applied in the Central Valley; and (2) reflecting an appropriate agronomic calculation as to how much nitrogen was taken up by the crops it was applied to across the Central Valley. The Report on page 20, recognizes that there is a long lag time between the use of a soil amendment and its ultimate detection in the event that any is leached into a groundwater aquifer. The Report should delete any discussion of nutrient budgeting as it fails to cite any regulatory authority to regulate nutrient applications and does not even attempt to address any of the CEQA or economic impacts associated with such an action. The economic impacts associated with limiting a farmer's yield on a crop due to nutrient budgeting limitations or irrigation efficiency restrictions has been totally ignored.

4. The Economic Analysis indicates that annual agricultural production in the Central Valley region is approximately $13.33 billion. In 2007 the value of agricultural production in Fresno, Tulare, Kern and Kings Counties alone was $16.07 billion. The overall value of California agriculture in 2007 was $25.83 billion, excluding livestock operations. Again this type of inaccurate statement of facts is indicative of the weaknesses inherent throughout the CEQA documents. (Economic Analysis at p. 3-6.)

111-32 cont'd

L. Agricultural Management Practices

1. The Report indicates that there should be an identification of (1)

111-33

existing agricultural practices and (2) what agricultural practices would have to be amended or enacted in certain areas. (Report at p. 150.) Any farm operation would involve several dozen to hundreds of separate management decisions during the course of the year for each field. Coalitions clearly cannot be obligated to identify the hundreds of thousands of management decisions and management practices that are involved across the millions of acres in each coalition. The scope of management practices should be limited to identification of particular management practices that are directly related to a water quality problem.

111-33 cont'd

M. Compliance Timelines and Enforcement Actions

1. The RPA states that water quality exceedances should all come into basin plan objective compliance within five to ten years. (Report at p. 159). This (like other timelines discussed above in sections C and J) is wholly unrealistic even as to surface water. In areas where issues exist in surface water like dissolved oxygen, pH, pathogens, salinity, etc., and water quality improvement efforts are underway and have been for years, it is unrealistic to assume because the Regional Board creates another program that these issues are going to somehow magically improve under a new specified timeline.

2. The proposal states that if any objectives are not reached within the applicable five to ten year period, then all growers in the coalition would be compelled to prepare individual farm management plans. Such a policy would only be justified if certain conditions were found to exist. First, if it was determined that the individual farmer was directly responsible for causing the impairment. Second, if specific management practices were identified as causing the problems, and those identified practices could be modified to cure the problem. Third, that the required individual farm management plan would be more effective than a collective, coordinated approach through the coalitions. (Report at p. 155.) The RPA apparently makes the assumption that individual farm management plans may be more effective than broader monitoring and management plans with the strength of the coalition behind it. That assumption is not supported in the Report, and likely cannot be supported. Instead, it is apparently offered merely as a retaliatory penalty.

111-34

3. The compliance timelines, as stated above, are problematic overall, but are especially troublesome when dealing with groundwater quality. Groundwater issues are typically decades in the making and may be the result of legacy pesticides, or water constituents such as pH, dissolved oxygen, salinity.

N. Coordination of Existing Programs

1. The proposal states that there should be coordination between the ILRP, diary program, Surface Water Ambient Monitoring Program, Department of

111-35

Pesticide Regulation, etc. (Report at pp. 156-57.) Such coordination is meritorious and has been stressed for years by SSJVWQC, particularly regarding coordination with the dairy program and other Regional Board programs dealing with *Escherichia coli (E.coli)* and fecal coliform. The Regional Board has been reluctant to fully coordinate these programs, and this needs to happen. 111-35 cont'd

2. The Report at page 33 discusses *E.coli*, which has no basin plan objective level. Fecal coliform does have a 200 colonies per hundred milliliters of water objective. There have certainly been pathogen detections in some of the water column samples, but a University of California study indicated that much of the pathogen is not attributable to irrigated agriculture. This point was omitted from the RPA. The RPA also fails to acknowledge that there should be a high level of coordination between other Regional Board programs dealing with these pathogens and the ILRP. 111-36

3. The RPA infers that the bright/clear line between the dairy program and the ILRP is going to be eliminated or significantly altered. The RPA, however, is unclear as to how this will occur, and does not address the confusion that could arise if it is not done properly. 111-37

O. Outside Party Participation

1. The language concerning "other interested parties" (Report at p. 154) appears to improperly open the door for negotiations on surface and groundwater management plans to other uninvolved parties. Management Plans and Monitoring and Reporting Program Orders have historically been approved by the Executive Officer and do not require multi-party negotiations. This language regarding public input also appears on page 155. 111-38

2. The RPA suggests that the public would be involved in determining the Tiering of an area. "Third-party groups and the Central Valley Water Board would identify low and high-priority areas in the development of watershed/area/commodity-specific implementation mechanisms during the 3-year transition period. The Central Valley Water Board intends to use existing information in this prioritization. However, there will be the flexibility for third-party groups and other interested parties to provide additional information during the process." (Report at p. 151) 111-39

3. The Report also appears to indicate that when the coalitions identify their priority areas within the first three years of transition, that there would be public input on those determinations as well. (Footnote 57 of the Report at p. 151.) This type of input is not required under the law and is unnecessary. It will delay and complicate development of required documents and certainly cause even extended timelines to be missed. It may also detrimentally affect participation. 111-40

4. In all of the Regional Board's other programs, individual dischargers are not required to have management plans reviewed periodically by other interested parties. Typically, when dischargers are required to submit special studies or management plans, the plan is submitted for Regional Board review and comment, revised based on Regional Board comments, and then implemented. The same methodology should apply to this program. 111-41

P. Tributary Rule

The Report indicates it will focus on waters that are tributary to areas having aquatic life and would treat these as priorities. Due to the tributary rule, the Report asserts that it would transpose such standards to upper basin waters. The tributary rule was previously discussed above in Section I., but it is noteworthy that this particular reference indicates that this would not involve "agricultural drains". (Footnote 66 of the Report at p. 159.) The Regional Board needs to clarify what is considered an agricultural drain as it applies to this section of the Report and agricultural return flows. 111-42

Q. SQMP/GQMP and FWQMP Requirements

1. Several elements of the proposed requirements for SQMP/GQMPs fail to account for the possibility that irrigated agriculture may not be the predominant source of the identified exceedances. (Appendix D at pp. D-1 and D-3.) The program should state that only if irrigated agriculture is identified as the predominant source of the pollutant discharge should the Surface and Groundwater Quality Management Plan be required to [numbers correspond to subsections in the Regulation] (4) identify practices to address the constituents of concern, (5) evaluate the effectiveness of management practices, (6) describe the grower outreach strategies, (7) track management practice implementation, (8) prepare a monitoring plan to track water quality, and (9) describe a schedule and milestones for the action taken. There is a real possibility that inputs from other point and non-point sources are contributing to the exceedances identified at monitoring sites, and identification of irrigated agriculture as the predominant source of the exceedances should be a prerequisite before any regulatory action is required. 111-43

2. The Report states that at a minimum, plans would describe those practices needed or currently in use to achieve water quality protection. (Appendix D.) We disagree with the use of this as a proper reflection of the applicable standard. The goal of FWQMPs should be to control discharges of pollutants to the maximum extent practicable. This approach is consistent with reasonable protection of water quality and also consistent with reasonable protection of water quality and also consistent with the requirements and standards imposed on municipal stormwater discharges. 111-44

3. Appendix D also includes his very troubling statement: "In addition to the minimum elements described above, the Executive Officer may require 111-45

ground or surface water quality monitoring to evaluate the effectiveness of the practices implemented by the grower." No criteria is discussed as to how the Executive Officer would establish a need for additional monitoring or the basis by which practices would be evaluated. In addition, the DPEIR fails to account for and analyze potential environmental and economic impacts associated with such additional monitoring requirements. As a result, the economics impact assessment greatly underestimates the RPA and its potential impact to agriculture.

111-45 cont'd

R. Summary of Comments on the Staff Preferred Alternative

The RPA (staff proposed alternative) was not properly reviewed as required under CEQA, including its potential economic impacts. Instead it was belatedly included only as an appendix to the Report. This subjects the entire proposal to legal challenge which would result in the CEQA analysis not meeting the court ordered deadline. (See discussion below.) Additionally, there are many specific problems with the above identified components of the staff proposal, which will face challenge if the staff proposal is advanced. The Board should adopt Alternative 2 and avoid these problems.

111-46

II. Draft Programmatic Environmental Impact Report

A. The DPEIR Does Not Describe or Analyze the RPA

1. The DPEIR includes five proposed alternatives. However, it does not include a description or analysis of the RPA discussed in the Report. The RPA apparently combines elements of the five identified alternatives to belatedly develop the Report included only as an appendix, which they are now calling an alternative. The RPA is now the proposed project and must be analyzed. The DPEIR does not make any attempt to analyze the environmental or economic impacts that would result if all of the identified elements were combined with each other, which is how they would be implemented if the RPA were selected.

111-47

2. A draft environmental impact report (EIR) must include a general description of the proposed project's technical, economic, and environmental characteristics. (State CEQA Guidelines, § 15124(c).) The project description must be stable, accurate, and consistent throughout the EIR. "An accurate, stable, and finite project description is the sine qua non of an informative and legally sufficient EIR." (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193.) "A curtailed or distorted project description may stultify the objectives of the [CEQA EIR] process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the "no project" alternative) and weigh other alternatives in the balance." (*Id.* at pp. 192 93.)

3. The DPEIR does not mention the RPA anywhere in its text. The RPA is only presented in the appendix. In *Vineyard Citizens for Responsible Planning v. City of Rancho Cordova* (2007) 40 Cal.4th 412, the Supreme Court reaffirmed that key pieces of the CEQA analyses cannot be buried in the appendices. Here, the RPA - *the proposed project itself* – is recommended by Regional Board staff for implementation by the Regional Board. This is a blatant violation of *Vineyard*, and it results in serious errors in the environmental analysis. An EIR is required to analyze the environmental impacts associated with any proposed mitigation measures. (State CEQA Guidelines, § 15126.4(a)(1)(D).) Thus, the DPEIR suffers from both substantive and procedural flaws that are fatal.

111-47 cont'd

B. Cumulative Impacts of the RPA Have Not Been Analyzed

1. The RPA is "a conglomeration of elements presented" in the five alternatives that are analyzed in the DPEIR. The RPA was not analyzed, whatsoever, in the DPEIR. Further, no attempt has been made to analyze the effects of the combined components of this alternative. Compounding this error, the DPEIR does not identify "any projects or programs adequately similar in nature, location, and type to result in a meaningful comparative analysis." "A cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts." (State CEQA Guidelines, § 15130(a)(1).)

111-48

2. In contravention of State CEQA Guidelines section 15130, the DPEIR employs neither a list nor a summary of plans and projections approach to the cumulative impacts analysis. In fact, the DPEIR does not identify a single program, policy, plan, or project to be included in the cumulative impacts analysis. Instead of analyzing the cumulative effects of the project together with other projects causing related impacts, the DPEIR concludes that there are no other projects – and analyzes the cumulative impacts of the project, standing alone. This analysis cannot withstand scrutiny. Other programs and projects that have the potential to affect water quality in the program area include United States Environmental Protection Agency's (EPA) recent action banning pesticide application in certain areas, and numerous pending Nation Pollutant Discharge Elimination System (NPDES) and other permit actions.

C. Alternative 1 Is Not A True "No Project" Alternative

1. The DPEIR asserts that alternative 1 constitutes the "No Project" Alternative, which the DPEIR defines as "full implementation of the present program." This description is inaccurate and misleading. In actuality, Alternative 1 is the "no additional regulation alternative." A "No Project" Alternative is intended to reflect what would happen absent any Regional Board action. In this case, no action results in no waiver program whatsoever. The existing waiver constitutes a Regional Board action just as all of the proposed actions included in the other alternatives of the DPEIR do.

111-49

2. "The no project analysis shall discuss the existing conditions at the time the notice of preparation is published, . . . 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." (State CEQA Guidelines, § 15126.6(e)(2).) When the existing conditions include implementation of a program or rule that will expire unless some affirmative action is taken, the "No Project" scenario must consider the expiration of that program or rule and its associated ramifications. (See, e.g., *Sherwin-Williams Co. v. S. Coast Air Quality Management Dist.* (2001) 86 Cal.App.4th 1258, 1280 [SCAQMD properly defined the "No Project" scenario as "not adopting the proposed amendments to Rule 1113, but instead allowing the expiration of the current product variances for some of the coating categories, and maintaining the current version of Rule 1113 as amended by a 1990 court order"].) In contrast, when an agency must act affirmatively to extend an existing program or rule, that itself is a project that must be analyzed under CEQA. (*Sunset Sky Ranch Pilots Assn. v. County of Sacramento* (2009) 47 Cal.4th 902, 909 [county's decision not to renew a conditional use permit that was expiring is not a project under CEQA, but the renewal of the permit would be].)

111-49 cont'd

3. The lack of an accurate "No Project" Alternative constitutes a fatal flaw for the DPEIR. The "No Project" Alternative is a mandatory component of an EIR. The purpose of this requirement is "to allow decisionmakers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project." (State CEQA Guidelines, § 15126.6(e)(1).) In this case, no such comparison is possible because the "No Project" Alternative is fundamentally inaccurate.

D. The Environmental Analysis is Flawed Due to Inaccurate Baseline Conditions

1. The Environmental Setting fails to describe accurately the existing environmental conditions, even at a programmatic level. "Knowledge of the regional setting [of the project] is critical to the assessment of environmental impacts . . . . The EIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed and it must permit the significant effects of the project to be considered in the full environmental context." (State CEQA Guidelines, § 15125(c).) Toward that end, the DPEIR "must include a description of the physical environmental conditions in the vicinity of the project, . . . from both a local and a regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." (Id. at § 15125(a).)

111-50

2. First, the "Existing Setting" chapter is, by its own admission, incomplete. For example, the description of the existing conditions related to surface

water makes no mention whatsoever of the amount of surface water currently being diverted or the amount being used for irrigation by participants in the ILRP. Likewise, there is no indication of how much water is returned to stream systems after agricultural use, and how much of that water is derived originally from groundwater basins or surface water sources. Absent this information about the existing physical conditions, it is not possible to determine whether the long-term ILRP will cause significant impacts on water supplies, stream systems, or the fish, wildlife and plants dependent on those systems.

111-50 cont'd

3. The DPEIR attempts to overcome the gaps in the "Existing Setting" chapter by adding a discussion of environmental setting to each of the impact analyses. This is confusing to the reader because these supplemental discussions of the "existing setting" are not entirely consistent with the description provided in the "Existing Setting" chapter. Moreover, even the supplemental discussions in the impact analyses are improperly truncated.

111-51

4. To the extent the DPEIR relies on the "No Program" Alternative to represent the existing baseline conditions, this is improper in this case. The "No Program" Alternative misstates what will occur absent any Regional Board action. Because neither this nor any of the other attempts in the DPEIR to describe the environmental setting is legally adequate, the EIR lacks any accurate baseline against which to judge the environmental impacts of the proposed program.

111-52

E. The DPEIR Fails to Evaluate the Reasonably Foreseeable Effects of the RPA on the Environment

1. "In evaluating the significance of the environmental effect of a project, the lead agency shall consider direct physical changes in the environment which may be caused by the project and reasonably foreseeable indirect physical changes in the environment which may be caused by the project." (State CEQA Guidelines, § 15064(d).) "An indirect physical change in the environment is a physical change in the environment which is not immediately related to the project, but which is caused indirectly by the project. If a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect physical change in the environment." (State CEQA Guidelines, § 15064(d)(2).)

111-53

The DPEIR fails in this requirement because the DPEIR acknowledges that irrigation costs would increase under the alternatives analyzed, and result in less water being used, crop patterns may change and some land going out of agricultural production, but it does not analyze the impacts from these changes. It does not consider what impacts will be caused by the reasonably foreseeable result of less irrigation, such as less water returning to stream systems and diminished flows at certain times of year, and less irrigation water reducing the amount of groundwater recharge that would otherwise occur, particularly in the San Joaquin Valley where many of the surface

water delivery systems were built with the intent to increase local groundwater basin recharge.

2. Similarly, the DPEIR acknowledges that the program will result in the conversion of agricultural lands to other uses, but it fails to analyze the reasonably foreseeable impacts associated with that conversion, such as climate change impacts, and conflicts with existing land use regulations and zoning.

111-53 cont'd

3. The RPA cumulative impacts were not analyzed whatsoever. The DPEIR does not analyze the reasonably foreseeable impacts related to nutrient management restrictions which will impact cropping patterns. It also suggests regulatory action to restrict certain irrigation practices (i.e., a 2 acre-foot limit or no row crop irrigation), which would have major environmental, economic and even community impacts. All of these direct and indirect impacts resulting from the implementation of the program must be analyzed in the DPEIR. None, however, was acknowledged whatsoever.

111-54

F. The DPEIR Fails to Address the Long-term ILRP's Potential Impacts on Land Use

1. A draft EIR must "discuss any inconsistencies between the proposed project and applicable general plans and regional plans," including habitat conservation plans and natural communities conservation plans. (State CEQA Guidelines, § 15125(d).) While the DPEIR acknowledges the requirement to evaluate its consistency with General Plans and Habitat Conservation Plans (HCPs), it makes no attempt to analyze these impacts even in a qualitative manner. Its characterization as a programmatic document does not wholly excuse undertaking the required environmental analysis. The DPEIR should evaluate the extent to which adopted General Plans within the long-term ILRP area designate agricultural land uses that would be undermined by the increased irrigation costs imposed by the long-term ILRP and the resulting loss of agriculture. Likewise, the DPEIR must discuss whether and how adopted HCPs in the long-term ILRP area rely on agricultural land uses and how the increased irrigation costs imposed by the long-term ILRP, and the resulting loss of agriculture, would affect those plans.

111-55

2. Even more egregiously, the DPEIR utterly fails to analyze the long-term ILRP's land use impacts. The DPEIR acknowledges that agricultural lands are a resource that must be analyzed under CEQA, and it also admits that many jurisdictions have adopted land use plans, regulations, and zoning ordinances to protect agricultural uses. Yet the DPEIR completely fails to analyze, even at a programmatic level, whether the long-term ILRP will conflict with any of these land use plans, regulations, or zoning ordinances. Again, the DPEIR's status as a programmatic document is not an excuse to omit any discussion of these potentially severe impacts – which is the faulty path taken

by the DPEIR.

111-55 cont'd

G. The DPEIR Fails to Identify the Environmentally Superior Alternative

1. The DPEIR adopts a NEPA-like approach and analyzes each of the alternatives presented in detail. However, the DPEIR ignores the CEQA requirement to identify the environmentally superior alternative. (See State CEQA Guidelines, § 15126.6(e)(2).)

111-56

H. Alternative 2 is the Superior Alternative

1. Among the five alternatives, Alternative 2 is the best option to strengthen the existing surface water ILRP and expand the ILRP to groundwater. The DPEIR confirms that Alternative 2 is the superior alternative. The Report evaluates the proposed alternatives on pages 96 through 105 (and in other locations), and finds that Alternative 2 was superior to all other alternatives. The only issue raised in the Report concerning Alternative 2 dealt with groundwater. The Report stated, when discussing groundwater monitoring under Alternative 2, that "feedback mechanisms would not include groundwater quality monitoring to determine whether practices implemented would be maintaining and/or restoring beneficial uses or the highest reasonable groundwater quality." (Report at p. 112.) This criticism is inaccurate as the statutorily created local groundwater quality management plans specifically require such monitoring and Alternative 2 expressly calls for monitoring to be included in the newly created groundwater management plans. Therefore, Alternative 2, without reservation, is the superior alternative.

111-57

III. Economic Analysis

A. Economic Analysis is Flawed and Fails to Adequately Address Economic Impacts

1. The Economic Analysis is extremely disappointing and inadequate. The analysis shows only very narrow differences in the economic impacts between the five alternatives, and has no analysis of the RPA whatsoever. To begin with, the Economic Analysis states that Alternative 1's (misnamed the no project alternative) costs would include the administration and management of water quality information. (Economic Analysis at p. 2-23.) Since it is the "no project alternative" it is assumed that existing programs would remain in place with no changes or additions. This assumption coupled with the fact that virtually all dischargers have implemented the management practices necessary to satisfy current ILRP requirements, one would expect the cost of Alternative 1 to be significantly lower than all other alternatives. However, management practice costs for Alternative 1 are listed at $450,581,233. The costs for Alternative 2, 3, and 4, which are aggressive expansions of the ILRP, are listed at approximately

111-58

$452,449,969 each. (Economic Analysis Figures 2-18-2-21.) The analysis indicates only a cost difference of $1,868,736 between the current ILRP and Alternatives 2 through 4. Given the fact that any of the alternatives, including the RPA, would require significantly more practices than are currently being implemented, the costs of the alternatives and the RPA as compared to Alternative 1 have to be significantly higher. (Economic Analysis at p. 2-3.)

111-58 cont'd

The economic impact differences between the alternatives is significant and this fact is not apparent from this analysis. Beyond that, the other alternatives also deal with groundwater as opposed to Alternative 1 which does not. The costs associated with the monitoring and reporting of groundwater quality are significant, and lead will lead to total costs under the other alternatives significantly higher than those of Alternative 1, perhaps as much as four times higher. The economic evaluations are wholly defective.

2. The Economic Analysis fails to satisfy CEQA because it does not contain an accurate discussion of the economic and social impacts of the proposed project. (See State CEQA Guidelines, § 15131, subd. (a), 15382.) Where an EIR identifies significant environmental impacts, the related economic and social impacts are relevant. The requirement to consider secondary and indirect environmental effects is mandatory. (*Citizens Association for Sensible Development of Bishop Area v. County of Inyo* (4th Dist. 1985) 172 Cal.App.3d 151, 170.) When non-environmental factors are determined to be significant, the EIR must explain the reasoning used to reach its conclusions. Here the costs associated with the proposed alternatives, over $450,000,000 is significant. The Economic Analysis fails to accurately analyze or explain the basis for its conclusions. (See State CEQA Guidelines, § 15131, subd. (b).)

111-59

3. Focusing only on groundwater: (1) dealing with nutrient requirements; (2) imposing additional groundwater monitoring; or (3) amending irrigation practices to meet new efficiency standards are just a few examples of components that vary greatly between alternatives and will have a huge impact on the cost of a given alternative. These impacts were totally ignored. Costs related to these requirements could easily reach into the dozens or hundreds of millions of dollars. It is not stated, but these costs are apparently to be borne by the affected landowners. If only a thousand farmers had to drill only two monitoring wells at a cost of $200,000, the total cost for this component approaches one-half billion dollars. If 500 farmers had to restructure their irrigation system in only four of their 20 fields at a cost of $40,000 per field, that is $400,000,000. These impacts have also been totally ignored in the document. When SSJVWQC addressed the environmental consultants at the field hearings, they affirmatively acknowledged that these issues are potential regulatory requirements and the costs may be significant, however, they said they could not address those impacts because the Regional Board staff proposal was so imprecise as to what

111-60

would actually be required that they could not evaluate the impact. This reflects both regulatory notice problems and the inadequacy of the Economic Analysis. 111-60 cont'd

4. Further, the Economic Analysis did not specifically analyze the RPA, even though they (the Regional Board staff – not the experts actually performing the Economic Analysis) have selected a number of $492,000,000 in costs. They also assert an assumption of how much agricultural land would likely be forced out of production and how many jobs would be lost if the RPA were implemented. Yet, they do not deal with any of the big ticket items or set forth any of their assumptions which makes the environmental analysis nearly useless. 111-61

5. The Report gives some approximation of the values to drill additional wells, and indicates that new wells would cost between $76,000 and $1,000,000. If the 45 communities that have impaired drinking water drilled new wells, that cost would be between $20 and $47 million to merely drill additional wells across these communities. (Report at p. 50.) 111-62

6. Appendix B of the Report also addresses monitoring well costs, and indicates on page 21 that they anticipate 5,000 additional monitoring wells. If these 5,000 new wells averaged only $10,000 each (a significant underestimate of the anticipated cost), this would result in $50 million in additional costs. Actual well costs to deep aquifers may cost 10 to 20 times this amount - therefore, the greater part of a billion dollars. This was completely ignored in the Analysis. 111-63

7. The Report indicates that the Regional Board staff proposes to augment their force and increase staffing to as many as a total of 48 staff members. Even Alternative 2 is determined to lose five jobs in the Tulare Lake Basin, versus Alternative 4 which would cost $511 million with 12 jobs lost. As discussed above, the economic analysis is woefully inaccurate, and significantly under estimates the cost of all the alternatives – particularly if coalitions do not continue to administer the waiver. A real possibility again totally ignored.. 111-64

8. Neither the RPA nor the Economic Analysis makes any assumption on compliance, enforcement or other costs which will be significant under all of the alternatives. 111-65

IV. Conclusion

The ability of irrigated agriculture to comply with the terms of any new program is dependent on the Regional Board adopting a reasonable and practical program that properly applies designated beneficial uses and interprets narrative water quality objectives. The agricultural coalitions signatory to this document appreciate the opportunity to comment on the DPEIR, RPA and associated documents. However, there

136-1

remain significant issues of concern and areas of disagreement concerning the DPEIR and the RPA. We reiterate that Alternative 2 provides the necessary protection for water quality while allowing the various agricultural entities the ability to assist growers and the Regional Board in developing reasonable programs for the protection of surface and groundwater in the Central Valley. Alternative 2 has been analyzed in the DPEIR and therefore is less vulnerable to a CEQA challenge than the RPA, which was not been analyzed in the DPEIR. We ask the Regional Board to carefully consider the comments provided above and recommend Alternative 2 as the preferred alternative.

Respectfully submitted,

DAVID ORTH, Steering Committee Coordinator
Southern San Joaquin Valley Water Quality Coalition
Kings River Conservation District
Kings River Water Association
Kaweah Delta Water Conservation District
Kaweah and St. Johns Rivers Association
Deer Creek and Tule River Authority
Kern County Water Agency

Belridge WSD
Berrenda Mesa WD
Buena Vista WSD
California Citrus Mutual
Cawelo WD
Henry Miller WD
Kern Delta WD
Kern-Tulare WD
Lost Hills WD
North Kern WSD
Paramount Farming Company
Rosedale-Rio Bravo WSD
Semitropic WSD
Shafter-Wasco ID
Tehachapi-Cummings CWD
Wheeler Ridge-Maricopa WSD

Attachments

82231.00003\5365586.1

Job No. 130710V1-CON

EST. 1968
PROVOST& PRITCHARD
CONSULTING GROUP
An Employee Owned Company

WATER & WASTEWATER
MUNICIPAL INFRASTRUCTURE
LAND DEVELOPMENT
AGRICULTURE SERVICES
DAIRY SERVICES
LAND SURVEYING & GIS
PLANNING & ENVIRONMENTAL
DISTRICT MANAGEMENT

FRESNO • CLOVIS • VISALIA • BAKERSFIELD • OAKDALE

1800 30th Street, Suite 280
Bakersfield, CA 93301-1930
(661) 616-5900 FAX (661) 616-5890
www.ppeng.com

MEMORANDUM

To: David Orth – Coordinator Southern San Joaquin Valley Water Quality Coalition

From: Michael (Mike) Day, CA Registered Civil Engineer C39494
Linda Gomez Sloan, CA Professional Geologist 8299

John Schaap, CA Registered Civil Engineer C61754, CA Registered Agricultural Engineer AG563.

Subject: Review of Proposed Environmental Impact Report (PEIR) for Irrigated Lands Regulatory Program (ILRP) of Central Valley Regional Water Quality Control Board (Regional Board)

Date: September 27, 2010

INTRODUCTION

Pursuant to a request from Ernest Conant of Young-Wooldridge, Provost & Pritchard Consulting Group, Inc. (P&P) staff and Ken Schmidt of Kenneth D. Schmidt & Associates (KDS&A) reviewed the subject document with respect to lands in Kern County that would potentially become subject to regulation under the proposed ILRP. This memo summarizes P&P and KDS&A[1] findings, and focuses primarily on technical issues (as opposed to policy or legal issues). The below comments and findings pertain to the Kern County portion of the area covered by the PEIR, in particular, and they often apply to other areas to the North as well.

GENERAL COMMENTS

In general, the PEIR is severely lacking in technical detail, making it difficult to comment on specific or detailed items. In particular, there are underlying assumptions "built in" to the document for Alternatives 2, 3, 4, and 5, which are also in the Staff's preferred alternative that are not explicitly stated, which are particularly troubling, but more importantly, difficult to evaluate by PEIR authors let alone a third party

111-66

The assumptions built in to the document include:

1) Regulation by the Regional Board is the only alternative to solve water quality problems in waters of the State;

[1] Ken Schmidt, CA Professional Geologist 1578, and Certified Hydrogeologist 176, reviewed the PEIR and participated in the preparation of this memo with respect to hydrogeology issues

David Orth – Southern San Joaquin Valley Water Quality Coalition
September 27, 2010
Page 2 of 9

2) All irrigated lands within the boundaries of California's Department of Water Resources (DWR) Bulletin 118 groundwater basins discharge or have the potential to discharge to groundwater;
3) The cited economic model correctly designates irrigated land vs. other land uses.
4) Deep percolation from irrigated lands always occurs in quantities large enough to transport significant amounts of contaminants below crop root zones;
5) Deep percolation from irrigated lands always has the potential to transport contaminants that would impact water supply wells;
6) All groundwater underlying irrigated lands, or underlying other areas that could be potentially impaired by "discharge" from irrigated land is high quality waters of the State with beneficial uses that should be protected from any degradation or contamination with any constituent of concern;
7) Specific constituents of concern are not designated or differentiated that would be subject to ILRP regulations. It should be noted that constituents of concern are managed differently by agricultural operations and behave differently in the environment.

111-66 cont'd

Further observations include:

1) There is a presumption that DWR Bulletin 118 groundwater basin boundaries are accurate;
2) No consideration or specific analysis of water and/or contaminant transport mechanisms in the root zone, vadose zone, and/or groundwater has been done to designate or differentiate areas that would be subject to ILRP regulations;
3) No consideration or specific analysis of agronomic science, groundwater hydrology and/or geochemistry has been done to designate or differentiate areas that would be subject to ILRP regulations, and in particular, these considerations may include:
    a. Mechanisms of contaminant volatilization, transport or capture in or above the crop root zone;
    b. Moisture content of vadose zone sediments;
    c. Clay layers that impede or inhibit groundwater movement;
    d. Groundwater depth;
    e. Piezometric water surface levels and gradients;
    f. Naturally occurring constituents beyond the control of irrigated agricultural land operators;
    g. Historically used (legacy) chemicals (many of which are no longer used and/or used differently now) in soils, vadose zone, or groundwater which are beyond the control of irrigated agricultural land operators.
4) No consideration of other immediate/adjacent factors; for example well construction and surrounding land use, farming and irrigation practices, hydrogeology, geochemistry, contaminant source and transport has been considered with respect to public water supply wells and/or domestic wells whose water would need to be protected from contamination. And, no consideration was given to alternatives besides regulating irrigated lands for protecting those wells;

111-67

David Orth – Southern San Joaquin Valley Water Quality Coalition
September 27, 2010
Page 3 of 9

5) Economic analyses lack in reality regarding monitoring and compliance requirements and responses\results to the regulation of irrigated lands; 111-67 cont'd

FINDINGS

P&P and KDS therefore submit the following findings for why these assumptions should not be made:

1) Irrigation itself is not a waste discharge to groundwater. Consider the fact that surface water used in most parts of Kern County is of a quality that, when used in irrigated agriculture, improves groundwater quality (if deep percolating water reaches it). Waters from the Friant-Kern Canal and Kern River originate from Sierra Nevada Mountain rain and snow melt runoff, and are consistently of excellent/high quality. Waters from the California Aqueduct also originate from Sierra Nevada runoff, and while higher in minerals, is also of better quality than groundwater in many areas. Water quality data for these three primary surface water sources for Kern County irrigated agriculture are provided in Table **A** to illustrate this point. Furthermore, deep percolation from irrigation is in fact an important groundwater recharge activity in some areas with suitable soils and groundwater conditions, and is necessary to maintain a water balance. Regulations to improve irrigation efficiency in those areas, thereby limiting deep percolation, would exacerbate already chronic water supply shortages and groundwater overdraft conditions as well as limit dilution of groundwater constituents with higher quality surface water 111-68

2) Moisture deficient sediments underlie some lands, particularly in western parts of Kern County, effectively acting as a barrier between downward percolating water and groundwater until the moisture deficient soils become saturated. These sediments have a significant capacity to absorb water. This phenomenon was investigated, identified, and became an important factor influencing construction of the California Aqueduct and other canals constructed later in Kern County Areas with substantial underlying moisture deficient soils should be excluded from the ILRP for groundwater protection purposes. 111-69

3) The DPEIR utilizes DWR Bulletin 118 boundaries, which have been found to be very general when reviewed by hydrogeologists with access to more well driller's logs than were available to DWR geologists setting boundaries. A more current and careful review of groundwater basin boundaries is needed to assure that some irrigated lands which do not overlie groundwater are not inappropriately included in the ILRP for groundwater protection purposes. 111-70

4) Irrigating areas which overlie shallow groundwater and/or poor quality groundwater commonly referred to as "brackish water", which is unsuitable for drinking is not a hazard that should be protected against factors that improve its quality. Much of Kern County should be excluded from the ILRP for this reason. A map prepared by Kern County Water Agency is provided with this memo (**Figure 1**) which shows areas in Kern County generally considered as having useable groundwater, and the remainder having unsuitable brackish 111-71

groundwater. Note, however that the map was not specifically prepared for this purpose, is now somewhat dated, and should not be explicitly taken as definitive boundaries for the ILRP.

On this point it should be noted that large areas of the Western portion of the San Joaquin Valley in particular, but a few other areas as well, have excessive, naturally occurring saline-sodic soils and first-encountered groundwater with high salt content (sodium, chloride, etc), boron, nitrates, and in some cases arsenic, selenium, molybdenum, nickel, and other trace elements. These areas have been well documented in numerous studies (Rector 1983).

As an example, total dissolved solids (TDS) values in groundwater and around the Lost Hills Anticline and the Antelope Plain were reported by Wood and Davis (1959) to range from 2,200 to 10,900 ppm in the 1950's. DWR found high concentrations of nitrates in groundwater in the San Joaquin Valley in the 1960's In more recent years the interagency San Joaquin Valley Drainage Program (Swain, 1990) found salinities frequently exceeding 20,000 µS/cm in shallow groundwater in the perched zone of the basin-rim zone, generally located at the lower end of alluvial fans and the adjacent basin trough. Figure 2 shows lines of equal Total Dissolved Solids (TDS) concentrations in the Lost Hills area, based upon Kern County Water Agency data from 1997.

Note that levels of salinity alone render brackish groundwater unsuitable for drinking or irrigation. Further, concentrations of nitrates, arsenic, selenium, and other trace elements exceeding drinking water standards are often found in these same areas. 111-71 cont'd

It is remarkable that all of the known areas with brackish groundwater in Kern County are currently designated by the Regional Board in the Tulare Lake Basin Plan as having beneficial use (though the CV-SALTS basin plan amendment process rightly has this under review).

5) In addition to the brackish waters discussed in item 5 above, many areas of Kern County have naturally occurring constituents in the soil, underlying sediments, and/or groundwater viewed by the Regional Board as contaminants that are beyond the control of the operators of irrigated lands. Regulations proposed in the draft PEIR would not address this situation.

    - One example of such are irrigated lands which previously were swamp and overflow areas. Many of these areas have soils and underlying groundwater with naturally occurring high levels of organics and/or nitrates. This is due to previous and continuing decomposition of the vegetative matter in swamp and overflow land soils and underlying sediments.

6) Crop, soil, vadose zone, and/or groundwater uptake of potential contaminants effectively mitigates pollution in many cases. 111-72

David Orth – Southern San Joaquin Valley Water Quality Coalition
September 27, 2010
Page 5 of 9

Many of the constituents of concern identified in the ILRP PEIR are already sometimes effectively removed or transformed to other harmless states through a variety of processes in the soil and/or underlying and neighboring areas that will continue to occur regardless of ILRP regulation. The Regional Board staff's preferred alternative for the ILRP advances unnecessarily expensive regulations that would not always be the most effective way to address many constituents of concern.

111-72 cont'd

Concerning nitrates, nitrogen is often applied to irrigated agricultural lands in organic or inorganic forms as an essential fertilizer, and goes through many complex processes that ultimately remove or immobilize all or most of it before it can reach groundwater. Crops use nitrogen (N) to manufacture proteins, chlorophyll, and other essential plant biochemicals necessary for their growth. Plants acquire N primarily from soils within the root zone. Most of the N in soil is a part of the soil organic matter. For prevention of a long-term decline in the soil organic matter, N must be added at least at rates that will replace the N removed in the harvested crop and replace losses of N below the root zone, which for practical purposes are not completely avoidable in all cases for sustained periods. The use and fate of nitrogen in agriculture is more completely described by Chang, et. al (2005) and Hantzsche et. al (1992).

The following mechanisms which already occur through normal agricultural operations have been identified by the above mentioned authors to remove nitrogen from agricultural fields or immobilize it.

- Removal in plant material through harvesting;
- Ammonia volatilization from the soil surface;
- Ammonia and other nitrogen gases volatilizing from plant surfaces;
- Denitrification loss of nitrate and nitrite as N_2, N_2O, and NO gasses;
- Binding of nitrogen in sediments;
- Leaching of nitrate and nitrite beyond the root zone.

Since nitrogen is a significant crop input and operating cost, farmers are motivated to manage this resource appropriately. Leaching is the only potential nitrogen threat to groundwater, and can only happen if nitrogen is available in a mobile form, and if water is percolating below the root zone. Best Practicable Treatment and Control (BPTC) (if that regulatory approach were to be applied) for leaching of nitrogen includes appropriate timing and applications of fertilizers, and good irrigation efficiencies. Our knowledge of Kern County irrigated agriculture suggests that these things are happening in most of Kern County already. The Regional Board staff's preferred ILRP alternative would not necessarily be the most cost-effective way to reduce nitrates in drinking water wells in particular. Based upon experience, P&P and KDS believe potable water wells can often more economically be protected from existing and future nitrate contamination by changes that cause them to be fed by deeper groundwater zones of higher quality (i.e. deepening or replacement with screens tapping waters with safe nitrate levels below protective clay layers), by water treatment to remove nitrate, or through service by bottled water..

111-73

Concerning pesticides and herbicides, many of the constituents of concern discussed in the PEIR have been banned and/or are no longer used in the Central Valley. Most pesticides and herbicides used in the Central Valley today have very short half-lives, and they volatilize, degrade into harmless forms, and/or bind to soil or sediment without becoming a threat to groundwater. Regulation of pesticides and herbicides for groundwater protection should be coordinated through the Department of Pesticide Regulation versus what is proposed in the PEIR by the Regional Board. 111-74

7) Most irrigated lands in Kern County have no leaching, or leaching that is well below the most extreme BPTC regulation proposed in the ILRP.

In addition to the findings discussed above, irrigation is otherwise not a significant threat to groundwater quality in many parts of Kern County because irrigation efficiencies are very high and deep percolation either does not occur, or happens in such low quantities that regulation under the ILRP would do nothing to reduce it. A number of references illustrate this point, and are described below:

From Fall 2000 through 2006, irrigation scheduling and soil moisture monitoring demonstrations and irrigation evaluations were conducted by the University of California Cooperative Extension in 132 fields over 11,994 acres with 30 different growers covering 14 different crops, 11 different soil textures and 9 different irrigation system types in Kern County. Data collected from these sites indicated that the average on-farm application efficiency was 95%. (Sanden, 2008, with interim results published in Sanden, 2006). In many of the fields, efficiencies of 100% were measured. These indicate no runoff or deep percolation. Burt et al (2008) discusses regulated deficit irrigation (RDI) practices, which are widespread in Kern County, and produce no deep percolation. This practice may not be sustainable for long periods of time; nevertheless, it is widely employed. 111-75

Sanden, Burt, and their co-authors conclude that farmers are already highly motivated to conserve water, control pumping power costs, minimize fertilizer and other inputs, and thus there is little, if any, "wasted" water to conserve. It follows logically that if no water is being lost to deep percolation, then there is very little groundwater pollution potential.

High irrigation efficiencies represent best practicable treatment and control (BPTC) for irrigation in areas that have become subject to that standard (also proposed in some of the Alternatives in the ILRP). Since that is already widespread in Kern County, regulation won't reduce deep percolation significantly.

8) Clay layers in many parts of the groundwater system underlying the Central Valley, and Kern County in particular, prohibit or greatly inhibit the downward movement of water in many areas, and thus isolate deeper waters with beneficial uses from contamination by possible percolating water from irrigated lands (Croft 111-76

1972, Metz 1991, Page 1986, Rector 1983). Where there may be percolation, time of transport considerations render many of the proposed ILRP regulatory actions ineffective.

Lake bed deposits have been identified in the subsurface, the A through F clays, that act as aquitards that retard vertical groundwater flow. The most regionally extensive E clay separates unconfined to semiconfined groundwater above the clay from confined groundwater below the clay. Its thickness ranges from about 10 feet near its edge to more than 160 feet beneath the Tulare Lake bed (Croft 1972; Metz 1991, Page 1986).

The aquifer above the A clay is comprised of interbedded lenses of sand and clay; typical of deposits under flood plain conditions. The combined thickness of clay beds in the near subsurface provides a uniform barrier to deep percolating water; forming a perched groundwater condition (Rector 1983).

111-76 cont'd

9) Water moves through soil due to two types of forces –gravity and capillary tension. Capillary forces pull water from wet areas into dry areas in any direction. Gravity pulls water downward. Capillary forces vary greatly in magnitude depending on the water content in a given soil and by soil texture. Capillary forces dominate flow conditions in unsaturated soils, while gravity only governs flow in saturated soil conditions (Gardner 1979). With this background, we note the following:
   - Surface evaporation and transpiration can create extremely dry near-surface soil conditions in more arid areas, such as many areas in the southern San Joaquin Valley;
   - Soil moisture content generally increases with depth, so capillary forces can tend to wick water from moist, deep percolation areas toward the adjacent near-surface dry soils rather than downward. This is more likely where more thickness of unsaturated sediments is present between the surface and deep groundwater;
   - Similarly, alternating layers of coarse- and fine-grained sediments can serve as capillary breaks that also act to retard downward movement of groundwater.

111-77

CONCLUSIONS

Based upon these findings, P&P and KDS make the following conclusions:

1) The Regional Board should adopt Alternative 2 subject to the following conditions.

2) The Regional Board should conduct scientific studies which eliminate the erroneous assumptions and incorporate consideration of the various matters discussed above in selectively identifying and designating specific irrigated lands which properly belong in the ILRP with respect to regulations that would protect groundwater with beneficial uses.

111-78

3) After accomplishing item 2 above, the Regional Board should re-visit, and revamp Alternative 2 with regulations working through existing coalition groups, with appropriate consideration of existing Groundwater Management and Integrated Regional Water Management Planning Agencies; and involve carefully selected experts from appropriate scientific disciples related to irrigated agriculture, hydrogeology, and pollution control, having practical, local knowledge. 111-78 cont'd

LIST OF ATTACHMENTS

Table 1: Water quality data for three primary surface water sources for Kern County irrigated agriculture.

Figure 1: Map illustrating areas in Kern County generally considered as having unsuitable brackish groundwater.

Figure 2: Total Dissolved Solids in Groundwater Above the Corcoran Clay in Lost Hills Area

REFERENCES

Brown, R.S., 1981. Depth to the Top of the Corcoran Clay, San Joaquin Valley, map. State of California, Department of Water Resources, San Joaquin District.

Burt, C., P. Canessa, L. Schwankl, and D. Zoldoske. 2008. Agricultural Water Conservation and Efficiency in California – A Commentary.

Chang, A., T. Harter, J. Letey, D. Meyer, R. Meyer, M.C. Matthews, F. Mitloehner, S. Pettygrove, P. Robinson, and R. Zhang. 2005. Managing Dairy Manure in the Central Valley of California. University of California.

Croft, M.G., 1972, Subsurface Geology of the Late Tertiary and Quaternary Water-Bearing Deposits of the Southern Part of the San Joaquin Valley, California, U.S. Geological Survey, Water-Supply Paper 1999-H.

Gardner, Dr. W.H., 1979. *How Water Moves in Soil*, University of Washington, for American Society of Agronomy.

Hantzsche, N.N. and E.J. Finnemore. 1992. Predicting ground-water nitrate-nitrogen impacts. Ground Water. Vol. 30(4): 490-499.

Metz, R.T., 1991, Study of the Regional Geologic Structure Related to Ground Water Aquifers in the Southern San Joaquin Valley Ground Water Basin, Kern County, California, prepared for Kern County Water Agency.

Negrini, R. et al, 2009, A Middle Pleistocene Lacustrine Delta in the Kern River Depositional System: Structural Control, Regional Stratigraphic Context, and Impact on Groundwater Quality, CSUB Department of Geology, Kern Water Bank Authority, and Kern County Water Agency.

Page, R. W., 1986. Geology of the Fresh Ground-water Basin of the Central Valley, California, with Texture Maps and Sections, USGS Professional Paper 1401-C.

Rector, M.R., 1983, Salt Management Project in Lost Hills Water District, Kern County, California, Lost Hills Water District in conjunction with Michael R. Rector and Associates.

Sanden, B. 2006. Field management and monitoring of almond irrigation in Kern County. Proceedings 2006 California Plan and Soil Conference. Realities of Modern Agriculture. Visalia, CA 7-8 Feb. 2006. University of California Press. Pp. 49-55.

Sanden, B. 2008. How good is water use efficiency in California Agriculture? News Release. September 24, 2008.

Swain, W.C., 1990, Estimation of Shallow Ground-Water Quality in the Western and Southern San Joaquin Valley, California, San Joaquin Valley Drainage Program Interagency Study Team, Sacramento, California.

Wood, P.R. and Davis, G.H., 1959, Ground-Water Conditions in the Avenal-McKittrick Area, Kings and Kern Counties, California, U.S Geologic Survey, Water-Supply Paper 1457.

3.3.27.1 Responses to Letter 111

Note: Comment Letters 112 and 136 are part of Comment Letter 111.

111-1

See Master Responses 3 and 4.

111-2

See Master Responses 4 and 10.

111-3

See Master Response 12.

111-4

See Master Response 12.

111-5

The estimate of 2 million additional acres was determined by subtracting the irrigated acreage in the current ILRP from DWR estimates of total irrigated acreage in the Central Valley (Draft PEIR, Appendix A, page 143, footnote 46). Despite using the best available information, there is uncertainty in the estimates for current existing irrigated acreage in the Central Valley depending on the information source (6.5 million acres to more than 8 million acres; see Draft PEIR, Appendix A, Table 16). The reported measure of how much additional acreage would be subject to the Long-term ILRP thus depends on the estimate of existing irrigated agricultural lands used in the calculation. The Central Valley Water Board has found in its compliance efforts with non-participants in the current program that multiple data sources may indicate that a parcel is used for irrigated agriculture but the only way to verify the information is by site visit.

111-6

See Comment Letter 1, Response 8.

111-7

See Master Response 18.

111-8

See Master Response 18.

111-9

See Comment Letter 9, Response 18.

111-10

See Comment Letter 1, Response 11.

111-11

Any managed wetlands within the Central Valley watershed boundary that have the potential to discharge waste to waters of the state would have regulatory coverage under any of the ILRP alternatives, regardless of whether it is located in the northern or southern portion of the valley.

111-12

The Central Valley Water Board will consider the support of "grandfathering" in current participants during development of the Long-term ILRP. Also see Comment Letter 87, Response 4.

111-13

The statement in the Draft PEIR, Appendix A, page 9 is accurate in stating that most coalitions do not have the authority to require members to implement management practices. As indicated in the comment, some member districts have authority over some aspects of growers' practices; however, the Southern San Joaquin Valley Water Quality Coalition (SSJVWQC) is established through an MOU that does not give the coalition itself any such authority over its members.

111-14

The Central Valley Water Board believes that the timelines are aggressive, but not unreasonable. A number of coalitions are presently exploring issues surrounding how to address discharge to groundwater and should be prepared to make a decision regarding their future involvement in the Long-term ILRP shortly after Board adoption of the program. When the Board considers the Final PEIR and Long-term ILRP, the coalitions would have been engaged in extensive discussions with staff and other stakeholders for more than two years. Having considered the range of possible alternatives during that time, the coalitions should be prepared to determine their role in the Long-term ILRP shortly after Board adoption. Therefore, staff considers the 3-month timeframe to be reasonable.

The 12-month timeframe for Board adoption of the applicable waivers and WDRs also should be achievable. The Board intends to focus its available staff resources on developing the applicable orders and bringing 2–3 before the Board for consideration each quarter.

The 30-month timeframe for enrollment of new participants from Board adoption of the Long-term ILRP would provide approximately 18–24 months from the adoption of the applicable orders for growers to enroll. Considering the State Water Board recently adopted major revisions to its construction storm water permit that provided a 9-month window until the new requirements applied, the 18–24 month timeframe should be more than sufficient for new growers to enroll.

111-15

On numerous occasions stakeholders have urged that the program be flexible and allow irrigated agricultural operations to implement practices that make the most sense at their particular sites. The Central Valley Water Board agrees with these stakeholder concerns and has noted that the variability of conditions and agricultural operations must be given primary consideration when developing regulatory requirements. In order to address these concerns, Alternative 6 would include the development of a series of general orders and prioritized requirements based on local conditions.

As noted in the comment there will be complexities associated with developing the geographically based orders, surface water and groundwater requirements, and prioritization of areas described in Alternative 6. These complexities will likely lead to increased time and effort in developing program monitoring and management requirements. However, the Central Valley Water Board believes that the framework is the best way to address concerns regarding program flexibility and meet applicable state policy.

111-16

See Comment Letter 111, Responses 14 and 34 and Master Response 13.

111-17

See Comment Letter 10, Response 4.

111-18

See Comment Letter 96, Response 21 and Comment Letter 1, Response 19.

111-19

See Comment Letter 39, Response 1.

111-20

See Comment Letter 1, Response 21.

111-21

The Central Valley Water Board will consider providing flexibility to characterize areas with identified water quality problems (dissolved oxygen, electrical conductivity, pH, pathogens, and toxicity) as lower priority, as long as the problems are not directly tied to irrigated agricultural waste discharges.

111-22

See Comment Letter 1, Response 23.

111-23

See Comment Letter 94, Response 40.

111-24

Baseline conditions are the current conditions in an area or groundwater basin, to be established through the use of existing regional monitoring data. Groundwater monitoring that continues with implementation of the ILRP would be used to establish trend data.

Evaluation of changes in management practices will be through the continued groundwater monitoring and through the use of targeted site-specific studies designed to evaluate the effects of changes in management practices on groundwater quality (Draft PEIR, Appendix A, page 158).

See Comment Letter 111, Response 25.

111-25

See Master Responses 4, 7, and 17.

Also see Comment Letter 5, Response 1; Comment Letter 9, Response 10, and Comment Letter 50, Response 6.

ILRP development is currently at the programmatic level. In Chapter 2 of the Economics Report, programmatic-level monitoring costs have been estimated for each of the alternatives, including costs associated with monitoring well installation.

As development of the Long-term ILRP progresses and its implementing mechanisms are prepared, greater detail about the monitoring requirements will be available for review and input, as well as further CEQA analysis, if appropriate. This comment concerning necessary detail will be considered.

111-26

See Comment Letter 1, Response 28.

111-27

See Comment Letter 1, Response 29.

111-28

See Comment Letter 1, Response 30 and Comment Letter 45, Response 16.

111-29

See Comment Letter 1, Response 30, 31, 32 and 33.

111-30

See Comment Letter 1, Response 34.

111-31

No specific information or evidence is provided to suggest why more than 18 months would be needed to demonstrate that existing ground water quality management plans are adequate, as the comment indicates. Also see Comment Letter 102, Response 9.

The Porter-Cologne Water Quality Control Act provides that the State Water Board and Regional Boards are the principal state agencies vested with "the primary responsibility for the coordination and control of water quality." The Water Boards' statutory authority gives it the responsibility and capacity to regulate the discharge of wastes to groundwater. The planning processes established by AB3030, SB 1938, and through the IRWMP do not vest local agencies with any authorities that supersede the authorities granted to the Water Boards.

111-32

See Master Response 19.

111-33

In the context of the ILRP, water quality management practices, or management practices, are those practices in place to meet the goals and requirements of the ILRP. Under Alternatives 2, 4, and 6, third-party groups would be required to provide tracking and reporting on these practices. Under Alternatives 3 and 5, individual operations would be required to develop individual farm plans that would describe practices in place to meet the goals of the ILRP.

111-34

The Draft PEIR, Appendix A (page 159) indicates that the compliance schedules apply to a limited set of waters and uses (those that meet the identified "priority" criteria) and only where agriculture is causing or contributing to the exceedance. Time schedules for compliance with any salinity objectives will primarily be addressed through the CV-SALTS process. Dissolved oxygen, pH, and pathogen issues generally need further investigation before it can be determined whether irrigated agriculture is causing or contributing to the problem. If agriculture is known to cause or contribute to a surface water quality problem, 5 years is a reasonable time to fully implement corrective measures in these priority areas. The types of management practices that are typically needed to manage such surface water quality problems are not unusual for agricultural operations (e.g., improved irrigation management systems; nutrient budgeting). The UC Cooperative Extension and NRCS have technical expertise and can assist growers to ensure those practices are established and managed correctly. Because many of the practices are used extensively already, and technical support is available, it is reasonable to expect such practices to be implemented within a few years.

The further development of the Long-term ILRP will include consideration of circumstances under which individual farm management plans may be required.

If the regional approach for addressing water quality is not resulting in improvements and ultimately compliance, it is reasonable for the Central Valley Water Board to directly regulate the individuals whose discharge may be causing or contributing to that water quality problem. For groundwater quality, improvement in water quality, rather than attainment of objectives, is required in the 5–10 year timeframe. As with surface water quality, the practices contemplated to reduce discharge of waste to groundwater (e.g., nutrient management, irrigation water management) are currently available and can be implemented by growers in a short time frame. The studies and assessments necessary to determine whether the practices are being implemented effectively can also be conducted within the 5–10 year timeframe.

The comment includes a recommendation for conditions that must be met prior to requiring an individual farm management plan. The first condition requires a determination that the individual farmer is directly responsible for causing the water quality problem. The only practical method for making such a determination is to conduct site-specific monitoring/ studies of all individual farms in the area with the surface or groundwater quality impact. The Central Valley Water Board does not believe such broad-based and costly monitoring is reasonable as a pre-condition, since it would be much less expensive to prepare an individual farm management plan.

111-35

The Central Valley Water Board agrees that ILRP requirements should be coordinated with other programs.

See Comment Letter 1, Response 45.

111-36

The Central Valley Water Board is not aware of any University of California studies that reach broad-based conclusions regarding irrigated agricultural contributions to elevated levels of pathogen indicator. The Board agrees that ILRP requirements should be coordinated with other programs.

See Comment Letter 1, Response 45.

111-37

Alternative 6 would be instituted through the development of WDRs and waivers (orders) for geographic areas and commodity groups throughout the Central Valley. Dairy program requirements and monitoring would be considered in the development of geographic orders.

111-38

See Comment Letter 1, Response 48.

111-39

See Comment Letter 1, Response 23.

111-40

See Comment Letter 1, Response 48.

111-41

This comment will be considered in development of the Long-term ILRP.

111-42

See Comment Letter 1, Response 50.

111-43

See Comment Letter 41, Response 23.

111-44

See Comment Letter 45, Response 47.

111-45

See Comment Letter 99, Responses 45.

111-46

See Master Response 4. In addition, because Alternative 6 is generally constructed from the components of the five original alternatives, a programmatic level estimation of the costs and

economic impacts has been considered in the Draft ILRP Economics Report (see Draft PEIR, Appendix A, pages 169–171). Also see Master Response 17.

The support for Alternative 2 will be considered in development of the Long-term ILRP.

111-47

See Master Responses 3 and 4.

111-48

See Master Response 9.

111-49

See Master Response 2.

111-50

See Comment Letter 1, Response 53. Also see Master Response 1.

111-51

Comment noted.

111-52

See Master Responses 1 and 2.

111-53

See Master Response 14.

The Draft PEIR addresses the potential for changes in stream hydrology (beginning on page 5.9-15). Where land goes out of production, there would be the potential for less water being diverted from surface water and groundwater sources. As the comment notes, it is possible that there would be less agricultural return flow in some seasons and at some locations. Improvements in irrigation water management, which would reduce the demand for both surface and groundwater diversions, would not be expected to significantly affect groundwater; the improvements would reduce the potential for transport of agricultural chemicals (pesticides, herbicides) to groundwater bodies, contributing to improved conditions. In areas where current irrigation practices recharge groundwater, reduced irrigation water application could contribute to lowered groundwater levels. However, improvements in water use efficiency may also result in less groundwater pumping in some areas. In areas where irrigation water comes exclusively from surface water diversions and there is no likelihood of reductions in groundwater pumping, small changes in groundwater levels may occur.

Regarding land use issues, the Draft PEIR, on page 5.11-1, states that land use changes associated with implementation of the program alternatives are speculative. Some lands may be converted from active agriculture to other uses, but the location and nature of those changes is unknown at this time. Any changes in use that would require development would be subject to local government

review, including consideration of consistency with land use plans, policies, and regulations. Also see Master Responses 11 and 16.

111-54

See Master Responses 9, 4, and 19. The Long-term ILRP would not dictate the use of specific irrigation management practices or cropping patterns; the program would encourage practices that protect surface and groundwater quality from agricultural-related discharges. The decisions about specific changes to irrigation management practices that might be needed to comply with the regulations would remain in the hands of the individual farmer.

111-55

See Master Response 11.

111-56

The CEQA Guidelines at Section 15126.6(e)(2) do not require that an environmentally superior alternative be identified in the Draft EIR.

111-57

See Comment Letter 1, Response 59.

111-58

See Comment Letter 1, Response 60.

111-59

See Comment Letter 1, Response 61. Also see Master Responses 14 and 17.

111-60

See Comment Letter 1, Response 62.

111-61

See Master Responses 4 and 17.

111-62

See Master Response 17.

111-63

See Master Response 17.

111-64

See Master Response 17.

111-65

See Master Response 17.

111-66

The comment identifies several assumptions believed to be included in the characterization of Alternatives 2–5; although many general assumptions were made to conduct the impact analyses because of the broad scale of the study area and the lack of specificity available for where agricultural practices would be modified in response to the program, the ones listed in the comment were not part of this approach. The impacts discussed in the Draft PEIR represent the potential for effects at some locations within the study area; the impact discussions do not suggest that these effects would be associated with farming management changes at any specific location within the study area.

See Master Response 12 and Comment Letter 1, Responses 30 and 32.

111-67

See Master Response 7. Further, it is noted that the Central Valley Water Board will determine the need and extent of future CEQA environmental review associated with specific ILRP implementing mechanisms, such as general orders.

111-68

See Comment Letter 80, Response 1 and Comment Letter 95, Responses 2 and 7.

When surface water is used with fertilizers and other chemicals it can degrade groundwater quality and the ILRP has to consider this as a potential impact, even though it may not occur in all areas regulated by the program.

Also see Master Response 12.

111-69

This comment will be considered in development of the Long-term ILRP.

111-70

DWR Bulletin 118 boundaries were used in the ECR (which is incorporated by reference into the Draft PEIR) because the DWR boundaries encompass the entire Central Valley, which is consistent with the ILRP study area. (California Department of Water Resources 2003.)

See Master Responses 1 and 12.

111-71

Comment noted.

111-72

See Comment Letter 108, Response 10.

111-73

The suggestions to rely on bottled water, drill deeper wells, and source water treatment instead of ensuring waste discharge from irrigated agricultural operations does not impair Basin Plan beneficial uses of said waters is not consistent with state policy.

See Master Response 12 and Comment Letter 50, Response 14.

111-74

See Comment Letter 108, Response 10. Many pesticides, such as organochlorine types, persist in the environment and continue to be detected in recent water quality monitoring data, even though the pesticides have not been applied or used for more than 50 years. The Central Valley Water Board would coordinate regulation of pesticides for groundwater protection through DPR.

111-75

See Comment Letter 5, Response 1. This area specific information will be considered in the development and implementation ILRP WDRs and waivers.

111-76

See Comment Letter 5, Response 1. This area specific information will be considered in the development and implementation ILRP WDRs and waivers.

111-77

The Central Valley Water Board agrees that the dominant forces for water movement in the vadose zone are dependent on the specific matric potential (the combined effects of capillarity and adsorptive forces within the soil matrix)and gravitational potential that exists at a particular location, depth, and moment in time. According to John R. Nimmo of the USGS (*Unsaturated Zone Flow Processes*, 2005, in Anderson, M.G., and Bear, J., eds., Encyclopedia of Hydrological Sciences: Part 13--Groundwater: Chichester, UK, Wiley, v. 4, p. 2299-2322), infiltrated water is redistributed in the soil profile by gravity, matric pressure gradients, and possibly other forces. Redistribution continues until conditions are such that all forces balance out. Matric pressure gradients move water from wet to dry, both upward and downward. Where a fine layer overlies a coarse layer, water moving downward is impeded under many conditions. Water breaks into the coarse layer when the pressure at the interface builds to the point that the water-entry pressure is exceeded.

Capillary movement due to soil suction is partially dependent on (among other factors) the specific soil matrix that exists at a particular location. There is a large variety in area and site-specific soils in the southern San Joaquin Valley, with uniform isotropic conditions generally existing only on a macroscopic scale. Even in generally homogeneous fine-grained soils with an upward matric potential, downward water movement may occur through a small fraction of the medium along preferential paths such as wormholes, fractures, fingers of enhanced wetness, and regions near contacts between dissimilar portions of the medium (Nimmo 2005). A common phenomenon in a layered soil (alternating coarse and fine-grained sediments) is the accumulation of water in the unsaturated zone to the point where it becomes saturated (perched water), even though there is unsaturated material between that region and the deeper regional saturated zone. Perched

groundwater exists in large portions of the southern San Joaquin Valley west of Highway 99. These areas are often tile drained to stabilize the water table at a depth that allows irrigation to occur.

This site-specific information will be considered in the development and implementation ILRP WDRs and waivers.

111-78

See Comment Letter 45, Response 20.

3.3.28 Letter 12—Tulare County Farm Bureau, Patricia Stever, Executive Director

Comment Letter IL12

TULARE COUNTY FARM BUREAU

Mission: to promote and enhance the viability of Tulare County agriculture.

September 24, 2010

Ms. Megan Smith
630 K Street, Suite 400
Sacramento, CA 95814

RE: Central Valley Regional Water Quality Control Board draft PEIR and ILRP Comments

Ms. Smith,

The Tulare County Farm Bureau appreciates the opportunity to submit comments on the Central Valley Regional Water Quality Control Board Irrigated Lands Regulatory Program (ILRP) Draft Programmatic Economic Impact Report (PEIR) and Economic Analysis.

The Tulare County Farm Bureau [TCFB] is a non-governmental, non-profit, voluntary membership association whose purpose is to protect and promote agricultural interests throughout Tulare County and to find solutions to the problems of the farm, the farm home and the rural community. TCFB 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. TCFB represents over 2,500 member families in Tulare County.

In reviewing the PEIR and the five outlined alternatives, proposed alternatives 2, 3, 4 and 5 will present additional increased and unnecessary regulatory burden on agricultural landowners and farm businesses in the CVRWQCB region. These plans have the potential to increase costs, all of which will be funded by fees paid by the participants, with a staggering increase in costs nearing a 90% increase over the current program. 12-1

It did not appear that the Staff Preferred Alternative was included in the PEIR and so we are unable to evaluate the alternative's impacts on agriculture including increased and unnecessary regulatory burdens and economic costs. 12-2

The Economic Analysis estimates it will cost a farmer thousands of dollars to characterize surface and groundwater quality for low impact areas. This does not include cost for water quality testing. This particular figure represents a disproportional cost to smaller farmers. In this current depressed economic environment, these costs, as well as those mentioned above, are unrealistic and not warranted to maintain surface water monitoring. 12-3

Through discussion with other agricultural organization, including the California Farm Bureau Federation, it is important to bring attention to the Economic Analysis. Monitoring costs in this portion of the document are grossly underestimated. Furthermore, these costs vary between regions of California further varying the costs associated with the program. This makes it very difficult to really get a clear understanding of what the potential cost will be to farmers.

TCFB believes that the work of monitoring and reporting needs to remain with the Coalitions as the third-party lead entities. These organized groups best understand the farmers with whom they work with and are best equipped to maintain reporting to the CVRWQCB. There is no need to create a new system of procedures and policies for reporting and organization when the current system in place works and has proven effective. It would be financially prudent to make the current system of coalitions work to accomplish the Goals and Objectives of the ILRP. It is our opinion that this recommendation can best be accomplished by adopting alternative number 2 as presented in the PEIR. 12-4

Again, we appreciate the opportunity to submit our comments on the ILRP.

Sincerely,

Patricia L. Stever
Executive Director

737 North Ben Maddox Way • Visalia, CA 93292 • Mailing: PO Box 748 • Visalia, CA 93279 • (559) 732-8301 • (559) 732-7029 FAX
E-mail: tcfb@tularefb.org • Web: www.tularefb.org • Join Farm Bureau: www.joinfb.org

3.3.28.1 Responses to Letter 12

12-1

See Master Response 17.

12-2

See Master Response 3.

12-3

See Master Response 17.

12-4

The support for maintaining the coalitions as lead entities, described under Alternative 2 will be considered in the development of the Long-term ILRP.

3.3.29 Letter 145—Upper Feather River Watershed Group, Carol Dobbas, Executive Director and Russell Reid, Chairman

Comment Letter IL145

UFRWGroup
Upper Feather River Watershed Group
Agricultural Stakeholders Advancing Water Stewardship

PO Box 975
Loyalton, CA 96118
www.ufrwg.org

September 24, 2010

ILRP Comments
Ms. Megan Smith
ICF International
913-737-3000
Emailed September 27, 2010 to ILRP Comments@icfi.com

RE: ***Comments on Long Term Irrigated Lands Regulatory Program Programmatic Environmental Impact Report (PEIR), Recommended Program Alternative (Program), and Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program (Economic Analysis)***

The Upper Feather River Watershed Group represents 103 volunteer members and covers 43,000 irrigated acres in the mountain region of Plumas, Sierra and a portion of Lassen Counties. We thank the Regional Board staff for engaging agriculture stakeholders to participate in the development of the Long Term ILRP. Upper watershed subcoalitions have actively participated in local scoping meetings, stakeholder workgroups, low-threat focus groups and directly with Regional Board staff. We have reviewed the straw proposals and the above long term documents from the perspective of a small membership coalition, low intensity agriculture operations, and a rural mountain watershed region.

As one of several Northern California foothill and mountain counties, we appreciate the inclusion of Tier 1 opportunities in the Long Term program documents. Since the initial implementation of the ILRP program in our area, immerging factors quickly revealed the need for program modifications to appropriately address watershed diversities within the large Central Valley Region. These factors include: dominance of low intensity agriculture practices, regional geographic characteristics, distinct mountain watershed climates, local land use percentages, and the results of water quality data collected under the Irrigated Lands Regulatory Program.

As one of ten subcoalitions in Sacramento Valley Water Quality Coalition (SVWQC), we support comments submitted by SVWQC. The comments in this letter are areas of specific concern to Upper Feather River Watershed Group for the new Long Term Program.

1.2 Key Study Assumptions and Limitations (page 1-3) - *". . . the model assumes that growers will react to increased costs and other compliance requirements by adjusting crop production as needed to maximize net income and stay in business. Results from the Central Valley were extrapolated to affected areas in the foothills and upper watersheds."*

UFRWG Comment: In Northern California upper elevation watersheds, with limited frost free growing seasons, and other geographic limitations, adjusting crop production is generally not a feasible option as with Central Valley tilled agriculture operations. Forage crops tolerant of cool climates such as permanent native meadows, rangelands, alfalfa hay & grain hay are the predominate crops and primarily support summer season livestock operations; with minimal to no viable alternative cropping options. Additionally, the watershed diversities mentioned above support the fact that broad assumptions based on Central Valley conditions do not accurately reflect conditions of the upper watershed regions. Errant broad assumptions used in Long Term ILRP planning will perpetuate the costly lapses of the current program. 145-1

2. Implementation Mechanism (Page 138) – *"Recommendation: A series of area-, geographically based, or commodity-based implementation mechanisms with prioritized requirements. Implementation mechanisms could include waivers in low-priority areas and general WDRs in high-priority areas. Individual WDRs could be developed and implemented as an enforcement tool."*

It is recommend there be inclusion of an option for Individual Waivers for Tier 1 areas as an incentive based implementation mechanism in addition to Coalition Waivers - rather than offering only Individual WDRs as an enforcement tool. The Recommended Program Alternative lacks an identified mechanism for incentive-based relief to individual operators for implementation of best practices, which meet or exceed water quality and management plan objectives. We request the RB to post a projected fee structure for each of the two compliance options (individual vs third-party group) to allow business minded operators the opportunity to accurately assess cost/benefits for compliance under each option. The current ILRP lacked realistic expense projections for the two options. 145-2

3. Lead Entity (Page 138) - *"Recommendation: Third-party structure established in Alternative 1 and 2 (Coalition model) with additional structure and third-party transparency requirements."*

Program uncertainty, coalition(s) management overhead for transitional compliance mandates, and program litigation has driven expansive invoicing and, in some cases, the accrual of contingency funds. A well defined long term program designed to provide regional modifications which are more fairly based on: actual agricultural water quality contribution, need for fiscally responsible management stability and provide financial relief, is overdue. 145-3

Groundwater (page 155) – *As part of GQMP development, the third party would collect and evaluate available groundwater data, identify groundwater quality management areas (GMAs) of concern, identify constituents of concern in the GMAs, prioritize the GMAs and constituents of concern, . . ."* 145-4

UFRWG believes it is inequitable for the 103 members of UFRWG to bear the entire burden for developing groundwater baseline reports for the CVRWQCB. The assumption that all

irrigated agriculture creates waste discharge to groundwater, and the expectation that agriculture coalitions must fund efforts for initial groundwater baseline reports is unreasonable. This ignores the fact that agricultural lands in the upper watershed regions account for only 10% of land use, while other potential contributors comprise 90% of land use. Additionally, PUR reports document that 85+/-% of chemical use, a primary constituent of concern to groundwater, is by non-agriculture entities in our counties.

Existing public funded groundwater management organizations are in a better position to collect and provide this information to the Regional Water Quality Control Board, and such a strategy would more fairly spread the economic burden of groundwater evaluation to all users and potential contributors within a region. The outcome of initial reports could then direct future groundwater planning and collaboration.

UFRWG recommends a program designed to avoid conducting costly duplicative studies for area groundwater as was completed for surface water.

145-4 cont'd

Tier 1 and Optional Certified FWQMP Surface Water (Page 157) *- "Monitoring would consist of tracking of management practices and watershed based assessment monitoring 1 year every 5 years (similar to the assessment monitoring required under the current ILRP). Monitoring and tracking results would be submitted in a report every 5 years to the Central Valley Water Board. Additional monitoring may be required where assessment monitoring identifies a water quality concern".*

UFRWG urges reconsideration of further revisions to current costly monitoring schedules in regions where changes in agriculture practices are significantly limited by regional climate and geography. Assessment monitoring every 5 years should be conducted only if there is significant increase or change in the agricultural practices. In subwatersheds with little acreage or few members, monitoring even on a 5 year schedule is expensive and would provide little additional information.

145-5

9. Fees (page 160) –" *The Central Valley Water Board will recommend that the fee structure reflect the differing levels of effort for the different tiers and oversight of the irrigated agricultural operations as individuals versus as part of a third-party group".*

UFRWG has experienced that the current acreage fee structure results in higher per-member fees for crops lower per-acre returns. This holds true for both the state fee and various coalition level fees for the smaller coalition groups. Low intensity agriculture such as pasture and forage operations generally require larger acreages to be viable for beef cattle production. However, this type of agriculture land has relatively low value and return per acre compared to other commodities.

As the Economic Analysis reveals, the economic returns, water quality threat level, and program oversight requirements for 100 acres of native permanent pasture land at 5000 ft elevation is quite different from 100 acres of higher value commodities, with more intense and diverse cropping practices grown on the valley floors.

145-6

A revision in fee structure at all program levels to reflect the above factors will ensure that low threat pasture and meadowland operators in small coalitions, are not disproportionately burdened with program overhead expenses as a result of assessments based solely on irrigated acreage.

145-6 cont'd

Figure 23. Long - Term ILRP Prioritization Scheme Example (Page 161) *- "Examples of high-priority areas for surface water would be those under SQMPs (Surface water Quality Management Plans) in the current ILRP (where irrigated agricultural operations are a source of the water quality concern). Area priority may be re-classified by the Central Valley Water Board based on review of new information collected during program implementation (see feedback loop in Figure 22).*

UFRWG joins others in noting that it appears that very few, if any, areas will be Tier 1 based on the mixed criteria statements in the DPEIR. A clearer definition of prioritization factors and "Area" characteristics is needed. Also, clearer definition and prioritization of management plans for the low priority water quality parameters of DO, pH and E.coli, which would otherwise eliminate qualification for Tier 1, even for identified low-threat geographical regions and commodities. We also request that the language be eliminated that automatically places an area in Tier 2 if you have a Surface Water Quality Management Plans for E. coli, DO and pH. Recent DO and pH studies in Upper Feather River Watershed by UCCE support earlier findings of similar studies conducted by California Department of Water Resources in the1970's. Natural elements are identified as the major contributor of these low-priority parameters in our watershed. However, agriculture has been required to fund monitoring and management planning to address these elements.

145-7

Compliance and Management Practice Costs (Chapter 2)

The merging of Upper Feather with Upper Yuba makes it hard to compare data in the tables with actual known numbers for Upper Feather River Watershed Group. The numbers for enrolled acres and irrigated acres in Table 2-3 do not match recorded numbers in our records. The same applies to Table 2-4 for enrolled growers and total growers. However, it is not clear the source or extent that Upper Yuba data may figure into the equation.

145-8

Farm Income and Production Analysis (Chapter 3)

The aggregation of crops types for the FFGO category likely does not accurately evaluate the wide variance in crop values between rice lands and pasture lands.

Likewise, the use of the Central Valley Production Model (CVPM) which specifically excludes foothill and upper watershed regions (as seen in Figure 3-1) is grossly inadequate to formulate major assumptions for the extremely different upper watershed regions. This is the type of broad generalization that has driven the costly over-arching mandates of the current ILRP.

145-9

Regional Economic Impacts (Chapter 4)

UFRWG echoes the comments submitted by Plumas County Flood Control and Conservation District. Additionally we point out, that significant shifts in agriculture cropping, and banking on influx of potential supporting businesses is not economically sustainable for rural, sparsely populated regions.

Agriculture plays a critical role in defining the Upper Feather River region's rural way of life and protecting valuable resources such as open space, waterways, habitat for wild species, culture and history, and the many other benefits these lands provide to area residents and visitors. Many of these benefits are not commodity based. 145-10

The loss of Sierra agriculture lands as a result of costly over-regulation is not an acceptable outcome of the LT ILRP as suggested in the DPEIR.

It is the anticipation of UFRWG and other Northern California upper watershed regions that Tier 1 classifications in the Long Term ILRP will address this fact, and a number of other program inequities. These types of modifications will result in a more practical and equitable Long Term ILRP that reflects the low water quality threats of low intensity agriculture operations in Non-Central Valley Floor regions.

Upper Feather River Watershed Group takes seriously our responsibility to our membership, to take the lead in water quality compliance objectives with the highest cost-benefit to our membership and to our rural communities. The prioritization of water quality concerns and watershed regions in the Long Term ILRP will allow the CVRWQCB to more effectively direct their resources and will allow low impact regions to most beneficially re-direct financial resources as well.

Sincerely,

Carol Dobbas
Carol Dobbas, Executive Director
Upper Feather River Watershed Group

RR
Russell Reid, Chairman
Upper Feather River Watershed Group

Cc: Katherine Hart, Chair
Pamela Creedon, Executive Officer
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive
Rancho Cordova, CA 95670

3.3.29.1 Responses to Letter 145

145-1

See Comment Letter 44, Response 7; Comment Letter 47, Response 13; Comment Letter 116, Response 12.

145-2

This comment will be considered in development of the Long-term ILRP.

145-3

This comment will be considered in development of the Long-term ILRP.

145-4

This comment will be considered in development of the Long-term ILRP.

See Master Response 12.

145-5

This comment will be considered in development of the Long-term ILRP.

145-6

This comment will be considered in development of the Long-term ILRP.

145-7

See Comment Letter 1, Response 23; Comment Letter 97, Response 6; Comment Letter 47, Response 2; and Comment Letter 41, Response 14.

145-8

This comment will be considered in development of the Long-term ILRP.

145-9

See Master Response 17.

145-10

See Master Response 17.

3.3.30 Letter 33—Yolo County Farm Bureau Education Corporation, Chuck Dudley, President

Comment Letter IL33

Yolo County Farm Bureau Education Corporation
Subwatershed Program
P.O. Box 1536, Woodland, California 95776
530-662-6316 • FAX 530-662-8611
www.ycfbec.org

September 24, 2010

ILRP Comments
Ms. Megan Smith
630 K Street, Suite 400
Sacramento CA 95814

RE: *Comments on Long Term Irrigated Lands Regulatory Program Programmatic Environmental Impact Report (PEIR), Recommended Program Alternative (Recommended Program), and Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program (Economic Analysis)*

Yolo County Farm Bureau Education Corporation (YCFBEC) administers the Yolo County Subwatershed Program with 254,000 irrigated lands enrolled. We have actively been engaged in following the process as the Long Term Irrigated Lands program alternative were proposed. After reviewing the Draft Program Environmental Impact Report for the Central Valley Irrigated Lands Regulatory Program (DPEIR), the Draft Staff Report, the Recommended Program Alternative (RPA), and the Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program (Economic Analysis) we make the following concerns:

Alternative #2 has the least economic impact. The staff preferred alternative for individual farm water quality plans is expensive for BOTH GROWERS and the REGIONAL BOARD. Small growers and specialty crop growers could find this requirement to be prohibitively expensive and be forced out of business. 33-1

The DPEIR Grossly Understates the Program's Potential Impacts on Land Use
The DPEIR should evaluate the extent to which adopted General Plans within the program area designate agricultural land uses that would be undermined by the increased irrigation costs imposed by the program and the resulting loss of agriculture. The DPEIR must discuss whether and how adopted HCPs in the program area rely on agricultural land uses and how the increased irrigation costs imposed by the program, and the resulting loss of agriculture, would affect those plans. 33-2

The Draft Staff Report makes an improper presumption that all irrigated agriculture creates a discharge of waste. In Appendix D the Surface Water Quality Management Plan (SWQMP) requirements fail to account for the possibility that irrigated agriculture may not be the predominant source of the identified exceedances as we discovered after spending thousands of dollars on surface water quality monitoring.

As general qualification, the SWQMP requirements should state that only if irrigated agriculture is identified as the predominant source of the pollutant discharge should the Surface and Groundwater Quality Management Plan be required to (4) identify practices to address the constituents of concern, (5) evaluate the effectiveness of management practices, (6) describe the grower outreach strategies, (7) track management practice implementation, (8) prepare a monitoring plan to track water quality, and (9) describe a schedule and milestones for the action taken. There is a real possibility that inputs from other point and non-point sources are contributing to the exceedances identified at monitoring sites, and identification of irrigated agriculture as the predominant source of the exceedances should be a prerequisite to taking the steps identified above. 33-3

The Recommended Program Alternative would require the development of a surface water quality management plan[1] (SQMP) for any parameter that exceeds water quality objectives two or more times in a three-year period. The exceedance trigger for the development of SQMPs, as expressed here, is not an appropriate trigger for many parameters. This requirement fails to take into account the purpose of the water quality objective at issue and the beneficial use for which it is designed to protect. More specifically, the two or more exceedances in three years is a standard derived from U.S. EPA's Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and their Uses (1985 Guidelines). Thus, at most, this standard should be applied where there are two or more exceedances of water quality objectives designed to protect aquatic life beneficial uses. It is inappropriate to use this standard to trigger implementation of SQMPs where there are exceedances of water quality objectives designed to protect non-aquatic life beneficial uses. 33-4

Agricultural Impacts

- What are the potential impacts to agricultural lands and potential loss of farmland due to increased regulatory costs? (Will lands be taken out of production due to high economic costs to comply with the requirements?)

Economics and Cost

- Adequacy and appropriateness of the economic analysis to your region. (As a general matter, there are numerous inaccuracies in the economic analysis that sway the economic results.
- Economic impacts and costs to comply for individuals and coalitions—Reasonable? Realistic? Feasible to continue farming?

Surface Water (Issues relating to the Recommended Program Alternative) 33-5

- Priority surface water bodies are defined as those water bodies or tributaries with aquatic life, drinking water, and human consumption beneficial uses or tributary streams with identified municipal or domestic drinking water intakes. The use of the tributary rule to determine which surface water bodies are considered priority may potentially expand the number of water bodies beyond what should be a priority (see Appendix A, p. bru159).

Groundwater Quality (Issues relating to the Recommended Program Alternative)

- Which groundwater aquifers are considered high priority? Has data been collected and analyzed from local and regional groundwater monitoring programs? If not, when will this be done?

Groundwater

- Possible areas of duplicity with existing monitoring efforts if the LT-ILRP adds a groundwater monitoring element, especially if it does not utilize existing local groundwater quality programs such as SB 1938, and Integrated Regional Management Plans.
- How will existing local groundwater monitoring programs be used for obtaining groundwater quality information?
- What is the definition of "discharges to groundwater?" Concerns with point of discharge and first encounter of groundwater since there are areas where first encountered groundwater is currently not nor historically been usable for drinking water or agricultural use.

[1] The SQMP would need to be developed for the watershed represented by the monitoring site.

09/26/2010 21:17 5306628611 YOLO FARM BUREAU PAGE 02/03

- The PEIR indicates that all ag operations can affect groundwater (ie: the mere act of irrigating a crop is considered a discharge to groundwater that causes degradation). This places the burden to prove no impact on the grower (grower has to prove way out of being regulated). What science or data was used to determine that all agricultural operations negatively affect
- ILRP Comments
- Ms. Megan Smith
- September 24, 2010
- Page 3
-
- groundwater? Were geographic areas concerned? Depth of groundwater? Use of drip or controlled irrigation?
- How would a grower or coalition determine the nature of discharges to groundwater?
- Timelines for compliance do not seem reasonable or feasible. For example, the 18 month period to prepare groundwater management plans is infeasible for many, if not all growers.
- Additional information is needed regarding groundwater monitoring requirements. Are existing wells sufficient or is there an expectation that additional monitoring wells will be required?

33-5 cont'd

General

- Additional information is needed regarding the statements that allow for periodic review of surface and groundwater plans by third parties and "interested parties" (see Appendix A, pp. 154-155). What role will the public now have?
- The Draft PEIR identifies potential increase of greenhouse gas emissions from agricultural activities. What about carbon sequestration? Was that taken into account?
- Within the Recommended Program, what is the process for moving between tiers?
- Can portions of a program (i.e. constituents, sub-watersheds) move between tiers?
- What is the point of compliance (edge of field, drain, root zone...) for the LT-ILRP and what is the process for determining this?
- How does a coalition "prove" an area has no serious problems and can work their way out of the obligations?
- What are the specifics to qualify as a "lower threat?" How does this designation work for certain geographic areas such as mountain valleys, foothill areas of limited use, or areas of limited water quality problems? To be "lower threat," can a grower be considered lower threat for surface water or groundwater, or must one be classified as a lower threat to both surface and groundwater?
- Who exactly "certifies" a management plan? Does such a plan have to be submitted to the Regional Board? How do we address "proprietary" or confidential business information?
- Additional information is needed regarding the possibility of 8 to 12 orders. How will multiple orders work with the existing coalition structure? Will new coalitions be formed?

Our members and Board of Directors have strong concerns about the proposed program and urge you to carefully consider the items listed above.

Sincerely,

Chuck Dudley
President

09/26/2010 21:17 5308628611 YOLO FARM BUREAU PAGE 03/03

3.3.30.1 Responses to Letter 33

33-1

Out of all the alternatives, except Alternative 1 (current program), Alternative 2 has the lowest estimated cost and may lead to the least economic impact. However, the Draft ILRP Economics Report indicates that the overall economic impacts of Alternatives 2, 4, and 6 may be similar. Further, Alternative 6 would not require individual farm water quality plans unless the proposed regional approach is ineffective (see Draft PEIR, Appendix A, page 155).

33-2

See Master Response 11.

33-3

See Comment Letter 111, Response 43.

33-4

Two or more exceedances of a water quality objective at the same location are the current triggers for management plans in the ILRP. This does not necessarily mean that only two samples within a 3-year period would trigger a management plan. Where the water quality standard is based on averaged conditions (e.g., 4-day, 30-day, annual), the collection of additional samples within the appropriate averaging period would be considered in evaluating whether exceedances have occurred. However, where only one sample has been collected during the appropriate averaging period (typically done to reduce costs), the results of the collected sample are generally considered representative of the averaging period. Development of the Long-term ILRP will consider clarification that appropriate averaging periods will be used when determining whether an exceedance has occurred.

33-5 (Form Letter 2)

This portion of the letter comprises Form Letter 2. See Responses to Comment Letter 9, Section 3.4, Individual and Form Letter Comments and Responses, in this Final PEIR.