3.4 Individual and Form Letter Comments and Responses

This section contains comment letters received from individuals (Table 3-5) and responses to those comments.

In addition, three form comment letters were received from individuals (Table 3-6). This section contains copies of the form letters received and responses to those comments. A master copy of each of the three form letters is followed by responses to the comments presented in that letter. Where signatories of a form letter provided additional comments with the form letter, those forms and responses to the additional comments are included following the master copy form letter responses.

Table 3-5. List of Comment Letters from Individuals

Letter	Comment Letter Signatory
87	Frank Alssberg, Bernard N. Bertagna, Mary Jane Bertagna, Berton Bertagna, Jason Bertagna, Callie Bonner, Joe Caito, Nicki Caito, Valere Goss, Bill Graves, Rhonda Graves, Alex Hardaway, Hans Jensen, Jay Krale, Robert Proe, Doly Sterette, Robert Stonneman, Kevin P. Sullivan, Cheryl Taylor, Tolle Taylor
86	Maria and Refugio G. Aguirre
30	Maria Barragan
35	Theresa J. Bright, Jeffreys Ranch
34	Ronnie Castillo
51	Romelia Castillo
31	William A. Chapman, The Clarence Scott Ranches
32	William A. Chapman, The Clarence Scott Ranches
7	David Cory
23	Bertha Diaz
85	Ismael Avila Estrada
84	Ismael Fernandez
122	Ellen Fickewirth
24	Mason Gallegos
46	Dan Hinrichs, P.E., Hinrichs Farms
79	Dan Hinrichs, P.E., Hinrichs Farms
138	Dan Hinrichs, P.E., Hinrichs Farms
52	Bud Hoekstra, BerryBlest Farm
5	Vance Kennedy
82	Nancy Lea
50	G. Fred Lee, Ph.D., G. Fred Lee and Associates; Anne Jones Lee, Ph.D., G. Fred Lee & Associates
66	Kent Vander Linden
6	Virginia Madveno
15	Maria Magana
16	Simona Magana
19	Adolfo Magana
141	A. J. Marcelli, Marcelli Farms

Letter	Comment Letter Signatory
39	Chris Marenco, Marenco Cattle Co., Inc.
17	Esther Martinez
18	Luis Medellin
14	Joanna Mendoza
25	Veronica Mendoza
22	Greg Merwin, Clarksburg Farmer
121	Trent Meyer
27	Josie Nieto
83	Linda Ormonde
21	Ana Karen Orozco
28	Maria Elena Orozco
8	Jesus Quevedo
26	Jesus Quevedo
40	Rebecca Quintana, Board Member, Stone Corral School District
38	Jessica Sanchez, Agua Youth Representative
114	Ryan Schohr
13	Joan C. Townsend
128	Harry Turiello
76	Tony Turkovich, Button and Turkovich
29	Lucino and Ana Vargas
20	Darrell Voortman, Irrigator
2	Kathryn Wilkins, Organic Farmer
103	John C. Zentner

Table 3-6. List of Form Comment Letters from Individuals

Letter	Comment Letter Signatory
Form 1—"Placer-Nevada-South Sutter-North Sacramento Sub-Watershed Group Ground Water Quality Monitoring"	
11	Herman Schindler
68	Anonymous
64	Lance and Gay Columbel
140	Phyllis Espinoza, Bushy Creek Nursery
65	Marian C. Jewett
130	Mike Pasner, Indian Springs Organic Farm
63	Don Rosa, Natomas Landowner and Farmer
Form 2—"Comments on Proposal for Long-Term Irrigated Lands Program"	
9	Kathleen Denison
73	John Barbee
135	Dennis Alan Bruggman
67	Franklin Espriella
71	William Fletcher, Trustee and Margaret C. Fletcher, Trustee

Letter	Comment Letter Signatory
77	Ken Gregory, Gregory Farms
75	Daniel Hrdy
74	Warren E. Johnston
131	S. Y. Monckton, Cattail Farms, Inc
69	Brian Paddock
133	Sarah W. Smith, Manager, Sewmawpaw Woodland, LLC
70	Alice B. Wohlfrom, Wohlfrom Family Farms
144	Mary Anne Wood
Form 3—"I have serious concerns about the proposed Long Term Irrigated Lands Program"	
81	Thea Wiedenroth
54	Jennifer Bittner
139	Stephen Brandenburger
59	Alfred Geerts
61	Andrew Johas
93	Roseann Lyons
55	Ed J. F. Mast
132	Van Overhouse
56	Virginia Plocker, H.D. Plocker Partnership
53	Helen C. Roberts and Stanley K. Roberts
62	John Studarus
60	Robert Suffin
57	Penelope Walgenbach
72	John Wilson
58	Alice B. Wohlfrom, Wohlfrom Family Farms

3.4.1 Letter 87—Ground Water Monitoring in the Sacramento Valley, Petition

Frank Alssberg, Bernard N. Bertagna, Mary Jane Bertagna, Berton Bertagna, Jason Bertagna, Callie Bonner, Joe Caito, Nicki Caito, Valere Goss, Bill Graves, Rhonda Graves, Alex Hardaway, Hans Jensen, Jay Krale, Robert Proe, Doly Sterette, Robert Stonneman, Kevin P. Sullivan, Cheryl Taylor, Tolle Taylor

Comment Letter IL87

Ground Water Monitoring in the
Sacramento Valley
Petition for additional consideration

We the undersigned growers and concerned residents of the Sacramento Valley would like to issue the following comments concerning ground water monitoring in the Sacramento Valley. In brief our concerns are as follows:

1. There are no pre-agriculture historical known levels of soluble salts or nitrates in California's aquifers. Therefore there is no meaningful baseline data. 87-1
2. It is unclear as to the proper tolerances that the board will find acceptable now or in the future. This is particularly unsettling. 87-2
3. No consideration is being made for quantities of materials entering aquifers from surface water, i.e. domestic well heads, improperly abandoned city wells, or wells near moving surface waters, such as the river or other streams during periods of high water. The drilling of new test wells may actually have a negative affect on soluble salts entering the ground water as we drill through old strata. 87-3
4. No consideration is being made for the amount of nitrates and salts entering the ground water from communities such as Paradise, Magalia, Cohasset and dozens of small west side communities. These are areas that have no water treatment plants but rely on septic systems. Older, failing and concentrated septic systems are known sources of nitrates in the ground water. 87-4
5. No consideration is being made to the variation in annual rainwater that would affect nitrate and salt concentrations throughout the year as the water table varies. 87-5
6. No consideration is being made to the various soil types or percolation rates that exist between parcels or landowners. 87-6
7. No consideration is being made to the contribution of soluble salts and nitrates coming from communities, golf courses, school districts, and numerous other entities that utilize fertilizers, usually without proper training or controls. 87-7
8. No consideration is being made to soil erosion, land movement, or surface geomorphism, plant absorption, natural plant decomposition, or any of a multitude of factors that can affect water impurity levels within a water table. 87-8

In spite of the factors mentioned above (and many others), farmers are asked to step up and pay for redundant and unnecessary studies, when in all likelihood they have the least affect on the aquifer. As growers and residents, we the undersigned, have always sought to maintain clean and pure water on the individual properties where we live and grow our crops. Therefore we feel the California Regional Water Quality Control Board should look to the actual sources of these salts and nitrates, if they even exist beyond historical levels. We also respectfully request additional time to spread the word throughout the agricultural community. We question the timing and motivations of these questionable studies.] 87-9

Name (Print and sign) Address (use additional pages as necessary)

1.

Continued of Water monitoring list of concerned residents
20 signatures per page

2. Kevin P. Sullivan 7211 Garden Hwy Chico Ca 95973
3. Callie Bowen
4.
5.
6
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.
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18.
19.
20.
21.

For ILRP COMMENTS
Ms. Megan Smith
630 K Street, Suite 400
Sacramento, Ca. 95814

Continued of Water monitoring list of concerned residents
20 signatures per page

2. Bernard N. Bertagna Bernard Bertagna
3945 Stevens Ave Chico Ca. 95928
3. Mary Jane Bertagna Mary Jane Bertagna
3945 Stevens Ave, Chico, CA 95928
4. Berton Bertagna Berton Bertagna
3363 Hegan Ln Chico CA 95973
5. Valerie Ross Valerie Ross
906 Hazel Ct Chico, CA 95928
6. Sarah Bertagna Sarah Bertagna
787 Cornell Ave Chico CA 95928
7. 10 Loves Cir Chico
Hans Jensen
8. Frank Alsdurf
1438 Sleepy Hollow Lane Paradise, California
9. Bill Graves Bill Graves
1065 S. Hillcrest Ave Chico 95928
10.
11.
12.
13.
14.
15.
16.
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18.
19.
20.
21.

For ILRP COMMENTS
Ms. Megan Smith
630 K Street, Suite 400
Sacramento, Ca. 95814

Continued of Water monitoring list of concerned residents
20 signatures per page

2.	Robert Sommerville	382 Ellen Ave Chico
3.	Cheryl A Ott	3375 Hubbard Ln Chico 95928
4.	Joe Taylor	3375 Hubbard Ln Chico 95928
5.	Jay Kyle	3217 GRAPE WAY CHICO
6.	Robert Price	557 Pines Compañeros
7.	JOE Cairo	240 DENNISON N. FORT BRAGG
8.	Nicki Cairo	19518 Benson Lane Fort Bragg
9.	Alex Hardaway	1387 Cass Rd Santa Rosa CA
10.	Daly Smith	10636 S. Miller Ave Chico, CA
11.	Rhonda Graves	10605 S. Miller Ave Chico, Calif 95928
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		

For ILRP COMMENTS
Ms. Megan Smith
630 K Street, Suite 400
Sacramento, Ca. 95814

3.4.1.1 Responses to Letter 87

87-1

The Central Valley Water Board acknowledges that there are no data representing pre-agricultural groundwater quality conditions, including nitrate levels, for the region. However, public health concerns, including "blue baby syndrome" (or methemoglobinemia), related to elevated nitrate concentrations in drinking water from groundwater sources, is well documented. Areas with high concentrations of dairy operations and agricultural fields that apply nitrogen-based fertilizers are known to have elevated and increasing levels of nitrate in the underlying groundwater basins.

See Master Response 1.

87-2

This comment cannot be responded to without more information regarding what is meant by *proper tolerances*.

87-3

The proposed ILRP would not involve drilling new wells for water supply; the analysis assumed that wellhead protection would be implemented at the local level where called for by the analyzed alternative. The Draft PEIR discusses potential effects on groundwater from infiltration of surface water and evaluates the potential improvements that could take place because of use of surface water as an irrigation supply and related impacts on groundwater quality (see Chapter 5, Section 5.9, Hydrology and Water Quality). All new groundwater monitoring wells constructed for any reason must conform to state and local well ordinances designed to prevent groundwater pollution from well construction and operation.

87-4

There are multiple sources that contribute contaminants that may reach groundwater throughout the Central Valley. A variety of conditions such as local soil type, percolation rates, annual rainfall, topography, vegetation, land use, and other local factors such as public use of fertilizers and presence of septic systems exist and exacerbate the conditions.

A successful Long-term ILRP will allow the Central Valley Water Board to adapt its approach to regulating discharges to groundwater, depending on local conditions and the significance of threats to beneficial uses.

87-5

See Comment Letter 87, Response 4.

87-6

See Comment Letter 87, Response 4.

87-7

See Comment Letter 87, Response 4.

87-8

See Comment Letter 87, Response 4.

87-9

See Master Response 12 and Comment Letter 95, Response 2.

The schedule for completing this CEQA process is dictated by an agreement entered into among the Central Valley Water Board, members of the environmental community, and representatives of the agricultural community, and approved by the Court. Nevertheless, the public involvement and review opportunities through the process of development of the CEQA analysis have been extensive. A summary of the ILRP development public involvement process can be found in the Draft PEIR, Chapter 2, Section 2.6.3, beginning at page 2-7.

3.4.2 Letter 86—Maria and Refugio G. Aguirre

Central Valley Regional Water Quality Control Board
Long-term Irrigated Lands Regulatory Program
Draft Programmatic Environmental Impact Report Public Comment Form

Comment Letter IL86

Name: Maria AGUIRRE y Refugio G.
Mailing Address: 15361 AVE 384 y
Telephone No. (optional): (559) 624-8090
Email (optional):

Comments/Issues: yo Soy Recidente de la comunidad de Seville, en Seville no se puede beber el agua de la llave, porque esta contaminada de Nitratos nosotros pagamos bastante por mes por agua que no se puede beba ni usar, mi cantidad pagada por mes es de $60.00 mas $32.00 de agua embotellada y Solamente somos 2 personas en casa. 86-1

Nosotros Somos personas que trabajamos en el Campo que nuestro Salario es bajo y no podemos seguir pagando por el precio de la contaminación y es por eso que me gustaria que la mesa ~~Directiva~~ Regional Tome en cuenta los costos de la comunidad y desarrollen un plan para las tierras Irrigadas, que sea efectivo en prevenir y detener la Contaminacion de Nuestras fuentes de agua. 86-2

Please use additional sheets if necessary.

SUBMIT WRITTEN COMMENTS BY SEPTEMBER 27TH TO:

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

Email: ILRPcomments@icfi.com
Website: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/long_term_program_development/

IL86

María Aguirre and Refujio G.
15361 Ave. 381

559-528-3090

I am a resident of the community of Seville. In Seville you cannot drink the tap water because it is contaminated with nitrates. We pay quite a lot every month for water that we can't drink or use. I pay $60 per month plus $32 for bottled water and there are only two of us at home.

We are field workers and our salaries are low. We cannot continue paying the price of contamination. That is why I would like the Regional Board to take the community's costs into consideration and develop a plan for irrigated lands that effectively prevents and stops the contamination of our water sources.

María Aguirre
15361 Ave. 381
Visalia, CA 93292

3.4.2.1 Responses to Letter 86

86-1

See Comment Letter 14, Response 1 and Comment Letter 123, Response 87.

86-2

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

3.4.3 Letter 30—Maria Barragan

Dirección Regional de Control de Calidad de Aguas de Central Valley Comment Letter IL30
Programa Regulatorio a Largo Plazo de Tierras de Regadío
Formulario de Comentarios Públicos Anteproyecto Programático de Impacto Ambiental

Nombre: Maria Barragan
Domicilio: 12655 Ave. 406
Cutler, CA 93615
No. Teléfono (optativo):
Email (optativo):

Comentarios/Problemas:

La razon de mis Comentarios es para pedir que la Mesa Regional Cumpla Con su mandato y proteja nuestras fuentes de agua.

Yo soy residente de la Comunidad de Cutler. Nosotros no bebemos el agua de la llave porque esta Contaminada Con un pesticida.

Yo paga como $30.00 al mes por el servicio del agua. Sin embargo, despues tengo que ir a comprar agua embotellada. Asi es que al final del mes gasto pagando como $70.00 al mes - $30.- del cobro del agua y $40 por agua embotellada. Mi ingreso mensual es de $1,100 asi es que esto es ~~demasiado~~ muy Costoso para mi.

Por eso quiero que la mesa regional desarrolle un plan para las tierras irrigadas que sea efectivo en prevenir la Contaminacion.

Gracias,

Maria Barragan

30-1

Por favor utilize páginas extras si es necesario

PRESENTE COMENTARIOS POR ESCRITO EN O ANTES DEL 27 DE SEPTIEMBRE A:

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

Email: ILRPcomments@icfi.com
Página Web: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/long_term_program_development/

IL30

María Barragán
12655 Ave. 406
Cutler, CA 93615

I am writing to ask the Regional Board to fulfill its mandate and protect our water sources.

I am a resident of the Cutler Community. We do not drink water from the tap because it is contaminated with a pesticide. I pay about $30.00 per month for water service, but then I have to go buy bottled water. So at the end of the month I am paying about $70.00 per month – $30 for the water bill and $40 for bottled water. My monthly income is $1,100 so this is very expensive for me.

This is why I want the Regional Board to develop a plan for irrigated lands that will effectively prevent contamination.

Thank you,
[signed: Maria Barragan]

María Barragán
12655 Ave. 406
Cutler, CA 93615

3.4.3.1 Responses to Letter 30

30-1

See Comment Letter 14, Response 2.

3.4.4 Letter 35—Theresa J. Bright, Jeffreys Ranch

Comment Letter IL35

Jeffreys Ranch

Seeds, Tomatoes, Grain & Pecans

Don and Theresa Bright
13460 Desert Hills PL NE
Albuquerque NM 87111
505-323-2679

Established December 1876
2250 Lone Star Road
Williams CA 95987
Sam Reynolds, Farmer

September 21, 2010

ILRP Comments

Ms. Megan Smith

630 K Street

Sacramento CA 95814

RE: Comments on Proposal for Long Term Irrigated Lands Program

As the owner of a small farm in Colusa County, I am very concerned about the proposed Long Term Irrigated Lands Program, particularly the increased groundwater regulations.

It will place increased regulatory financial burdens on Sacramento Valley Agriculture that bear no correlation to the need for protection of water quality. Water quality testing has shown very few water quality problems due to agriculture, yet upwards of 97% of these costs would be funded by agricultural assessments. Additionally, the Recommended Program will have a disproportionate impact on smaller farming operations.

Groundwater quality in the Sacramento Valley is very good, with few problems associated with agriculture. Most farm families live on their farms, drinking and otherwise using the groundwater in close proximity to their operation. We like clean water, and we have a vested interest in keeping it clean. However, agriculture causes very few groundwater quality issues, and therefore should not bear such a disproportionate portion of the burden. 35-1

There are several state programs monitoring and protecting ground water already. In these tough economic times it would not be a sound economic choice to spend even the lowest estimated cost for this program when there are others already in place.

Our farm has participated in the Irrigated Lands Discharge program from its inception, even before it was mandatory. These new regulations are beyond reason, both from a scientific approach and from an economic one.

Sincerely,

Theresa J. Bright

Theresa J. Bright

3.4.4.1 Responses to Letter 35

35-1

See Comment Letter 41, Response 40 and Master Response 12. The Central Valley Water Board is aware that areas identified as vulnerable to leaching and runoff are primarily located in the San Joaquin and Tulare Basins.

3.4.5 Letter 34—Ronnie Castillo

Comment Letter IL34

September 13, 2010

Re: ILRP Comments

Dear Ms. Smith,

As a board member of the Orosi Public Utility District, I am writing to ask the Regional Water Board to develop an Irrigated Lands Regulatory Program that is strong enough to reduce fertilizer and pesticide pollution of our valley's water resources before any more communities lose their source of safe drinking water.

Today many thousands of people in the Central Valley cannot use the tap water in their homes for drinking or cooking due to nitrate contamination. In some areas in the valley, more than 20% of small public water systems are already unable to supply safe drinking water, including our many of our valley's schools, which have to use their shrinking educational budgets just to supply safe water to students and teachers. Many more communities are on the edge, having to pay for expensive nitrate treatment or close wells, limiting local drinking water supplies, and creating additional barriers to local economic development. Our water district just recently had to spend thousands of dollars to drill a new well and ensure our residents safe drinking water. This was due to high levels of nitrates in other wells.

34-1

The good news is that nitrate is a preventable problem that is largely caused by runoff from chemical fertilizer and animal waste. Furthermore, the board has the power and responsibility to develop a program that can be strong enough to reduce fertilizer and pesticide pollution of our valley's water resources before any more communities lose their source of safe drinking water.

For these reasons, I am asking the board to develop a program that includes: (1) a way to collect basic information from farms, such as how much fertilizer is being applied and how much nitrate is already in Valley water supplies; (2) individual farm plans for extremely high risk areas that include clear guidance for farmers on what practices are necessary to protect water from contamination; and (3) adequate enforcement mechanisms so that this program results in meaningful, quantified improvements to water quality.

A strong and effective Irrigated Lands Regulatory Program can stop further contamination of our drinking water sources before more communities are burdened by the high cost of cleanup. It can also ensure that future generations are able to find safe drinking water sources.

Sincerely,

Ronnie Castillo

3.4.5.1 Responses to Letter 34

34-1

See Comment Letter 40, Response 2 and Comment Letter 14, Response 1.

3.4.6 Letter 51—Romelia Castillo

Comment Letter IL51

September 13, 2010

Re: ILRP Comments

Dear Ms. Smith,

I am writing to ask the Regional Water Board to develop an Irrigated Lands Regulatory Program that is strong enough to reduce fertilizer and pesticide pollution of our valley's water resources before any more communities lose their source of safe drinking water.

Today many thousands of people in the Central Valley cannot use the tap water in their homes for drinking or cooking due to nitrate contamination. In some areas in the valley, more than 20% of small public water systems are already unable to supply safe drinking water, including our many of our valley's schools, which have to use their shrinking educational budgets just to supply safe water to students and teachers. Many more communities are on the edge, having to pay for expensive nitrate treatment or close wells, limiting local drinking water supplies, and creating additional barriers to local economic development.

The good news is that nitrate is a preventable problem that is largely caused by runoff from chemical fertilizer and animal waste. Furthermore, the board has the power and responsibility to develop a program that can be strong enough to reduce fertilizer and pesticide pollution of our valley's water resources before any more communities lose their source of safe drinking water.

51-1

For these reasons, I am asking the board to develop a program that includes: (1) a way to collect basic information from farms, such as how much fertilizer is being applied and how much nitrate is already in Valley water supplies; (2) individual farm plans for extremely high risk areas that include clear guidance for farmers on what practices are necessary to protect water from contamination; and (3) adequate enforcement mechanisms so that this program results in meaningful, quantified improvements to water quality.

A strong and effective Irrigated Lands Regulatory Program can stop further contamination of our drinking water sources before more communities are burdened by the high cost of cleanup. It can also ensure that future generations are able to find safe drinking water sources.

Sincerely,

Romelia Castillo

3.4.6.1 Responses to Letter 51

51-1

See Comment Letter 14, Response 1.

3.4.7 Letter 31—William A. Chapman, The Clarence Scott Ranches

Comment Letter IL31

The Clarence Scott Ranches
Family Owned and Managed since 1850

c/o William A. Chapman, x.h.z.
4038 Boulder Drive
Antioch, California 94509 – 6233

Telephone (925) 754 – 3595

September 22, 2010

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

RE Long Term Irrigated Lands Regulatory Program - Increase Cost to Farm in California

Ms. Smith,

The proposed Long Term Irrigated Lands Regulatory Program (LT - ILRP) is of significant concern to my family members. The resulting **adverse** economic impact(s) and related costs to comply - will not produce or improve our farm production.

The Recommended Program is a major expansion of the current IRLP. Since over 90% of the increased costs (estimated to be as much as $66,000,000.00) to administer the LT - ILRP - which will be funded by agriculture through acreage fees assessed by the Regional Board. The LT - ILRP program will place an ever increasing regulatory and financial burden on the **Sacramento Valley agricultural** communities- COSTS **that bear no correlation** to the need **for the protection of water quality.** 31-1

The proposed Long Term Irrigated Lands Regulatory Program (LT - ILRP) will only duplicated existing groundwater monitoring programs and efforts - with the result of an increase Cost to agriculture and a waste of money. The Groundwater quality in the Sacramento Valley is **VERY GOOD** and with few problems associated with agriculture. Currently there are extensive groundwater monitoring programs in existence within the Sacramento Valley drainages. The history from the existing groundwater monitoring programs will support this statement. 31-2

The Economic Analysis is flawed and fundamentally wrong in its assumptions. Monitoring costs are underestimated and changes in the underlying assumptions used will result in substantial increased cost to be borne by the California Agriculture Communities. 31-3

The cost to administration the Long Term Irrigated Lands Regulatory Program would be better spent by funding the Williamson Act Program - That is If 'continued FARMING in CALIFORNIA' is a part of your FINAL OBJECTIVE.

Sincerely,

William A. Chapman

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3.4.7.1 Responses to Letter 31

31-1

See Master Response 17.

31-2

Mechanisms for addressing groundwater are dependent upon the alternative chosen to implement the Long-term ILRP. Alternatives 4 and 6 would require participation in a regional groundwater monitoring program and would involve coordination with other groundwater monitoring programs to avoid duplicative efforts (see Draft PEIR, Appendix A, page 158). The staff recommendation to implement regional groundwater monitoring (Alternative 6) rather than site-specific monitoring was made, in part, to lessen the potential finical burden on agriculture (see goal 3 on page 92 of the Draft PEIR, Appendix A).

31-3

See Master Response 17.

3.4.8 Letter 32—William A. Chapman, The Clarence Scott Ranches

Comment Letter IL32

The Clarence Scott Ranches
Family Owned and Managed since 1850

c/o William A. Chapman, x.h.z.
4038 Boulder Drive
Antioch, California 94509 – 6233

Telephone (925) 754 – 3595

September 22, 2010

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

RE Long Term Irrigated Lands Regulatory Program - Increase Cost to Farm in California

Ms. Smith,

The proposed Long Term Irrigated Lands Regulatory Program (LT - ILRP) is of significant concern to myself and my family members. The resulting **adverse** economic impact(s) and related costs to comply - will not produce or improve our farm production.

The Recommended Program is a major expansion of the current IRLP. Since over 90% of the increased costs to administer the LT - ILRP will be funded by agriculture through acreage fees assessed by the Regional Board. The program will place an ever increasing regulatory and financial burden on the **Sacramento Valley agriculture** communities- COSTS **that bear no correlation** to the need **for the protection of water quality.** 32-1

Now that the State of California is terminating funding for the **Williamson Act** - the increase fees, fines, assessments that will result from the **LT - ILRP** - will have the potential impact - and logical justification - for an increase in the loss of California farmland. Is that the FINAL OBJECTIVE of this administrative program??

Will *China* be able to provide adequate farm produce to replace the farm products lost due to resulting conversion of farmland in California to houses? 32-2

Will the displaced agrarians be your 'first hires' to augment the increased demand and need for the desk bound consultants, who will write and administer the LT - ILRP?

Sincerely,

William A. Chapman

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3.4.8.1 Responses to Letter 32

32-1

See Master Response 17.

32-2

See Master Response 11.

3.4.9 Letter 7—David Cory

Note: This letter has been withdrawn from consideration by the commenter.

3.4.9.1 Responses to Letter 7

7-1

No response needed.

3.4.10 Letter 23—Bertha Diaz

Comment Letter IL23

Dirección Regional de Control de Calidad de Aguas de Central Valley
Programa Regulatorio a Largo Plazo de Tierras de Regadío
Formulario de Comentarios Públicos Anteproyecto Programático de Impacto Ambiental

Nombre:	Bertha Diaz
Domicilio:	13922 Florida Ave Dos, Ca 93647
No. Teléfono (optativo):	(559) 352-9552
Email (optativo):	

Comentarios/Problemas:

El problema en mi comunidad es que el agua esta contaminada con Nitratos. La agua nos afecta porque el agua es necesaria para beber y cocinar. Nuestra comunidad es de gente trabajadora, que trabajan en los campos de sol a sol. En nuestra comunidad tratamos de luchar por el agua limpia como podamos. El agua es muy importante para sobrevivir, especialmente en el Valle Central que el clima es muy caliente y para los trabajadores del campo es muy peligroso para ellos si no tienen agua limpia para beber. Espero que con esta carta entiendan mis razones porque creo que el problema del agua debe de ser arreglado porque es un deber no un privilegio. Muchas gracias!

23-1

Atentamente,
Bertha Diaz

Por favor utilize páginas extras si es necesario.

PRESENTE COMENTARIOS POR ESCRITO EN O ANTES DEL 27 DE SEPTIEMBRE A:

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

Email: ILRPcomments@icfi.com

Página Web: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/long_term_program_development/

II.23

Bertha Díaz
13922 Florida Ave.
E. Orosi, CA 93647

559-358-9353

The problem in my community is that the water is contaminated with nitrates. The water affects us because water is necessary for drinking and cooking. We are a community of working people who work in the fields from dawn to dusk. In our community we try to fight for clean water as best we can. Water is very important for survival, especially in the Central Valley because the weather is very hot and it is dangerous for the field workers if they do not have clean water to drink. I hope you understand my reasons from this letter because I believe that the water problem must be fixed because it is a right and not a privilege.

Thank you very much!

Sincerely,
Bertha Diaz

Bertha Díaz
13922 Florida Ave.
E. Orosi, CA 93647

3.4.10.1 Responses to Letter 23

23-1

See Comment Letter 14, Response 1.

3.4.11 Letter 85—Ismael Avila Estrada

Dirección Regional de Control de Calidad de Aguas de Central Valle,
Programa Regulatorio a Largo Plazo de Tierras de Regadío
Comment Letter IL85
Formulario de Comentarios Públicos Anteproyecto Programático de Impacto Ambiental

Nombre: Ismael Avila Estrada
Domicilio: 23573 Parso Ave
Ducot CA 93218
No. Teléfono (optativo): 559.534.2220
Email (optativo):

Comentarios/Problemas: Hola pa la comunidad de ducot estamos teniendo mucho problemas como agua con nitratos con el olor asufre con el color a lodo podrido es un agua demasiado contaminada me gustaria que analizaran un poquito el el agua y le dieran tiempo para poder usar el agua para algo porque no nos sirve para nada estra comprando agua para todo y estra pasando toda vida el vivir alto porque todo los meses se nos quiere enfermar Gracia por el tiempo que nos dedican Ismael Avila E

85-1

Por favor utilize páginas extras si es necesario.

PRESENTE COMENTARIOS POR ESCRITO EN O ANTES DEL 27 DE SEPTIEMBRE A:

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

Email: ILRPcomments@icfi.com
Página Web: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/long_term_program_development/

IL85

Ismael Ávila Estrada
23373 Parso Ave.
Ducor, CA 93218

559-534-2290

I'm speaking on behalf of the community of Ducor. We are having a lot of problems like water with nitrates, with the smell of sulphur, with the color of rotten mud. The water is too contaminated. I would like for you to analyze the water a little and devote time to it in order to be able to use the water for something because it doesn't help us at all to be buying water for everything and still paying the high bill because [illegible] from us every month. Thank you for the time you devote to us.

Ismael Avila E.

Ismael Ávila Estrada
23373 Parso Ave.
Ducor, CA 93218

3.4.11.1 Responses to Letter 85

85-1

See Comment Letter 14, Response 1 and Comment Letter 123, Response 87.

3.4.12 Letter 84—Ismael Fernandez

Dirección Regional de Control de Calidad de Aguas de Central Valle
Programa Regulatorio a Largo Plazo de Tierras de Regadío
Formulario de Comentarios Públicos Anteproyecto Programático de Impacto Ambiental

Comment Letter IL84

Nombre: Ismael Fernandez
Domicilio: 20366 Ave 256 EXETER Ca 93221
No. Teléfono (optativo): 559-217-2283
Email (optativo):

Comentarios/Problemas:

Mi Comentario es que nesecitamos mas proteccion para nuestras Familias Porque Yo tengo mi Propio poso de Agua Pero no podemos tomar el Agua por que tiene Nitratos y es un Peligro para Nuestra Salud
Yo estoy de aCuerdo que se preocupen mas por Protejernos.

84-1

Por favor utilize páginas extras si es necesario.

PRESENTE COMENTARIOS POR ESCRITO EN O ANTES DEL 27 DE SEPTIEMBRE A:

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

Email: ILRPcomments@icfi.com

Página Web: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/long_term_program_development/

IL84

Ismael Fernández
20366 Ave. 256
Exeter, CA 93221

559-217-2283

My comment is that we need more protection for our families because I have my own water well but we can't drink the water because it has nitrates and is dangerous for our health.

I agree that there should be more concern for protecting us.

Ismael Fernández
20366 Ave. 256
Exeter, CA 93221

3.4.12.1 Responses to Letter 84

84-1

The support for the protection of water quality will be considered in the development of the Long-term ILRP.

3.4.13 Letter 122—Ellen Fickewirth

Comment Letter IL122

September 27, 2010

Central Valley Regional Water Quality Control Board
ILRP Comments
Ms. Megan Smith
630 K Street, Suite 400
Sacramento, CA 95814

Subject: Irrigated Lands Regulatory Program – Ground Water Quality Monitoring

Dear Ms. Smith:

We are growers in Placer and Sutter Counties and members of the Placer-Nevada-South Sutter-North Sacramento (PNSSNS) Sub-Watershed Group. We understand that the Central Valley Regional Water Quality Control Board has plans to duplicate regulations that are already in place and to charge additional fees. However, in today's economic conditions, it would be in the best interest of the government and in the best interest of the agriculture community to not duplicate regulations.

We are already being regulated and paying fees for existing water quality programs which may increase if the proposed Long Term Irrigated Lands Regulatory Program is implemented. The California Department of Pesticide Regulation has regulations in place to protect groundwater. Our local counties, cities, and water agencies and districts also have groundwater data and monitoring programs to protect groundwater. 122-1

We are all concerned with sustaining our valuable groundwater and are doing what we can to protect it. When developing additional regulations, please consider the groundwater protection measures that are currently in place, as well as the various costs that farmers are already enduring. Thank you for your attention to this matter.

Sincerely,

Ellen Fickewirth

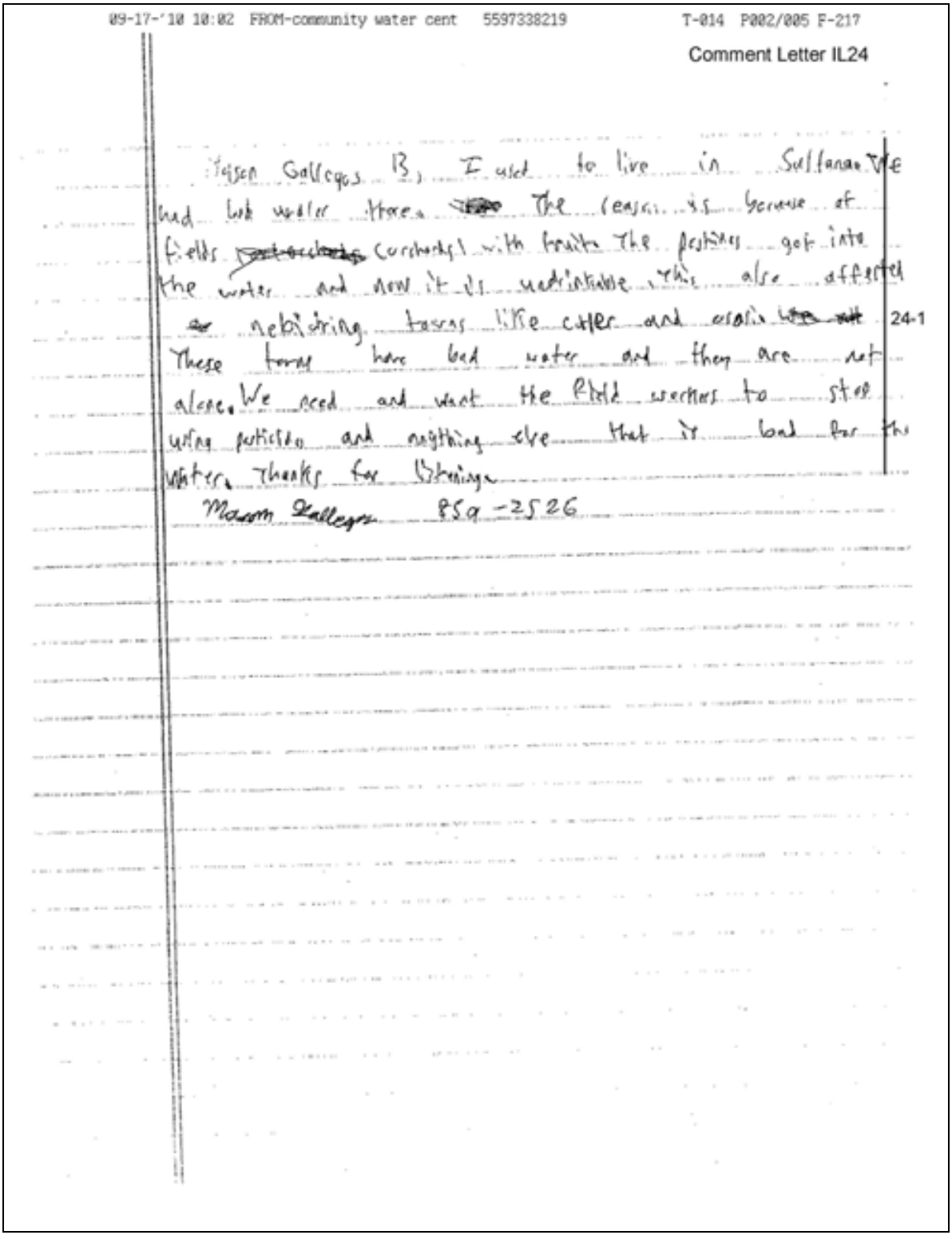
Ellen Fickewirth
2780 N. Dowd Road
Lincoln, CA 95648

3.4.13.1 Responses to Letter 122

122-1

See Comment Letter 99, Response 25.

3.4.14 Letter 24—Mason Gallegos



09-17-'10 10:02 FROM-community water cent 5597338219 T-014 P002/005 F-217

Comment Letter IL24

Jesus Gallegos B, I used to live in Sultana. We had bad water there. The reason is because of fields ~~[illegible]~~ cornfields with trees. The pesticides got into the water and now it is undrinkable. This also affected neighboring towns like cutler and orosi ~~[illegible]~~ 24-1
These towns have bad water and they are not alone. We need and want the field workers to stop using pesticides and anything else that is bad for the water. Thanks for listening.

Mason Gallegos 859-2526

3.4.14.1 Responses to Letter 24

24-1

See Comment Letter 14, Response 1.

3.4.15 Letter 46—Dan Hinrichs, P.E., Hinrichs Farms

Comment Letter IL46

Hinrichs Farms
4541 Luneman Road
Placerville, CA 95667
530-626-4802

September 25, 2010

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

RE: Comments on the Draft PEIR and Technical Memorandum Concerning the Economic Analysis

Dear Ms. Smith:

The following comments have been prepared and are being submitted by Dan Hinrichs, P.E. as owner of Hinrichs Farms. Hinrichs Farms is a member of the El Dorado County Agricultural Water Quality Corporation. The EDCAWQC is a member of the Sacramento Valley Coalition. Dan Hinrichs was the representative for El Dorado in the Stakeholder's meetings held as part of the long term program. The EDWCAWC will be submitting comments under a separate submittal.

Draft PEIR:

1. On page 1-11, Table 1-1, Vegetation and Wildlife, BIO-1, mitigation by compensating for permanent loss of wetlands may not be possible due to limited water resources. — 46-1
2. On page 1-13, agricultural resources – add – Loss of irrigated agriculture will reduce carbon sequestration through loss of photosynthesis. — 46-2
3. On page 1-13, agricultural resources, add – Loss of irrigated agriculture will reduce fire breaks in foothill and mountain regions — 46-3
4. On pages 3-12 and 3-13, Section 3.3.3 – Monitoring Provisions provide for surface water monitoring and groundwater monitoring. There are many areas, especially in the foothills and mountains where there is no defined water table (DWR bulletin 118). In these — 46-4

areas groundwater is found in fractured hard rock or in limited areas of perched water. Individual domestic wells are low producing wells often 200 feet deep or greater. Due to these conditions it is nearly impossible to determine source or destination of groundwater movement. Therefore, it is impossible to determine sources of groundwater contamination. There should be a provision of alternative monitoring such as vadose zone monitoring or mass balance of constituents added to cropped areas. Use of monitoring wells will not answer questions regarding impact of irrigated agriculture on groundwater. 46-4 cont'd

5. On page 3-16, Monitoring Provisions, same comment as above
6. On page 3-23, nutrient tracking, second bullet, the reference is incorrect. The Western Fertilizer Handbook is published by the California Plant Health Association. 46-5
7. On pages 3-24 & 25, same comment as #4 above. 46-4 cont'd
8. On page 3-28, same comment as #4 above.
9. Chapter 4 – This chapter is too brief in that there are major differences within watersheds especially in foothill locations on both the east and west sides of the central valley. Foothill and mountain locations have major differences in agricultural practices. Agricultural areas have more breaks for riparian areas than do most valley locations. 46-6
10. On page 5-1, Table 5.1-1, Tailwater recovery system – these systems will increase salt loadings due to evaporation and evapotranspiration. 46-7
11. On page 5-2, Table 5.1-1, Pressurized irrigation – Setting up irrigations systems can be in some circumstances exceed usual field preparation activities. 46-8
12. On page 5.10-6& & 7, Assessment Methods, bottom of page 6 and top of page 7, there is an assumption that converted land will primarily be to other types of agriculture. In the upper foothills and mountain areas, the only crop that can be grown is irrigated pasture or hay crops. There are no other crops that can replace these. Pasture and hay crops are not large revenue producers; therefore, conversion due to high costs for program implementation is more likely than other crops. 46-9

Economic Analysis:

1. Table 2-5, Atrazine is missing from this table 46-10

2. Addition – In Section 2.3.1 add list from DPR of pesticides of concern in groundwater (published annually). 46-11
3. Table 2-8 provides excellent large scale values but actual numbers vary considerable – perhaps a range of cost/acre values would be more appropriate. 46-12
4. Table 2-9 – Pressurized irrigation system number is low except for large scale systems. It would be more appropriate to show a range of values. Provide values for drip irrigation or low volume spray irrigation. Also, there is a significant difference between solid set sprinkler irrigation and portable sprinkler irrigation systems. 46-13
5. Table 2-15 – The annual cost of a monitoring well depends on the acreage covered. The annual cost of monitoring for 3 wells, with quarterly monitoring and reporting with licensed professional stamp will be $10,000 - $12,000/year. The cost per acre will depend on the size of the area being monitored. 46-14
6. Most of the economic analysis has been very well done. 46-15

Please do not hesitate to call if there are any questions or if you need additional information.

Sincerely,

Dan Hinrichs

Dan Hinrichs, P.E.

CC: Carolyn Mansfield, President ELCAWQC
Doug Leisz, Vice President ELCAWQC

3.4.15.1 Responses to Letter 46

46-1

The Central Valley Water Board agrees that the competition for water resources in the state will continue to be a factor affecting the feasibility of conserving and restoring wetlands. At this time there is no evidence to suggest that wetland creation is infeasible.

46-2

See Master Response 15.

46-3

As the location and nature of possible land conversions resulting from implementation of the ILRP are unknown, and may not occur, assuming such possible conversion would lead to non-irrigated fallowed lands and an appreciable loss of fire breaks is speculative. However, the Central Valley Water Board is concerned about the potential loss of fire breaks and will consider any specific information provided during the development of any orders that would be applicable to the areas referenced. Also see Master Response 14.

46-4

The Central Valley Water Board anticipates that the implementing mechanisms for the Long-term ILRP (i.e., general orders, WDRs) will be developed to allow for a tiered approach to establishing monitoring programs. Accordingly, in areas where groundwater monitoring results exist or are likely to be inconclusive, the Board would have the flexibility to establish other monitoring methods to more effectively evaluate discharges.

46-5

The reference is correct as written.

46-6

As indicated in the Draft PEIR, Chapter 2, Introduction, (see page 2-3) and permitted by the State CEQA Guidelines (Section 15150), the ECR, which provides a detailed description of the environmental setting for the ILRP area, is wholly incorporated by reference. The brief overview provided in Chapter 4, Environmental Setting, and the additional resource-specific information presented in individual resource sections of Chapter 5, Environmental Impacts and Mitigation Measures, acknowledge the differences present among agricultural practices and other conditions of foothill regions relative to the valley floor, where relevant to the discussion.

Also see Master Response 7.

46-7

The impact analysis specifically discusses the impacts from use of tailwater recovery systems (see Draft PEIR, Chapter 5, Environmental Impacts and Mitigation Measures, Section 5.9, Hydrology and Water Quality, page 5.9-15).

46-8

At a programmatic level, the analysis assumption concerning pressurized irrigation system-related fieldwork is accurate as stated in Table 5.1-1, "Fieldwork involved in setting up new irrigation system does not substantially exceed usual field preparation activities."

46-9

The comment refers to what is anticipated to be a very small portion of potentially converted agricultural land. The Draft PEIR (page 5.10-7) recognizes this condition by stating "It is reasonable and logical to assume that, while some portion of the affected farmland would be converted to nonagricultural use, a majority of the lost acreage would not be converted to a nonagricultural use but instead would be used to produce a crop that would require lower compliance costs and generate sufficient revenue to stay in agricultural production." However, the Central Valley Water Board shares the concern that costs could impact agricultural viability and will take those concerns into account in the development of the Long-term ILRP.

46-10

See Master Response 17.

46-11

See Master Response 17.

46-12

See Master Response 17.

46-13

See Master Response 17.

46-14

See Master Response 17.

46-15

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

3.4.16 Letter 79—Dan Hinrichs, P.E., Hinrichs Farms

Comment Letter IL79

Hinrichs Farms
4541 Luneman Road
Placerville, CA 95667
530-626-4802

September 27, 2010

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

RE: Comments on the Staff Report

Dear Ms. Smith:

The following comments have been prepared and are being submitted by Dan Hinrichs, P.E. as owner of Hinrichs Farms. Hinrichs Farms is a member of the El Dorado County Agricultural Water Quality Corporation. The EDCAWQC is a member of the Sacramento Valley Coalition. Dan Hinrichs was the representative for El Dorado in the Stakeholder's meetings held as part of the long term program. The following comments were not endorsed by the EDCAWQC.

Overall the report is very well done. There are only a few issues as noted below:

1. The staff recommended alternative is a bit confusing with the explanation provided. A more concise summary of the alternative would be helpful. 79-1
2. A problem with the current program, which may still be in place with the long term program, is data analysis and interpretation. There have been circumstances where a constituent standard was exceeded and a management plan prepared. The exceedance source was shown to be from a non-agricultural source. However, the exceedance was still on the record. It should not be. Part of this is a lack of experienced staff in agriculture (e.g. an agricultural engineer) or in determining fate and transport of constituents of concern in agriculture. There also needs to be more experience 79-2

and understanding of constituent movement in the vadose zone. Soil scientists have this basic knowledge. 79-2 cont'd

3. Monitoring wells in the foothill and mountain areas is a problem issue due to the lack of groundwater tables. There is groundwater but it is present in fractures of rock with no known connection between pockets of water. This situation makes it impossible to develop monitoring wells that will show sources of contamination or changes in groundwater constituent levels with application of management plans. Alternative methods of confirmation of management plan results should be allowed. This includes vadose zone monitoring or mass balance of constituents applied versus constituents removed by crop uptake. 79-3

4. It would be helpful to re-convene the stakeholders group for a session to present the staff alternative and answer questions about it. 79-4

Please do not hesitate to call if there are any questions or if you need additional information.

Sincerely,

Dan Hinrichs, P.E.

CC: Carolyn Mansfield, President EDCAWQC
Doug Leisz, Vice President EDCAWQC

3.4.16.1 Responses to Letter 79

79-1

A concise summary will be prepared in development of the Long-term ILRP.

79-2

The Central Valley Water Board agrees that interpretation of water quality data can be challenging, especially when the data are primarily from samples collected in receiving waters and limited data are available that characterize the actual waste discharges from irrigated lands. The Board has a highly skilled staff of engineers, scientists, and geologists, who continually work to improve understanding of water quality and the effects of agricultural discharges on water quality. See Comment Letter 102, Response 10.

79-3

See Comment Letter 46, Response 4.

79-4

The Stakeholder Advisory Workgroup was formed to assist the Central Valley Water Board in developing Long-term ILRP alternatives and evaluation measures. The Workgroup finished this work in August 2009. If there is sufficient interest among Workgroup members, the Board is open to holding future discussions regarding the recommended alternative.

3.4.17 Letter 138—Dan Hinrichs, P.E., Hinrichs Farms

Comment Letter IL138

DJH ENGINEERING
PLACERVILLE, CA
530-626-4802

TECHNICAL MEMORANDUM

Date: **October 20, 2010**

To: **Adam Laputz**

From: **Dan Hinrichs**

Subject: **Irrigation Costs** **Project No: 337**

I have commented on the economic analysis with my official comments to Jones & Stokes. I am still concerned that I may have not expressed my concerns adequately. Table 2-9 shows annualized costs for several management practices. The first concern is that there should be a range of costs for each item, not just the 2 listed ones. I haven't found the assumptions for determining how these costs are annualized. How many years and at what interest rate?

Most importantly, there should be capital costs shown for making these improvements. This is the cost that the grower will have to meet immediately. Government grants can help but do not cover 100% of the cost. One grower in El Dorado County is converting his vineyard from overhead sprinklers to drip irrigation. He has 25 acres of vines with 5 currently irrigated by drip irrigation. He will be installing drip irrigation on 8 acres this year with the remaining 12 acres next year. His cost is approximately $30,000 for materials and labor. This computes to $1500/acre. The vineyard operation is one where the return on the crop would allow financing to cover this cost. 138-1

There are many growers in the valley and lower foothills that rely on irrigation ditches for water delivery. If they convert to a pressure system, they will need to purchase pumps and install pressure pipelines where they had low pressure or gravity pipes. I don't believe that this cost is included in the analysis.

However, there are lower value crops (as discussed in the economic report) where conversion from a surface irrigation to pressure irrigation would not be feasible

and significant more costly than the value given in Table 2-9. There is an irrigated pasture near the community of Cool where the irrigation system was installed a number of years ago. The NRCS came out and said that they would need to install a completely new irrigation system. There are problems with the old one but it appears that some modifications may take care of the problems. The point is that even with a government grant there is no way that a new irrigation system could be financed with the return from this operation (owner leases to cattleman).

I believe that there may be times where someone decides that a pressurized system is needed when it may not be. Surface irrigation systems in the valley and some mountain regions may be operating well with no contamination of surface waters. Separating cattle from surface streams will provide a significant improvement to water quality without the expensive cost of sprinkler irrigation.

Who makes that decision? Is the person making that decision really qualified to do so? We have issues with vineyards deciding between sprinklers and drip irrigation. There are a number of variables in making the decision but with a vineyard there is enough of a return that the new system could be financed. However, with an irrigated pasture the return cannot pay for the investment.

138-1 cont'd

3.4.17.1 Responses to Letter 138

138-1

See Master Response 17. Also see Comment Letter 99, Response 7. These comments will be considered in the development of the Long-term ILRP.

3.4.18 Letter 52—Bud Hoekstra, BerryBlest Farm

Comment Letter IL52

Comments

On

The Draft

IRRIGATED LANDS REGULATORY PROGRAM

Programmatic Environmental Impact Report

Submitted by

Bud Hoekstra

BerryBlest Farm

September 2010

1

PREFACE TO DRAFT PIER COMMENTS, ILRP

Dr Sandler, former medical director of NASA's space operations, convincingly told a group of medical students why he chose to dedicate his life to the medicine of space travel: "Space," he said, "is our last hope for a clean environment."

It is easier to comprehend the irony than the truth of his words. Agriculture like many of the technologies employed on this planet has built-in self-destruct mechanisms. The plow furrows, the furrows erode, the erosion is a consequence of delivering food to the table. Not only does soil erode, but the quality of streams, rivers, lakes and aquifers erode. Nobody dreams of enduring wheat fields with perennial plants that never needs sowing and a fuel-less endeavor of bringing in the sheaves with a wave of a Harry Potter wand. There are but two options, two roads to take: one, people all over the world can write an epitaph for the resource-robbing plow by inventing practices that preserve the environment intact, or people can find a means to migrate to a fresh, new, green planet to take the place of this one.

The uncomfortable truth is this: The science of agriculture studies the land – mankind's little green food-producing acre, and the science of ecology studies the land – God's little green acre of wild food plants that nourish all God's creatures. The difference between them, between mankind's plowed field and God's wild glen is that God's green acres do not wither and die over time from mere use. God uses the land to grow things; mankind uses the resource up, contaminating, polluting, spoiling. The sustainability of wild nature has yet to be invented for the farm.

Farmers and ranchers generally share an attitude about what they do for a living: they must make money. Aside from money-making practices, if their offspring are to survive on this planet for generations to come, they will have to drink water and eat food just as their parents did, and they will have to use the same land and the same rivers for food and water, and the only way this can happen is if the enterprise of the farm not only produces food but stewards the soil and the water. Developing and adopting these stewardship practices is the future of farming.

For the sake of enlightenment, science and economics use measures. A farmer's success is gauged by the thickness of his wallet; the success of modern agriculture is measured by the abundance of food. The new agriculture requires a retooling of measures. "Entropy" is a borrowed term, borrowed from science, and means the degree of organization or disorder. Soil is molecular chaos. Sunlight, water and the chemistry of a green plant organizes the molecules of that chaos into a tomato. A tomato is molecularly organized soil; soil is tomatoes in entropy. Economics as a discipline languishes to measure the resource base. On the one hand, ag economists measure easily the productivity of the soil in bushels or the increased productivity in dollars. When tomatoes in entropy are washed away by erosion, no one has a measure for the lost production capacity in years. No one has a measure of a farm's half-life. The proverbial joke is that asphalt is the land's last crop – no sustainability!

Clean water will be tomorrow's **farm**'s first and foremost product.

2

Don't let the preface to my comments on the draft PIER fool you, because I am reiterating what many experts in the field of agriculture are saying. We need a kinder, gentler agriculture, one that restores the integrity to the land, one that minimizes pollution, and regulation must be a part of the process to reach that endpoint. I am in agreement that regulation is a necessary evil of out times. I am in agreement that an ILRP program is needed. My comments focus on whether or not the ILRP can work, can be made to work, can bring about and effect clean water for California.

My comments on the draft PIER come in three parts:

- A brief and disingenuous look at past mistakes by the Water Board staff in applying the ILRP
- A look at real-life scenarios of agricultural pollution to see how the ILRP would play out, if the scenarios had happened in California or were to happen in California in year 2012.
- A simple economic analysis of the ILRP and assessment of whether or not the ILRP meets the objectives that the ILRP professes to meet

Underlying the ILRP is the principle that farms shed pollution in the form of eroded soil, nutrient waste and the excess of economic poisons (pesticides) that exude from crop-growing fields. All farms pollute, whether they irrigate or not, and the focus of the ILRP is irrigated land. The EPA has written a handbook for state regulators that details this science, the science of agricultural pollution, that includes irrigation management is a big part of the solution. MANAGEMENT MEASURES FOR THE CONTROL OF NONPOINT POLLUTION FROM AGRICULTURE captures what we know of the underlying pollution from agriculture.

Generally summed up, we can identify these premises:

*agricultural activities pollute

*the pollution affects surface run-off and groundwater

*the ILRP focuses on 1. Nonpoint source pollution (rather than point source NPDES pollution) and 2. Farms that irrigate.

52-1

The scope of the ILRP has not always been clear to me, because the Water Board staff has defined "irrigation" as a bucket of water thrown on an almond tree from which nuts will eventually be harvested for commercial sale. That definition is almost quoted verbatim from a staff member answering a question on what irrigation means. But other staff members have waffled on such lines drawn as cover crops: cover crops and pasture are not harvested for commercial sale, yet both are sometimes irrigated. One staffer has determined that irrigated pasture in a commercial operation calls for a waiver whereas an irrigated cover crop on an organic farm does not. The ILRP staff has given ambivalent answers to the question of access roads. The last determination was that any intermingling of waste with run-off from an irrigated field means that the access road is included in the waiver. Otherwise it is not. Access roads are often sprayed with herbicides, occasionally pesticides if the roadside vegetation is a pest incubator, and an order issued by the Water Board for waiver-holders covered the contamination from

3

roadside spraying. The whole idea of what's covered by the waiver and what's covered by BMP's to meet the terms of waiver is fuzzy. ↑ 52-1 cont'd

A CENTURY OF THOUGHT ON WATER RESOURCES

1902: "To tear treasures out of the bowels of the land was their desire, with no more moral purpose at the back of it than there is in burglars breaking into a safe." Joseph Conrad

1905: "The nation ... behaves badly if it leaves the land poorer to those who come after it. That is all I mean by the phrase `conservation of natural resources.' Use them, but use them so that as far as possible our children will be richer, and not poorer, because we lived." Teddy Roosevelt

1909: "One hundred years from now, as people look back on our continent ... we shall be heartily damned for the reckless uses we have made of our soil, the loss of our forests, the weakening of watershed values..." Ray Wilbur [US Secretary of Interior]

2010: "We cannot protect our natural resources without rules and farming practices that are created to work together to look after our soil and water." Jerry DeWitt [Leopold Center for Sustainable Agriculture]

2010: "Regulation is not all bad ... We're fortunate in this area that we haven't had to deal with regulation yet, but we know it's coming. It is all around us. We know water tables are dropping, and we need to give the Ogallala Aquifer time to recharge." Donny Carpenter [Texas grower, corn and cotton; June/July PROGRESSIVE FARMER]

4

Past mistakes in applying current program, alternative 1

What's on paper seldom matches with what's on the ground, and I want the Water Board to see how Alternative 1, the current ILRP, played out.

I applied for a waiver. [I filed and NOI, notice of intent to comply, under the auspices of resolution R5-2003-0105.]

As part of my application, I had to prepare a general report on my farm and report my farm's past history, a very checkered past. In my NOI I revealed the farm's involvement in drug production as part of the history that I was required to report. I reported it. I was brief and to the point in my NOI acknowledging the past history of drug production that I was to report. I did not belabor the matter, although I can write volumes on it, on my experiences, on my effort to cope with the legacy of drug production and follow the mandates of the law.

I applied for the waiver and I noted the past history of drug production, which is not an agricultural activity and not something I was personally involved with or responsible for.

52-2

I wrote, mentioning the drug matter: "The 23-acres of BerryBlest Farm lie in the sun-baked foothills of Calaveras County at approximately 2800 feet, draining for the most part into Humbug Creek, 5% or so into Wet Creek, both are tributaries of the South Fork of the Mokelumne River, an un-dammed wild and scenic river. The domain of vegetation on the land is black oak, Mariposa Manzanita, and Ponderosa Pine with a scattering of blackberries, buckbrush, cedar, and other species, mostly vegetating the ravines. Humbug Creek is biologically unique with its blanket of ferns and ground cover. The farm was established in 1989 with horses, hogs, chickens, goats and a breeding kennel of hunting dogs. For about six years, the farm operated with a cash crop of meth and stolen Toyota parts that ended in a [sheriff's] raid, a [bank] repossession [of the farm] and an eviction of the squatters [doper community]."

I noted the farm's history of methamphetamine: "As meth, alcohol and other drugs shadowed the [doper] community..."

Having noted the history of illicit drugs, I proceeded to name the constituents of concern that quite possibly would emanate from my farm: I named soil erosion as a possibility; my nutrient program consisted of manure and cover crops. I noted the possibility that estrogenic substances residing in the manure could seep into surface water from my fields. I did not know for sure if I would or if I could test for estrogen within the detection limits necessary, but I supposed BMP's could contain the potential risk the loss of estrogen.

The NOI was straightforward: I put down the farm's past history, noting the drug operations, and I named the potential contaminants, sediment and estrogen, that could leach. I did not think drug production had any relevance to my farming practices. Clanlabs make point-source, or NPDES,

5

pollution, because they are manufacturing not agriculture. Drug production is not an agricultural pursuit and subject to a waiver of discharge requirements. My farming practices would not affect the legacy of trace wastes from drug operations that came before me by other owners.

The Water Board replied with a waiver in their NOA: "Based on a review of your NOI and General Report, you have met the conditions for coverage..."

But the NOA stepped way out of line and attached burdensome conditions in regard to past drug produiction as terms of the waiver,

The time table explicit in the NOA was horrific:

I received the NOA approximately on May 1, 2005. Thirty days later, I was to produce a Farm Evaluation Report and a Monitoring and Reporting Program Plan. In addition, I was to begin water-testing at once in the middle of the dry summer, to quote the NOA, "on or before 1 July 2005," and I was to turn in the 12-month completed annual report in eight months, due "March 1, 2006." This was just impossible on the face of it. It smacked of regulatory molestation, and probably was.

This rush-to-meet time schedule pre-empted quality design of the MRP and imposed upon my time so as to create a hardship, and the time table was designed to be an imposition and to hurt me for my effort to obey the law and protect water. And nobody at the Water Board cared if I had the time to do the technical reports right.

52-2 cont'd

Although the time table was imposition enough, the NOA added a lalicious do-you-in "kill" clause to the Waiver. The NOA required me to "take into consideration the potential contaminants that may exist as a result of the toxic litter, drug production and other activities that occurred prior to the purchase of the property by the current owner." I was supposed to test for meth wastes in the seasonally dry Humbug Creek or in the still flowing Mokelumne River. I had to monitor and report on meth wastes and truck tires littering my farm! Or test for the unknown substances in jars that I turned in on hazmat collection day!

Aside from the question of who is responsible for the wastes, the question remains whether such NPDES waste falls into the waiver program or triggers WDR's. Meth wastes are not nonpoint pollution and meth wastes are not agricultural. Waivers cover nonpoint agricultural waste. The results of esting and finding meth wastes in the river would not be expected to alter my farming practices one iota. Yet, the NOA states plainly that if the condition of drug-testing my farm is not met, my waiver would be terminated: "If it is determined that conditions of the Waiver are not being met..."

The NOA ignored my bid to test for estrogenicity on my farm.

Putting all of this into one nut shell, this is what the waiver comes down to: I had 30 days to phone CalEPA and ask how to make meth and to phone the USDA NRCS and ask about farming practices that would prevent contamination from a defunct meth operations and abandoned tires that once were situated near or on my farm.

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So I appealed the condition of the waiver, but there was no appeal from the time line. In 30 days I had to have two reports handed in, meth being the subject, and in 60 days, the conditions of the NOA were reaffirmed on appeal. My farm had to track the untrackable – legacy wastes from a defunct clanlab, abandoned tires from a chop shop, and unknown substances, like the tissues and organs floating in fluids.

I tackled the conditions as best I could and I did the paperwork as fast as I could, first by an appearance at CalEPA's headquarters in Sacramento where I could ask how to make methamphetamine. I didn't know how to make it. CalEPA was ahead of the game. Their Dr.'s Black (OEHHA) and Shumaker (TSCA) had collaborated on the issue of meth waste and compiled the information on the Web. Basically, the byproducts are ephemeral and evanesce: red phosphorus, though explosive, degrades in a few days to phosphates in open air, just like the phosphates found in fertilizer and manure. Benzene reportedly evaporates into the air with a half-life of two-hours in water. An EPA administrator unclipped the pages of meth waste posted on an OEHHA wallboard and photocopied them for me with the express wish that I turn in the pages in my technical reports, noting the environmental fate of each chemical. I did.

OEHHA and TSCA collaborated on the meth wastes, and both shared the information on their separate Web sites. CalEPA gave me OEHHA pages. The Water Board retorted demanding the TSCA pages.

Cranking out reports at 3 am in the morning, I sent the technical reports, or what would barely pass for reports, to the Water Board and the reply came back: the reply urged me to use TSCA rather than OEHHA information. The TSCA person at CalEPA had walked me down to the OEHHA office, and when nobody was available there to help me, the administrator ran off copies of the posters on the OEHHA wall showing the environmental fate of meth wastes. TSCA information and OEHHA information were the same information, a product of collaboration by the two CalEPA agencies. But the Water Board criticized my use of OEHHA information and demanded TSCA's.

52-2 cont'd

In my technical reports, I emphasized that estrogen may be a constituent of concern, not meth, and that estrogen testing would make a better condition of the Waiver. That was ignored.

In my reports I noted that amphetamines are found on all farms. Nutmeg is 20% myristicin and the liver metabolizes myristicin into amphetamine. Carrots have myristicin and theoretically one could get high on amphetamine by sitting down and eating a ton of carrots at a single sitting. Likewise, decomposers of compost bins where carrots rot, where left-over foods with nutmeg are thrown, fields where carrots are grown, undergo decomposition by bacteria that turn myristicin into amphetamine. The point was this: my farm was unlikely to harbor a legacy of wastes from drug operations based on CalEPA guidelines, but likely to have naturally occurring amphetamines that could, except for their tiny, miniscule amounts, be bonafide constituents of concern. The Water Board had no standards or detection limits for the precursor and intermediate chemicals that I was asked to monitor for.

A year of months later new faces at the Water Board retracted the drug-residue condition as inappropriate and saddled me with the condition of testing for pesticides even though I don't use them. I wasn't asked to test for estrogen, which I named as a constituent of concern, I was asked to test for

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pesticides that I don't use. Drift makes pesticides ubiquitous, and my farm would shed pesticides present because of drift from other farms that use them. My farm does not use chemical pest control on its crops, and the presdence of drift chemicals would not alter my farming practices to reduce drift. The amount of drift residue would be in the thousandths of pictograms and virtually unmeasurable within the detection limits of EPA-approved methods.

The point of this review of past Water Board sins is this: were any of the objectives of the ILRP being met in the issuance of my waiver? The answer is NO.

- In keeping with the ILRP objectives, would conditions of my waiver ensure that state waters meet applicable water quality objectives?"
- Did the NOA encourage the implementation of management practices on my farm "that improve water quality." Or did the busy work of the monitoring condition merely jeopardize the economic viability of my farm and steal my time?.
- Incentives? The conditions of the Waiver slapped me with useless paperwork, a disincentive. The time table was a disincentive. I had already employed BMP's and minimized my waste discharge when I submitted my NOA. The current program, if anything, punished my effort to protect the waters of the state.
- Testing for meth waste was inappropriate, and since I had already used a suite of BMP's, since I had had the NRCS engineer Mike Grinstead evaluate the conservation plan of my farm, there was no scrap of coordination in evidence between Water Board programs and the NRCS program. [In fact, the Water Board did not recognize a conservation standard BMP called "Code 500 Obstruction Removal" that I used and reported in my general report and in a letter threatened to cite and fine me for using this BMP.]

52-2 cont'd

The current program or "Alternative 1" in practice failed to meet the stated objectives of the ILRP. It just didn't work! Whether or not the other alternatives will fare better in the hands of the Water Board is anyone's guess.

At the stakeholder workgroup meeting, Joe Karkowski heard requests for a template of farm BMP's and promised a template to the workgroup. No template was forthcoming. Mark of Jones and Stokes at the draft PtER review meeting on September 10th heard my request for a template of groundwater BMP's.

I've made my point about the failure of Alternative 1, the current ILRP, to meet the objectives of the ILRP on the ground.

But I am providing another example, one of many, that illustrates the failure again.

Here we go: approved, accepted and proprietary methods. The Hach Chemical Company's Master Catalog for Complete Water Analysis 2010-2011 (page 18) distinguishes "US EPA approved" methods of analysis from "US EPA accepted" methods of analysis. EPA-approved methods are recorded in the

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The Hach Difference

EPA-Approved Methods

The EPA has evaluated and approved new technological methods developed by Hach Company. All EPA-Approved methods are cited in the Federal Register and compiled in the Code of Federal Regulations at 40 CFR 136 and CFR 141.

EPA-Accepted Methods

The EPA has reviewed Hach methods and accepted them for use in compliance monitoring. These methods are defined by EPA as Acceptable versions of previously approved methods. These methods are generally not published in the Federal Register or in the Code of Federal Regulations. A facsimile of the EPA- Acceptance letter is available upon request.

Hach Equivalent Methods

All EPA-Approved methods have specification criteria built into their procedural steps. When an approved or accepted EPA method has been packaged by Hach from the EPA reference method as a test method that meets or exceeds these specification criteria, these methods are deemed to be equivalent for use in EPA compliance monitoring (40 CFR 136.6). EPA does not normally issue equivalence letters of packaged reference methods. Hach maintains the formulation, procedure, and data demonstrating equivalency and is available upon request.

Hach Approved Methods

These methods may be used for compliance monitoring. They have either obtained an EPA Approval or Acceptance letter, or the method is a packaged product that follows an EPA Reference method and is deemed Equivalent by Hach. With any method used for compliance reporting, always consult with your local regulatory authority.

52-3

Hach has more EPA approved methods than any other supplier!

Analyte	Sample Matrix†	Hach Method	Approval Type	Reference Method	See Page
Acidity, as $CaCO_3$	WW	8010	Accepted	SM 2310 B(4a)	130
Acidity, Methyl Orange, Digital Titration	WW	8201	Equivalent	SM 2310 B(4a)	130
Acidity, Phenolphthalein, Digital Titration	WW	8202	Equivalent	SM 2310 B(4a)	130
Alkalinity, Digital Titration	WW	8203	Equivalent	SM 2320 B	132
Alkalinity, Titration	DW	8221	Equivalent	SM 2320 B	132
Ammonia as Nitrogen	WW	10205	Equivalent	EPA 350.1, SM 4500-NH_3 G or H	134
Ammonia as Nitrogen	WW	10205	Equivalent	EPA 350.1, SM 4500-NH_3 G or H	134
Ammonia as Nitrogen	WW	10205	Equivalent	EPA 350.1, SM 4500-NH_3 G or H	134
Ammonia Nitrogen, Electrode	WW	10001	Equivalent	SM 4500-NH_3 D, E, F, or G	47
Ammonia Nitrogen, Known Addition, Electrode	WW	10002	Equivalent	SM 4500-NH_3 D, E, F, or G	47
Ammonia, as Nitrogen	WW	8038	Accepted	SM 4500-NH_3 C	134
Arsenic, Total	WW	8013	Accepted	SM 3500-As B or C	137
BOD	WW	8043	Accepted	SM 5210 B	139
Chemical Oxygen Demand	WW	8000	Approved	40 CFR 136	151
Chemical Oxygen Demand	WW	8231	Accepted	EPA 410.3 or SM 5220 C	—
Chemical Oxygen Demand	WW	8000	Equivalent	EPA 410.3 or SM 5220 C	151
Chemical Oxygen Demand	WW	8000	Equivalent	EPA 410.3 or SM 5220 C	151
Chloride, Mercuric Nitrate	WW	8206	Accepted	SM 4500-Cl C	143
Chloride, Mercuric Nitrate, Digital Titration	WW	8206	Accepted	SM 4500-Cl C	143
Chloride, Silver Nitrate	WW	8225	Accepted	SM 4500-Cl B	144
Chlorine, Free	DW	10231	Equivalent	SM 4500-Cl G	145
Chlorine, Free	DW	8021	Accepted	SM 4500-CL G	145-147
Chlorine, Free Amperometric Titration	DW	8334	Equivalent	SM 4500-CL D	145
Chlorine, Free Amperometric Titration	WW	8334	Equivalent	SM 4500-CL D	145
Chlorine, Free & Total	WW	10232	Equivalent	SM 4500-Cl G	145
Chlorine, Total Amperometric Forward Titration	DW	10026	Equivalent	SM 4500-CL D	146

†DW = Drinking Water; SS = Sewage Sludge; SW = Surface Water; WW = Wastewater

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Hach EPA Compliant Methods

52-3 cont'd

Analyte	Sample Matrix[1]	Hach Method	Approval Type	Reference Method	See Page
Chlorine, Total Residual	WW	8167	Accepted	SM 4500-Cl G	145, 147
Chlorine, Total Residual	DW	8167	Accepted	SM 4500-Cl G	145, 147
Chlorine, Total Residual	DW	8168	Accepted	SM 4500-Cl D	146
Chlorine, Total Residual	WW	8168	Accepted	SM 4500-Cl D	146
Chlorine, Total Residual, Amperometric Back Titration	WW	10025	Accepted	SM 4500-Cl C	146
Chlorine, Total Residual, DPD	WW	10014	Accepted	SM 4500-CL G	—
Chlorine, Total, DPD	DW	8370	Accepted	SM 4500-CL G	144
Chromium VI	WW	10218/10219	Equivalent	SM 3500-Cr D	149
Chromium VI, Dissolved	WW	8023	Accepted	SM 3500-Cr B or D	149
Coliform, Fecal, EC Medium with/MUG	DW	10018	Equivalent	SM 9221 D	229
Coliform, Total and *E. coli*, m-ColiBlue24	DW	8433	Approved	40 CFR 141.21, page 349	229
Coliforms, *E. coli*, m-TEC	SW	8367	Equivalent	EPA 1103.1	230
Coliforms, Fecal and Total, MPN, A1 Medium	DW	8368	Equivalent	SM 9221 B/D	230
Coliforms, P/A	DW	8319	Equivalent	SM 9221 D	235
Color, APHA Pt-CO	DW	8025	Equivalent	SM 2120 B	153
Conductivity	DW	8160	Accepted	SM 2510 B	22-54
Copper, Bicinchoinate Procedure	WW	8506	Approved	SM 3500-CU C or E	154
E. coli, m-ColiBlue24	WW	10029	Approved	Federal Register March 26, 2007	230
E. coli, m-ColiBlue24, enumeration	SW	10029	Approved	68 FR 43274, July 21, 2003	230
E. coli, m-ColiBlue24, P/A	DW	10029	Approved	40 CFR 141.21, page 349	230
Fecal Coliform, LT Broth and EC	SW	8001A	Accepted	SM 9221 E	230
Fecal Coliform, LT Broth and EC	SS	8001A	Accepted	SM 9221 E	230
Fecal Coliform, Sludge, MPN, A1 Medium	WW	10028	Equivalent	SM 9221 D/E	230
Fecal Coliform, Sludge, MPN, LTB/EC Medium	WW	10027	Equivalent	SM 9221 D/E	236
Fluoride	DW	8029	Accepted	SM 4500-F C	158-159
Fluoride, Electrode	DW	8323	Equivalent	SM 4500-F C	46
Fluoride, Electrode	WW	8323	Equivalent	SM 4500-F C	46
Fluoride, SPADNS	WW	8029	Accepted	SM 4500-F D	158-159
Fluoride, SPADNS	DW	8029	Accepted	SM 4500-F D	158-159
Fluoride, SPADNS2, Arsenic Free	WW	10225	Equivalent	SM 4500-F D	158-159
Fluoride, SPADNS2, Arsenic Free	DW	10225	Equivalent	SM 4500-F D	158-159
Fluoride, Total	WW	8029	Accepted	SM 4500-F-B or C	158-159
Hardness, Calcium, Digital Titration	WW	8204	Equivalent	SM 3500-Ca D	141
Hardness, Calcium, Titration	WW	8222	Equivalent	SM 3500-Ca D	141
Hardness, Calcium, Titration	DW	8222	Equivalent	SM 3500-Ca D	141
Hardness, Total	WW	8226	Accepted	SM 2340 B or C	161
Hardness, Total, Digital Titration	WW	8213	Equivalent	SM 2340 B or C	161-162
Hydrogen Ion, pH	WW	8156	Accepted	SM 4500-H+ B	—
Iron, Total	WW	8008	Approved	Federal Register June 27, 1980	166-167
Iron	DW	10229	Equivalent	SM 3500-Fe B, D	166
Lead, Total	WW	8033	Accepted	SM 3500-Pb B or D	168
Manganese	WW	8034	Approved	40 CFR 136	169
Nickel, Total	WW	8037	Accepted	SM 3500-Ni D	172

[1]DW = Drinking Water; SS = Sewage Sludge; SW = Surface Water; WW = Wastewater

Continued on next page.

The Hach Difference

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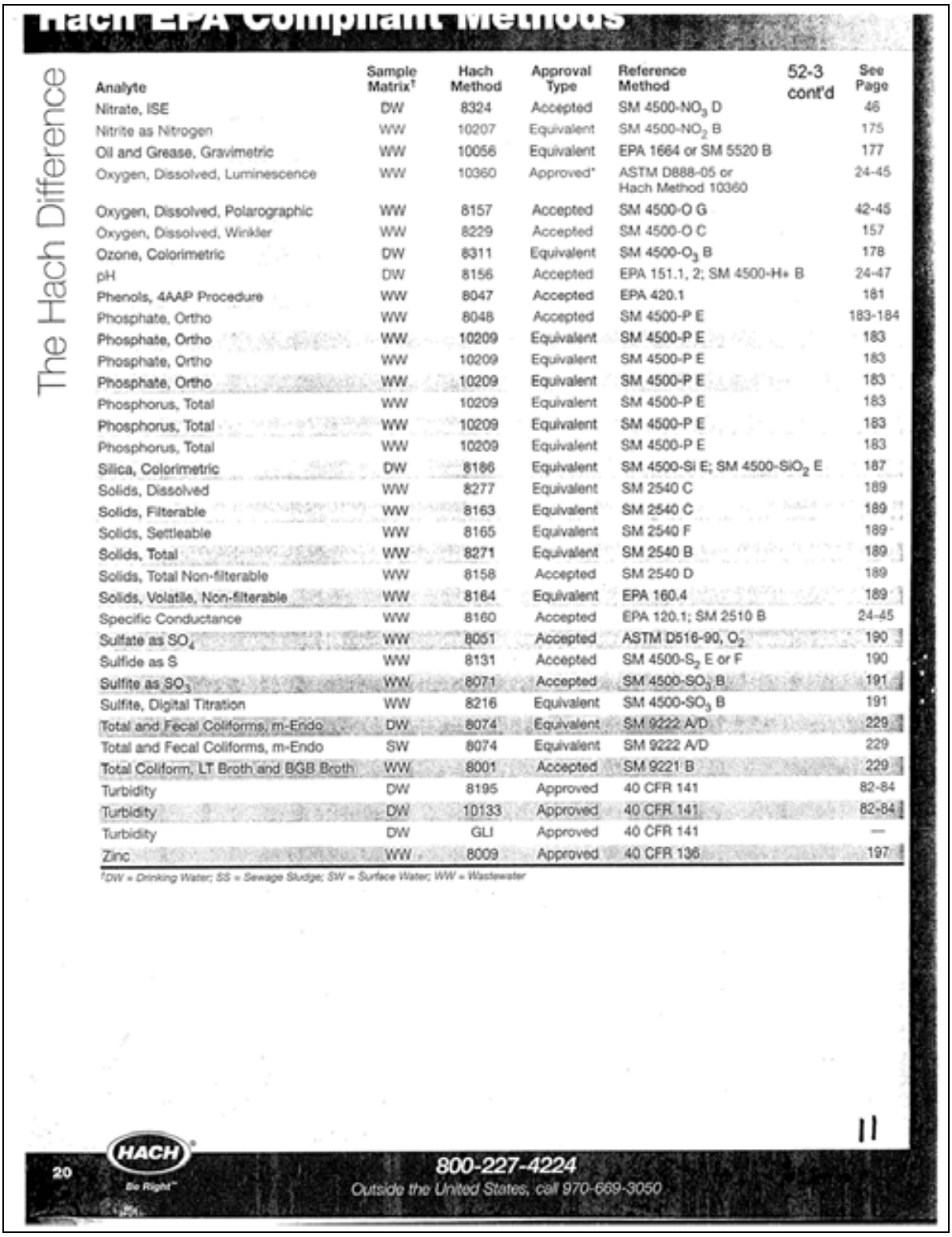

Hach EPA Compliant Methods

The Hach Difference

Analyte	Sample Matrix†	Hach Method	Approval Type	Reference Method 52-3 cont'd	See Page
Nitrate, ISE	DW	8324	Accepted	SM 4500-NO_3 D	46
Nitrite as Nitrogen	WW	10207	Equivalent	SM 4500-NO_2 B	175
Oil and Grease, Gravimetric	WW	10056	Equivalent	EPA 1664 or SM 5520 B	177
Oxygen, Dissolved, Luminescence	WW	10360	Approved*	ASTM D888-05 or Hach Method 10360	24-45
Oxygen, Dissolved, Polarographic	WW	8157	Accepted	SM 4500-O G	42-45
Oxygen, Dissolved, Winkler	WW	8229	Accepted	SM 4500-O C	157
Ozone, Colorimetric	DW	8311	Equivalent	SM 4500-O_3 B	178
pH	DW	8156	Accepted	EPA 151.1, 2; SM 4500-H+ B	24-47
Phenols, 4AAP Procedure	WW	8047	Accepted	EPA 420.1	181
Phosphate, Ortho	WW	8048	Accepted	SM 4500-P E	183-184
Phosphate, Ortho	WW	10209	Equivalent	SM 4500-P E	183
Phosphate, Ortho	WW	10209	Equivalent	SM 4500-P E	183
Phosphate, Ortho	WW	10209	Equivalent	SM 4500-P E	183
Phosphorus, Total	WW	10209	Equivalent	SM 4500-P E	183
Phosphorus, Total	WW	10209	Equivalent	SM 4500-P E	183
Phosphorus, Total	WW	10209	Equivalent	SM 4500-P E	183
Silica, Colorimetric	DW	8186	Equivalent	SM 4500-Si E; SM 4500-SiO_2 E	187
Solids, Dissolved	WW	8277	Equivalent	SM 2540 C	189
Solids, Filterable	WW	8163	Equivalent	SM 2540 C	189
Solids, Settleable	WW	8165	Equivalent	SM 2540 F	189
Solids, Total	WW	8271	Equivalent	SM 2540 B	189
Solids, Total Non-filterable	WW	8158	Accepted	SM 2540 D	189
Solids, Volatile, Non-filterable	WW	8164	Equivalent	EPA 160.4	189
Specific Conductance	WW	8160	Accepted	EPA 120.1; SM 2510 B	24-45
Sulfate as SO_4	WW	8051	Accepted	ASTM D516-90, O_2	190
Sulfide as S	WW	8131	Accepted	SM 4500-S_2 E or F	190
Sulfite as SO_3	WW	8071	Accepted	SM 4500-SO_3 B	191
Sulfite, Digital Titration	WW	8216	Equivalent	SM 4500-SO_3 B	191
Total and Fecal Coliforms, m-Endo	DW	8074	Equivalent	SM 9222 A/D	229
Total and Fecal Coliforms, m-Endo	SW	8074	Equivalent	SM 9222 A/D	229
Total Coliform, LT Broth and BGB Broth	WW	8001	Accepted	SM 9221 B	229
Turbidity	DW	8195	Approved	40 CFR 141	82-84
Turbidity	DW	10133	Approved	40 CFR 141	82-84
Turbidity	DW	GLI	Approved	40 CFR 141	—
Zinc	WW	8009	Approved	40 CFR 136	197

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Federal Register and listed in the CFR, Code of Federal Regulations. EPA-accepted methods usually bear a letter of acceptance from one EPA region or another.

What does the ILRP want in the way of methods to be used in monitoring by the farmer?

Order R5-2003-0826: "The coalition group shall used EPA-approved methods..."

Order R5-2003-0827: "The Discharger shall use EPA approved methods."

The words are plain enough. However, after I was ordered to test for drug production contaminants, after I bought EBMUD data on pesticides in the Mokelumne River to satisfy the new condition of monitoring for pesticides, I was told that I had to monitor run-off directly from my farm (above and below, even though I'm on the divide with no "above.") and that I had to do lab-testing in accordance with SWAMP and produce a QAPP to assure quality in testing above and below my farm.

The Order says "EPA approved" but the attachment A says "EPA accepted."

"This...will be achieved by using accepted methodology (e.g. US EPA.)"

Plus, the SWAMP template requires "List the nonstandard methods that will be used ..."

52-2 cont'd

The Order itself is a jot confusing: "The submittal of an MRP is a condition of the Waiver ... The Detailed Report is a condition of the Conditional Waiver... A QAPP is required to be submitted with the Detailed Report for the MRP Plan to be complete..." Nowhere is "the Detailed Report" explained (capitalization appears in the order.)

The Clean Water Act section 319, I believe, provides for the use of alternative methods of testing. The Water Board requires me to submit a Monitoring and Reporting Plan (MRP) and the QAPP is a part of the Detailed Report which is a part of the Monitoring and Reporting Program and Monitoring and Reporting Program Plan (MRP Plan.)

Compliance is like hunting down a hidden entrance to a Pharaoh's tomb!

The Water Board staff ordered me to use the SWAMP to prepare the QAPP. Chris Jimmerson gave me a specific website to visit and review the guidelines of the SWAMP. I went to the website – I photocopied the page that said the SWAMP had been removed. After repeated conversations with the staff, I went to Assemblyman Tom Berryhill and asked for assistance. His aide contacted Chris Jimmerson and returned with the web address and his demand for a QAPP. I told the aide that there is nothing at the web address he was given. The aide got on the computer and in a few moments replied, "You're right. I'll go talk with them." In a week, I get a letter telling me I've got an extension of time and that I should use the hard copy of the SWAMP. At the Water Board's website, SWAMP is identified as "surface water ambient monitoring program" whereas in the order SWAMP is an anagram of "state-wide ambient monitoring program."

SWAMP required that I "describe the purpose of the study." In other words, why was I monitoring. The EPA says that monitoring is necessary in adaptive management to measure the effectiveness of

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BMP's. In addition, I would explain why the Water Board staff insists that I test above and below my field where there is no above, except for rainfall. The Order mandates "...MRP Plan must include ... measurements of water quality parameters such as ... dissolved oxygen ..." Chris Jimmerson of the Water Board demanded that I test for DO above and below my field.

Dissolved oxygen is useful parameter in measuring the health of streams. When oxygen levels fall below 5 mg per liter, fish start to die. Saturation levels are temperature-dependent, and the maximum oxygen that cold water will hold is about 15 mg per liter. The DO level can drop below its saturation level (at a given temperature) if contaminants of water combine with dissolved oxygen (such as dissolved iron that rusts) or if eutrophic water (contaminated with nutrients) has a bloom of algae that breathes the oxygen and uses it up. Algae depresses oxygen levels in one part of its daily cycle and supersaturates water during photosynthesis when oxygen is released. Riffles in a stream can churn air into water and raise oxygen levels.

However, with rain falling on a field, or runoff exiting a field, DO is a useless parameter in measuring the quality of water or the effectiveness of BMP's. I discussed this with the lab I use for testing, and the lab recommended a different staffer at the Water Board whom I called. He overrode the requirement that I test my rainfall (reference site) and instead use a comparison site on BLM land,a although testing DO is impractical at both locations.

52-2 cont'd

Using BMP's to reduce runoff, my field shed little water. I took pictures during the 100-year-storm of a glaze of water across the land from my porch doorstep. The photos were astounding as a sheet of water mantled the ground. In the field, the rough surface and beginnings of a cover crop plus deep tillage had the combined effect of trapping the rainfall in puddles that soaked in and even at the low-point in the field, a small trickle of runoff poured when I pieced the containing furrow with my hand. As the rain turned to snow, a dramatic effect appeared: the land was covered with snow, a landscape of white, except the field where the water pooled because of deep tillage and water being of warmer mass modified the surface temperature causing the snow to melt as it hit. The field was dirt, uncovered by snow.

In summary, how did the ILRP work with changing staff faces? I was to monitor for contaminants of drug production, I was to monitor for pesticides that I don't use, I was to monitor rainfall for dissolved oxygen using a SWAMP website that wasn't there.

As Dr Sandler had postulated, a new planet is our only hope for a clean environment.

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