

MEETING
STATE OF CALIFORNIA
CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

SOUTHERN CALIFORNIA EDISON ENERGY EDUCATION CENTER
4175 SOUTH LASPINA STREET
TULARE, CA 93274

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TIFFANY C. KRAFT, CSR
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APPEARANCES

BOARD MEMBERS

Mr. Karl Longley, Chairperson

Mr. Jon Costantino, Vice Chairperson

Ms. Jenny Moffitt

Ms. Sandra Meraz

Ms. Carmen Ramirez

STAFF

Ms. Pamela Creedon, Executive Officer

Mr. Ken Landau, Assistant Executive Officer

Mr. Clay Rodgers, assistant Executive Officer

Mr. Alex Mayer, Staff Counsel

Mr. Joe Karkoski, Program Manager, ILRP

Mr. Doug Patteson, Supervising Engineer

Mr David Sholes, Senior Engineering Geologist

Mr. Brent Vanderburgh, Engineering Geologist

APPEARANCES (CONTINUED)

ALSO PRESENT

Mr. John Albertson

Ms. Melanie Aldridge, Maricopa Orchards

Mr. Eric Averett, Kern River Watershed Coalition Authority

Mr. Barry Bedwell, California Grape and Tree Fruit League

Ms. Arlene Bettencourt, California Water Alliance

Ms. Tricia Blattler, Tulare County Farm Bureau

Mr. Butch Brazil

Ms. Kimberly Brown, Paramount Farming Company

Mr. Patrick Cavanagh

Mr. Ed Chambers, Ed Chambers Farm Management

Mr. George Clausen

Mr. Casey Creamer, California Cotton Growers Association

Ms. Michele Costa, Kings County Farm Bureau

Mr. Anton Covington

Mr. Manuel Cunha, Nisei Farmers League

Ms. Susan De Anda, Community Water Center, AGUA Coalition

Mr. Royce Fast, Fast Farms

Ms. Donna Fenton, Kern County Health Specialist

Ms. Laurel Firestone, Co-Executive Director, Community Water Center

Ms. Gayle Frye

APPEARANCES (CONTINUED)

ALSO PRESENT

Ms. Sandra Garcia, Campesinas Unidas Valle De San Joaquin

Mr. Paul Gibaney, MoCaratan Inc

Mr. Steve Godlin, Tulare Farm Bureau

Mr. Rob Goff, Paramount Farming Company

Mr. Juventino Gonzalez

Mr. Loren Harlow, TLBWSD

Mr. Bob Harper, Agriculture Growers Panel

Ms. Kathryn Hogan

Mr. Bruce Kelsey

Mr. John Kirkpatrick

Ms. Shirley Kirkpatrick

Mr. Craig Knudson

Mr. Mark Larson, Kaweah Delta Water Conservation District

Mr. Ron Matik

Ms. Estha Martinez

Mr. Ben McFarland

Mr. Gary McGowen

Mr. Mark McKeen

Mr. Bob McKellar, McKellar Ag Group

Mr. Eric Miller, South Valley Farms

Mr. Ted Miller

APPEARANCES (CONTINUED)

ALSO PRESENT

Mr. Daniel Munk, Farm Advisor UCCE

Mr. Joel Nelson, California Citrus Mutual

Ms. Nori Naylor

Mr. David Orth, Southern San Joaquin Valley Water Quality Coalition

Mr. Don Palla

Mr. Don Patrick

Mr. Michael Prado, AGUA

Mr. Walter Ramirez, CRLA Foundation

Mr. David Roberts, Agriculture Growers Panel

Mr. Joe Russell

Ms. Raquel Sanchez, Campesinas Unidas del Valle De San Joaquin

Mr. Blake Sanden, UC Cooperative Extension

Mr. John Schaap, Kern River Watershed Coalition Authority

Mr. Will Scott, African American Farmers of California

Ms. Phoebe Seaton, California Rural Legal Assistance Foundation

Mr. Bill Stone

Mr. Thomas Suggs, Wheeler Ridge Maricopa Water Storage District

Mr. Bill Thomas, SSJ Water Coalition

Mr. Rick Wegis

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1 name is Joe Karkoski. And I'm the Program Manager for the
2 Irrigated Lands Regulatory Program.

3 Today, Clay Rodgers and I will provide you with
4 an overview of the proposed surface water and groundwater
5 monitoring strategies for the Irrigated Lands Regulatory
6 Program and how these compare with monitoring being
7 conducted in other programs at the Central Valley Water
8 Board.

9 --o0o--

10 PROGRAM MANAGER KARKOSKI: First, I will briefly
11 describe why monitoring is needed and what elements must
12 be included in any water quality monitoring strategy,
13 whether surface water or groundwater.

14 I will also discuss information that is needed in
15 addition to monitoring data to assess compliance.

16 I will then talk about surface water monitoring
17 considerations, how they apply to the Irrigated Lands
18 Program, and how this contrasts with other Regional Board
19 programs.

20 This will be followed by detailed discuss of
21 groundwater monitoring consideration by Clay Rodgers.

22 --o0o--

23 PROGRAM MANAGER KARKOSKI: So why do we require
24 monitoring? Generally, we require monitoring to assess
25 compliance with the State and federal regulations, as well

1 as with Regional Water Board orders. These orders
2 implement provisions found in our basin plan, the Clean
3 Water Act, and the California Water Code, as well as Title
4 27 of California Water Code.

5 The surface water and groundwater monitoring that
6 we are talking about today is typically done to confirm
7 compliance with the conditions in our orders, such as
8 receiving water limits and to confirm that beneficial uses
9 are being protected. Monitoring is often used to assess
10 the impacts of discharges, evaluate the effectiveness of
11 control measures, or help identify source of pollution.

12 --o0o--

13 PROGRAM MANAGER KARKOSKI: The development of a
14 monitoring program strategy requires decisions in four
15 main areas. This includes:

16 What constituents measure or test;

17 Where and how many sample collection locations
18 are needed;

19 When and how often samples will be taken;

20 And what the appropriate yield and laboratory
21 methods are.

22 Careful planning and implementation of these
23 monitoring elements is needed to ensure that objectives
24 and requirements of the regulatory program are met. If
25 any of the parts are not adequately addressed, it may not

1 be possible to determine compliance or evaluate the
2 effects of discharge on water quality.

3 --o0o--

4 PROGRAM MANAGER KARKOSKI: While monitoring data
5 is a critical element needed to assess compliance with
6 water quality regulation, there are other elements as
7 well. It is important to know what type of management
8 practices and control measures are already in place and
9 which new practices are being implemented.

10 It is also important that accurate data analysis
11 and comprehensive reporting are available for decision
12 making. That analysis includes determining whether
13 management practices are effective and assessing trends in
14 water quality. We need to know: Are we seeing
15 improvement in water quality?

16 --o0o--

17 PROGRAM MANAGER KARKOSKI: For the surface water
18 quality portion of this presentation, I'll talk about the
19 eight considerations that go into developing a monitoring
20 strategy. I will describe how the characteristics of
21 irrigated agriculture operations inform our monitoring
22 program and contrast this with examples from two other
23 Regional Board programs.

24 Lastly, I will talk about the regional monitoring
25 approach used for Surface Waters and Irrigated Lands

1 Regulatory Program.

2 --o0o--

3 PROGRAM MANAGER KARKOSKI: This diagram
4 illustrates some of the multiple inputs that commonly
5 contribute to surface water quality conditions, including,
6 irrigated agricultural operations, livestock grazing,
7 timber management, urban storm water runoff, wastewater
8 treatment discharges, and septic systems.

9 In addition to discharges that occur on the
10 surface, subsurface leaching and groundwater recharge can
11 reach surface waters and impact water quality. When
12 deciding on a monitoring strategy, it is important to keep
13 in mind the complexity of the natural hydrologic system,
14 as well as the potential effects from a variety of land
15 uses and facilities.

16 --o0o--

17 PROGRAM MANAGER KARKOSKI: The strategy for
18 monitoring surface water quality in any program depends on
19 many factors. Some key considerations are as follows:

20 Is there a specific facility or project operated
21 by one entity or are there many different operations and
22 entities?

23 Is there a defined discharge point or many
24 disperse points of discharge?

25 Are the expected pollutants, their time in the

1 conducted on a regional basis.

2 --o0o--

3 PROGRAM MANAGER KARKOSKI: A wide range of
4 potential pollutants can originate from irrigated
5 agriculture operations, including sediments, nutrients,
6 pesticides, pathogens, salts, and metals. However, their
7 presence is not reliably predictable and varies in both
8 space and time.

9 Many factors make predicting agricultural
10 discharges inexact. Samples include rotation of crops,
11 varying climate, soil conditions, changing agricultural
12 practices, and changing crops.

13 Implementation of management practices to control
14 pollutants is not fully documented. However, the measures
15 and practices that prevent the surface water pollution are
16 fairly well established, as is knowledge of proper
17 implementation.

18 --o0o--

19 PROGRAM MANAGER KARKOSKI: The current irrigated
20 lands surface water monitoring is based on a three-year
21 rotated cycle. One year of extensive monitoring referred
22 to as assessment monitoring is required. Pesticides
23 toxicity, metals, nutrients and pathogen indicators are
24 analyzed. Reduced monitoring of nutrients and pathogen
25 indicators referred to as core monitoring is conducted for

1 the next two years before the next cycle of assessment
2 monitoring is conducted. Monitoring of parameters and
3 surface monitors with management plans or monitoring
4 associated with total maximum daily loads, or TMDLs is
5 referred to as special project monitoring. The frequency
6 of monitoring is generally monthly, but can be less
7 frequent. For example, some pesticides are monitored only
8 in the months when the pesticides were used.

9 The monitoring approach is a representative
10 monitoring approach. And you'll hear when Clay talks, it
11 differs from the representative approach we're proposing
12 for groundwater.

13 I'll show you a couple figures in a minute to
14 explain this more fully. Basically, not all of the
15 surface water receiving agricultural drainage are being
16 monitored. The sites that are monitored are associated
17 with or represent what is occurring in non-monitored
18 sites. Once the coalition receives the monitoring
19 results, they determine whether water quality objectives
20 have been completed.

21 If there are two or more exceedances in a
22 three-year period, then a management plan needs to be
23 prepared. A management plan identifies the steps that
24 will be taken to identify sources and address any problems
25 where irrigated agriculture is a source.

1 --o0o--

2 PROGRAM MANAGER KARKOSKI: In contrast to
3 irrigated agriculture operations, a wastewater treatment
4 plant is a unique facility with a single discharge point,
5 a well-defined source area, predictable pollutants with
6 well-defined pathways, generally contiguous, irregular
7 discharge, and well-documented measures implemented to
8 prevent pollutant discharges. It is feasible and
9 effective to regulate and monitor wastewater treatment
10 facilities on an individual basis.

11 Under the NPS wastewater program, there are more
12 than 200 individual wastewater treatment plants permitted
13 in Region V. Monitoring of the effluent discharge is
14 required. So you can see that yellow area of the effluent
15 discharge, as well as upstream and downstream in the
16 receiving water body.

17 --o0o--

18 PROGRAM MANAGER KARKOSKI: The aerial photo shows
19 the typical monitoring setup, which would be similar for
20 any facility or project monitored under the NPS Wastewater
21 Treatment Program.

22 --o0o--

23 PROGRAM MANAGER KARKOSKI: Another example is
24 construction projects which are site-specific, have a
25 limited number of discharge pathways, a well-defined

1 source area, and source control that set well-established.
2 Currently, there is a statewide general NPDES permit for
3 construction use. Under the stormwater construction
4 general permit, monitoring would be conducted on a
5 site-specific basis. Whether monitoring is needed depends
6 on the degree and extent of disturbance and the project
7 location.

8 Generally, monitoring applies to stormwater
9 runoff from the project site. A number of active permits
10 under this program ranges from 1,000 to 2400 construction
11 sites. It is feasible to conduct runoff monitoring for
12 construction sites and similar projects on a site-specific
13 basis because the size and timing and activities are
14 defined and predicted. Specific monitoring requirements
15 may be limited or extensive, as determined by the
16 Executive Officer, and are dependent upon observations of
17 the effectiveness of implemented measures.

18 I should have said NPDES is a National Pollutant
19 Discharge Elimination System. It is the federal
20 permitting program that comes under the federal Clean
21 Water Act.

22 --o0o--

23 PROGRAM MANAGER KARKOSKI: To recap, the main
24 reason why we have a regional monitoring approach for
25 surface waters, I want to emphasize the difference in

1 scale between the NPDES programs I described and the
2 Irrigated Lands Program.

3 At about 200 individual facilities, effluent
4 monitoring of facility-specific receiving water monitoring
5 is required for treatment. At about 2,000 individual
6 projects, effluent monitoring may be required for
7 construction sites. Receiving water monitoring is not
8 required.

9 At about 33,000 individual operations, surface
10 water monitoring for irrigated agriculture is the most
11 feasible and effective for receiving waters on a regional
12 basis. Monitoring on an individual basis would be cost
13 prohibitive and unmanageable for both the dischargers and
14 the Regional Water Board.

15 --o0o--

16 PROGRAM MANAGER KARKOSKI: In this example, I
17 will give a general idea of how a regional surface water
18 monitoring strategy is supplied. This map illustrates the
19 large number of parcels and variety of crops present
20 within just one drainage area where a management plan will
21 be implemented. Each square and rectangle represents a
22 unique agricultural parcel. Note the main water body,
23 which is represented by the dark blue line.

24 The monitoring site for this drainage is shown by
25 the yellow dot located at the bottom left corner of the

1 map, which is downstream of the drainage. The different
2 colored blocks represent different land uses and crop
3 types, such as vineyard fruit, row crops, et cetera.
4 Surface water monitoring at the designated monitoring site
5 represents inputs from all crop types that discharge in
6 that drainage.

7 Because monitoring is conducted near the
8 downstream end of the receiving water monitor and not
9 directly in the discharge of the ag fields, dilution of
10 upstream discharge is likely to occur. While this is a
11 disadvantage to this monitoring approach, it does allow us
12 to understand the overall water quality impact of many
13 different operations on ambient water quality conditions.
14 It also allows water quality problems to be addressed
15 throughout the watershed more quickly and discharge
16 monitoring data for each parcel has to be evaluated.

17 When a water quality problem is observed, a
18 management plan process must enable the coalition to
19 determine what is going on upstream. To be successful,
20 the regional water monitoring strategy must be
21 supplemented by grower-specific information, such as
22 pesticides used for management practices.

23 With the grower-specific information, the
24 Coalition Board can identify potential sources of water
25 quality problems and follow up with those individuals.

1 --o0o--

2 PROGRAM MANAGER KARKOSKI: Using a regional
3 approach typically means that monitoring does not occur in
4 all water. In this schematic, streams are shown in dark
5 blue and the contributing drainage areas are shown by the
6 blue-green colored areas that are shown on this really
7 light.

8 This example shows a variety of monitoring sites
9 are selected as primary monitoring locations within a
10 number of drainage. The data collected are used as an
11 indicator or represent water quality conditions in the
12 similar drainage. Go ahead, click.

13 --o0o--

14 PROGRAM MANAGER KARKOSKI: So this focuses on
15 just one particular monitoring site. So you see this
16 monitoring site where that yellow dot is actually getting
17 the drainage from the purple stream. Okay.

18 Click next one.

19 --o0o--

20 PROGRAM MANAGER KARKOSKI: So the other screens
21 that are represented by that monitoring site are shown in
22 that dark yellow, light-brownish color. So those screens
23 are represented by that specific yellow dot where we're
24 monitoring.

25 --o0o--

1 PROGRAM MANAGER KARKOSKI: And those areas, those
2 other potential contributing areas, are also represented
3 by the one site where we are actually conducting the
4 monitoring. So that one site that we are monitoring is
5 representing what's known on a whole represented drainage.

6 --o0o--

7 PROGRAM MANAGER KARKOSKI: Actually, go back.

8 --o0o--

9 PROGRAM MANAGER KARKOSKI: So additional elements
10 of the surface water monitoring strategy will be unique to
11 each coalition, and a regional monitoring approach -- the
12 number of monitoring sites must be sufficient to provide
13 geographic coverage and characterize the variety of crops
14 grown in the area of interest.

15 At the same time, if a water quality problem is
16 identified, the associated watershed area must not be so
17 large that a source identification grower outreach efforts
18 are impacted.

19 --o0o--

20 PROGRAM MANAGER KARKOSKI: In summary, monitoring
21 data from the Irrigated Lands Regulatory Program would be
22 used to meet a variety of program objectives. Monitoring
23 is required to evaluate the compliance with waste
24 discharge requirements or now with the conditional waiver
25 and to ensure protection of beneficial uses.

1 It is used to assess the impacts of irrigated
2 agricultural discharges, surface water body to evaluate
3 the effectiveness of management practices. Because of
4 this spatial extent and large number of irrigated
5 agricultural operations in the Central Valley region,
6 regional monitoring is an efficient and effective means to
7 gather surface water quality data.

8 While this approach does not allow us to identify
9 if or what specific operations discharge, it does allow us
10 to identify areas where significant water quality problems
11 exist and then refine and focus efforts to identify and
12 address the sources of those problems. We believe that
13 this approach can result in timely detection of water
14 quality problems and ineffective strategies.

15 --o0o--

16 PROGRAM MANAGER KARKOSKI: Before I turn things
17 over to Clay, be happy to entertain any questions.

18 CHAIRPERSON LONGLEY: Joe, you're speaking about
19 the monitoring program for this. Could you explain your
20 relationship of the monitoring program to the waste
21 discharge requirements themselves?

22 PROGRAM MANAGER KARKOSKI: Yeah. So if we could
23 maybe go back a few slides. There we go.

24 --o0o--

25 PROGRAM MANAGER KARKOSKI: So the monitoring

1 program will be looking at a couple of things. One is
2 we're trying to identify problem areas. So like I
3 explained with this regional monitoring approach, one of
4 the things the coalitions do is analyze their watersheds.
5 They look at similar soil types, similar crop types, and
6 similar pesticide use patterns. And they pick the
7 monitoring site to represent that great area. So we're
8 using those sites as indicators as to whether the surface
9 water quality objectives are being met.

10 Now, if they're not being met, we do a couple of
11 things. When I say "we," this includes the coalitions.
12 One is we try to identify whether there are irrigated
13 agricultural sources that could be contributing to that
14 problem. So with pesticides, it's usually fairly straight
15 forward. We have pesticide use reports. We can tell
16 whether agriculture is using that particular pesticide.

17 With other parameters such as E. coli, that's an
18 indicator of pathogens and could be coming from many
19 sources, including natural sources, septic, cities, et
20 cetera. So there, we have to do some additional source
21 analysis to determine whether there is a problem with
22 that.

23 If there is an irrigated ag contribution to the
24 water quality problem, then the coalition gathers
25 information on management practices. We look at whether

1 there are some improvements in practices that can be made.
2 The coalition conducts outreach to their growers. And
3 different coalitions do that in different ways. Some do
4 that in one-on-one meetings, conduct surveys, and then we
5 track the water quality over time to see if there are
6 improvements in water quality. So it's an iterative
7 adaptive process.

8 CHAIRPERSON LONGLEY: And do you have the
9 information now that you could -- I know you have a few
10 more things to say. Do you have the information now to
11 put together a definitive data monitoring program? If
12 not, how does that process evolve?

13 PROGRAM MANAGER KARKOSKI: Well, the coalitions
14 have been monitoring surface water for quite a long time.
15 So we started the monitoring in 2003/2004. They took over
16 around 2005 and have been monitoring since. So we already
17 have an established surface water quality monitoring
18 program in place. So I'm fairly confident in what we
19 have.

20 And again, understanding the limitations. This
21 isn't looking at every discharge. It's giving us an idea
22 of do we have significant water quality problems in an
23 area where the ag operations combined, there is enough of
24 that discharge of pollutant to cause a problem, requiring
25 us to act.

1 CHAIRPERSON LONGLEY: And please continue your
2 comments to the groundwater importing.

3 PROGRAM MANAGER KARKOSKI: I'll let Clay do that.

4 CHAIRPERSON LONGLEY: Certainly.

5 PROGRAM MANAGER KARKOSKI: The one other point
6 I'd like to make is that the one area where we've had very
7 limited information is on management practices. So at the
8 beginning of the talk, I showed there are sort of pieces
9 of this puzzle to try to determine compliance. And so we
10 do get some information on management practices. We're
11 not getting information on management practices from every
12 grower. So monitoring isn't just about water quality
13 monitoring. It's also about gathering information

14 CHAIRPERSON LONGLEY: What is the importance of
15 management practices?

16 PROGRAM MANAGER KARKOSKI: Well, as I showed with
17 the other slides for, say, treatment plants, with
18 treatment plants, we don't need to know what treatment
19 processes they're using or what practices they're using
20 because we're setting effluent limitations and we're
21 monitoring their effluent.

22 CHAIRPERSON LONGLEY: Let me stop you there.
23 We're on a treatment plan -- based on the size of a city,
24 you typically have a pre-treatment program, don't you?

25 PROGRAM MANAGER KARKOSKI: Right.

1 CHAIRPERSON LONGLEY: That pre-treatment program,
2 does it get involved in management practices?

3 PROGRAM MANAGER KARKOSKI: Right. Yeah. Yeah.
4 Our primary way of evaluating compliance for the
5 wastewater treatment plant, sort of in contrast to how
6 we're doing things with ag, is we can measure the effluent
7 and we can measure the impacts on the receiving water.

8 So for the irrigated ag, we're not asking every
9 grower to monitor the discharge coming off their field.
10 So we're using an indicator of compliance which are the
11 management practices. So it's a much less costly way of
12 trying to determine compliance. So we look at the
13 management practices that are being implemented. We have
14 a few select surface water quality monitoring sites to see
15 if those management practices appear to be collectively
16 affected. And we kind of go from there. If it's not
17 effective, we work with the coalitions and growers to
18 improve those practices, and like I said, evaluate the
19 trends in water quality.

20 CHAIRPERSON LONGLEY: Thank you.

21 BOARD MEMBER RAMIREZ: I have a question.

22 So you mentioned that you're not getting a lot of
23 response from management practices. Is it because it's a
24 new program and people are slowly starting to get on
25 board? Or is it because people are protesting or what?

1 PROGRAM MANAGER KARKOSKI: I'd say right now we
2 don't have in our conditional waiver clear requirements to
3 get submittal of management practice information from all
4 growers.

5 Now, we have a process when the management
6 practice is required to have the coalitions gather
7 information on management practices. Like I said,
8 different coalitions do it differently. The East Side
9 Coalition that we talked about a few times, they do an
10 evaluation where they try to identify the growers that are
11 closest to the water bodies and say maybe are using a
12 particular pesticide. And they'll get very detailed
13 information on what those growers are doing because
14 they'll meet with them one on one. That might be 14
15 growers out of a couple hundred in a given watershed. But
16 they've seen some success and improvement in water
17 quality. Other coalitions might conduct a survey of the
18 whole 200 growers and get some feedback.

19 Now, the potential disadvantage of that is it's
20 almost like you're checking a box. So the key with the
21 management practice isn't necessarily are you using
22 practices or not; it's how well are you implementing it,
23 right. You may have a sediment basin to capture sediment;
24 but if you're not cleaning it out and maintaining it, it's
25 not an effective practice.

1 So it's sort of a balance between trying to -- so
2 far, it's been a balance between trying to get a lot of
3 information and getting a global picture versus some
4 coalitions acting one-on-one and getting a very good idea
5 on a site-specific basis.

6 CHAIRPERSON LONGLEY: Jon wants to ask a
7 question.

8 But before that, first of all, if you can't hear
9 us -- and I've just been told we almost have to develop a
10 love relationship with this mike. If you can't hear us,
11 let us know.

12 Also, we still have three seats up front here at
13 the table. Particularly, if you are a press person or
14 anybody is welcome to sit up here. You want to take
15 notes, it's a lot easier to have a table in front of you.
16 If you're here to take a picture of the press or whatever,
17 this is also a good place for you.

18 So looks like I have some takers for the seats.
19 Probably have four people for three seats. Maybe we can
20 get a chair over here at the table. There's a seat right
21 over here.

22 BOARD MEMBER COSTANTINO: My question has to do
23 with, you use the term regional monitoring. And this is a
24 big region. I know we're not talking about that big a
25 region. Can you describe how each individual region goes

1 about the growing process?

2 PROGRAM MANAGER KARKOSKI: Yeah. So if we can
3 back up a couple of slides. Stay there. Okay.

4 So, you know, this is one of the examples. And I
5 don't think I have a better slide. But if you -- we'll go
6 back to the other slide as well. But I was warned not to
7 use specific examples of any specific coalition.

8 This one is actually specific to the East Side
9 Coalition. It's Cache Slough. So actually you can say
10 it's 27,000 acres that are actually in that drainage area.
11 So as we move forward, you know, in the whole east side --
12 I'll use east side because I'm most familiar with it --
13 they have about 900,000 acres. So we may end up -- and
14 this is just as an example. We end up with ten sites that
15 are primarily monitored that would be -- and so the
16 regional monitoring is having the ten sites in that whole
17 East Side San Joaquin Coalition area. So that's the
18 region I'm referring to.

19 And then the monitoring sites will monitor a
20 specific drainage, which may be a relatively small
21 drainage, like this 27,000 acres compared to the whole
22 900,000 or million acres. But it will be representing
23 other drainages that are nearby and have similar
24 characteristics.

25 So part of the explanation will be that if you

1 find a problem in the site that's monitored, any of the
2 sites that are represented by that monitored site must
3 also go through the evaluation of seeing what practices
4 are being in place and are in place and improve those
5 practices, if necessary.

6 Did I answer your question?

7 BOARD MEMBER COSTANTINO: Yes.

8 The second part is how -- who selects the sites
9 and what's the back and forth between coalitions and the
10 Board on approval?

11 PROGRAM MANAGER KARKOSKI: Yeah. So in
12 general -- and this depends. Sometimes we can have those
13 discussions and negotiations before we bring an order to
14 you. And then if we do that, we'll have the order to
15 identify the site locations. Other times we might -- if
16 we are not able to do that, we'll just say here are the
17 criteria we're looking for, and then they'll have to
18 submit a proposed monitoring plan. So the coalitions will
19 be the first to propose a monitoring plan that would meet
20 whatever criteria the Board adopted for that particulate
21 monitoring plan.

22 CHAIRPERSON LONGLEY: Any further questions from
23 the Board members?

24 Thank you, Mr. Karkoski.

25 PROGRAM MANAGER KARKOSKI: You're welcome.

1 ASSISTANT EXECUTIVE OFFICER RODGERS: Chairman
2 Longley and members of the Board, my name is Clay Rodgers.
3 I am an Assistant Executive Officer in the Fresno office, and
4 I'm here today to talk about groundwater monitoring in the
5 Irrigated Lands Regulatory Program.

6 The groundwater part of the presentation will
7 include an introduction that talks about background
8 information on the Central Valley groundwater basin, basic
9 information regarding dischargers in the Central Valley,
10 and introductory information on groundwater occurrence and
11 flow.

12 Also included will be background information on
13 groundwater programs overseen by the Central Valley Water
14 Board and a discussion of how historically groundwater
15 monitoring has been conducted.

16 I will finish with a discussion of the
17 groundwater monitoring requirement staff is recommending
18 be incorporated into the Irrigated Lands Regulatory
19 Program, general orders, that will be brought for your
20 consideration beginning in October.

21 --o0o--

22 ASSISTANT EXECUTIVE OFFICER RODGERS: I'd like to
23 present some groundwater facts that emphasize the critical
24 role groundwater plays in the valley. These include the
25 Central Valley has the second largest contiguous

1 groundwater basin in the United States and the largest in
2 California. According to the Department of Water
3 Resources, groundwater in California supplies almost
4 50 percent of the domestic and public drinking water
5 supply. And in the Central Valley, groundwater supplies
6 more than 50 percent of that drinking water supply. In
7 many communities, particularly in the South Valley,
8 groundwater is the sole source of public drinking water
9 supplies.

10 --o0o--

11 ASSISTANT EXECUTIVE OFFICER RODGERS: Groundwater
12 in the Central Valley is intensively used for a multitude
13 of purposes that include agricultural irrigation,
14 municipal and domestic water supply, and industrial
15 operations. There are also a multitude and variety of
16 dischargers operating in the Central Valley and a few
17 percentages are worth noting. In the Central Valley,
18 agriculture is a multi-billion dollar industry, and over
19 80 percent of all the irrigated lands within California
20 are in this area.

21 Approximately 50 percent of all waste dischargers
22 regulated under the Land Disposal Program in California
23 are located within the Central Valley region. These are
24 discharges from facilities such as wastewater treatment
25 plants, food processors, and landfills. And approximately

1 40 percent of all the septic systems within the state are
2 also located within the Central Valley region.

3 This information emphasizes the groundwater in
4 the Central Valley is an extensively used resource, and
5 its continuing ability to meet these needs is critical to
6 the economic viability of the region. By extensively
7 used, I want to point out that not only is groundwater
8 used as a water supply, but a significant amount of
9 groundwater recharge comes from infiltration associated
10 with agricultural irrigation and from land activities the
11 Central Valley Water Board regulates.

12 --o0o--

13 ASSISTANT EXECUTIVE OFFICER RODGERS: Before I
14 talk about our groundwater programs, I would like to take
15 a few minutes to provide a brief review of how groundwater
16 occurs and the distinct differences between groundwater
17 and surface water that leads to the different manner in
18 which we regulate these water bodies.

19 Groundwater in the San Joaquin and Sacramento
20 Valley occurs primarily in unconsolidated material, what
21 is referred to as a porous medium. These unconsolidated
22 materials are primarily soil and underlying sediment that
23 have not been compacted to the point of becoming a rock
24 and at times can be referred to as dirt.

25 Water occurs in the porous spaces between the

1 grains of what in the upper picture of this slide would be
2 a sand. In the foothill and mountain areas of our region,
3 much of the sub-surface material is rock. And groundwater
4 occurs primarily in fractions or cracks in the rocks
5 represented by the lower picture.

6 This talk will concentrate on the porous media
7 that occurs within the aquifers of the Central Valley.
8 And I will not discuss complexities associated with
9 dealing with fractured rock. I'll leave that for another
10 day.

11 --o0o--

12 ASSISTANT EXECUTIVE OFFICER RODGERS: The
13 aquifers of the San Joaquin and Sacramento Valleys occur
14 when the subsurface soils and sediments become saturated
15 with water. Once saturated, groundwater movement is
16 through the small opening or pore space and around the
17 grains as shown here by the blue arrow. This results in
18 significant friction or resistance to flow. It results in
19 horizontal flow being measured typically in tens or
20 hundreds of feet per year. Groundwater in the Central
21 Valley, because it flows so slowly, occurs primarily under
22 what is called laminar flow. This is different than
23 surface water that often occurs in the turbulent flow.

24 --o0o--

25 ASSISTANT EXECUTIVE OFFICER RODGERS: This

1 picture shows the difference between turbulent and laminar
2 flow. The difference that's important in this discussion
3 are that mixing readily occurs under turbulent flow and
4 not under laminar flow. Laminar flow was typical of
5 fluids that flow slowly and through a tube in smooth
6 walls. Turbulence occurs when the flow is faster.

7 --o0o--

8 ASSISTANT EXECUTIVE OFFICER RODGERS: This slide
9 is a hydrogeologic cross section that I would like to use
10 in basic concepts. A land application area in the surface
11 in green is shown. This scenario applies to most of our
12 waste discharge requirement program sites where our agency
13 regulates the discharge of wastewater to land. This would
14 be something like a wastewater treatment plant or food
15 processor that applies their treated wastewater to land.

16 The green curve there from the bottom of the land
17 application area represent percolation into the tan
18 colored vadose zone.

19 The vadose zone is at the top of the blue boxes
20 that represents the top of the groundwater. While most of
21 our land application areas apply wastewater to irrigate
22 crops to take up nutrients, there is still percolation
23 below the root zone. And in the vast majority of land
24 applications, there is recharge to groundwater.

25 The blue boxes represent different aquifers of

1 water-barring zones that are separated by the yellow and
2 the yellowish-green in this picture. They represent
3 aquitards zones with vertical or downward flow where water
4 is restricted or slow. While the flow of water is slow to
5 an aquitard, it is almost never stopped.

6 While aquitards are shown in this figure, they
7 are not always present. The direction of groundwater flow
8 in this picture is from left to right, and the direction
9 of the dark blue arrow in the upper water-bearing zone,
10 what we refer to as upgradient or upstream of the aquifer
11 would be on the left side of the application area, and the
12 downgradient or downstream would be to the right of the
13 application area.

14 While the direction of groundwater flow shown in
15 pink to the right, groundwater flow is different than
16 surface water and typically occurs within the channel and
17 is almost always down that channel.

18 In groundwater, the flow is very long and is
19 based upon a number of different factors. The factors
20 include recharge, which in this slide would occur from the
21 land application area as water percolates or leaches
22 through the vadose zone.

23 Another issue is discharge from the aquifer that
24 in this figure occurs where the water supply wells are
25 pumped. The different recharge and discharge from the

1 aquifer can cause dramatic differences in the direction of
2 groundwater flow.

3 --o0o--

4 ASSISTANT EXECUTIVE OFFICER RODGERS: The Central
5 Valley Water Board permits typically have different
6 requirements for surface and groundwater. These are due
7 to physical differences in how those waters occur.

8 The first is that since surface water often
9 occurs under turbulent flow, there is significant mixing
10 that occurs in a relatively short amount of time,
11 typically from minutes to days. The laminar flow of
12 groundwater does not promote mixing, and any mixing that
13 occurs in groundwater occurs over very long periods of
14 time.

15 Secondly, surface water in stream flows much
16 faster than groundwater, such that if a surface water
17 problem occurs and the source is known, the water quality
18 issues will be minimized much faster, often within hours
19 or days. Whereas, when groundwater issues are discovered,
20 it typically takes years or decades to mitigate the
21 impacts, even if there is no continuing source. This is
22 related to the rate of flow and the rate of mixing.

23 Thirdly, groundwater and surface water flow
24 differently, as was discussed a couple of slides earlier.
25 Surface water is typically confined to a channel and

1 except for some extreme circumstances flows downhill and
2 quickly. Groundwater, on the other hand, is not typically
3 constrained to a channel. And the direction of
4 groundwater flow can vary dramatically based upon many
5 factors.

6 The unsaturated material above the water table is
7 commonly referred to as the vadose zone. There is no
8 vadose zone in surface water. The vadose zone can act as
9 a reservoir when the unsaturated material contains
10 contaminants that leach into groundwater. Depending on
11 the depth of groundwater and the composition of the
12 unsaturated materials, this leaching process can continue
13 for years after the surface activities stop and lead to
14 even longer-term impacts in groundwater.

15 --o0o--

16 ASSISTANT EXECUTIVE OFFICER RODGERS: Many
17 programs overseen by the Central Valley Water Board
18 include requirements to protect and monitor groundwater
19 quality. These programs include:

20 Underground storage tanks that are primarily gas
21 stations;

22 Site cleanup and Department of Defense that
23 includes industrial and military facilities; the Title 27
24 program that includes landfills;

25 Certain wastewater surface impalements, mines,

1 Most monitoring wells are designed to collect
2 first encountered water at or near the top of the water
3 table through the well streams. We typically require
4 monitoring of first encountered groundwater because it
5 provides the earliest indication of a problem.

6 Downgradient monitoring wells are located as
7 close as possible to the downgradient edge of the land
8 application area. In the case of land application
9 areas -- and this pertains to irrigated fields as well --
10 water percolates into areas below the root zone and
11 recharges underlying groundwater. As this water is
12 stacked on top of the water table and moves downgradient,
13 the result is that water actually moves at a vector and a
14 shallow monitoring well at the downgradient edge of the
15 field and sample water recharged from that specific field.

16 --o0o--

17 ASSISTANT EXECUTIVE OFFICER RODGERS: Upgradient
18 wells are located far enough upgradient to be out of the
19 influence of the land application area. Upgradient wells
20 are typically needed to assess water quality before it can
21 be become an influence by site activities to help identify
22 any impact as water flows beneath the site and evaluate
23 whether there is an upgradient source where groundwater
24 issues are identified.

25 Water supply wells are not typically used as

1 monitoring wells for compliance purposes. They have
2 longer well streams and typically start below the top of
3 the groundwater. This limits our ability to identify the
4 source of any impacts and whether the site being monitored
5 is the culprit.

6 Also, the long well stream at the water supply
7 well results in source of the well being very large, while
8 suitable for regional studies, is not appropriate for
9 site-specific studies.

10 In addition, impacts of the surface would take
11 much longer to be identified in deeper water supply wells.
12 This delay would prevent us from taking appropriate steps
13 to minimize the impact and would lead to more extensive
14 impacts to water quality and greater potential loss of
15 beneficial uses.

16 A minimum of three monitoring wells are needed to
17 calculate the soil for the groundwater and allow
18 estimation of a direction of groundwater flow.

19 Many of our sites contain more than three wells,
20 and the number is dependent upon the complexity of the
21 site and increases if wells are installed to assess the
22 lateral or vertical extent of impact. Large groundwater
23 monitoring well systems can exceed 100 wells.

24 --o0o--

25 ASSISTANT EXECUTIVE OFFICER RODGERS: Groundwater

1 monitoring that this Board oversees for dairies has taken
2 a different approach from historic approaches and applied
3 for facilities where groundwater importing is required.

4 Monitoring at dairies is done under two parallel
5 tracks. The first track is monitoring of on-site water
6 supply wells for long-term regional trends. And the
7 second track consists of either individual or
8 representative monitoring at the discharger's choice. I'm
9 not going to talk about the water supply well monitoring
10 unless there are questions and concentrate on the second
11 track.

12 For a discharger that chooses to go the
13 individual route -- a dairy that chooses that -- the
14 required monitoring system is very similar to the
15 conventional monitoring overseen by the Central Valley
16 Water Board and talked about on the previous slide. This
17 would typically require the installation of monitoring
18 wells of the first encountered groundwater upgradient of
19 the dairy and downgradient of the ponds, corrals, and crop
20 land to identify whether the operations at the dairy are
21 in compliance with the Dairy General Order.

22 Representative monitoring is a new concept that
23 has been employed at dairies as an alternative individual
24 monitoring. A Coalition called the Central Valley Dairy
25 Representative Monitoring Program has established a

1 representative monitoring program and installed over 130
2 wells at 18 dairies last fall and is proposing to add
3 wells to about 26 more dairies this fall.

4 --o0o--

5 ASSISTANT EXECUTIVE OFFICER RODGERS: So what is
6 representative monitoring?

7 Representative monitoring is the monitoring of a
8 limited number of facilities that represent the larger
9 group and taking that information learned on those
10 representative sites and applying it to facilities that
11 are not monitored. It is not regional monitoring.

12 This method of monitoring is quite applicable to
13 programs where we have a large number of sites to monitor,
14 such as occurs in the Dairy Program and is being proposed
15 under the Irrigated Lands Program.

16 The State well representative monitoring is a
17 little different. It is the specialized studies of
18 representative sites in lieu of monitoring every site.
19 That information for dairies and irrigated lands is to
20 identify the combination of management practices and site
21 conditions that are protective of groundwater quality.
22 Once the combination of protective management practices
23 and site conditions are identified, or to identify what
24 does not work, the information is applied to sites that
25 have not been monitored to identify if improvements in

1 management practices are needed. I can best show how this
2 is done on the following slide.

3 --o0o--

4 ASSISTANT EXECUTIVE OFFICER RODGERS: I call this
5 the matrix. The idea is that the boxes of the matrix
6 represent combinations of management practices and site
7 conditions.

8 In this example, there are 24 numbered boxes, but
9 that number has no significance. Here, the blue boxes --
10 very light blue -- identify combinations protective of
11 groundwater quality, and the yellow boxes represent
12 combinations that are found to be not protective. The
13 boxes represented less protective conditions as you move
14 down in the matrix and less protective practices to the
15 right and results in box one being most protective
16 combination and box 24 being the least protective
17 combination.

18 This incorporates the idea that there are
19 management practices that may be protective of groundwater
20 quality or the conditions are protective or less
21 vulnerable to impact, but may not be protective of
22 conditions that more susceptible to impact.

23 As scientists, geologists and engineers, we can
24 come to agreement on the relative ability of conditions
25 and practices to protect groundwater quality. Basically,

1 something to the effect that we can say that this practice
2 should result in better protection of groundwater than
3 that practice, given the other factors are the same. This
4 might be something like saying that lower fertilizer
5 application rates are more protective than higher
6 fertilizer application rates or that deep groundwater is
7 less likely to be effected by surface activities than
8 shallow groundwater. These comparisons are made with the
9 assumption that the other factors are the same.

10 The goal comes in identifying the boundary
11 between the blue and yellow boxes. The end result of this
12 effort would be to apply what is learned to sites not
13 monitored, such that sites whose combination falls in the
14 yellow box would need to improve their practices, shift
15 them to the left into a blue square.

16 --o0o--

17 ASSISTANT EXECUTIVE OFFICER RODGERS:

18 Representative monitoring has several advantages over
19 individual monitoring. These advantages include: More
20 efficient use of both resources, time and money; the time
21 issue is true for Water Board staff discharges and their
22 consultants. There is less overall monitoring being
23 performed, which leads to a significant cost savings to
24 the regulated community. And the cost of doing -- that
25 cost including the cost of doing the monitoring, well

1 installation, sampling, and reporting of the data.

2 There is much less time needed for staff to
3 review a small number of work plans and reports versus
4 hundreds or even thousands of work plans and reports that
5 would be submitted under a program utilizing conventional
6 monitoring -- conventional individual monitoring.

7 This also leads to a more consistent quality of
8 the data, which enhances the ability to interpret the data
9 and generates more consistent quality work products. It
10 also enhances the ability to assess differences in
11 monitoring data, rather than trying to determine this by
12 looking at a multitude of reports from individual sites.

13 One of the biggest advantages is that it
14 establishes what practices are protective of groundwater
15 quality. And this is based on actual data being collected
16 and not based upon a series of assumptions.

17 --o0o--

18 ASSISTANT EXECUTIVE OFFICER RODGERS: I do want
19 to point out that there are disadvantages of
20 representative monitoring.

21 The first of these is that most sites will not be
22 monitored. It takes acceptance by both the regulators and
23 the regulated community that the information from the
24 monitored sites can be applied to the sites not monitored.

25 The second of these is if the regulated community

1 has to understand that if the results somewhere else
2 indicates that they need to improve their practices, they
3 will be obligated to improve their practices and cannot at
4 the end refuse to make the needed improvements.

5 --o0o--

6 ASSISTANT EXECUTIVE OFFICER RODGERS: As I start
7 to talk about the Irrigated Lands Regulatory Program, the
8 first question is: Why do we need to monitor groundwater?

9 Aside from the reasons presented earlier in this
10 presentation regarding compliance with the proposed order
11 and a series of questions developed that will be discussed
12 shortly, the answer is shown on this slide. This slide
13 shows data that staff compiled for water supply wells in
14 Tulare County. Each stop represents a well that is either
15 in the TEAR tracker database, data from the California
16 Department of Public Health, or data from Tulare County.
17 And again, the primarily water supply wells and not
18 shallow monitoring wells.

19 The red dots represent wells where an analysis of
20 groundwater has detected nitrates of concentrations
21 exceeding the maximum contaminants level for nitrates on
22 at least one occasion.

23 The yellow dots are for detection of nitrates in
24 well water from half the MCL and less than the MCL.

25 And the green dots are where detected nitrate

1 concentrations in well water were below half the MCL.

2 As can be seen from this map, there are
3 significant issues with nitrates in Tulare County. While
4 this area has some of the worst problems associated with
5 nitrates, this problem exists up and down the Central
6 Valley region.

7 Groundwater reports from the University of
8 California at Davis and the United States Geological
9 Survey indicate that agricultural operations, including
10 dairies, apply the greatest mass of nitrate and appear to
11 be the primary contributor to this issue on a regional
12 scale. There are other sources of nitrate, but they are
13 probably most important on a local scale.

14 One thing I would like to add is that the
15 majority of these data are for water supply wells. One
16 would expect the nitrate concentrations and first
17 encountered groundwater will be higher.

18 --o0o--

19 ASSISTANT EXECUTIVE OFFICER RODGERS: In the
20 process leading up to development of the Environmental
21 Impact Report for the Long-Term Irrigated Lands Regulatory
22 Program, these goals were developed. The goals are to
23 protect the beneficial uses of groundwater, minimize waste
24 discharge from irrigated land, maintain the economic
25 viability of agriculture, and ensure that discharges from

1 agriculture do not impair the access to safe and reliable
2 drinking water.

3 Monitoring is needed to make sure that these
4 goals can be achieved and identify what, if any,
5 improvements need to be made and where.

6 --o0o--

7 CHAIRPERSON LONGLEY: Mr. Rodgers, you're doing a
8 good job of providing the importance and the goals of ILRP
9 program. You have about a dozen slides left, and I'd
10 appreciate if you can go through those very rapidly.

11 ASSISTANT EXECUTIVE OFFICER RODGERS: Okay.
12 Basically, I'll just go through --

13 --o0o--

14 ASSISTANT EXECUTIVE OFFICER RODGERS: These are
15 the goals. Next slide.

16 --o0o--

17 ASSISTANT EXECUTIVE OFFICER RODGERS: We had a
18 series of -- we put together a Groundwater Monitoring
19 Advisory Work Group at the request of the Executive
20 Officer to provide guidance to Regional Board staff on how
21 we address groundwater problems within the region. And
22 this group was asked to weigh in on how we should monitor
23 groundwater. And this included a number of outside
24 experts from the University of California at Davis,
25 United States Geological Surveys, other State agencies,

1 and private consultants. We had a series of meetings that
2 were conducted and open to the public, and they developed
3 a series of questions.

4 --o0o--

5 ASSISTANT EXECUTIVE OFFICER RODGERS: This was
6 the first question. I'll let you read it real fast.
7 Basically, to identify what are the impacts to groundwater
8 and where has groundwater been degraded.

9 --o0o--

10 ASSISTANT EXECUTIVE OFFICER RODGERS: What
11 agricultural management practices are protective of
12 groundwater quality and to what extent is that effected
13 by?

14 --o0o--

15 ASSISTANT EXECUTIVE OFFICER RODGERS: To what
16 extent irrigated agriculture's impact on groundwater
17 quality be differentiated from other sources.

18 --o0o--

19 ASSISTANT EXECUTIVE OFFICER RODGERS: What are
20 the trends in groundwater quality?

21 --o0o--

22 ASSISTANT EXECUTIVE OFFICER RODGERS: What
23 properties are the most important that result in
24 degradation of groundwater related to agricultural
25 activities?

1 --o0o--

2 ASSISTANT EXECUTIVE OFFICER RODGERS: And what
3 are the transport mechanisms? How does this impact occur
4 and are there intermediate steps that we can take to
5 protect groundwater?

6 --o0o--

7 ASSISTANT EXECUTIVE OFFICER RODGERS: How can we
8 confirm that management practices actually work?

9 --o0o--

10 ASSISTANT EXECUTIVE OFFICER RODGERS: And with
11 that, we'll move onto trend and representative monitoring.

12 --o0o--

13 ASSISTANT EXECUTIVE OFFICER RODGERS: Trend
14 monitoring is proposed to entail monitoring of a limited
15 number of water supply wells to assess regional trends in
16 waters that are being used. This would ideally be
17 shallower wells where the construction is known.

18 We are recommending shallower wells because they
19 are most susceptible to water quality problems and effects
20 would be observed sooner than the deeper large
21 agricultural water supply wells.

22 This would be done in high and low vulnerability
23 areas. The value in vulnerability areas to confirm that
24 problems are not present or identify trends that would
25 indicate that significant problems are coming. The value

1 of high vulnerability areas is confirmed with implementing
2 management practices that are leading to improvements.
3 It's proposed that trend monitoring would be established
4 by each coalition following submittal of a work plan where
5 basically they would tell us how they propose to do that.
6 And that would be for Executive Officer approval.

7 --o0o--

8 ASSISTANT EXECUTIVE OFFICER RODGERS: Second
9 track is the representative monitoring that could be very
10 similar to what we talked about here. This is proposed in
11 high vulnerability areas only. The proposed
12 representative monitoring would assess data at the field
13 scale to allow extrapolation of fields not monitored in
14 the same fashion as done for digs. It would require
15 installation of monitoring wells at first encountered
16 groundwater to allow identification of the sources of the
17 water being sampled and allow evaluation of whether
18 management practices are protective. And for areas where
19 changes are made, to assess the impact of those changes in
20 management practices at the earliest possible time.

21 We're also open to alternatives to representative
22 monitoring. We've been approached by some of the
23 coalitions telling us that they would like to do
24 alternatives to just groundwater monitoring. Certainly,
25 we're open to that idea. Some of that is monitoring soil

1 in the vadose zone and doing the numerical modeling to
2 assess its impact on groundwater.

3 We are amenable to approaches such as that,
4 although particularly in a case where numerical models are
5 used, we would probably require some amount of groundwater
6 monitoring to confirm that, in fact, the model could
7 accurately predict water quality.

8 Also, we are recommending a cooperative approach
9 to implement the representative monitoring. Staff has met
10 with representatives of the coalitions and suggested they
11 should work cooperatively to implement the program rather
12 than each third party working independently. It makes
13 sense that the data collected in the third party area
14 would be applicable to the region or commodity. And
15 working cooperatively with minimizing the overlap and
16 duplication of effort between the coalitions and this
17 should lead to substantial cost savings.

18 --o0o--

19 ASSISTANT EXECUTIVE OFFICER RODGERS: This one
20 I'll take just a second to go through, since it's a topic
21 of conversation.

22 Groundwater monitoring being proposed for
23 Irrigated Lands Regulatory Program will be expensive.
24 Everybody wants to know how much it will cost. That
25 depends on a lot of different factors. These factors are

1 mostly related to how the problem is approached. For
2 instance, does each coalition decide to take their own
3 approach or do they work together to answer the questions
4 one time for the region? I can tell you what the dairy
5 industry has done to provide a rough idea of what the cost
6 would be.

7 The dairy program spent on the order of \$2
8 million in the past couple years to get the Central Valley
9 Dairy Representative Monitoring Program set up and do the
10 first phase of that work. A million dollars of that came
11 from the NRCS. The dairy group has about 3,100 members
12 that are charged \$81 per month to be in the program. That
13 is in addition to a membership fee, joined a cost of \$500.

14 I was told they do not foresee having to increase
15 the rates to generate on the order of one-and-a-quarter
16 million dollars per year to cover the cost of the program.
17 The Irrigated Lands Program will be much larger because
18 there are 33,000 farmers on seven-and-a-half million acres
19 growing in excess of 250 crops. However, what should be
20 assessed is not necessarily the number of crops, but the
21 management practices. And many crops have similar
22 management practices that allow lumping of the different
23 crops into a manageable number of groups.

24 The bottom line is that dairies are fewer in
25 number, growing a smaller number of crops. But their

1 site-specific monitoring systems are larger because they
2 have production areas to monitor in addition to their
3 cropland.

4 All this said, a representative monitoring
5 program for the Irrigated Lands Regulatory Program in a
6 best-case scenario might be about the same size or a
7 little larger than the dairy program, and in worst case
8 might be five times larger. So that leads to a range of
9 costs on the order for the entire region of 1.5 to \$7
10 million per year. Assuming the costs were spread out over
11 the seven-and-a-half million acres, a ballpark cost would
12 range from about 20 cents per acre to slightly less than a
13 dollar per acre. Of course, if cooperative approaches are
14 taken, that's going to be on the lower end.

15 Based on my conversation with industry
16 representatives and written comments we have received,
17 concern is that they do not know what representative
18 monitoring will cost.

19 Our suggestion is that if the coalition wants to
20 nail these numbers down, they need to submit their work
21 plan and get it approved. Once there is a work plan, cost
22 will be estimated and would include any variations such as
23 alternative approaches and take their specific
24 alternatives into consideration.

25 In addition to the Dairy and Irrigated Lands

1 Regulatory Program, representative monitoring programs
2 need to cooperate. I would think the dairy information
3 for cropland would also be of value to the Irrigated Lands
4 Regulatory Program.

5 --o0o--

6 ASSISTANT EXECUTIVE OFFICER RODGERS: I'm not
7 going to spend any time talking about the implementation.

8 --o0o--

9 ASSISTANT EXECUTIVE OFFICER RODGERS: And I'll
10 just talk about the summary.

11 In summary, the programs that include groundwater
12 monitoring overseen by the Central Valley Water Board
13 implement conventional individual groundwater monitoring
14 for programs that have hundreds or thousands of sites,
15 such as dairies, and is being proposed for the irrigated
16 lands. We are implementing representative monitoring as
17 an alternative to monitoring every facility. This is a
18 cost and time effective method of collecting required
19 information and identify what needs to be done to protect
20 groundwater quality.

21 The trend in representative monitoring are
22 proposed for irrigated lands based on collecting the data
23 needed to answer those critical questions that we skimmed
24 through and help ensure that the goals of the
25 Environmental Impact Report are met.

1 This concludes my presentation. Be happy to
2 answer any questions.

3 CHAIRPERSON LONGLEY: Thank you very much. We'll
4 take questions in a minute.

5 I'd like to point out that the basis of what
6 you've heard -- apologize for the time it took, but this
7 is what the Board staff presents to the Board and the
8 kinds of things that we have to make our decisions off of.
9 It's so important to hear your comments, your comment
10 letters, and your comments here today and in the possible
11 future meetings.

12 I might point out -- and I think staff will
13 address this later. There was a great concern about
14 comments being shut off. Comments are not shut off. And
15 we'll ask staff to give a little bit of clarification on
16 how this process runs all the way to probably the first of
17 February.

18 With that said, we're going to have some more
19 questions for you, but we're going to take a five-minute
20 break to stand up. The oxygen is probably getting
21 depleted in this room. And while we are standing up,
22 hopefully these doors in the rear can be open, giving
23 people in the back that are standing in the back a little
24 opportunity.

25 (Whereupon a recess was taken.)

1 CHAIRPERSON LONGLEY: Thank you all for coming
2 out today. We welcome your presence here. It's pretty
3 obvious we're going to be back here again. You can count
4 on that.

5 In the mean time, it's obvious we have to find a
6 bigger place. I'm going to suggest that we go to the
7 harvest hall across the street. Someone mentioned the
8 Convention Center. Recognize when we do come down, we
9 have to pay for those spaces. So we try to balance
10 getting you all in the room together with what it costs.
11 Maybe we wait until October, and we hold it outside and
12 make staff a little nervous.

13 We have Mr. Rodgers is on TV over here. And once
14 he gets off the TV, you can watch him tonight. We'll be
15 going back into session.

16 We are going to wrap this up on Item 4. I only
17 have a few cards of people who want to talk on Item 4.
18 I'm surprised. So I'll go through those people who gave
19 us cards on 4, and then I'll ask for anybody else who
20 wants to testify and hopefully you have a card here.

21 A lot of you didn't mark which session. If it
22 looked like it belonged in the afternoon session, that's
23 where I put it.

24 We're told that we have to be out of here at
25 6:30. We'll stay here until they pick us up and carry us

1 out the door. So if you want to talk, you're going to get
2 your time in front of us.

3 What else is there? Yes, so if you gave me a
4 card and you want to hold off until this afternoon, that's
5 fine, too. This afternoon's session we're going to have a
6 staff presentation on what the WDRs are. As I stated
7 earlier, this is what Board members are working off of.
8 You have to know what we're working off of. We need your
9 input.

10 After the staff presentation, we have three
11 panels. And after the panels, we will take interested
12 parties, which is the -- you can have three minutes to
13 tell us what you want to say. And if you can get one of
14 us to ask you questions, we stop the clock at that point.
15 So the three minutes is your three minutes.

16 With that said, do you want to continue -- are
17 there any questions by Board members?

18 Yes, I have one.

19 BOARD MEMBER MOFFITT: You had mentioned that the
20 monitoring that we would group growers by management
21 practices and in similar conditions. Can you give an
22 example of what some of those management practices might
23 be?

24 ASSISTANT EXECUTIVE OFFICER RODGERS: Probably
25 the easiest example might be, like, different irrigation

1 systems where it would be flood or furrow irrigation
2 versus drip or micro sprinkler

3 EXECUTIVE OFFICER CREEDON: Clay, would you move
4 closer? Members, would you please speak really close to
5 the speaker?

6 ASSISTANT EXECUTIVE OFFICER RODGERS: Do I need
7 to repeat that?

8 The differences in management practices would be
9 something like irrigation systems where, you know, you
10 have growers that use furrow or flood irrigation and then
11 maybe conversion to something like micro sprinkler or drip
12 irrigation.

13 BOARD MEMBER MOFFITT: Thank you.

14 CHAIRPERSON LONGLEY: Any further questions?

15 Jon.

16 BOARD MEMBER COSTANTINO: I have a question.

17 Can I see slide 30? My question, Clay, is can
18 you explain the connection between monitoring and the
19 shallow depths versus projection of the supply wells at
20 deeper depth?

21 ASSISTANT EXECUTIVE OFFICER RODGERS: Actually,
22 let me sit there and answer this question so I can use the
23 cursor.

24 Can everybody hear me? Okay. I'll use the
25 cursor to make this demonstration.

1 In this example, this line right here is the top
2 of the water-bearing zone, what we call first encountered
3 groundwater. And these monitoring wells here and here
4 monitor that.

5 Water supply wells typically are completed much
6 deeper and completed either below these aquitards. Or if
7 there are no aquitards, are below. And the reason for
8 that is if anybody in this room that has had a caveated
9 turbid aquifer understands you can't -- you have a
10 pressure when you pump this well. The water comes in from
11 around the well and entered the screen. And there is a
12 cone of depression where the water tables actually could
13 be lowered here at the surface. If that water table comes
14 down to where you get air entering the well, you get a
15 cavitating pump. And you won't have a turbid pump for
16 very long if you continue operating it. Basically, at
17 that point, your well has gone dry.

18 Because of this, water first comes in up here in
19 this shallow water. And so it takes time for it to move
20 vertically. What happens is if you get percolation here
21 and it flows down through this vadose zone and hits the
22 water, it will flow laterally in some amount downward,
23 such that this well here can monitor what goes on in this
24 specific land application area. That's the purpose to put
25 this well basically at the downgradient edge of this so

1 that we sample what is specifically being recharged from
2 this land application area and not necessarily to sample
3 all the things going off upgradient miles away, which is
4 what would happen if we sampled these wells. They're very
5 well for averages over large regional areas. They will
6 not work if we try to identify whether what is going on in
7 this field is actually protective of water quality.

8 We also do this because this allows us to sample
9 the youngest water, allows us to identify any problems at
10 the earliest possible time so that steps can be taken
11 before we end up in a situation that all these deeper
12 water-bearing zones are impacted to the point their
13 beneficial uses are affected.

14 So that's our goal is to do this at the earliest
15 possible time. It's not to -- you know, and the purpose
16 of representative monitoring is to identify those
17 management practices that actually work and get them
18 implemented so in the long term, you know, these nitrate
19 issues that we see because we're seeing nitrates down in
20 these zones also. And if we don't lose the ability to use
21 that water for all of its intended beneficial uses, that's
22 the responsibility of our agency.

23 CHAIRPERSON LONGLEY: You can answer the next
24 question I think at the podium. And I'll give you the
25 same question that I gave Mr. Karkoski. That is: Do you

1 have any information now that you can design a groundwater
2 monitoring program? And if you don't, what do you need?

3 ASSISTANT EXECUTIVE OFFICER RODGERS: I think the
4 information is there for what needs to be done to design a
5 groundwater monitoring program. It's going to need to be
6 a little bit of an iterative process because, you know,
7 it's been that way as we've implemented the dairies.
8 We've done a small amount of work in the beginning and
9 then added to that as we collected the data.

10 But certainly the information is out there by the
11 coalitions and by the farmers to identify how to lump
12 these to identify which fields need to be monitored and
13 then to either do some alternative or to install those
14 shallow monitoring wells to measure the effectiveness of
15 practices at that specific site.

16 CHAIRPERSON LONGLEY: And you talked about an
17 iterative process. You design it or does the individual
18 discharger or the coalition design it?

19 ASSISTANT EXECUTIVE OFFICER RODGERS: The
20 coalition actually will design the program. They will
21 propose to us what they want to do in a work plan.
22 Certainly, we will review that work plan. If we have
23 issues, we'll work with them to come up with something
24 that's acceptable to both parties. And then ultimately
25 the Executive Officer would approve that work plan.

1 CHAIRPERSON LONGLEY: Thank you. Any further
2 questions by Board members? If not, we will go to cards.

3 I have a card from Kimberly Brown.

4 Following Kimberly, I have a card from Royce
5 Fast.

6 MS. BROWN: Hi. My name is Kimberly Brown. I
7 represent Paramount Farming Company.

8 Most of our irrigated agriculture is throughout
9 the Central Valley, with a large portion in the Kern area.

10 CHAIRPERSON LONGLEY: Ma'am, you're going to get
11 real close to that mike.

12 MS. BROWN: In relation to the monitoring
13 parameters that were discussed today, I would just
14 encourage the Board to encourage staff to continue to
15 understand what is available. I think to have a defined
16 set of goals as to what you guys are trying to achieve
17 with the current management practices that the farmers are
18 implementing is very important. You're talking about
19 encouraging detailed looks at the different management
20 opportunities. You need to have all that information
21 first to define your goals so that you can create a
22 program. Doing an iterative process through regulation I
23 think needs to first make sure you guys understand what
24 current management practices are effecting now and how
25 that can be done. And that's very specific to different

1 areas.

2 Clay mentioned it's water levels. It's
3 irrigation practices. All of those things are very unique
4 by area. It's not just a Central Valley wide issue or
5 even within the Tulare Lake basin. There's very specific
6 issues that are encountered in certain areas, whether some
7 areas don't have usable groundwater or certain ones the
8 depth to groundwater is much different than in other areas
9 where it's a lot shallower.

10 So I encourage you guys to press staff to
11 understand what monitoring information is out there
12 because there have been entities involved in this for
13 decades and individual farmers in this for decades.
14 Practices have changed through those decades. And it's
15 important to recognize what's being done now and work on a
16 program that sets goals to achieve improvements from
17 what's been done now and not other issues.

18 CHAIRPERSON LONGLEY: Thank you.

19 Are there any questions?

20 Royce Fast.

21 BOARD MEMBER COSTANTINO: Thank you, Kimberly.

22 I was going to ask staff, I know we're going to
23 talk about the iterative process during the ILP discussion
24 in the afternoon, so I would make a note to have a comment
25 from staff later on about the iterativeness -- if that's a

1 word -- about the iterative process of how we move
2 forward.

3 CHAIRPERSON LONGLEY: Thank you.

4 Is Royce here?

5 I have a card from David Orth.

6 MR. ORTH: Good morning. Thank you. David Orth,
7 Coordinator for the Southern San Joaquin Valley Water
8 Quality Coalition and the Kings River Watershed.

9 A lot of concern about this issue. I spoke to
10 you over the years and to your staff about where this is
11 headed. This is a cost/benefit. Basic cost/benefit
12 issue. How much are we going to spend for what purpose?

13 It's correct that the coalitions get to develop
14 the work plan. But as we've tried to engage with staff
15 and understand what that means, we're obviously thinking
16 something much smaller potentially than what you heard
17 today. And words like iterative and adaptive and
18 flexibility and expandability mean more cost to us.

19 So as we think about this issue, I think it's a
20 bit of a disservice to compare this to the dairy program.
21 The dairy numbers are not static. The dairy variables are
22 much lower in scope. We're talking seven-and-a-half
23 million acres with 250 crops with multiple practices and
24 irrigation techniques and soil site conditions. This is
25 going to be a lot bigger than the dairy program. And we

1 shouldn't underestimate that.

2 Last workshop in Rancho Cordova on this topic, I
3 sat and listened and walked away from that feeling a
4 little bit better. And Clay and I have had conversations
5 about embracing this coalition coordinated development of
6 an alternative. So we've reached out ourselves, Valley
7 Coalition, with the East San Joaquin Coalition, Western
8 Growers, and some of the major commodity groups to create
9 an action plan that hopefully will bring to you in the
10 next few months an alternative to be a yet-to-be very well
11 defined and very potentially expensive program. We want
12 to give you a more viable alternative. So we thank Clay
13 for offering that up, and we are going to certainly
14 embrace it.

15 Let me say at the end that we at the local level
16 are spending a lot of time trying to deal with nitrates in
17 drinking water. I personally am involved in integrated
18 planning effort just finish up last night with a large
19 stakeholder a drinking water report to the Governor on
20 ways to move this issue forward. We care. We're trying
21 to dedicate our resources to solving this problem. What
22 we need to do is to develop a monitoring program that
23 gives us good, quick local information to make effective
24 local decisions to solve problems, not to collect just a
25 bunch of data.

1 So thank you.

2 CHAIRPERSON LONGLEY: Thank you, Dave.

3 You're talking about with coming back with an
4 alternative program you said a couple months. When did
5 you think this might be? I hate to pin you down.

6 MR. ORTH: I understand. I know the Board has to
7 make a decision on the East San Joaquin Order by October.
8 They certainly want some certainty here as well. So I
9 think the challenge for at least the South Valley and the
10 East San Joaquin is to come together in the next couple
11 months to see if we, at a minimum, can't define what we
12 think the process and the actions need to be and what type
13 of time frame to get us to some better definition.

14 CHAIRPERSON LONGLEY: Another reason for that
15 question is that probably should come back down here for
16 another meeting, seeing the turnout today.

17 MR. ORTH: Absolutely.

18 CHAIRPERSON LONGLEY: If you're going to be
19 putting in an alternative, I'd like that alternative
20 before we come back so we're not talking about one thing
21 and then talking about something else.

22 MR. ORTH: I think we'll do our best to give you
23 some definition. I mean it's obvious this is a very
24 important issue. And I would encourage you to think about
25 more dialogue with the community. So thanks.

1 CHAIRPERSON LONGLEY: Thank you very much.

2 Bill Thomas.

3 MR. THOMAS: Bill Thomas, Southern San Joaquin
4 Water Quality Coalition.

5 Carmen and Jenny and Jon, thank you for coming
6 down to this end of the valley. You really need to hear
7 from these people, not just Dave and I or your staff.
8 I'll be very brief.

9 The problem with the monitoring isn't the trend
10 monitoring. There doesn't seem to be controversy there.
11 There is a lot of controversy as you look for sensing,
12 relative to representative monitoring. That comes in a
13 couple of forms. It's been impossible to get our hands on
14 what was even being proposed. We'd hear maybe 200 new
15 wells. Maybe 500 new wells.

16 We, in our negotiations, had advanced a couple of
17 alternatives. One was let's look at commodity mixes, like
18 the nut crops, the tree crops, silage, and hay, et cetera.
19 Do that across the entire region, and that can get at
20 those management practices where we have problems, a high
21 vulnerability. That was resisted.

22 We also said, as an alternative, let's look at
23 the hot spot problem areas, monitor to that to try to find
24 out. That was resisted. That was part of our
25 frustration.

1 As Dave just said, we've heard signals from Clay
2 just recently that maybe we have those opportunities again
3 to explore that more fully. We are going to do that,
4 sooner than the two months. Because I know it needs to be
5 defined well prior to that. I think --

6 CHAIRPERSON LONGLEY: We need to get these
7 alternatives on the table.

8 MR. THOMAS: No question about that, Carl.

9 We thank you, as the Board members, for opening
10 that door for that new opportunity. Don't think it would
11 have happened, but for some of your comments and
12 influences when we were before you on the East San
13 Joaquin.

14 Thank you.

15 CHAIRPERSON LONGLEY: Thank you very much.

16 I have no other cards that specifically indicate
17 this session. A number of cards had no session on them,
18 so anybody who -- particularly, first of all, anybody
19 who's given me a card that didn't put a number down that
20 would like to speak at this point in time, come forward,
21 please.

22 MR. MILLER: Thank you. My name is Ted Miller.
23 I'm the proud grandson of a farmer and a rancher. I live
24 on two acres about 20 miles south of Fresno. We have a
25 domestic well. So I guess I'm here speaking for people

1 who pump water out of the ground and bathe in it and drink
2 it, as opposed to irrigating it.

3 One-hundred feet from our domestic well is an
4 agriculture well. That agriculture well is used to
5 irrigate 30 acres of almonds that surrounds the property,
6 used to be part of the home site. Was split off and sold
7 when the farmer died from cancer seven years ago.

8 The agriculture well has a lower injection point
9 which is used to inject fertilizer. It's a common
10 practice. The man who bought the agriculture well added
11 an upper injection point on the system above the filters.
12 When power is cut to the well, the column of water
13 retreats back to the groundwater. When he pumps -- I am
14 sorry for this upper/lower.

15 When he pumps the fertilizer into the lower
16 point, which was what was historically used of acubreaker
17 on top protects that from being sunk down into the
18 groundwater and simply go out into the field and everyone
19 is fine. But he added the upper injection point,
20 apparently so that the fertilizers could go through the
21 filters because there was some advantage to that, some
22 small advantage. And everything was just fine when he's
23 pumping fertilizer into that upper injection point, unless
24 the power is cut to the well. If the power is cut to the
25 well, 160 feet by eight inches of water goes crashing down

1 that well, down to the aquifer with 500 gallons of high
2 nitrogen fertilizer following it. It's a kill shot to the
3 groundwater. It could go for ten years using that upper
4 injection point and nothing would ever happen. But if
5 they lose power at the wrong time, it's a kill shot.

6 I filed a complaint. I contacted the Fresno
7 County Environmental Health Department. I have high
8 praise for the Fresno County Environmental Health
9 Department. There is a few farmers in Fresno County, as
10 you may know. Wayne Cox and Harry Ye dealt with the
11 farmer in question. Talked with him. Told him about
12 their concerns. Handled him carefully. But nonetheless,
13 they told them about their concerns.

14 I also contacted the Regional Water Board office,
15 and I have high praise for Brent Vanderburg and for David
16 Scholes from that office. They sent a letter to the
17 farmer in question and they referred him to the King's
18 River --

19 CHAIRPERSON LONGLEY: Go ahead. Finish your
20 sentence.

21 MR. MILLER: Thank you. -- To the King's River
22 Watershed Coalition Authority. The King's River Watershed
23 River Authority produced a report. I don't have high
24 praise for them. The report from the King's River
25 Watershed Coalition Authority was supposed to be an

1 investigative report on the situation. It was as though
2 you asked a murderer's attorney to investigate a murder.
3 They found that the report was extremely slanted and
4 contained misstatements of fact. And it goes into the
5 record, and it makes it look like there was never anything
6 wrong?

7 CHAIRPERSON LONGLEY: Have you submitted those
8 comments before?

9 MR. MILLER: No, sir I have not. I found out
10 about this two hours ago. I will be submitting this.

11 CHAIRPERSON LONGLEY: What was your name, sir?

12 MR. MILLER: My name is Ted Miller.

13 CHAIRPERSON LONGLEY: Thank you very much, Mr.
14 Miller.

15 Are there any questions from members of the
16 Board.

17 Is there anybody else who wishes to testify at
18 this time? Yes. Go ahead. Sir.

19 MR. CHAMBERS: My name is Ed Chambers. I live at
20 [REDACTED] (inaudible) in Porterville. And I'm a farmer, citrus
21 farmer.

22 I have read some of the predictions for the
23 amount of taxes it's going to take to run this operation.
24 I think that my biggest concern is that everybody in the
25 state or in the valley is going to be a beneficiary from

1 whatever remediation takes place. I think the tax should
2 be spread over a lot bigger base than just putting it all
3 on the farmers' backs. It's just not an affordable
4 situation right now.

5 I realize that there are some problems, and I
6 think they should be addressed. But I think this is
7 something that everybody that lives in this area has a
8 stake in and should be paying.

9 The end results will be if we continue like we
10 are, a lot of small farmers are not going to be able to
11 keep up not only with the money issue, but filling out all
12 the regulation papers. I spend over a third of my time
13 doing regulations now. And this is just going to add one
14 more deal where I have to sit at my desk and not farm, but
15 fill out papers, most of which fall on deaf ears that
16 never go anywhere. Very rare that they go anywhere.

17 The other thing I'd like to say is I'm dealing
18 with the Air Pollution Control District right now. I've
19 done everything in my power to do what they ask me to do.
20 They say when they are just totally intolerable of any
21 suggestion that comes back to them that what they're
22 asking is either impossible or that I've done my very best
23 to comply with it. They didn't give me the information,
24 but they say, well, you should have known anyway. And
25 flexibility with the regulators is a problem. The maze of

1 paperwork and recordkeeping and the resistance and the
2 matter-of-factness that there is no other way but their
3 way is intolerable to me. Thank you.

4 (Applause)

5 CHAIRPERSON LONGLEY: Supervisor Allen Ishida.

6 SUPERVISOR ISHIDA: My name is Allen Ishida. I'm
7 a Supervisor for Tulare county and the Chairman of the
8 Tulare County Board of Supervisors and also the Chairman
9 of the Tulare County Water Commission.

10 Five years ago when the Board of Supervisors
11 reinstated the Water Commission, we reinstated it for the
12 purpose of looking at nitrates specifically. From our
13 first meeting that we had with our Nitrates Subcommittee
14 Meeting, I learned an awful lot about nitrates.

15 Number one, I do believe, Carl, you were at that
16 meeting. We had experts in from the USDS. We had other
17 water experts in. There were two things that stuck in my
18 mind. One thing was that you can leach the water and that
19 gives you a history of the water we've been using. And
20 there was certain levels in that water that develop
21 through the atomic testing of the nuclear bombs in Nevada
22 and also from the importation of fertilizers from Chile.

23 What's important to me is we need to age the
24 water that we're using because our farming practices have
25 changed substantially over the years. The other issue was

1 isotope sourcing of nitrates. I don't believe this
2 Commission or the study from Davis addressed either one of
3 those problems.

4 Now, my concern is very definitely we need that
5 basic information before we start doing regulations and
6 fees. I don't think there is any farmer in this audience
7 that's not willing to do its part. But if you give us
8 solid facts, and we'll be there to do our part.

9 The other issue was brought up today by Dr.
10 Stoneburner about public health. It seems that the
11 nitrate issue is not that big of a public health issue in
12 the Central Valley or California. So my question to the
13 Commission, your Board, is: What is the purpose of your
14 Board? Is it public health or is it regulation to
15 administer to a law that may be flawed? So thank you.

16 (Applause)

17 CHAIRPERSON LONGLEY: Thank you.

18 Sir.

19 MR. WARMERDAM: My name is Ed Warmerdam. I'm
20 from (inaudible) Farms, Incorporated.

21 We have the most beautiful valley in the world.
22 Now how far is our fees going to go? Are you going to
23 start one dollar? Five dollars an acre? Are you going to
24 get up five hundred to a thousand? We're going to put
25 Mojave Desert out here. And monitoring wells is not doing

1 much good if you don't spend your energy to try to make
2 some dams. Not one dam, many a dams. Otherwise, don't
3 need it.

4 I think that's about all I've got to say.

5 CHAIRPERSON LONGLEY: Thank you, sir. If we can
6 hold applause down.

7 I'll accept applause for Allen any time he wants
8 it.

9 MR. PALLA: My name is Don Palla. I did write
10 down number four on my card so I should have been called
11 up. I'm not sure what happened. But I want to address a
12 couple of items here.

13 First off, I think that probably every grower in
14 here is concerned about two major things: The cost of
15 monitoring that you're proposing, and the other would be
16 the nutrient levels that it seems that you're proposing to
17 try to control, the types of nutrients we put on and the
18 quantity.

19 I would say that you're basing a number of your
20 assumptions on data that hasn't been adequately arrived
21 at. And I think the gentleman that Supervisor from Tulare
22 County just mentioned the issue that you're looking at
23 data that could very well be considerably older than
24 current data that needs to be looked at. And I think the
25 wells are one thing that you brought up -- this gentleman

1 here, Clay Rodgers, brought up a slide that showed a lot
2 of the contaminated wells. I think if you looked at some
3 of those wells, those wells may not be in use any more.
4 And the contamination is probably from something that
5 happened many, many years ago.

6 So farmers -- I'm from Button Willow, by the way.
7 I drink water out of a well all of my life. And I'm quite
8 healthy right now. And I think some of the regional
9 issues that you're bringing up are very, very important.
10 I think if you're going to look at this, instead of it
11 being a blanket thing that's going to effect all farmers
12 within the valley, I think you need to look at areas where
13 there definitely is problems and address those issues.

14 I think what we're concerned about is a blanket
15 viewpoint of this thing to where basically all farmers are
16 assumed culpable. I think many of the assumptions here
17 that were brought up -- one of them that I think is
18 extremely dangerous, which was also brought up by Mr.
19 Rodgers, he said when he was looking at the matrix diagram
20 up there he said he wasn't identifying any of the numbers.
21 It was just an assumption of certain things happening and
22 then a gradually becoming worse.

23 And one of the assumptions he said is less for
24 less apply for less -- I modified your words a little bit.
25 We'll be less intrusive upon the groundwater. I think

1 you're assuming a problem that may not exist. I mean, we
2 definitely have areas where, yes, we have nitrates in the
3 wells. But I think it's an incorrect assumption to assume
4 that farmers are responsible for that.

5 So I think that before someone comes up here with
6 that type of acronym following his name and state
7 something like that, I think that's reckless. And I think
8 you need to be very careful before you make that type of
9 assumption.

10 So the cost issue in this thing -- I think you
11 could have had probably ten percent of this room filled up
12 in comparison to what you're seeing right now because of
13 this one issue. There were numbers that were bantered
14 about that, my understanding, is that it came from this
15 Committee from this Board of \$120 an acre. I guarantee
16 you most everyone in this room right now came at least for
17 that one item right there. And then in your handout, you
18 have a number that says \$21 an acre. And then the
19 presentation that was done by Mr. Rodgers -- and Mr.
20 Rodgers, I hope you don't think I'm picking on you, but
21 you're the last person that spoke. And he came up with
22 numbers that were ranging from 20 cents to a dollar. So a
23 maximum of a dollar --

24 CHAIRPERSON LONGLEY: I think, sir, first of all,
25 I think at some point we need to address those numbers

1 more. What he expressed to you was the monitoring
2 costs -- for the monitoring costs. There is in the worst
3 numbers that were presented was first cost case as could
4 be seen from that matrix he put up if a person had no
5 controls in place. It's something that's bothering me
6 because what does it cost? What's the real cost on land
7 for row crops amount?

8 MR. PALLA: About 250.

9 CHAIRPERSON LONGLEY: So you're talking that kind
10 of money and you're talking it's kind of alarming.

11 MR. PALLA: Yes, it is.

12 CHAIRPERSON LONGLEY: It's very alarming, and it
13 caught my attention. I grew up here in ag in Tulare
14 County. So that's something honestly that this Board is
15 concerned about, at the same time we have to protect water
16 quality. And that's a very difficult, but possible juggle
17 here.

18 MR. PALLA: I agree. But I think it's incumbent
19 upon the Board then to make sure that the data that they
20 receive is current data. And I think the issues that the
21 Supervisor brought up are very, very pertinent. Maybe
22 some of the most important brought up here today. Because
23 there's too many assumptions that we're the ones who are
24 culpable for this. And to me, the oil in the ocean -- oil
25 is naturally produced in the ocean, and everyone thinks

1 it's the oil companies doing that and they're the evil
2 guy.

3 That's kind of how I'm feeling right now. It's
4 like the farmer is being viewed as the evil person. And
5 that's not the case. I mean, we eat the food that you
6 eat. We produce that. We eat it. We drink the same
7 water that you drink. We have no desire to try and
8 pollute or contaminate the surface. Like biting the hand
9 that feeds you. We have no intention to do that.

10 But if there is an issue that we've caused, I
11 think as the other gentleman said, I think everyone is
12 willing to step up. I think it needs to be determined
13 where that cause is.

14 CHAIRPERSON LONGLEY: Thank you, sir. You've
15 made your point. I have to apologize. I did -- you
16 filled out a card, but I don't have it here.

17 MR. PALLA: My name is Dennis Palla?

18 CHAIRPERSON LONGLEY: How do you spell your last
19 name?

20 MR. PALLA: P-a-l-l-a.

21 CHAIRPERSON LONGLEY: Thank you very much.

22 Sir, I'd like to move on to anybody else that
23 wants to speak.

24 (Applause)

25 CHAIRPERSON LONGLEY: Anybody else wish to speak

1 on Item 4?

2 BOARD MEMBER COSTANTINO: Clay asked a question
3 of you, Joe, about the information that we used in wells
4 that are closed well for our data. Can you speak to that?

5 ASSISTANT EXECUTIVE OFFICER RODGERS: I'm sorry,
6 Mr. Constantino. I missed that question because I was
7 talking to staff.

8 BOARD MEMBER COSTANTINO: There was the last
9 speaker brought up the question of using the contaminated
10 wells for wells that were no longer in use. There was an
11 imposition or assumption that we are using data from wells
12 that are no longer producing. I just want to ask that
13 question.

14 ASSISTANT EXECUTIVE OFFICER RODGERS: Actually,
15 the vast majority of the data that we put up there for
16 that map of Tulare County are recent wells and the vast
17 majority of them are operating.

18 The reason you see so many green dots around some
19 of the cities is because those are Department of Public
20 Health wells where they're regulated and cannot provide to
21 the public water that exceeds those concentrations. So
22 those wells get closed in and shut off and that's part of
23 the reason why you don't see a lot of regulated around the
24 larger cities. Those data are fairly recent. The nitrate
25 problems, they are a legacy issue. They've been coming

1 for a long time. But all the scientific data that we see
2 dates that there is a continuing contribution to that
3 nitrate.

4 BOARD MEMBER COSTANTINO: Thank you.

5 CHAIRPERSON LONGLEY: Yes, sir, go ahead. Please
6 limit your comments.

7 MR. MILLER: My name is Eric Miller. I'm the
8 General Manager of South Valley Farms. I've written my
9 thoughts down so I can stay on track.

10 South Valley Farms is a large grower of almonds
11 and pistachios located predominantly in the north Kern
12 water storage district in northern Kern County.

13 I would like to express my significant concerns
14 with the proposed General Order for the Tulare Lake Basin
15 that would impose significant and expensive regulatory
16 oversight on our farming operations, without recognizing
17 the substantial improvements in farming practices that
18 have occurred over the last 20 years and the effect of
19 these improvement on groundwater quality.

20 As an example, all of our plantings are irrigated
21 with high-tech micro-irrigation systems that are very
22 efficient with verified distribution uniformities
23 regularly exceeding 90 percent. These systems allow the
24 precise application of both irrigation water and nutrients
25 but precise applications of water and nutrients is very

1 important from a business standpoint since these essential
2 inputs to the farming process are very expensive.

3 Said another way, we are in the business to make
4 a profit. And this idea that we are throwing on water and
5 nitrates haphazardly is illogical and misinformed because
6 that would limit their profit potential by applying more
7 of these expensive resources than is needed.

8 Also over the past 20 years South Valley Farms as
9 well as many other growers have installed micro spray and
10 drip irrigation systems. And they are used almost
11 exclusively for permanent crop plantings as well as other
12 crops.

13 In Northern Kern Water Storage District, where we
14 farm, the predominance of these drip irrigation systems
15 has reduced water use in the district by at least 20
16 percent over the last 20 years. About four percent of
17 this reduction is associated with changes in cropping
18 patterns away from cotton and alfalfa and toward tree nuts
19 but most is directly attributed to improving the
20 efficiency of irrigation from 60 to 80 percent in flood
21 and old-style sprinkler irrigation systems to
22 micro-irrigation where the efficiency is typically in the
23 range of 90 percent.

24 With 20 percent less water being applied and
25 potential for leaching, nutrients below the root zone is

1 substantially reduced. We also use various sensors to
2 monitor to irrigation water as it's being applied. From
3 this information, as well as soil nutrient testing, we can
4 assure that we are managing nitrates effectively and
5 efficiently.

6 In closing, I'm very concerned that the Regional
7 Board has not adequately considered the substantial
8 investments made by the agriculture sector to improve
9 irrigation and nutrient management practices. Without
10 considering these investments, how do you know if current
11 operations are substantially contributing to existing
12 groundwater quality problems or if we are dealing with a
13 legacy issue left behind by some previous land owner,
14 since regulatory approach would likely vary substantially
15 depending on the answer to this question, it is not
16 prudent for the Regional Water Board to prematurely impose
17 expensive blanket regulations on all irrigated
18 agriculture, not knowing if any benefits in terms of
19 improved groundwater quality will be achieved.

20 Thank you.

21 (Applause)

22 CHAIRPERSON LONGLEY: Next speaker, please. That
23 one more.

24 MR. MC FARLAND: Thank you. My name is Ben
25 McFarland. I'm the Executive Director of the Kern County

1 Farm Bureau, an organization that represents more than
2 1,400 farmers, ranchers, and their families in Kern
3 County.

4 First, we need to recognize that farm management
5 practices have changed dramatically in the last 30 years.
6 The cost of fertilizer and water has required farmers to
7 adapt and use less of these resources. Therefore, the
8 market is already implementing the changes you desire.

9 Instead, let's focus our time and resources on
10 fixing local problems and not further inhibit our needed
11 food and ag producers with a blanket policy. Ultimately,
12 I ask you to be mindful of the requirements and associated
13 costs of what you are proposing because, as it is, it will
14 put generations of family farms out of business.

15 Thank you.

16 CHAIRPERSON LONGLEY: Thank you.

17 You know, I was concerned about the comments that
18 staff -- this Board not considering -- this Board not
19 considering -- and I guess based upon some comments I've
20 read not really consulting with other parties here in this
21 part of California. And I'm asking at this point in time
22 the Executive Officer to reply to that.

23 EXECUTIVE OFFICER CREEDON: Dr. Longley, we have
24 had extensive --

25 CHAIRPERSON LONGLEY: Pamela, you've got to get

1 closer.

2 EXECUTIVE OFFICER CREEDON: Dr. Longley, I've
3 been accused of many things in life, but never being open
4 to hearing what others have to say, all parties, and all
5 viewpoints being considered, this Board knows that's of
6 utmost importance to me. And all of my managers are very
7 aware of that requirement for me.

8 And I'm very disheartened to hear Mr. Thomas come
9 forward and imply that we haven't been open to
10 alternatives. In fact, we have all along been open to
11 alternatives for this program. And we are very sensitive
12 to the cost.

13 But what I keep hearing is we need to take into
14 consideration things that we've been asking for for a long
15 time from coalitions. And we haven't got the information
16 yet. So we would very much like to consider what the
17 growers are doing now if we could get the information.

18 And part of what you're seeing in response to
19 that is proposed requirements that will give us that
20 information so we can make more informed decisions.

21 But we have -- in terms of monitoring, we have
22 always been open to it. We have always welcomed ideas.
23 We have also welcomed that we could consider differences
24 of approach to addressing this issue. But we need to have
25 them to come forward and propose to us what they would

1 like for us the consider. What I'm hearing from them is
2 they're willing to do that. So we are open to it. We
3 will always be open to it. And even if we move into an
4 alternative and find it's not working, we'll be open to
5 changing that as we move forward in time. But we do need
6 to get the information from the coalitions or the growers
7 so that we can make better informed decisions for the
8 Board.

9 So part of what you're seeing today is a response
10 of moving into new regulation and trying to develop a
11 program with limited data. So we developed a program that
12 requires more information to be provided.

13 And I also would like to touch a little bit on
14 the legacy issue. We are well aware as staff of this
15 being partially or a good majority of being a legacy issue
16 for the Board. What the growers and the coalitions need
17 to understand is where we have a water body that's been
18 polluted -- meaning, a standard has been exceeded. In
19 this case, the MCL for nitrate in many cases -- this Board
20 has to respond. It's polluted by the definition in our
21 laws, the water quality laws that are there to protect
22 everyone, including ag. And where we have that pollution
23 occurring, our Board has to respond. So whether you
24 caused it or didn't cause it, it's not relevant to what we
25 have with polluted groundwater. We have to be sure that

1 our regulations in place do not allow that pollution to
2 continue.

3 And part of what we have to discern is that
4 current practices are, in fact -- I'm convinced you all
5 have changed your practices. I know that. There is no
6 doubt in my mind that ag has improved over the years and
7 that you're doing the best you can. But we need to
8 demonstrate that's true. And how we do that, we're
9 willing to work with you to determine that, but we have to
10 have it based on data, not just on, "Believe us." It
11 doesn't work that way in our world for regulation.

12 So we're willing to work with you, but when we
13 have pollution -- this whole program is focused on areas
14 where we have known problems with the groundwater. And
15 how we can make sure that our agency is implementing the
16 charge that's been given to them by the law that we can
17 demonstrate that agriculture is in fact not contributing
18 to that problem. That's what we need to do. And that's
19 what this whole monitoring program is trying to establish
20 for our Board. So that they, at the end of the day, can
21 tell the general public, including ag, that we're
22 implementing the charge the law has given to us. So it's
23 not about trying to make it so costly we're putting ag out
24 of business; it's trying to demonstrate that agriculture
25 is, in fact, not contributing to the problem.

1 So Dr. Longley, that's what this is all about and
2 that's what we continue to strive for and staff continues
3 to strive for. We are doing that through representations
4 of coalitions.

5 I hope we can continue to work with those
6 coalitions, whether it's the existing or future coalition
7 members so we can more accurately portray and establish
8 requirements that better fit the agricultural community in
9 this area.

10 CHAIRPERSON LONGLEY: Thank you very much.

11 I would like now to spend just a little bit of
12 time -- spend just a little bit of time on process.
13 What's happening between now and might possibly 1 February
14 of next year.

15 EXECUTIVE OFFICER CREEDON: I'm so sorry.

16 Member --

17 CHAIRPERSON LONGLEY: On the process. In other
18 words, continuing acceptance of comments, if you could
19 discuss the time line on that, possible future meetings
20 and that sort of thing.

21 EXECUTIVE OFFICER CREEDON: I will touch on that.
22 Did you have a question about what I said? Did you want
23 to ask --

24 CHAIRPERSON LONGLEY: Go ahead, Carmen.

25 BOARD MEMBER RAMIREZ: It wasn't going to be a

1 question of staff. It was going to be more of a comment.

2 EXECUTIVE OFFICER CREEDON: Okay. We do have a
3 process.

4 First, I'd like to mention that some in the back
5 were not able to hear the presentation of staff. We had
6 the exact same presentation done in Sacramento. We have a
7 video. What we will be doing in the next week is posting
8 that video presentation. If you wish to go online, you
9 can view it. We will also be posting copies of the staff
10 presentation PowerPoint along with their text so that you
11 can read it if you would like. So that's available as
12 well.

13 And Dr. Longley has suggested and we will have an
14 additional meeting/workshop down here so we can make the
15 presentation again if you would like to attend a second
16 time.

17 The process now, this was a draft. We took this
18 process outside the normal practice we do for everything
19 with regulations, understanding the controversy and
20 concern around it. So this was a draft -- a rough draft.
21 Usually, the public doesn't get a chance to see this
22 because we're still working on it. But we wanted to get
23 it out there to let people to see it and provide comments
24 to us in a public workshop.

25 We'll take the written comments we've received.

1 We'll take the verbal comments received today. We'll take
2 additional comments in the future. Staff will work to
3 re-write the current regulations to address these comments
4 and concerns. We will continue to work with the
5 stakeholder groups we created. We did form stakeholder
6 advisory work group for this program, specifically which
7 included agricultural representation. It included State
8 agency associated with agriculture. Included the
9 Department of Pesticide Regulations and the Food and
10 Agriculture and environmental justice and environmental
11 organizations that have a vested interest in what's
12 happening here as well.

13 We sought their input throughout this entire
14 process, and we will continue to do that as we move
15 forward. We will set out another draft for public
16 comment, and we will either conduct another workshop or
17 conduct a hearing for the Board to consider. And even if
18 we conducted a hearing, which means the Board could take
19 an action, at the end of the hearing, if the Board chooses
20 not to we could continue it until we could get the process
21 at a point where the Board is willing to take an action.
22 So you will have multiple opportunities to continue to
23 comment on this process with the Board.

24 We do have some time constraints with our
25 irrigated lands, because we have eight to twelve orders we

1 are drafting. We do have a limit to how long we will go
2 out because we will not require full implementation of the
3 requirements across the region until we have the last
4 order done to make sure that we're not having one
5 coalition having to spend more than the next one. So
6 we're trying to level the playing field so that we're not
7 putting an economic disadvantage for ag, if you're the
8 first one to get in the order. We're trying to level that
9 cost out throughout the whole region as opposed to just
10 one coalition over the other.

11 So we do have -- we can't extend out forever.
12 But we have time and we can receive your comments. We do
13 value public comments. We do value transparency in the
14 all that we do. So we will continue to seek comments from
15 you on this order as we move forward.

16 CHAIRPERSON LONGLEY: Thank you.

17 And Executive Officer talked about the Board's
18 website. I think some of you have picked up the agenda
19 outside. If you look on the agenda right above the date,
20 you will see the URL for the website.

21 Carmen.

22 BOARD MEMBER RAMIREZ: Thank you.

23 I just wanted to say I'm really impressed and
24 really surprised in a good way at how many people have
25 turned out here. So I would just like to say I recognize

1 as -- so you heard from staff. And I would like to say as
2 a Board member I recognize and appreciate the improvements
3 that ag is making on their management practices. And we
4 recognize that.

5 As a Board member, I know there is legacy issues
6 and there could be an issue -- there might be an issue and
7 we will look into whether or not the data that we're
8 getting is the most accurate and current data and whether
9 or not that really applies here.

10 So I would just like to if -- whatever my voice
11 means to people here that I hear you and I appreciate what
12 you're telling me and all these things go into our
13 consideration when we help shape it.

14 So I appreciate your comments. And your comments
15 are well taken. And the Board, in my understanding, will
16 take those into consideration and make sure that staff
17 knows that we care about these things. They're important
18 to you. They're important to us. They're important to
19 the family that drinks the water. You drink the water.
20 So we appreciate your time and appreciate your presence.
21 And we're very attentive to what you're telling us.

22 So thank you.

23 CHAIRPERSON LONGLEY: Thank you very much.

24 Any further comments from members of the Board?

25 Go ahead, Jon.

1 BOARD MEMBER COSTANTINO: Carmen, I appreciate
2 your comments. And Pamela, I appreciate your comments.

3 And I wanted to thank everybody for coming. And
4 it's quite remarkable that there's that many people here
5 six months before this order is even coming to the Board.
6 I'm actually looking forward to hearing what the Board is
7 going to present. I haven't seen it. As a Board member,
8 there is no reason for me have my mind made up yet or make
9 a decision today. This is a workshop and this being the
10 draft and the first time we're going to hear it, it's a
11 good opportunity for everybody to actually get involved.
12 And when a month from now or two months from now we set
13 out something that says here's an idea and it goes to the
14 coalition and it goes to the farmers, you'll know what
15 we're talking about. We're talking about representative
16 monitoring and trend monitoring and will make for a better
17 process. So I just wanted to say we're listening and
18 appreciate the comments.

19 CHAIRPERSON LONGLEY: Thank you, Jon.

20 And of course, this afternoon we will be going to
21 Item 5 on the agenda. That's the item that will be
22 presented to this Board for the first time. This morning
23 was a background. There will be staff presentation.
24 Following the staff presentation, as I mentioned earlier,
25 we have three panels. Following by that, once again, I

1 have sets of cards up here of individuals that are wishing
2 to testify.

3 So with that said would you folks if you're going
4 to the various restaurants in this town. But I know that
5 the Tulare Chamber of Commerce is happy we're here. We'll
6 come back into session at 1:25, or as soon thereafter as
7 possible. And I might have to announce the Board will be
8 dining, but will not be discussing matter of substance at
9 this workshop.

10 (Whereupon a lunch recess was taken at 12:21 PM)

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1 One of my responsibilities is to oversee the Ag
2 and Planning Unit that prepared the draft waste discharge
3 requirements for Tulare. This is an informational item
4 only and the Board will not make a decision on this item
5 today. The Board will hear comments from interested
6 parties and may provide direction to staff regarding the
7 draft of the Order.

8 --o0o--

9 SUPERVISING ENGINEER PATTESON: In this
10 presentation, I will provide an abbreviated summary of the
11 Long Term Irrigated Lands Program. Following my
12 introductory comments, Brent Vanderburgh will describe
13 some of the features of the Tulare Lake Basin Area. And
14 Brent's presentation will be followed by David Sholes, who
15 will discuss the General Order.

16 And then finally, I will discuss some of the
17 comments that we received in our responses. And then Clay
18 Rodgers will provide a concluding statement.

19 So you're free to ask questions as we go or if
20 you'd like to wait.

21 --o0o--

22 SUPERVISING ENGINEER PATTESON: I think this is
23 pretty much been covered this morning.

24 Development of the Order began over a year ago.
25 Staff met with the Southern San Joaquin Valley Water

1 Quality Coalition between June 2011 and July 2012 before
2 this Order was drafted.

3 While the Order was being prepared, several other
4 Irrigated Lands Regulatory Program Orders were undergoing
5 similar stakeholder input and development, and many of the
6 parts of the Orders are similar, this Order and those
7 Orders, such as the process for defining high
8 vulnerability areas or process for developing monitoring
9 plans. This is to ensure a level playing field for
10 growers in different coalitions and that each is required
11 to conform to similar provisions, regardless of where
12 they're located.

13 However, the Order is not identical and do
14 provide flexibility in consideration of differences in
15 climate, geology, and hydrology, and David's presentation
16 will discuss some of that.

17 And finally, growers who choose not to join a
18 third-party group could not apply for coverage under this
19 Draft Order but would need to comply with the individual
20 Order. And so I'll now turn the presentation over to
21 Brent Vanderburgh, who will describe the Tulare Lake
22 Basin.

23 ENGINEERING GEOLOGIST VANDERBURGH: Good
24 afternoon, Mr. Chairman and members of the Board.

25 My name is Brent Vanderburgh. I'm an Engineering

1 Geologist in your Fresno office. This morning, I'll
2 present a brief summary of the geology, agriculture,
3 surface water, and groundwater as they occur in the Tulare
4 Lake Basin.

5 --o0o--

6 ENGINEERING GEOLOGIST VANDERBURGH: The Tulare
7 Lake Basin Area encompasses the Tulare Lake Basin,
8 excluding the area of Westlands Stormwater Coalition. In
9 this slide, the Tulare Lake Basin area is shown outlined
10 in red near the bottom of the slide.

11 The Westlands Stormwater Coalition is located
12 directly west, or left of this area.

13 The Eastern San Joaquin River Watershed Area
14 subject to the June information item is directly north, or
15 above this area.

16 --o0o--

17 ENGINEERING GEOLOGIST VANDERBURGH: The tan areas
18 of this slide represent some of the larger municipalities
19 within the Tulare Lake Basin Area, with Fresno to the
20 north and Bakersfield to the south. Many other
21 communities are spread throughout the area as well.

22 Groundwater is the primary source of drinking
23 water supply for the major cities and smaller communities
24 in the Tulare Lake Basin Area, although in recent years,
25 several cities have gone to use treated surface water to

1 supplement their groundwater supply.

2 --o0o--

3 ENGINEERING GEOLOGIST VANDERBURGH: There are
4 approximately 2.9 million acres of irrigated lands in the
5 Tulare Lake Basin Area. The green areas of this slide are
6 based on California Department of Conservation Farmland
7 Mapping and Monitoring Program data and represent these
8 irrigated lands.

9 Over 100 crops are grown in the area. Top crops
10 include forage grains, grapes, almonds, cotton, citrus,
11 stone fruit and vegetables.

12 Of the four counties partially included in the
13 area, Fresno, Tulare, and Kern Counties consistently
14 produce the highest annual agricultural sales in the
15 state.

16 --o0o--

17 ENGINEERING GEOLOGIST VANDERBURGH: Of the 2.9
18 million acres of irrigated lands in the Tulare Lake Basin
19 Area, 350,000 acres of land are associated with dairies.

20 The yellow portion of the slide show the
21 distribution of dairy lands in the area. These lands, and
22 the 600 or so dairies with which they are associated, are
23 regulated under the Dairy General Order adopted by this
24 Board in 2007 and are not subject to the Order being
25 discussed today.

1 --o0o--

2 ENGINEERING GEOLOGIST VANDERBURGH: Now I'll
3 discuss surface water.

4 This slide shows the general overview of the
5 major surface water systems in the Tulare Lake Basin area.
6 The area is essentially within a closed basin, which means
7 surface water flows very deep in the basin, except in
8 years of high precipitation.

9 Surface water originating within the areas comes
10 from four main river systems. And during wet years, other
11 smaller streams.

12 Surface water is also imported into the area via
13 three large canal systems. These major surface water
14 systems will be highlighted in the following slides. So
15 from north to south, the four main river systems include:

16 --o0o--

17 ENGINEERING GEOLOGIST VANDERBURGH: The Kings
18 River --

19 --o0o--

20 ENGINEERING GEOLOGIST VANDERBURGH: The
21 Kaweah-St. Johns River --

22 --o0o--

23 ENGINEERING GEOLOGIST VANDERBURGH: The Tule
24 River --

25 --o0o--

1 ENGINEERING GEOLOGIST VANDERBURGH: And the Kern
2 River.

3 There's not enough surface water originating in
4 the Tulare Lake Basin Area to support the needs of
5 agriculture. So surface water is imported into the area
6 with three large canal systems. The three canals that
7 import water into the area include --

8 --o0o--

9 ENGINEERING GEOLOGIST VANDERBURGH: The
10 Friant-Kern Canal --

11 --o0o--

12 ENGINEERING GEOLOGIST VANDERBURGH: The
13 California Aqueduct --

14 --o0o--

15 ENGINEERING GEOLOGIST VANDERBURGH: And the Delta
16 Mendota Canal in the northwest corner of the area, which
17 supplies water to the James and Tranquility Irrigation
18 Districts.

19 --o0o--

20 ENGINEERING GEOLOGIST VANDERBURGH: In addition
21 to the major surface water features mentioned in the
22 previous slides, numerous smaller streams and tributaries
23 of the main river systems spread across the valley floor.
24 Most of these smaller streams are dry for a portion of the
25 year. These tributary streams and other smaller streams,

1 which flow only during a portion of the year, are known as
2 ephemeral streams.

3 Some streams may also be considered ephemeral due
4 to the control of their flow by water districts as they
5 distribute water for use by the members. Water quality
6 monitoring of ephemeral streams necessitates a different
7 monitoring strategy than that used to monitor streams with
8 year round or perennial flow.

9 Many of the natural stream channel shown on this
10 map are now used for distribution of surface waters for
11 agriculture and other purposes. Many have been
12 channelized and the details of their natural all drainages
13 have been altered.

14 In addition to the natural or modified channels,
15 many man-made conveyance structures or canal and ditch
16 systems have been created to distribute irrigation waters
17 over vast areas of farmland.

18 --o0o--

19 ENGINEERING GEOLOGIST VANDERBURGH: Constructed
20 conveyance structures exist throughout the Tulare Lake
21 Basin area. An example of this is most clearly
22 demonstrated in the former Tulare lakebed. This grid-like
23 pattern is not typical of natural stream channel patterns
24 found in the Central Valley.

25 --o0o--

1 ENGINEERING GEOLOGIST VANDERBURGH: Next I want
2 to briefly talk about groundwater systems in the area.
3 Almost exclusively, the groundwater that is important to
4 irrigated agriculture occurs in the sediments of the
5 valley portion of the area.

6 Currently, this groundwater is recharged by
7 infiltration from precipitation, seepage from rivers, and
8 man-made conveyance structures, purpose built infiltration
9 facilities, and mostly, by infiltration of water applied
10 to cropland.

11 --o0o--

12 ENGINEERING GEOLOGIST VANDERBURGH: Finally, this
13 slide published by the United States Geological Survey,
14 illustrates the several ways groundwater is recharged and
15 discharged within the Central Valley.

16 Note that the combination of precipitation and
17 infiltration of stream flow only account for 31 percent of
18 total recharge with the infiltration of irrigation water
19 and other artificial sources constituting the remaining 69
20 percent.

21 This diagram represents the general contribution
22 to groundwater recharge for the entire Central Valley.
23 The drier climate conditions and ephemeral nature of
24 streams within the southern San Joaquin Valley will likely
25 result in lesser contributions from precipitation in

1 stream flow and greater contributions from irrigation
2 water and other artificial sources within the Tulare Lake
3 Basin Area.

4 --o0o--

5 ENGINEERING GEOLOGIST VANDERBURGH: This
6 completes my overview of the Tulare Lake Basin Area.

7 Unless there are questions from the Board, I will
8 now turn the presentation over the David Sholes, who will
9 describe the Draft Order and Monitoring and Reporting
10 Program.

11 --o0o--

12 SENIOR ENGINEERING GEOLOGIST SHOLES: Good
13 afternoon, Chair Longley and members of the Board.

14 I'm David Sholes, Senior Engineering Geologist in
15 the Agriculture and Planning Unit in the Fresno office. I
16 will begin my presentation of the Draft Order by first
17 covering four topics that affect many parts of the Order
18 and MRP. These are: The scope of coverage, the discharge
19 limitations, the California Environmental Quality Act, and
20 Regional Board and State Board Plans and Policies.

21 I will follow this discussion with a summary of
22 the Draft Order and Monitoring and Reporting Program.

23 --o0o--

24 SENIOR ENGINEERING GEOLOGIST SHOLES: With
25 respect to the scope of coverage, this Order will cover

1 groundwater management plan. And this time schedule may
2 be modified by the Board if compliance is infeasible
3 within that time period.

4 --o0o--

5 SENIOR ENGINEERING GEOLOGIST SHOLES: This Draft
6 Order relies on the Irrigated Lands Program Environmental
7 Impact Report, or EIR, to fulfill the requirements of
8 California Environmental Quality Act, or CEQA. The
9 findings and provisions contained within the Draft Order
10 are within the range of alternatives evaluated in the EIR
11 and are not expected to cause any significant adverse
12 environmental impacts not already considered by the EIR.
13 And therefore, the program EIR is applicable to this
14 Order.

15 --o0o--

16 SENIOR ENGINEERING GEOLOGIST SHOLES: Finally,
17 our list of general topics, the Draft Order complies with
18 Regional Board and State Water Board plans and policies.
19 And these include the anti-degradation policy, the
20 nonpoint source pollution control policy, and the Tulare
21 Lake Basin Plan. A summary of these and other policies
22 that this Order addresses may be found in the information
23 sheet, which is Attachment A of this Draft Order.

24 --o0o--

25 SENIOR ENGINEERING GEOLOGIST SHOLES: So let's

1 move into the particulars of the Draft Order now. The
2 Draft Order is designed to be implemented by a third-party
3 group on behalf of the members of that group within the
4 Tulare Lake Basin Area. A Draft Order contained
5 requirements for both third-parties and their members,
6 which I will summarize in the next slides.

7 --o0o--

8 SENIOR ENGINEERING GEOLOGIST SHOLES: As I begin
9 talking about third-party requirements, it's important to
10 remember that third party is not a discharger that
11 represents growers who are or may be. Because a
12 third-party is not a discharger, the Draft Order does not
13 contain any enforceable provisions with respect to the
14 third party, other than to remove them as representatives
15 of growers if their performance does not meet the mark.

16 The third-party structure has worked for the
17 current program, and staff fully support continuing with
18 this approach. There have been lessons learned over the
19 past several years, and these are incorporated into the
20 third-party requirements, which I will now discuss.

21 The requirements for the third party include an
22 initial application to represent growers, transparency
23 requirements such as identifying the management structure
24 of the organization, and providing members with a summary
25 of fee expenditures for the program.

1 The third-party would also organize enrollment of
2 its members into the Order and conduct education and
3 outreach.

4 Much of the monitoring, data gathering,
5 information distribution, educational outreach, and
6 reporting to the Regional Board is either done or
7 coordinated by the third-party, who fulfills these
8 requirements on behalf of its membership.

9 --o0o--

10 SENIOR ENGINEERING GEOLOGIST SHOLES: The Draft
11 Order also contains requirements for the members of a
12 third-party group. These include requirements that the
13 owner or operator must enroll with a third party or the
14 Regional Board to be covered by this Order.

15 Once enrolled, the member would be required to
16 implement management practices necessary to implement and
17 protect water quality -- necessary to improve and protect
18 water quality, minimize the application of excess
19 nutrients and prevent erosion and the discharge of
20 sediment into waters of the state.

21 Members would be required to participate in
22 outreach and education activities at least once a year if
23 the irrigated land is in a designated high vulnerability
24 area or where Surface Water or Groundwater Water
25 Management Plan is in place.

1 --o0o--

2 SENIOR ENGINEERING GEOLOGIST SHOLES: Members
3 would have to abide by the requirements of this Order and
4 provide the third party with information it may require to
5 document compliance. Members who construct new ponds
6 would have to have it designed by a qualified person
7 permitted to do so under the provisions of the California
8 Business and Profession Code.

9 The intent of this requirement is to ensure that
10 ponds are properly sized, do not present an erosion or
11 sediment discharge issue, and if above ground, are stable.

12 And finally, members would have to permit
13 representatives of the Board to inspect the irrigated
14 lands property at reasonable hours and after appropriate
15 notice.

16 --o0o--

17 SENIOR ENGINEERING GEOLOGIST SHOLES: Members
18 would also submit a farm evaluation and a nitrogen budget
19 to the third party who would summarize these for reporting
20 to the Regional Board in the Biennial Monitoring Report.
21 Nitrate budgets for irrigated lands in high vulnerability
22 areas must be prepared by a nutrient management
23 professional. If there is a potential discharge sediment
24 to surface water, the member would also prepare and
25 implement a Sediment and Erosion Control Plan.

1 --o0o--

2 SENIOR ENGINEERING GEOLOGIST SHOLES: The
3 proposed Surface Water Monitoring Program is a
4 continuation of the existing program. Currently approved
5 Surface Water Quality Management Plans are being
6 implemented to continue under the new program.

7 The proposed monitoring program provides some
8 changes for the existing sampling strategy did not result
9 in sampling of ephemeral streams and provides greater
10 flexibility in choosing which compounds may be
11 constituents of concern subject to analysis.

12 --o0o--

13 SENIOR ENGINEERING GEOLOGIST SHOLES: The Surface
14 Water Monitoring Program starts with a surface water
15 assessment report that would describe the current state of
16 knowledge of surface water quality in the Tulare Lake
17 Basin Area.

18 The report would also determine where there are
19 gaps in the data. And this gap analysis is key to the
20 next step, which is the preparation of a Surface Water
21 Monitoring Plan.

22 The Surface Water Monitoring Plan is the guiding
23 document describing how the third party will monitor
24 surface waters in the Tulare Lake Basin.

25 The plan incorporates four monitoring strategies:

1 Assessment, core, specific studies, and ephemeral. Three
2 of these are currently being used by the coalition to
3 monitor surface waters now. And that would be assessment
4 or special studies. As I mentioned previously, ephemeral
5 monitoring is necessary due to reasons of climate and
6 seasonal water flow in the Tulare Lake Basin. And that's
7 a new type of monitoring to the program.

8 --o0o--

9 SENIOR ENGINEERING GEOLOGIST SHOLES: The third
10 party would prepare a Monitoring Parameters Report for
11 each sample site which was specified in the constituents
12 and the frequency of analyses based on a review of
13 existing data. And this aspect of the proposed MRP
14 provides additional flexibility above the current program
15 with respect to constituents of concern to be analyzed.

16 --o0o--

17 SENIOR ENGINEERING GEOLOGIST SHOLES: The
18 proposed Surface Water Monitoring Plan would require
19 assessment and core monitoring to occur on a five-year
20 cycle with two years of assessment monitoring for a larger
21 list of constituents, followed by three years of core
22 monitoring for a reduced list of indicator constituents.

23 Under the proposed program, the third party will
24 gain flexibility to propose an appropriate frequency for
25 testing or specific constituents of concern or parameters

1 based on a review of existing data or conditions, such as
2 when a compound is applied to irrigated lands.

3 The frequency, schedule, and list of analyzed
4 parameters would be subject to Executive Officer review
5 and approval before implementation.

6 And with respect to data management, the proposed
7 Surface Water Plan would require that data be submitted
8 quarterly in an electronic format compatible with the
9 State Water Board's California Environmental Data Exchange
10 Network, or CEDEN database.

11 --o0o--

12 SENIOR ENGINEERING GEOLOGIST SHOLES: I'll now
13 move to the Groundwater Monitoring Program. Many of the
14 details of the Groundwater Monitoring Program were
15 described in the previous presentation, and I will not
16 repeat them here.

17 Briefly, trend monitoring will occur throughout
18 the Tulare Lake Basin Area, and representative monitoring
19 will occur in high vulnerability areas.

20 The third party would be responsible to design
21 the Groundwater Monitoring Program. Trends and
22 representative monitoring must address questions proposed
23 by the Groundwater Monitoring Work Group or the Irrigated
24 Lands Regulatory Program. And these were discussed in the
25 previous presentation.

1 So the Groundwater Monitoring Program starts with
2 the Groundwater Assessment Report, which would be prepared
3 by the third party.

4 --o0o--

5 SENIOR ENGINEERING GEOLOGIST SHOLES: The
6 Groundwater Assessment Report will review existing
7 groundwater studies and data. And from an evaluation of
8 this data, third party would propose areas of high and low
9 vulnerable groundwater. After proposing these areas, the
10 third party would develop a prioritization of and schedule
11 for how and when the monitoring would occur. The
12 prioritization time schedule would be subject to Executive
13 Officer review and approval. The next step of the
14 Groundwater Monitoring Program is preparation of trends
15 and Groundwater Monitoring Work Plans.

16 --o0o--

17 SENIOR ENGINEERING GEOLOGIST SHOLES: The third
18 party would prepare a trend Monitoring Work Plan
19 describing trend monitoring of both high and low
20 vulnerable areas to evaluate base line quality and over
21 time identify trends in the regional groundwater quality
22 associated with irrigated agriculture. Trend monitoring
23 will allow the use of existing wells to monitor.

24 --o0o--

25 SENIOR ENGINEERING GEOLOGIST SHOLES: The third

1 party would be required to develop a representative
2 Groundwater Monitoring Work Plan to evaluate whether
3 specific agricultural practices are protective of
4 groundwater quality under various site conditions in high
5 vulnerability areas.

6 Here, groundwater monitoring wells will likely be
7 necessary. However, we'll consider proposals by the third
8 party to achieve monitoring goals by alternate means, such
9 as modeling or vadose zone monitoring, which were also
10 discussed during the previous presentation.

11 --o0o--

12 SENIOR ENGINEERING GEOLOGIST SHOLES: The draft
13 MRP requires an annual submittal of the previous year's
14 groundwater monitoring results. Results will be submitted
15 in spreadsheet format and uploaded to the State Water
16 Board's geotracker database by the third party.

17 --o0o--

18 SENIOR ENGINEERING GEOLOGIST SHOLES: Finally,
19 the capstone of the Monitoring Reporting Program is the
20 Biennial Monitoring Report. This report is the mechanism
21 by which the third party and the Regional Board will
22 evaluate the effectiveness of the Irrigated Lands
23 Regulatory Program in the Tulare Lake Basin.

24 Every two years, the third party would submit a
25 monitoring report that includes summaries of water quality

1 analyses and any exceedances in water quality objectives
2 and summaries of the farm evaluations and nitrogen
3 budgets, CEQA mitigation monitoring, and outreach events
4 conducted in the previous two years.

5 The report would include an evaluation of the
6 collected data, updates on management plan progress, and
7 overall conclusions and recommendations for any needed
8 modifications to the program.

9 This concludes my summary of the Draft Order and
10 Monitoring Reporting Program and my portion of the
11 presentation.

12 Unless there are any questions from the Board, I
13 will now turn the presentation over to Doug Patteson who
14 will discuss some of the comments we received.

15 CHAIRPERSON LONGLEY: Any questions from Board
16 members? Thank you very much.

17 (Thereupon an overhead presentation was
18 presented as follows.)

19 SUPERVISING ENGINEER PATTESON: Comments that
20 have been received so far have mostly been programmatic in
21 nature. And I'd like to just run through a few of the
22 more significant ones. I've phrased them in the form of
23 the question and our response. The question will be in
24 yellow and then our response is in a white quote.

25 --o0o--

1 reasonable step possible to minimize costs without
2 compromising environmental compliance.

3 The initial draft of the Order contained an
4 estimated cost of \$120 per acre per year. Further
5 refinement of the cost calculation has led to a current
6 estimate of \$21 per acre per year. The primary reason
7 that the estimated costs are lower is that the need for
8 implementation of improved practices is lower in the
9 Tulare Lake Basin. The Tulare Lake Basin has both fewer
10 surface water quality problems to address and a greater
11 degree of improved practices that have already been
12 implemented.

13 The estimate could further decrease or increase
14 as we learn more about the Tulare Lake Basin Area through
15 our program implementation. The current program, which
16 addresses only surface water, has a region-wide cost of
17 about \$17 an acre. For growers that are already covered
18 by the conditional waiver that's currently in effect,
19 there is an increase of estimated cost of \$4 per acre.

20 Of the total cost estimate, the largest component
21 is for implementation of management practices. This is
22 money that will be spent by farmers for improving their
23 property, not money paid to the State or to a third party.

24 An example of this is conversion from flood or
25 furrow irrigation to drip the micro sprinklers, which has

1 operational benefits in addition to being more protective
2 of water quality.

3 --o0o--

4 SUPERVISING ENGINEER PATTESON: Why aren't small
5 farmers exempted?

6 The majority of small farms are along the eastern
7 edge of the basin which is primarily in an area that staff
8 believes would be the high vulnerability areas of high
9 impacts to groundwater from agricultural operations.

10 This part of the basin provides much of the water
11 recharge to groundwater used for domestic purposes by most
12 of the large cities and small towns in the basin. Many of
13 the smaller communities in this area, for example, Seville
14 and Orosi, have water quality issues related to
15 agricultural activities. For this reason, it is
16 appropriate to include small farm operation in the Draft
17 Order.

18 --o0o--

19 SUPERVISING ENGINEER PATTESON: Why are third
20 party involved?

21 Growers can pool their resources to conduct
22 monitoring required, and the third party will gather the
23 information from growers and provide it to the Central
24 Valley Water Board. The alternative would be for growers
25 to be regulated directly by the Board and conduct

1 farm-specific monitoring, which would be much more
2 expensive.

3 --o0o--

4 SUPERVISING ENGINEER PATTESON: Why does every
5 farmer have to prepare a farm evaluation and nitrate
6 budget?

7 The basis for success of the proposed regulatory
8 program is that growers will implement farming management
9 practices that will protect both surface and groundwater
10 quality. The current regulatory program is in its tenth
11 year, yet the Board has limited information regarding farm
12 management practices currently in place by growers.

13 If a farmer has already implemented protective
14 management practices, the grower will not be required to
15 implement additional practices and the farm evaluation
16 template will be the method of documentation for the
17 grower.

18 The evaluation will also be the process through
19 which growers needing change will document the changes
20 that have occurred or new practices that have been
21 implemented.

22 Nitrate management is a specific type of
23 management practice that identifies the nutrient needs in
24 terms of timing and amount of a given crop in order to
25 maximize the yield and minimize nutrient runoff in fields

1 to surface water or infiltration into groundwater.

2 An annual nitrate budget worksheet will be
3 completed by all members and submitted to the third party
4 and to the Central Valley Water Board. Growers within
5 high vulnerability areas will be required to have a
6 qualified individual certify their nitrate budget.

7 --o0o--

8 SUPERVISING ENGINEER PATTESON: Are on-farm
9 irrigation structures such as tail-water ponds regulated
10 by this Order?

11 And the answer is no. The proposed Order is not
12 intended to regulate water as it travels through or
13 remains on the surface of agricultural fields, including
14 furrows, beds, checks, on-farm distribution systems,
15 including tail-water ponds, and soil pore liquid above the
16 water table.

17 --o0o--

18 SUPERVISING ENGINEER PATTESON: What is the
19 process for development of the Draft Tulare Lake Basin
20 Area General Waste discharge Requirements?

21 The Central Valley Water Board's currently in a
22 process of revising the Draft Order. Comments will be
23 noted at this workshop and in the next few weeks as staff
24 prepares for the next round of public review and comment.
25 So we're still accepting comments on the Draft Order that

1 was recently sent, and we will be issuing a tentative
2 Order for another round of public comment projected to be
3 in October of this year. That will have a minimum of a
4 30-day comment period as well.

5 Following receipt and review of the comments
6 during that public comment period, staff will prepare a
7 tentative order that is currently scheduled to be
8 considered by the Board at its first meeting in 2013.
9 Staff will continue to work with agriculture, other
10 interested parties, and other State agencies as we proceed
11 with drafting the proposed requirements.

12 That concludes our presentation. I'd like to
13 hand the presentation over to Clay Rodgers for some
14 concluding statements.

15 ASSISTANT EXECUTIVE OFFICER RODGERS: Hi. I'm
16 Clay Rodgers again, Assistant Executive Officer of the
17 Fresno office. And I'm just going to make a couple brief
18 comments. I'm not going through some of the detail that I
19 had planned on in order to keep this short.

20 --o0o--

21 ASSISTANT EXECUTIVE OFFICER RODGERS: There's
22 been concern about the fact that we've been accused of not
23 providing much flexibility in the plan. What I want to do
24 is these things listed up here, which are the monitoring
25 plans, the alternatives to representative monitoring, the

1 ability to coordinate with other coalition groups to come
2 up with large regional plans instead of going
3 individually, the idea that they can identify what the
4 high vulnerability areas are in the groundwater assessment
5 report and ultimately they have the ability to tell us how
6 they would prioritize this work being done, recognizing
7 that it can't all be done at one time is flexibility in
8 the plan.

9 Also, that we will continue and need to work with
10 agriculture to find the balance between the orders that
11 ensure our program requirements are met, yet provide the
12 Board and the regulated community that flexibility that
13 change is needed.

14 Prescriptive orders may provide certainty, but
15 they limit our flexibility. And we need to find a balance
16 between that flexibility and that certainty. So there is
17 concerns about certainty of cost, certainly, but the idea
18 is that if we have to go with a very prescriptive program,
19 that usually sends us into a conservative order, which
20 ultimately means that it's more strict regulation than if
21 we do have this iterative process where it allows us to
22 look and see how things are done and provide a little
23 flexibility.

24 --o0o--

25 ASSISTANT EXECUTIVE OFFICER RODGERS: Summary,

1 this just reiterates real briefly on some of the things
2 that Doug said. Why are they revising the Order? And
3 that is because we need to include the groundwater in the
4 program. Groundwater is very important to the area. And
5 it needs to be protected.

6 The scientific information that we have indicates
7 that the groundwater is potentially impacted by
8 agricultural activities. That does not go to say that we
9 don't think that a significant amount of the problems are
10 legacy impacts from the past. It doesn't say that we
11 don't believe that agriculture is making improvements.
12 And certainly over the past couple of decades, they have.

13 It just goes to say that we need to get the
14 information to support that, in fact, in the long term,
15 they're going to protect the beneficial uses of our
16 groundwater. And we believe this program offers a method
17 to do that.

18 The cost estimates have been revised. That's
19 been a lot of consternation over that \$120 per acre that
20 was in the Order. Certainly, that was on a more regional
21 basis and look at this -- looking at this information in
22 more detail. That number was revised downward to about
23 \$21 per acre. I think that's primarily in recognition of
24 all of the improvements that have been made in this area.
25 There are massive areas that have been converted to

1 micro-sprinkler irrigation. And certainly, those costs
2 are far more than \$120 an acre to install those types of
3 systems. They're being done for a multitude of reasons,
4 not only to protect water quality, but to conserve our
5 limited water supply, to protect the ability to more
6 evenly distribute that water across the field, and also
7 allows some EQIP funding and other things to help offset
8 some of that cost.

9 There's been concerns about the similarity
10 between this Order and other orders. Some of that is
11 related to the regulatory structure that basically talks
12 about the fact that nutrient budgets, farm evaluations,
13 and whatnot are required of farmers across the region. So
14 there is some of that similarity, but we are working to
15 identify where they need to be different and where that's
16 based on the climate, the geography, differences between
17 the areas. And certainly we want to make sure that we get
18 that involved. And certainly we're looking for the
19 coalitions to help provide us any information that we may
20 need to do that.

21 Industry involvement. I mean, we've heard some
22 concerns recently that industry hasn't been very involved
23 I can tell you personally we've been meeting with industry
24 through the coalition. We decided who came to those
25 meetings. They were representatives of irrigation

1 districts from the four different sub-watersheds that we
2 have of Kern, Tule, Kaweah, and Kings River.

3 I think we met 11 times over the past 13,
4 14 months. And certainly to my knowledge, we've met with
5 everybody who's requested to meet with us. We have
6 returned every phone call. To do that we will continue to
7 strive to make sure that industry and other stakeholders
8 are involved in this so we come up with the best Order
9 that we can come with that is cost effective as it can be
10 and provides the information needed for us to fulfill our
11 responsibilities.

12 The next steps, I'll basically skip that because
13 Doug covered that.

14 And that concludes staff presentation. And I and
15 the team are available to answer any questions you may
16 have.

17 CHAIRPERSON LONGLEY: Questions from members of
18 the Board?

19 Jenny.

20 BOARD MEMBER MOFFITT: I have a few.

21 First off, thank you for the presentation and
22 thank you for making it a little bit more clear to me.
23 There were some things that were mentioned today that I
24 didn't notice when I was reading the WDR. There was a
25 mention that there could be more than one third-party

1 coalition group that could be representing growers in the
2 area. Is that true or did I misunderstand?

3 ASSISTANT EXECUTIVE OFFICER RODGERS: That is
4 correct. We have written their Order in such a manner
5 that if it was the decision of the farmers in that area
6 there were to be multiple coalitions that we could have
7 more than one coalition within this area.

8 BOARD MEMBER MOFFITT: And what would that mean
9 for the farmers trying to get coverage? Would they have a
10 choice? Would the coalitions all have to accept them? Is
11 there a possibility the farmer might not get coverage
12 because the three coalitions do not accept them?

13 ASSISTANT EXECUTIVE OFFICER RODGERS: Well,
14 certainly we've had some of those issues in the past that
15 were dealt with where there have been pockets that perhaps
16 they were not within an irrigation district that the
17 coalition covered.

18 What we are working on is that if there is a
19 coalition that they cover a specific geographic area and
20 they would need to provide coverage to everybody within
21 that area.

22 BOARD MEMBER MOFFITT: So the growers would be
23 able to get coverage --

24 ASSISTANT EXECUTIVE OFFICER RODGERS: That is our
25 goal. Growers will be able to get coverage under this and

1 not have to proceed with an individual Order if they did
2 not have coverage in their area.

3 BOARD MEMBER MOFFITT: Okay. And then what is
4 the percentage of the land in the coalition's region that
5 would be under the Surface or Groundwater Quality
6 Management Plan?

7 ASSISTANT EXECUTIVE OFFICER RODGERS: David, do
8 you have the numbers for the surface water, what
9 percentages are in the surface water program now?

10 MR. SHOLES: I don't have exactly.

11 ASSISTANT EXECUTIVE OFFICER RODGERS: Right now,
12 our belief is that between a third and half of the farmers
13 are covered under the Surface Water Program.

14 Under the Groundwater Program, that number is
15 going to increase significantly, because there is a large
16 potential of people that have the ability to impact
17 surface water and not -- or not impact surface water, but
18 have an impact on groundwater.

19 BOARD MEMBER MOFFITT: Okay.

20 ASSISTANT EXECUTIVE OFFICER RODGERS: Did I get
21 that backwards?

22 BOARD MEMBER MOFFITT: No. I think you got that
23 right. I don't think I was thinking clearly.

24 And then as we start discussing doing monitoring
25 of groundwater, that percentage can also increase as we

1 detect more nitrates in groundwater -- if we do detect
2 more nitrates in the groundwater.

3 ASSISTANT EXECUTIVE OFFICER RODGERS: Are you
4 talking about coverage and new required coverage? If the
5 monitoring wells indicated there were certain groups that
6 were included that didn't need to be included, then I
7 would assume they would have the technical information
8 needed to justify not being covered under the Order.

9 It could also go the other direction, too, where
10 if it finds out that people that preliminary -- that the
11 identification was made that they were not a potential
12 threat to water quality and data indicated that they were,
13 then there could come a time where the decision was made
14 that those people needed to have coverage.

15 EXECUTIVE OFFICER CREEDON: So, Clay, there is
16 two different issues. There's coverage under the Order.
17 And then there's the Groundwater Management Plans that
18 would be triggered in high vulnerable areas or areas where
19 we recognize that they are impacting groundwater. So
20 there's two things here. The general coverage, right now
21 we have how many acres enrolled in Tulare in this area?

22 ASSISTANT EXECUTIVE OFFICER RODGERS: About a
23 million acres.

24 EXECUTIVE OFFICER CREEDON: A million acres out
25 of the 1 --

1 ASSISTANT EXECUTIVE OFFICER RODGERS: 2.55.

2 EXECUTIVE OFFICER CREEDON: Are currently -- so
3 when we move into the groundwater, nearly all of that 2.5
4 or how many there are would be covered under the program.

5 Then who then is under a Groundwater Management
6 Plan? Obviously, those in high vulnerability areas would
7 be under the Groundwater Management Practice. And there
8 may be others that meet that as well if they have
9 different irrigations but aren't in a high vulnerable
10 areas.

11 That's part of this Groundwater Assessment
12 Program that they will need to do initially to help refine
13 and define the vulnerable areas. And then the monitoring
14 program would determine if there are other areas that
15 needed a different management plan to be developed.

16 So similar to what we have now with the surface
17 water program, where if we find a problem they would
18 identify the actions they need to take that one identify
19 ag as a source. And if it is a source, what are the
20 practices they're going to do in order to address the
21 issue. That is a similar process we'll be doing with
22 groundwater as well.

23 CHAIRPERSON LONGLEY: Any further questions?

24 BOARD MEMBER MOFFITT: I have a lot.

25 CHAIRPERSON LONGLEY: Go ahead.

1 BOARD MEMBER MOFFITT: So on to settling ponds, I
2 really appreciate staff's explanation of why there might
3 need to be a certified engineer to develop them. But I
4 have -- I'm not quite sure that having a certified
5 engineer approved or be involved in every single settling
6 pond is necessary. Is there a size limit that we're
7 looking at or is -- because certainly there are many
8 factors of settling ponds that may be not need a certified
9 engineer.

10 ASSISTANT EXECUTIVE OFFICER RODGERS: Certainly,
11 it's a little bit different than a certified engineer. I
12 think we're talking about a qualified professional. So
13 that could be, like, a technical service provider perhaps
14 from NRCS or CDFA that could provide that.

15 Our primary concerns are this: We want to know
16 they are large enough to contain whatever the issue is.
17 If their design is to contain water to prevent runoff, we
18 need to know they're actually properly sized so they can
19 do that and be protective. In this case, surface water.
20 If the issues are that they are above grade, then we want
21 to make sure that there is at least some semblance of how
22 those are constructed. And it probably is a little bit
23 more than the contractor piling up dirt so that we don't
24 have an instance where we have a catastrophic failure of
25 something that would then lead to other problems if those

1 things happen.

2 That's the primary reason that that qualified
3 person needs to really start a brief of why that qualified
4 persons needs to be involved in those types of structures.

5 EXECUTIVE OFFICER CREEDON: So if I could just
6 clarify. I'm sorry.

7 But Clay, right now, Member Moffitt, has it
8 correct with a certified engineer. And as a result of
9 some of the other comments we received on East San Joaquin
10 and others, we're looking at changing that language. So
11 it will be revised.

12 CHAIRPERSON LONGLEY: Pamela, you have to get
13 close to the microphone.

14 ASSISTANT EXECUTIVE OFFICER RODGERS: I can do it
15 from here, Pamela.

16 Basically, we have revised that language. It's
17 going to be done in East San Joaquin. It is done in the
18 Tulare Lake Basin to take out that certified engineer and
19 increase the group -- the size of the group of people and
20 who could perform that service.

21 BOARD MEMBER MOFFITT: Okay. I really do
22 appreciate that.

23 Our farm alone has three different -- and if we
24 had to spend that much money on the certified engineer,
25 that would prohibit us from doing practices that I think

1 are actually -- will help water quality. And that's the
2 last thing we want to hear on the Board is to cause that
3 requirement so those good practices that we want to
4 encourage.

5 Another question I have is about the Sediment and
6 Erosion Control Plan. The Sediment and Erosion Control
7 Plan needs to be prepared if there is a potential to
8 discharge sediment. What does that mean?

9 ASSISTANT EXECUTIVE OFFICER RODGERS: Joe, you
10 want to take that question?

11 PROGRAM MANAGER KARKOSKI: Joe Karkoski,
12 Irrigated Lands Project Manager.

13 Yeah, this is another area where we're re-looking
14 at that requirement. Right now, I believe the way we had
15 it worded is that there's a potentially discharge to the
16 surface water than you need to have a sediment and erosion
17 control plan. We're re-looking at that. And we'll be
18 coming up with some language to focus on where there's
19 some culpability potential to discharge excess sediment or
20 cause erosion.

21 Similar to the item you just heard earlier in the
22 month where that clearly was a sediment problem. So we
23 want to make sure that we identify those issues up front
24 and get some preventative measures in place so we don't
25 have to bring East San Joaquin to do it all.

1 BOARD MEMBER MOFFITT: I think I'll stop for now
2 and let other people have a chance.

3 CHAIRPERSON LONGLEY: Jon.

4 BOARD MEMBER COSTANTINO: I have a couple of
5 questions.

6 I didn't quite understand what the ten-year
7 compliance time frame goal -- couldn't quite understand
8 what is up with the ten years, what significance it has.
9 What we do in the mean time when we get there or what is
10 expected by the ten years.

11 PROGRAM MANAGER KARKOSKI: Well, basically what
12 we're expecting within that time frame -- and I think the
13 way we worded it was if we can do it faster, do it
14 faster -- is to for any irrigated ag contributions to a
15 water quality problem, that irrigated agriculture do their
16 part to address that problem by implementing improved
17 management practices.

18 So a ten-year time frame seems very reasonable to
19 go through even a couple of iterations to bring in
20 approved practices. So we realize especially with
21 groundwater, you're not necessarily going to attain the
22 receiving water quality objective within ten years. But
23 you can at least minimize your -- irrigated agriculture
24 will minimize their discharge of waste during that time
25 period and implement the appropriate practices.

1 Now in some cases like with, say, pesticides and
2 surface water quality issues, we have a five-year time
3 frame, that sort of thing. It's much easier to see
4 whether you're making progress with this plan. Identify
5 where the potential problem areas are and do the
6 monitoring and see the lack in the spot.

7 BOARD MEMBER COSTANTINO: So how do we know if
8 somebody can do something quicker? That was my second
9 question. What actually has to be done? If I look at
10 this group of farmers, what percentages is already
11 converted to these water practices? Who has to do what?
12 I didn't get that from this presentation as to on the
13 ground how many people are going to be expected do things
14 other than monitor what we are doing now?

15 PROGRAM MANAGER KARKOSKI: Right. Well, I think
16 Pamela mentioned a few times and we mentioned earlier, we
17 don't have all that information on what practices are
18 currently being implemented. So I can't really answer
19 that question for you, because it's sort of a two-part.

20 One part is where do you have the water quality
21 problems where irrigated agriculture is causing or
22 contributing to that problem.

23 And then the second part of that is how many
24 folks are already implementing practices that are
25 protected and how many need to improve their practices.

1 And we can only get that information through
2 these feedback hearings, getting information on best
3 management practices from the growers.

4 And in terms of determining what the irrigated ag
5 contribution is, in some cases, like I said, that could be
6 relatively straight forward when we've got pesticide use
7 information as an example. In other cases, we may need to
8 do some further investigation to determine what, if any,
9 irrigated ag contribution there is. So it's going to be
10 part of the management plan that they submit to us, sort
11 of the overall strategy how they plan to address both
12 surface and groundwater quality problems.

13 BOARD MEMBER COSTANTINO: So when we answer that
14 question you said "they" and "them." Can you be more
15 specific?

16 PROGRAM MANAGER KARKOSKI: Well, primarily be the
17 third party on behalf of the growers will be doing the
18 work. They'll be working with us. And as has often
19 happened, it's the third parties also work with or
20 industry representative, whether it's commodity groups,
21 chemical companies, NRCS, U.C. Barbara extension. So I
22 was saying they and we and us work on it. But the third
23 party will have primary responsibility in terms of
24 advancing the specific plan to address the problem.

25 BOARD MEMBER COSTANTINO: So if a plan comes in

1 and a third party has a thousand farmers, how do I know
2 what farmer number 687 is specifically responsible to do
3 year one versus year two versus waiting until year ten?

4 PROGRAM MANAGER KARKOSKI: Well, that's something
5 we would expect the third party to lay out.

6 So one of the things that we have already with
7 our Surface Water Quality Management Plan is we ask them
8 to provide specific performance goals for us. So if they
9 do that initial survey of what management practices are
10 being implemented and then they identify, well, here's
11 some areas where we think there needs to be improvement,
12 we would expect them to say here's our plan. Here are our
13 goals for the expected improvements to those growers who
14 maybe aren't implementing those improved practices.

15 EXECUTIVE OFFICER CREEDON: So can I -- the
16 current proposed program, the farm evaluation plan that
17 we're asking for would provide by grower the management
18 practices they're implementing. That's not submitted to
19 the Board. It's submitted to the third party who would
20 compile that information and summarize it to us. This has
21 been a point of controversy on how that's reported and to
22 the degree that they report it in terms of I think this is
23 one where we wanted a certain --

24 ASSISTANT EXECUTIVE OFFICER RODGERS: This is the
25 spatial --

1 EXECUTIVE OFFICER CREEDON: The spatial thing.
2 So there is some controversy they don't want it as small
3 as we want it. But we think we need it in an area. But
4 we won't know specifically each individual grower unless
5 we find a need in a certain area to go out and conduct
6 that inspection and that we go to the coalition first to
7 see what information they have before we deal with the
8 individual grower. That's the process we've set up now.

9 So we don't have reported to the Board under the
10 proposed program individual grower information for what
11 management practices they're going to be implementing. So
12 we're working with the coalitions to work through those
13 issues and concerns.

14 BOARD MEMBER COSTANTINO: Okay. And maybe I just
15 don't get it yet. But if the coalition says 50 percent of
16 our members are doing this, but we think 60 percent need
17 to do it to be at the level we want, how do they pick that
18 next ten percent? Who is on the hook and who is off the
19 hook? Is there an interim --

20 EXECUTIVE OFFICER CREEDON: That will be defined
21 through the management plans they submit to us.

22 BOARD MEMBER COSTANTINO: They will be the
23 grower?

24 EXECUTIVE OFFICER CREEDON: The third party.
25 When we say "they," it's always third party in terms of

1 complying with the Order and submitting information to us,
2 unless there's a specific requirement that the grower
3 report directly to the Board. But most of this is all
4 through a third party component.

5 BOARD MEMBER COSTANTINO: Does that mean
6 enforcement can only be taken against a third party?

7 EXECUTIVE OFFICER CREEDON: No. We learned that
8 through the last couple Board meetings. No, that's not
9 true.

10 Where the coalition is the first line of defense
11 we go to to find out where we have a problem in a
12 watershed. We go to them and find out what they've done,
13 if they're in our management plan and the type of outreach
14 and education they've done with our growers to bring the
15 growers into compliance with our requirements or help
16 guide them into compliance. But where they failed to come
17 into compliance, we go to individual growers for
18 enforcement.

19 BOARD MEMBER COSTANTINO: Okay. And then --

20 EXECUTIVE OFFICER CREEDON: You'll hear from the
21 environmental justice organizations that they don't -- for
22 what we're describing and the questions you're asking,
23 that's why they don't like third party component because
24 we're not dealing directly with each individual grower.

25 BOARD MEMBER COSTANTINO: I'll think about that

1 and talk to staff.

2 There was mention of other funding. EQIP was
3 mentioned. And then I think the dairy program was in a
4 note that NRCS paid for half of it. Is there other
5 funding available to move forward or is that not just a
6 question --

7 ASSISTANT EXECUTIVE OFFICER RODGERS: You know, I
8 don't have the answer to that. We do not have funding
9 associated with that for the most part. So it would have
10 to come from other State agencies or somebody like NRCS.
11 I know in the past EQIP funding has been available to help
12 with installation of management practices or things such
13 as new irrigation systems. And NRCS, I'm not sure if it
14 was EQIP did make up a significant contribution to the
15 area representative monitoring program.

16 PROGRAM MANAGER KARKOSKI: So I can maybe just
17 add a little bit to that.

18 So we have had -- currently have Prop. 84 grant
19 funds that are -- we've got for our region \$8 million.
20 And that money is still being distributed for
21 implementation of management practices. And we're
22 basically marrying the NRCS program in terms of how much
23 money match and get the maximum amount.

24 The other thing is the California Department of
25 Food and Ag has their FREP Program, Fertilizer Research

1 and Education Program. And so we've been dialoguing quite
2 a bit with them. I know there are a number of the
3 coalition folks have been talking to them as well as to
4 how can we direct some of that money, which is like
5 \$750,000 or so per year for research and education. How
6 can we direct that to some of these issues that we're
7 trying to address? Like whether it's developing the
8 nitrate budget or developing training programs, that's the
9 other thing we've been talking to CDFA about.

10 So we're trying to know whether it's, like,
11 outright grant funding or developing tools that make it
12 easier to comply, trying to figure out ways of reducing
13 cost.

14 BOARD MEMBER COSTANTINO: Thank you.

15 I guess my last comment I guess is to everybody
16 in the audience that it seems like the numbers we have are
17 based on the knowledge we have of those costs. And the
18 more we know about who is doing what, the more we can sort
19 of accurately refine that number as to who meets what.

20 I would just encourage whatever information that
21 will help us get that number more accurate. Because then
22 as a Board, as a collective Board, not just Board members,
23 we can know whether or not what this program actually
24 costs. So just encourage that information.

25 CHAIRPERSON LONGLEY: I think that's a good

1 point, Jon.

2 Secondly, we need -- all of us need to be working
3 with our elected officials to ensure that the farm bill is
4 there to help. Folks in the Midwest make damn good use of
5 farm bill, much more so than I see here in California. As
6 you say in the dairy program, a million dollars or so went
7 to the monitors. That's another source of funding that we
8 have to work on.

9 Sandra, do you have a comment?

10 BOARD MEMBER MERAZ: Yes. I've been listening to
11 the agriculture on the cost, and especially the small
12 farmer. That's a big concern. But there's also another
13 concern and that's the word small, and the small
14 disadvantaged communities. And they're paying a big cost
15 also. It's being said and mentioned here that agriculture
16 is only one of the many contributors. So it's our
17 responsibility I think to talk to communities. It's a
18 human right to have access to clean water. And that's
19 part of why we are here, all of us.

20 Sure, I heard someone say they drink the water.
21 And I heard another person say the area -- maybe that
22 person doesn't live in the area where it's contaminated.
23 But we have to have an open mind and listen and work
24 together. So that is my comment. I'm listening intently
25 and trying to help any way that I can.

1 CHAIRPERSON LONGLEY: Thank you, Sandra.

2 Carmen, do you have --

3 BOARD MEMBER RAMIREZ: No, I'm interested in
4 learning about how these third-party coalitions come
5 together.

6 Having been on the other side of regulation, I
7 think that I'm very grateful and the Board staff seems to
8 be open to negotiating and trying to figure out where the
9 right numbers are and things like that.

10 Aside from, like, Board Member Costantino said,
11 the more information that you can provide to us, the more
12 you can provide to us, the more accurate information that
13 we can give you as far as cost.

14 So you know, we are sensitive to cost. And you
15 know, but we also care about things that Sandra said.
16 People drink this water. You drink this water. Your
17 family drinks this water. We want to be sensitive, but we
18 also have to take into consideration the tasks that we're
19 charged with.

20 So with that, I would return it to Jenny who I
21 understand has more questions.

22 CHAIRPERSON LONGLEY: Thank you.

23 At this point in time, we're going to take a
24 break and get the panel up here.

25 I'm sorry. Go ahead, Jenny.

1 BOARD MEMBER MOFFITT: Sorry to be a nag --

2 CHAIRPERSON LONGLEY: You're not a nag. They're
3 important questions. Go ahead.

4 BOARD MEMBER MOFFITT: So I do have some
5 questions about the surface water monitoring. I thought I
6 had noticed in the draft -- and maybe it's changed since
7 then -- that we have now in addition no -- a no
8 monitoring, we're adding chronic monitoring what is
9 currently being done; is that correct?

10 PROGRAM MANAGER KARKOSKI: We had chronic
11 testing -- we had added chronic testing to two of the
12 tests.

13 So just to be clear, there are four toxicity
14 tests. Three in the water column. So there's algae.
15 There's fat head minnow and water. So we had originally
16 proposed a while ago to do that from the key acute testing
17 to chronic testing and water flow. We dropped that and we
18 said, we'll look at that issue with the Technical Issues
19 Committee that we have formed before to see what benefits
20 we might get out of chronic testing versus acute testing
21 because it is more expensive.

22 Now, the algae test is already a chronic test.
23 It's not death of algae. It's the growth. And also the
24 sediment test has always been an acute test, and that's
25 what it's going to continue.

1 BOARD MEMBER MOFFITT: So the chronic --

2 PROGRAM MANAGER KARKOSKI: So bottom line, we're
3 not proposing any changes to the toxicity.

4 BOARD MEMBER MOFFITT: Okay. And then I guess
5 one of my big concerns is about small growers. And I know
6 it was mentioned that small growers, while they only
7 represent 6 percent of the acreage, there is a concern
8 that small growers do have a large portion of the acreage
9 that will be impacted.

10 I'm concerned that some of the requirements that
11 these farmers may have to do may be cost prohibitive and
12 not help them actually change practices. What can we
13 do -- what systems can we put in place so that we provide
14 support for small growers in those areas?

15 PROGRAM MANAGER KARKOSKI: Well, Mike had
16 mentioned before a couple of things that we're looking at
17 doing are developing the templates for farm evaluation and
18 for the nitrogen budgets so that it's not something that
19 has to be created. So that will be the same with the
20 sediment and erosion control.

21 And you know, one of the things that hasn't been
22 mentioned is when we're looking at cost -- for example, we
23 had estimated a cost for a nutrient management plan.
24 Since that time, one of the coalitions has been talking to
25 the fertilizer providers, and they're seeing that as a

1 service that they should offer to their growers for free,
2 the nitrate budget. So that's part of the discussion. So
3 having a template and having some common training and then
4 working with industry because it's in their interest to
5 make sure that their growers feel like they're getting
6 value for the product that they're buying. So that's part
7 of it is trying to provide those templates to make things
8 easier to do and reducing the paperwork burden.

9 But we think we have relatively sort of simple
10 and common forms that can be filled out, it should reduce
11 that rate of 40 per.

12 Now there will be some times when data is going
13 to cost. So, for example, if a grower has a practice that
14 is not protective of water quality and they need to
15 implement a new practice, that is going to cost money. Of
16 course, a lot of these practices, some of which you've
17 heard mentioned here, have multiple benefits. We go from
18 furrow irrigation to micro irrigation. You might say
19 water, you could increase yield. So anyway, we'll
20 definitely do the ten. I know a lot of the coalitions as
21 well, they tried to provide that support and they try to
22 work with the agricultural commissioners and the local
23 NRCS to make sure their support systems are in place and
24 available to the growers.

25 BOARD MEMBER MOFFITT: I'd like to see a big

1 emphasis on that.

2 EXECUTIVE OFFICER CREEDON: If I -- Joe pointed
3 out that he said "we," meaning the Board. But we're
4 working so closely with California Department of Food and
5 Ag and other supporting agencies. And his example of the
6 Prop. 84 moneys where we were able to get moneys to
7 growers to implement some of these measures, we're doing
8 all we can to work with those agencies that could provide
9 support to the growers.

10 So when we're doing these template forms, we're
11 not doing it here at the Water Board staff meeting. We
12 are working with groups that are experts in the
13 agriculture industry to help develop those forms so that
14 the growers don't have to go outside to seek professional
15 help to fill out the forms. It should be something easy
16 for them to do.

17 The other thing we're looking at is how many
18 times they have to do these reports, the frequency they
19 record them, so that we're not putting undue burden. The
20 one grower came forward and said, "I just do paperwork all
21 the time." We need to be aware of that so we're not just
22 having the reporting all the time. But there is a balance
23 there between keeping us informed and at the same time not
24 being a burden on them in terms of cost and time.

25 BOARD MEMBER MOFFITT: Yeah. I do have to say, I

1 did appreciate some of the changes in the language of this
2 Order from the first draft we had seen of the East San
3 Joaquin and now budgeting. Now there is the possibility
4 that one could work with CDFA to certify. While I
5 appreciate those efforts because that makes a big
6 difference with all the growers, but certainly with
7 smaller growers who can't afford to hire consultants.

8 BOARD MEMBER COSTANTINO: Before I hand it to
9 Carl, this is a request of staff and not something for
10 right now, but something I would like to see. Is that
11 this is an existing program that was expanded upon. I
12 think the number was -- it's not \$20 dollars an acre.
13 It's \$4 an acre for everyone in the program. Only half
14 the acres are in the program. I would like to see
15 existing program versus new because the cost, the who is
16 in it, who's out, what practices are different, how the
17 monitor is different.

18 And again, not for now, but at a future date when
19 we present the next rounds of these discussions, I think
20 it's important for folks to know that are already in the
21 program is only incremental. And if it's not, those
22 making the decision knows looking at what's going on can
23 really tell this is not -- think of what it is. It is an
24 expansion of an existing program and that needs to be
25 clear.

1 CHAIRPERSON LONGLEY: Thank you very much.

2 At this time, if we can start setting up for the
3 first panel. The first panel will be the Environmental
4 Justice Panel. And a comment before we take a short
5 break.

6 As we pointed out before, this is one of several
7 WDRs. Each one of those WDRs is unique. When I say WDRs,
8 waste discharge requirements. Each one of these general
9 orders is unique. The Administrative Draft Order, of
10 course, is under informal public review at this time. And
11 we're looking for comment.

12 Each comment for the dischargers -- if you don't
13 like the term "discharger," but it's a term in law. The
14 public and the individual Board members, staff will revise
15 the administrative draft to circulate it to industry for
16 formal review and comment. Clearly, we need your comments
17 to continue to come in. Particularly take a look at each
18 new revision and comment on that revision.

19 At this point, this is an information item only.
20 No action on this item will be taken here today, but the
21 comments that both my fellow Board members and you, the
22 public, are making are invaluable. It will help to focus
23 on the future Draft Orders and finally what the final
24 Order will look like.

25 We're going to take a break.

1 (Whereupon a recess was taken at 2:41 PM.)

2 CHAIRPERSON LONGLEY: We were asking if there is
3 any individuals here who speak only Mong, and the
4 gentleman is our interpreter. If there is nobody here,
5 obviously there is no reason for him to remain.

6 With that said, I believe Mr. Joel Nelson would
7 like to make a comment.

8 MR. NELSON: Thank you, Mr. Chairman and members
9 of the Board. Joel Nelson, President of California Citrus
10 Mutual.

11 The reason I'm standing here, it's a comment on
12 the process as we've been here today. We were informed as
13 last week that the process would be unless the growers
14 were here to participate, that the hearing process was
15 going to be a workshop to receive communications from
16 stakeholder groups. It is now almost 3:00 and the first
17 stakeholder group is before you, after five hours. We
18 weren't told this was going to be the case until early
19 last week.

20 We were discouraged in not bringing forth
21 PowerPoint presentations because they're hard to work with
22 and items of that nature. And there were some of those
23 colleagues of mine that were prepared to bring a
24 PowerPoint presentation. So none of us did that, as we
25 were discouraged to bring forth that PowerPoint

1 presentation.

2 I have no problem with this PowerPoint
3 presentation. It's a means of communication. But to
4 discourage the stakeholder groups, such as agriculture
5 that sat here for five-and-a-half hours and allow them to
6 a communicate in a manner that is appropriate for you to
7 receive a message, that is the unconscionable. Think of
8 the process and the adulteration that's taking place.
9 Thank you.

10 (Applause)

11 CHAIRPERSON LONGLEY: We're ready for the first
12 panel, the Environmental Justice Panel, AGUA.

13 (Whereupon a slide show presentation was given
14 as follows.)

15 MS. SEATON: Good afternoon, members of the Board
16 and other participants. My name is Phoebe Seaton with
17 California Rural Legal Assistance Foundation. I work
18 throughout the San Joaquin Valley in particular the Tulare
19 Lake Basin working with communities who are struggling to
20 attain the basic components of a safe and healthy
21 community, including safe drinking water.

22 --o0o--

23 MS. SEATON: As most of us in the room here know,
24 throughout California, contamination is costing not only
25 communities, but this state and local governments millions

1 of dollars each year. Community members, many of whom are
2 present, pay two times for water each month: Once for
3 contaminated drinking water and once again for bottled
4 water they can drink and cook with. Many community
5 members spend upwards of ten percent of their take-home
6 income on water each month.

7 Similarly, the State spends tens of millions of
8 dollars treating contaminated drinking water.

9 --o0o--

10 MS. SEATON: This again, as most of us are
11 familiar with, is deep and vast problem impacted
12 communities throughout the state, in particular, in this
13 region and other disadvantaged regions in this state. 265
14 communities have experienced violations in maximum
15 contaminants level that is just the contaminants such as
16 nitrates that are monitored for.

17 --o0o--

18 MS. SEATON: Already, many communities here and
19 throughout the state have drinking water contaminated with
20 nitrates. For the smallest communities, one contaminated
21 well means that all the water in their community is
22 contaminated and undrinkable.

23 For other communities that are lucky enough to
24 have multiple wells, it impacts the capacity of their
25 system and makes it at times unaffordable or unviable for

1 them to grow and prosper.

2 --o0o--

3 MS. SEATON: Unfortunately, there seems to be
4 consensus that this is not a static problem, but is, in
5 fact, growing. And more and more wells and communities
6 will be impacted by contaminated drinking water.

7 --o0o--

8 MS. SEATON: Many of us read the U.C. Davis
9 report on nitrates, which found conclusively that current
10 practices are not adequate to protect groundwater from
11 nitrates. It also found that nitrate leaching is not only
12 a legacy issue, but continues to be a growing problem.

13 --o0o--

14 MS. SEATON: Similarly, pesticide contamination,
15 though not outlined in the proposed Order, is a major
16 problem in the Tulare Lake Basin and in other parts of
17 California. The Water Board has delegated this authority
18 and responsibility to the Department of Pesticide
19 Regulation, but they failed to monitor and regulate
20 pesticides to the extent required by law.

21 Therefore, we find it inappropriate for this
22 Board to delegate that authority and responsibility to
23 DPR.

24 --o0o--

25 MS. SEATON: I'd like to turn things over to

1 Susan De Anda will be talking about the impact on
2 communities of this problem.

3 (Thereupon an overhead presentation was
4 presented as follows.)

5 MS. DE ANDA: Thank you. My name is Susan De
6 Anda. I'm the Co-Director of the Community Water Center
7 and also the AGUA Coalition. I am also with (inaudible)
8 People United for Water. Thank you. Good afternoon.

9 So San Joaquin Valley is nitrate for ground zero.
10 In 2007, 75 percent of California nitrate exceedances
11 occurred in the water systems located right here in the
12 Central Valley.

13 Nitrate contamination poses two main risks: A
14 health problem and a financial burden to those living with
15 contamination. Imagine not being able to cook or use your
16 tap water for basic things like drinking it or cooking
17 with it. That is the struggle that many Central Valley
18 residents have to deal with and have been struggling for
19 far too long in the Central Valley.

20 In addition to this, nitrates have been linked to
21 cancer, thyroid, a number of sorts of diseases. It's a
22 contaminant that this picture, the clear-looking water
23 bottle has high levels of nitrates. And it's detrimental
24 to your health, versus the water that's green and brown
25 and smells like sulfur. It's actually safer to drink the

1 brown-looking water because of the contaminants that's in
2 there. Looks can be deceiving and I advise all of us to
3 really ensure what's in our drinking water, especially
4 here in the Central Valley when we know we have high
5 levels of nitrates throughout the Central Valley plaguing
6 our drinking water.

7 Now in addition to living in this type of
8 condition, we have a financial burden. Many of our
9 families and community partners in the farm-working
10 communities are having to pay twice for water, for a water
11 bill they do not use. In addition to that, having to buy
12 additional drinking water just to have safe drinking water
13 in the house.

14 We're farmworkers. We're farm working
15 communities. A lot of the farmworkers right now are
16 working. They're not here. And it's these very same
17 families that are having to be exposed to this toxic water
18 and still have to pay for the price of that contamination.

19 --o0o--

20 MS. DE ANDA: Why is this important? Well, it's
21 really important because one-third of the San Joaquin
22 Valley residents surveyed reported that they use
23 contaminated tap water for drinking. And I'll tell you
24 why. When you cook a big pot of soup and beans, it takes
25 a lot of water to use it for that. If you don't know it's

1 in your water and you're using nitrate-contaminated water,
2 it only increases the concentration. This is a health
3 problem.

4 Now, in addition to that, many people that we
5 surveyed didn't know they had nitrates in their water. So
6 part of our work is to outreach to people and for them to
7 be informed and really understand the impacts to their
8 health.

9 Now, despite the acute health effects of nitrate
10 contamination, like I mentioned, to avoid that reality,
11 those that know what's in their water, they're having to
12 do interim solutions, buying a filter or buying additional
13 drinking water at their expense.

14 --o0o--

15 MS. DE ANDA: Again, it is our most at-risk
16 communities that are having to pick up the tab for this
17 contamination. And I think you members of the Regional
18 Water Board, you're in the right position to ensure that
19 we can change people's lives. You can change our lives
20 and families here in the Central Valley by ensuring we
21 have better programs that really protect contamination.

22 Now, among the community water systems that are
23 faced with the reality, it is the smaller ones that have
24 less than 200 connections who are exposed and have
25 persistent violations when it comes to nitrates.

1 Now it's not just our communities systems. Also,
2 our schools in the Central Valley are exposed to this
3 reality. In the community of Seville, that local school
4 has to spend between 500 and \$600 a month in the summer
5 months from the general funding that's intended for
6 educational purposes for drinking water for students.

7 Now in the winter, that drops between 200 to 300,
8 but still it is money the school is using from their
9 general funds for drinking water for students. This is
10 2012. We should not be allowing that in our communities.

11 Now, as I mentioned, I'm the coordinator of the
12 coalition of AGUA. I want to bring to your attention,
13 AGUA was a coalition that was formed in 2006 because of
14 this drinking water crisis. As a organizer, I keep
15 hearing the story over and over and over. The communities
16 aren't able to drink the water. Water is coming out bad
17 and they have to buy additional drinking water. What kind
18 of filters do we get? The story was the same thing.

19 AGUA was organized in 2006 to really address this
20 problem from the root and work with the Regional Water
21 Board to ensure that our programs are truly protective of
22 our drinking water. In this case, our groundwater. When
23 over 90 percent of valley residents rely on groundwater as
24 a source of drinking water, I want to remind you, as Board
25 members, we have a mandate to protect our drinking water.

1 And that's our groundwater.

2 --o0o--

3 MS. DE ANDA: So I'm going to give you a virtual
4 tour of a few communities, many who are part of the
5 coalition who currently live with contamination.

6 Cutler is unincorporated community in Tulare
7 County. Approximately 5,000 residents live in this
8 community. The Cutler PUD, the Public Utility District,
9 is entirely reliant on groundwater. In the past, they've
10 had to shut down wells because of nitrate contamination.

11 Now come to our community of Cutler. You'll hear
12 residents talk about they receive a notice saying don't
13 drink the water because we have PBCP in our drinking
14 water. Now we know that was back in the 70s. But it's
15 consistent and it plagues our water.

16 --o0o--

17 MS. DE ANDA: Ducor, California, another
18 community of approximately 800 residents, predominantly
19 Latino farmworkers. They have to drill a new well because
20 of high nitrates of nitrates. That cost over a million
21 dollars. And that cost goes to the consumer. Now they
22 have to rely on the high sulfur and manganese. That's the
23 water bottle I showed you earlier that's brown. That's do
24 Ducor.

25 --o0o--

1 MS. DE ANDA: East Orosi is another
2 unincorporated community of around 500 people. In this
3 community, the Community Services District of East Orosi
4 relies on two wells. And throughout the year, those two
5 wells are providing high levels of nitrate throughout the
6 year.

7 --o0o--

8 MS. DE ANDA: Monson is another community, about
9 30-plus private home owners who are having of to deal with
10 this reality as well. They're nitrates levels are
11 detected to 150 parts per million. And this is the
12 community of Monson.

13 --o0o--

14 MS. DE ANDA: Another one, Rodriguez Labor Camp,
15 also known as California Labor Camp. This community is
16 about 35 households that are served by privately-owned
17 water systems. In this community people, are receiving up
18 to 137 milligrams per liter of nitrate levels. We know
19 the MCL is 45. They're far above exceeding the maximum
20 contaminant level.

21 --o0o--

22 MS. DE ANDA: Tooleville is another community of
23 approximately 77 homes. Around 500 residents, farm worker
24 communities. Again Tooleville is another community where
25 there are two wells are providing nitrate-contaminated

1 water. The story continues.

2 --o0o--

3 MS. DE ANDA: To conclude, Tonyville. Tonyville
4 is another community, about 150 residents. Throughout the
5 year, nine months out of the year, they're provided canal
6 water. When the canal it's being cleaned, they switch to
7 well water. When they receive well water, they're getting
8 perchlorate in their drinking water and nitrates.

9 The story continues. And unfortunately, there is
10 more communities that I can sit here and talk to you
11 about. I would definitely encourage the Board to come out
12 and hear firsthand and come to those communities for you
13 to see first-hand how it is to live in this type of
14 condition.

15 --o0o--

16 MS. DE ANDA: To wrap up my presentation, you
17 know, I just want to give you -- given this reality, I
18 want to tell you that voluntary practices alone are not
19 sufficient to protect our drinking water. We need to
20 implement strong regulatory programs that truly protect
21 our drinking water from further contamination.

22 And you know what? We feel that we pay the cost
23 through having to pay twice for water and through our
24 health. I truly believe it's time to ensure those that
25 are responsible are paying for the cost of pollution.

1 With that, I will introduce Michael Prado, a
2 long-time rally resident, also part of the coalition AGUA
3 and also part of the Board.

4 MR. PRADO: Good afternoon, Mr. Chair and fellow
5 Board members. My name is Michael Prado. And I serve on
6 the Sultana Community Services District in Sultana,
7 California.

8 I'm also here as a long-term resident of the
9 valley for 51 years. As a resident and Water Board
10 member, it's important to remind ourselves that in the
11 valley, groundwater contamination is drinking water
12 contamination. What goes into groundwater through the use
13 of fertilizer and pesticides has serious implications for
14 all of us. The Board cannot use its cede regulatory
15 authority to another agency if that agency's program does
16 not comply with California water quality laws.

17 We should all be concerned, especially small,
18 disadvantaged communities like mine. The Regional Water
19 Board is our only protection from degradation of
20 groundwater quality. That is why it is so important that
21 testing for pesticides must be incorporated into this
22 monitoring program.

23 And to close, help me ensure that I provide safe
24 drinking water to my residents. In the end, we are
25 communities that want to continue to work with

1 agriculture. But in order to do so, we need to start to
2 have safe drinking water first.

3 Thank you, Water Board. I believe this in your
4 hands. And hopefully everything turns out for the best
5 interests for everybody. Thank you.

6 MS. FIRESTONE: Thank you. My name is Laurel
7 Firestone. I'm Co-Executive Director of the Community
8 Water Center.

9 --o0o--

10 MS. FIRESTONE: I'm going to give -- a number of
11 you are new or relatively new to the Board and may not
12 have the full history of the development of this program.
13 I want to make sure that you understand that this program
14 has been under development far before 2011 and the
15 stakeholder process that was described for this particular
16 Order, but at least before 2005 before I got involved.
17 And since then, there have been regular and extensive
18 stakeholder processes over at least the last five years.
19 And it's really been ten years that this groundwater
20 program has been in development since the initiation of
21 the Surface Water Program.

22 Inadequate protections mean new and increasing
23 contaminants. So while everyone understands that there
24 have been past practices that have caused contamination,
25 what this program is focused on is preventing future

1 contamination. And what we do today will ensure that
2 there is not a new wave of contaminants in the future.

3 This slide shows the next wave of contaminants
4 which our communities are facing, which is 123 TCP, which
5 is a chemical that was part of fumigants used that were
6 banned in the '80s that are showing up in cities and small
7 communities alike throughout agricultural areas.

8 This is the next wave that's going to cost really
9 hundreds of millions of dollars due to inadequate
10 pesticide and chemical regulations. And what this Board
11 needs to do is ensure that we stop the next wave after
12 this.

13 --o0o--

14 MS. FIRESTONE: So since the beginning of this
15 program, the environmental justice communities have been
16 saying that there are four main components that we feel
17 are necessary to have an effective regulatory program.

18 We need something that makes real farm level
19 changes that will improve water quality. Not just paper,
20 not just collecting data, but really see farm level
21 changes to improve water quality. That's where our
22 resources are best put.

23 We need to ensure that the Board has effective
24 mechanisms to ensure compliance. And this is really key
25 and I think an area where the current draft still has a

1 ways to go.

2 What has been proven over the last 20 years of
3 studying this problem and documenting this problem, which
4 has been done numerous times by universities, federal, and
5 State agencies and Interagency Task Force is that
6 voluntary practices are not enough. We need a regulatory
7 program to ensure that there is widespread practices. And
8 the difference between a regulatory program and a
9 voluntary program is the ability to have enforcement. And
10 also means that you don't have free riders, that you're
11 making it a fair playing field for all farmers. And that
12 we're seeing that we can see the kind of changes that need
13 to be made.

14 We also need to provide the public with
15 sufficient information to determine if the program is
16 effective and enforceable.

17 So under State law, there is not a citizen suit
18 capability like also under the Clean Water Act. So for
19 groundwater, we rely entirely on the Board to take any
20 enforcement action to ensure compliance. And also public
21 accountability, so making information public and putting
22 public pressure to see changes. That's really the only
23 mechanisms we have. We don't have what's typically there
24 for surface water, which is lawsuits.

25 And finally, what really this program has

1 expressly not done and we hope this Board can make sure
2 that it does through other means is to address cleanup of
3 legacy contamination, as well as mitigation of continued
4 degradation. And our suggestion is that this needs to be
5 linked with enforcement for continued degradation. So by
6 creating mechanisms for enforcement, you can actually
7 generate funds that go to happen communities supply safe
8 drinking water now.

9 --o0o--

10 MS. FIRESTONE: There are some key components we
11 want to highlight in the current draft that we think are
12 important. Trend monitoring is obviously vital. Nutrient
13 management plans, particularly in high vulnerability
14 areas; these are all really key basic things that will
15 make a huge difference in terms of water quality.

16 The less aggregated reporting on best practices
17 is important. There has been an improvement from that
18 from earlier draft of the East Side San Joaquin. We think
19 that's vital from an enforcement and transparency
20 standpoint. And also the submittal of groundwater quality
21 data is publicly accessible. That's probably something if
22 we're going to collect data, we need to make it useful to
23 be able to improve water quality. And this is the basic
24 thing that this does.

25 There is a few things that do concern us. A

1 number of things that do concern us about the current
2 program, particularly that there is a very long time range
3 for implementation on really what a lot of -- I think we
4 heard from the ag community, they believe they're doing
5 already. So it shouldn't take ten years to institute best
6 practices.

7 And understanding that it takes a long time to
8 see water quality improvements, we need to have ability to
9 have some trigger for enforcement in the short term. And
10 that's where it comes to the problem of lack of
11 publicly-available information. So we need to know where
12 there is problem areas and which farms need to be targeted
13 to improve practices. And at this point, there is
14 insufficient farm level reporting that can trigger
15 individual enforcement actions.

16 --o0o--

17 MS. FIRESTONE: As was mentioned, there is
18 insufficient oversight of pesticide likely to contaminate
19 groundwater. And as a result, communities will continue
20 to bear the cost of drinking water contamination.

21 --o0o--

22 MS. FIRESTONE: I'll go through quickly. We
23 provided written comments. I won't go through a ton of
24 them now.

25 But our basic recommendations on this draft are

1 covered. If DPR's program changes, then they can use that
2 data. But until that time, we think that needs to be
3 included in this program.

4 --o0o--

5 MS. FIRESTONE: And finally, we really encourage
6 the Board to set up a supplemental environmental program
7 to funnel enforcement fees to mitigation of water quality
8 impacts. Communities have been waiting ten years just to
9 get planning funds to develop solutions to drinking water
10 problems. We need all the funding that we can get to
11 solve drinking water problems and ensure people have safe
12 drinking water.

13 But this requires the Board creating the
14 mechanisms to do that, to funnel whatever enforcement fees
15 are collected to communities and solutions in communities.

16 And with that, I would be happy to answer any
17 questions.

18 CHAIRPERSON LONGLEY: Any questions by members of
19 the Board?

20 Carmen.

21 BOARD MEMBER RAMIREZ: You testified at the
22 August hearing, you mentioned DPR and that they don't
23 currently monitor for all the pesticides on the 6900 list.
24 Have they been approached? And if so, what is their
25 response?

1 MS. FIRESTONE: Yeah, we have a meeting scheduled
2 with them in the early fall to go through their program.
3 At this point, like we said, they test about six of the 98
4 pesticides that are on that 6800 B list, which is the list
5 of pesticides already identified as having a potential to
6 contaminate groundwater. It's already a smaller list.
7 And what we've heard from them is that it takes time and
8 resources to monitor things. And so far, that hasn't been
9 a priority. And we've approached the coalitions about
10 going in together to Department of Pesticide Regulations
11 to suggest that they use the fees that they already
12 collect from pesticide fees to increase their testing in
13 their program to cover this gap. And if that's the case,
14 then we would be satisfied by that.

15 At this point though, really, this Board is
16 responsible for protecting water quality and can't rely on
17 them if that's not the case.

18 BOARD MEMBER RAMIREZ: Thank you.

19 I guess I would ask staff, at some point, I think
20 I'd like more information on this. I kind of recall the
21 presentation that DPR did in August, and this was a
22 question I had. I didn't ask it, but you know, I don't
23 know the history behind this. But seems to be something
24 that continues to come up. And if there is a way that we
25 can encourage DPR to do more work that's going to help

1 these communities, I think that's time well spent.

2 EXECUTIVE OFFICER CREEDON: We are working with
3 DPR. In fact, last week I met with both Brian Leahy, who
4 is the Director of DPR, and Sandra Schubert, the
5 Undersecretary of CDFA, about our continued working with
6 them.

7 And Brian with DPR clearly understand the role of
8 the Board and is not about to indicate -- some of the
9 comments were received as this Board has no authority over
10 pesticides, and he is not in agreement with that. He
11 fully understands the role of the Board and our efforts in
12 terms of protecting water quality and how it involves
13 pesticides.

14 They will work cooperatively with us on trying to
15 add and expand. And where they can, where we can
16 supplement it with our requirements as well.

17 CHAIRPERSON LONGLEY: Any further questions,
18 Carmen?

19 BOARD MEMBER RAMIREZ: No. Go ahead.

20 CHAIRPERSON LONGLEY: Go ahead, Carmen.

21 BOARD MEMBER RAMIREZ: So you had mentioned that
22 what the panel would like to see is actual farm-level
23 changes, actual everyday practices changed. It seems like
24 a program that we were discussing today encourages
25 farmworkers. I think a lot of ag is already on board,

1 like you said. But it does encourage everyday practices.

2 So while this might not do a lot for the existing
3 DEET level or contamination that exists now, it does
4 protect millions of the kids on the picture maybe in the
5 future.

6 So you mentioned how the structure of the fees
7 that we get now could maybe go to help drinking water
8 solutions. Do you have anything concrete that you've
9 proposed to the Board or that you could propose to the
10 Board?

11 MS. FIRESTONE: Yeah. Thank you. There is two
12 pieces of that.

13 First of all, the components for effective
14 program, I was reading this. I actually think this
15 program does do -- and is a huge step forward along those
16 lines. And this program is a compromise. It's not
17 perfect. It frankly leaves a huge amount of the burden
18 and the definition of what will and won't be done on the
19 third-party coalitions and the growers themselves to
20 determine.

21 We think that's appropriate. But we want to make
22 sure that the Board has some basic level performance
23 measurements that they can use to ensure that water
24 quality changes are happening and practices are being
25 adopted. And that's where the enforceability and fees

1 come in.

2 So that is -- the Board can set limits on loading
3 into groundwater. And if growers exceed those limits and
4 are vastly exceeding the amount of loading into the
5 groundwater that is clearly not protective of groundwater,
6 they can take enforcement action.

7 But in order for this Board to do that, they
8 need to both collect the data to be able to see that and
9 not just keep it with the coalitions. And they need to be
10 able to have that as a clear limit in the permit itself so
11 they can take enforcement action.

12 What we don't want to see is leaving all ability
13 to take enforcement actions on groundwater monitoring that
14 we won't see results for so far down the line that there
15 really won't be any ability to take enforcement actions.

16 On the question around directing fees to
17 communities, there is a number of ways that this could be
18 done. The Board has laid a number of those out. And what
19 we're looking for is encouragement by this Board for staff
20 to pursue the development of a supplemental environmental
21 program, which is a mechanism that the Board can use where
22 any dischargers can, in lieu of paying a penalty into the
23 cleanup and abatement account where it goes generally into
24 the State Board's kitty that they can distribute as they
25 want around the state, that it can go to local communities

1 to get safe drinking water. And we think our ag
2 communities and local growers would want to see that as
3 well. The Board would need to create a mechanism to
4 direct that.

5 And likewise, what that requires is some ability
6 to take enforcement action. And again, we're not
7 looking -- nobody wants to see unnecessary costs or
8 punitive enforcement. But we do need to send strong
9 signals that this is an enforceable program. This is not
10 voluntary. And people need to take it seriously. And
11 there needs to be strong signals to do that. If you don't
12 have enforcement mechanisms, you can't do that.

13 CHAIRPERSON LONGLEY: Any further questions?

14 Thank you very much.

15 MS. FIRESTONE: Thank you.

16 CHAIRPERSON LONGLEY: We're ready now for the
17 next panel. The next panel is the Agriculture Growers
18 Panel.

19 MR. HARPER: I'm Bob Harper. I guess it's a
20 stretch for me to be a grower.

21 I'm from the University of California Cooperative
22 Extension, but I'm going to make some comments based on a
23 lot of work and things we've done over the years with
24 grower activities related to nitrogen management.

25 So a few things I wanted to again mention.

1 Again, this is perspective of cooperative extension and
2 researcher, but I'm involved in the operation of a
3 research model over on the west side of Fresno County.

4 Like to mention a few of the types of things I've
5 seen over the last several decades in terms of changes in
6 practices that a lot have some potential I think for
7 protection of groundwater in terms of nitrate management.

8 One thing I think is there is a lot of emphasis
9 on improvements in data collection and recordkeeping and
10 knowledge of the soil water and soil characteristics that
11 have an impact on how water and how nutrients move through
12 the soil, a lot of GPS-based information and all that's
13 available in recordkeeping to keep track of that.

14 Reductions in early season water application is
15 another thing that is very widespread in certain parts of
16 the valley. There are water costs and availability issues
17 that have driven a lot of this. In addition, maybe the
18 concern for water quality that have been large reductions
19 in winter and fallow period irrigations that used to be
20 applied.

21 If you go, for instance, on the west side of the
22 San Joaquin Valley, there is very large areas that used to
23 be furrow irrigated during the winter and pre-plant
24 applications. Now, routinely the first irrigation of the
25 season the pre-plant irrigations are done with hand-move

1 sprinklers. It's expensive, but it's allows them to apply
2 much less water, allows them more storage capacity in the
3 soil and reduces the chance of de-percolation.

4 Elimination of fallow period and winter nitrogen
5 application is another thing that's a very common practice
6 in agriculture really in a lot of different parts of the
7 United States. We used to have a lot of wintertime
8 nitrogen application during the fallow period for annual
9 crops. That's really a practice of the past. And most
10 applications were made much closer to the planting time or
11 within the growing season.

12 Much more emphasis on soil nitrate and testing.
13 A lot of the recommendations -- I'll mention a few of them
14 that have come out of research studies that a number of
15 U.C. people have been involved in the would suggest upper
16 two-foot recommendation for soil nitrate testing. And
17 there is a lot of that going on in quite a few different
18 crops.

19 One thing I think also that's really important in
20 annual crop discussions is the consideration that crop
21 rotations really are not stand-alone type of things. If
22 you describe the best practices, say, for cotton or corn,
23 alfalfa -- excuse me -- crop rotation, crop like a
24 vegetable crop, these are not things that are done in most
25 farm locations as continuous cropping with the same crops.

1 So a lot of times you'll have things that are, say, crops
2 that are grown in rotation that leave relatively large
3 levels of soil nitrogen, like alfalfa or legumes or some
4 vegetables. And a lot of growers will then follow those
5 crops with crops that use higher levels of soil nitrate.

6 Crops that are more shallow rooted that may leave
7 nitrogen behind at lot of times it's very standard
8 practice is to follow those with crops that are deeper
9 rooted, that will establish deeper available in the end.

10 There is much more emphasis again just kind of
11 going through a number of different kinds of practices
12 here that emphasis on split applications of applied
13 nutrients. So rather than one-time large kind of
14 convenient to do single applications, we were doing much
15 more in the way of split applications, even with surface
16 irrigation type of systems.

17 And lastly, in the rural practices discussion, I
18 just wanted to mention again reiterate the idea that there
19 are major changes in what people are doing and irrigation
20 system design and management, more pressurized systems
21 with at least the potential for greater application
22 uniformity, if they're run correctly. More emphasis on
23 efforts to improve irrigation management practices so that
24 we can kind of better tie in what the crop uses and match
25 both the nitrogen application timing and water application

1 to what the crops is actually doing.

2 One last thing I guess I'd like to cover is a
3 little bit of information about a cotton industry-specific
4 nitrogen management practice just to kind of give you an
5 idea of the types of things that have been implemented,
6 say, in the last 10, 15 years.

7 A number of the farm advisors and myself are
8 involved in a project that started in 1996 that was
9 initially a cotton industry-supported self-supported
10 five-year research program. We had eight research sites
11 in five different years. And that was followed by a
12 follow-up project that was a three-year project funded by
13 CDFA and the FREK (phonetic) program.

14 And basically what I just wanted to mention is
15 that the components of that project, that basically it was
16 a project that identified and confirmed with moderate
17 varieties what type of amounts of nitrogen are required in
18 order to grow a crop per bail of cotton. The idea then is
19 you can adjust how much you think you need as a grower
20 based on the yield history and the yield goals and how
21 things are growing during the course of the season.

22 The program that we came up with in terms of
23 guidelines was based on soil nitrate tests and use of
24 those. Upper two feet is the minimum, down to a three or
25 four foot depth, if possible. Nitrate sampling was part

1 of it, in addition to evaluations of how the crop was
2 growing during the course of the season so we could make
3 in-season corrections to split applications.

4 So we came up with guidelines then that were
5 proposed and went out to the industry. This was, again,
6 essentially an eight-year research program. And some of
7 the things that came out of that again as we have
8 presented information as to sources of variation in soil
9 nitrate, some of the types of things that people have to
10 consider in making use of things like soil nitrogen
11 monitoring, what to consider in terms of crop rotations
12 and how that needs to be factored in when trying to make
13 evaluations. Use of petiole nitrate, similar types of
14 things are done in a number of other types of crops.

15 And I guess the last thing I'd like to make a
16 point of is that we had essentially in this study over an
17 eight-year period about 50 different sites where cotton is
18 grown where we went all the way from zero to 200 pounds of
19 applied nitrogen per acre in all these treatments. And we
20 made adjustments based on soil test numbers for residual
21 soil nitrate. And out of all of those locations, about 75
22 to 80 percent of the locations essentially had no deep
23 movement of nitrate detected below about four feet in the
24 profile. So in all of these 50 test site locations we
25 looked at, we went to 8 feet and monitored soil nitrate

1 levels at the beginning of the season and at the end of
2 the season.

3 So again, there are a number of I think effective
4 practices that have been used that have been developed and
5 can be used to reduce the potential for groundwater
6 contamination with nitrate. And so just some examples
7 there based on some of our experiences.

8 MR. MC KEEN: Good afternoon. I'm Mark McKeen,
9 third generation farmer from Riverdale. Farmed numerous
10 crops in Riverdale and rural area.

11 I want to cover some of the farming practices
12 that we use to grow our food and fiber.

13 My first example, following what Bob just talked
14 about, Willby (phonetic). We have upland and other
15 varieties. It starts the previous years. Use yield
16 monitors to measure the yield in different areas of the
17 field down to three centimeters.

18 Before planting a crop, a soil sample is taken to
19 determine the amount of nitrogen left from the previous
20 crop. There is usually very little nitrate remaining, but
21 a base line need to be established. We use that amount
22 that's available to the plants.

23 After the crop emerges, we will site dress a
24 tractor with GPS and equipment. This is where the
25 previous year's yield data comes into play. It is no

1 secret that soils vary in quality across fields. This
2 variability for the most part remains consistent from crop
3 to crop. If the soil is good for tomatoes, it is good for
4 cotton.

5 We use yield data from the previous crop to
6 determine the level of nitrogen to apply to a certain
7 area. By using U.C. guidelines that Bob just referred to
8 for the amount of nitrogen that's required to produce a
9 certain level of production, we apply approximately 40 to
10 60 percent of the amount of nitrogen needed. So we
11 establish an estimated final production at this time. The
12 tractor knows its location by receiving GPS satellite
13 signal and a controller will adjust the amount of product
14 being dispensed at that location.

15 I had some slides to kind of show some of this
16 technology to you, but I was told we couldn't use that.

17 Our experience in U.C. guidelines suggest that
18 smaller applications of nitrogen over a longer period of
19 time were more effective at utilizing nitrogen.

20 Therefore, we apply fertilizers over the growing season as
21 required, the results of plant samples throughout the
22 growing season.

23 Depending on the type of product being applied,
24 we also use aerial images to determine input levels of
25 certain applications. Aerial images are used in our trees

1 and vines to a greater extent because obtaining yield data
2 is more difficult. In addition, it's the soil sampling we
3 sample petiole poles, et cetera, at times during the
4 growing cycle to determine levels of input using U.C.
5 guidelines.

6 In all of our crops that I produce, too much
7 nitrogen nearing harvest is potentially detrimental. We
8 carefully monitor that amount, particularly at the end.

9 In almonds, potentially, it can cause hull rot
10 and in cotton, excessive growth, et cetera, et cetera, for
11 different crops.

12 As you can see, this is not the way my
13 grandfather or father farmed in the past. The past
14 irrigation practice of furrow and flood are quickly being
15 replaced by more efficient methods such as drip and
16 sprinklers, field moisture monitoring, plant moisture
17 requirements done by sophisticated models or tools
18 utilized to enhance our nitrogen efficiency.

19 My son recently returned from college and has
20 many more ideas, many of them very costly, on how to
21 improve the monitoring and better use of fertilization.
22 Many methods employ real-time remote field sensing
23 equipment. Many farmers are using such equipment as we
24 speak. And many more will adopt those methods as
25 financial results allow them to do so. As you can see,

1 farming is a vastly different enterprise than what it was
2 just yesterday.

3 Since hearing of the Irrigated Lands Program and
4 the Board's approach to solving this problem, I feel like
5 myself and my fellow farmers are criminals. Guilty until
6 we prove our innocence. It would seem to me that the
7 programs would be much more effective by approaching each
8 problem on a case-by-case basis, with results-oriented
9 solutions that are specific to each farmer's
10 circumstances. Cropping methods and soil types are a
11 large component of the problem in my view and need to be
12 recognized to provide solutions.

13 I have dairy friends who have been under an Order
14 for some time now. Their costs are much more than what
15 was originally presented. They are constantly reaching
16 for new benchmarks and are frustrated that the methods
17 that the Board has mandated do not yield results but
18 result in higher costs. I have very little faith that
19 your stated costs will not be exceeded.

20 In all due respect, Ms. Creedon -- I have to
21 speak to this -- it is difficult for coalitions to develop
22 solutions when the rules of the game continue to change.

23 I had one more point to make. As the Board and
24 other regulated government entities head down this path to
25 mandate more control and adding more fees, it is my

1 assertion that you are continuing to inflict more damage
2 on the small farmer than on large farmers. Regulation
3 coming out of Sacramento and other places leaves farmers
4 drinking out of fire hoses. We struggle keep up with
5 advances of regulation while producing safe and affordable
6 food.

7 I thank you, the Board, for coming down here
8 today and listening to our comments.

9 MR. ROBERTS: Good afternoon. My name is David
10 Roberts. I'm a family farmer from the Seville area that's
11 just a couple miles outside Seville. And I do not have
12 filter on my water.

13 When I get home tonight, my wife is going to say,
14 "What did you learn?" I'm going to say from a bunch of
15 government types, I learned that I'm the problem. I'm not
16 a farmer. I'm a discharger. I come from a generation, a
17 generational discharging problem. I'm a college-educated
18 discharger. And I look forward to the next generation of
19 dischargers. Excuse my tongue and cheek, but we do
20 evolve. We're talking about a legacy problem.

21 We talk about small farmers today, which I
22 consider myself. But all these regulatory costs just add
23 to getting our business to the big guys that can spread
24 the risk and afford the liability.

25 Just a few generations ago, family farmer, family

1 citrus farmer was 40 acres. And with that, he could
2 proudly afford to send his children to school. Today,
3 it's about 300 acres to be a viable family farm, viable
4 citrus family farm.

5 As people, I'm proud of the citrus industry
6 because I don't know many second-generation orange
7 pickers. I think many of our workers enjoy the American
8 dream. They come as immigrants. They work their tails
9 off. They earn respect. And they educate their children
10 and move on.

11 So you've raised the threshold for them, if they
12 chose to be farmers, from 40 acres to 300 acres. That's a
13 huge economic threshold for them to get a foothold into
14 this industry.

15 California Citrus Mutual commissioned a study to
16 figure out regulatory costs burden to growers in
17 California. That burden as of 2008 was \$400 to the acre.
18 At 300 acres for a viable unit, that's \$120,000. My kids
19 can go to college on \$120,000.

20 That's versus Texas. Texas is at \$55.
21 Industries, as California is a case study of, industries
22 go where they can produce with the least cost. 400/55.
23 That doesn't answer countries like Peru, Chili, Argentina,
24 Mexico, and on and on. So you're going to take one more
25 industry and you in a county that's in number one ag

1 county -- number two ag county in the nation, you're in
2 it. You're going to deplete that.

3 Our imported fresh fruits and vegetables, that
4 graph is almost a straight up line. The United States is
5 not keeping up with demand in fresh fruits and vegetables.
6 We're having to import many of that. And a lot of that is
7 the regulatory costs. You forced people right over the
8 border. You forced them into South America. You forced
9 them into other places.

10 To speak to our fertilization, for decades now we
11 don't just apply. We take leaf samples. This has both
12 historical data on it and our current position. We take
13 soil samples. This gives us what we can depend on getting
14 out of the soil. And then we combine that with the type
15 of soil, the location, the crop, the last year's crop load
16 what we expect with the current crop load, and all that
17 through a licensed pest control advisor to come up with a
18 plan for the year.

19 As you heard earlier, excess nitrogen or excess
20 anything, excess water, anything is just bad. We take
21 fruit from being viable to it causes it to rot too early,
22 get too big, too coarse. We stay right at optimum.

23 A few notes in my fertility program from my
24 advisor, I'm advising that we apply less more frequently
25 than a lot of times at once. That's for fertilizing.

1 Apply 15/20 gallons an acre during season to address
2 infiltration, nutrition concerns, especially in blocks
3 where low EC water is used for irrigation.

4 Another, on lemons, apply additional 15 to 25
5 units of nitrogen as needed during the summer to maintain
6 vigor and size. May include calcium, nitrate application
7 to reduce heat and water stress.

8 We're very judicious in what we do because it's
9 our bottom line. Our workers depend on it. Our
10 communities depend on it, and our families depend on it.

11 It's also interesting, we've looked at several
12 studies over the years that say for the crop loads that we
13 pull off of our trees, we do not apply enough. We are
14 mining the soil to make up the differences.

15 In this closing, sustainable agriculture, to me,
16 means we require a profit. Without a profit, I cannot be
17 here next year. My people, my workers that depend upon
18 me. Many of them have been with me for decades. They
19 don't have a steady job. Our communities don't have
20 steady employment.

21 I heard talk about how the different agencies are
22 going to help me fund the things that you require of me.
23 Have any of you ever applied for one of those? You might
24 as well put a gun to your head. The brain damage is huge.
25 Oftentimes, the hours required to put those forms together

1 are ridiculous. Oftentimes, the money you receive comes
2 too late and is too little.

3 And on top of that, I think both the State and
4 the federal government are close to bankruptcy; aren't
5 they? And I don't want welfare. I want a viable
6 sustainable farm. Thank you.

7 CHAIRPERSON LONGLEY: Does that finish up with
8 the presentation of growers or is there another presenter?

9 MR. COVINGTON: Good afternoon. My name is Anton
10 Covington. I'm a farmer from the (inaudible) Water
11 Irrigation District, as well as one of the Board of
12 Directors.

13 I have handed out a package here of the speech
14 I'm going to give this afternoon, as well as a packet of
15 maps and graphs that are also there on the side for the
16 audience to look at.

17 I've been asked to speak on behalf of all the
18 land owners in the district, (inaudible) subdivision of
19 the state of California was formed in 1938 to deliver
20 water to the landowners. The contract was signed in 1951
21 and the system was fully operational around 1955. Since
22 becoming fully operational through today, it has and
23 continues to deliver water to the 50-plus-thousand acres
24 that are within its borders.

25 Prior to the surface water system that was

1 developed, all irrigation water in the district came from
2 the ground. During that time, the groundwater level began
3 precipitous drop that started with the inception of
4 irrigated agriculture in the early '20s and continued to
5 drop until the 1950s as when surface water delivered from
6 the canals was used for irrigation.

7 I have provided a map of the district, along with
8 a graph showing the groundwater levels starting at the
9 time that irrigated ag began and then the start of surface
10 water deliveries with the corresponding groundwater level
11 by year.

12 That graph is represented with the bars and the
13 blue line. If you take a look at the blue line, you can
14 see how water starting back in the 1920s that's the
15 groundwater level and it's a continuous drop and where the
16 bar starts to emerge, approximately 1951, you can start to
17 see the blue line continue to go up. And if you look
18 those -- the audience can't see it -- but the red bar
19 graph highlights that back in those early years, there was
20 as much as 170-plus-thousand acre of water being delivered
21 to the district.

22 You can also see groundwater level began to rise
23 with each high volume year. And when there was a short
24 year, the level would drop and the following year when
25 more groundwater was extracted during a short year.

1 During these years, all the farms were flood
2 irrigated. There was a tailwater in the low corner of
3 every 80 acres with a return pump system to bring the
4 water back up to the head end of the field. The water
5 naturally sank in the ground (inaudible) water for the
6 entire year.

7 The record shows the rise in the groundwater
8 level was directly related to the increase in surface
9 water deliveries. There is no doubt the irrigation water
10 was getting down into the groundwater as it percolated
11 down from the strata in the soil.

12 As time went on, high volume deliveries equated
13 to groundwater recharge. Then came the (inaudible) Act.
14 And people began to contemplate doing more with less
15 because of higher costs associated with the Act. And so
16 drip irrigation, along with micro sprinklers, began to
17 emerge as the wave of the future.

18 If you'll take a look, there is another graph
19 that shows the convergence in the acreage by year to the
20 more efficient system. That's the blue lines. Again,
21 starting approximately in '86, we had 5,000 acres that
22 were under drip or micro-type sprinklers. It was slow to
23 start. But as the economics of full cost water began to
24 hit, the pocketbook of the agriculture industry, necessity
25 became the mother of invention.

1 By 2003, the majority of the acreage had been
2 converted. And if you look at the distance to the water
3 chart, you can see the groundwater just going down, back
4 up over there, as well as on the chart here. In 2003, the
5 highlight of the new systems coming in and the groundwater
6 going down. You can see the water going down every year,
7 so no matter how much water was delivered to the land
8 owner, you will notice the district is delivering 20 to
9 30,000 acre feet less annually to take care of the same
10 amount of acres.

11 Another issue that came to the forefront with the
12 Reclamation Reform Act was a supply of surface water.
13 Because of the mandate restoration of the San Joaquin
14 River on the San Joaquin River became the supplies that
15 are here today would soon be nonexistent as the fishery
16 was guaranteed its supply in (inaudible) allocated what
17 was left over.

18 The political landscape at the time seemed to
19 build more storage. History tells us that water is for
20 fighting and whiskey is for drinking.

21 With that said, the Interior Department was not
22 authorized to build more storage and in the traditional
23 form of a damn or increase the capacity of the present
24 one, but they were authorized to allow districts to build
25 water banks and bank water in the underground.

1 The land only mark in 1993 constructed
2 (inaudible) was expanded to 160 acres in 2011, complete
3 with monitoring wells and extraction wells that recovered
4 the banked water by pumping it out of the bank and into
5 the distribution system for the district.

6 The system was designed and engineered by Provost
7 & Pritchard. As you can see, the district has maintained
8 the groundwater level data as far back as the 20s, with
9 the advent of the in-district groundwater bank, the
10 district contemplated a special marker network to allow
11 the evaluation effect of banking monitored.

12 In 2007, the district contracted with
13 professional groundwater management consultants to
14 establish a groundwater management plan, complete with
15 groundwater monitoring protocols. These have been
16 followed annually.

17 At the same time, in 2007, in cooperation with
18 the Deer Creek and Tule River Authority purchased in
19 preparation of a regional groundwater contour map.
20 Historical collection made of regional water wells level
21 data from 900 wells taken from the California Department
22 of Water Resources database was reviewed and analyzed.
23 Well water level contour map were gathered each year from
24 '95 to 2005.

25 Since then, the historic data analysis project

1 group has created maps on an annual basis. The land only
2 mark (inaudible) bring in the spring and the fall the Deer
3 Creek and Tule River Authority only contour maps based on
4 data reflected in the spring.

5 2010, the district began preparing well water
6 contour maps of just (inaudible) area. They were prepared
7 for spring and fall and prepared in 2011 as well.

8 Provost & Pritchard compiled all data and all
9 contour maps, the district ground water level data and
10 this data also provided the directional flow of water
11 under the district.

12 Drinking water is required to be analyzed in the
13 district and potential for nitrates on an annual basis at
14 establishments that are open to the public for drinking
15 water must be provided.

16 Tulare County Environmental Health Department an
17 independent agency requires annual testing and the public
18 filing with results of drinking water. Some examples of
19 those that violated that information are Columbine
20 Elementary School that has a 2011/12 nitrate level of 9.6
21 ML per liter. And the city of Earlimart's water provided
22 by four wells and the test results show nitrate level
23 range of 11 to 17 ML per liter.

24 Last time I listed one of them who was told that
25 the effluent from the plant that was being discharged into

1 sinking ponds in the plant contained high nitrates. It
2 was assumed that the region for groundwater contained
3 nitrates because the effluent was getting down to the
4 groundwater. They were also informed if they didn't put
5 in a treatment plant, along with stream monitoring wells
6 to check to see if the effluent was effecting the
7 groundwater, they would be shut down. The whole idea of
8 the pond is to get rid of the water below ground. It
9 seemed to be a perfect candidate for pollution.

10 The treatment plant was put in, along with three
11 monitoring wells. One well was put in location of where
12 the well is and provides the drinking water. And the
13 other two are out in the field where the effluent being
14 discharged. When inspectors came to check the wells and
15 sinking ponds, they were dry, indicating the water did not
16 reach the air in the monitoring wells and therefore the
17 discharge was not made to the groundwater.

18 In fact, the water at the well provides a
19 drinking water (inaudible) in the effluent from the plant
20 after treatment. All wells were 45 ML maximum contaminant
21 level.

22 The groundwater in the district moves west and
23 veers to the north, the analysis provided by our engineers
24 Provost and Pritchard. If irrigators were polluting, the
25 drinking water analysis would be a disaster in the area

1 where the city of Earlimart is located because it is in
2 the northwest part of the district. Maybe you can point
3 that out, right there. That's the northwest part and
4 water flows from west to north to north. That's where our
5 groundwater comes out.

6 The district has also formed the Southern San
7 Joaquin Valley Water Quality Coalition to monitor drainage
8 (inaudible) to serve the public. Coalition has filed all
9 necessary documentation to demonstrate the land owners are
10 not polluting. The district has set up all the necessary
11 protocols to monitor the land owners for groundwater and a
12 separate group to monitor and report all surface water
13 discharges.

14 Outside agencies require those providing drinking
15 water to test their wells. When outside agencies have
16 come into check for tolerances that need to be adhered to,
17 they have found that the groundwater is within the
18 parameters of good health. And when they have found it is
19 isn't, the perpetrator cooperated at the local level and
20 fixed the problem.

21 Today, here we sit with the mandate to charge
22 every acre \$120 to the district, along with additional
23 federal fees to make up reports that are irrelevant,
24 because we are already monitoring our operations that
25 affect the groundwater and surface water drainage. That

1 \$120 is just the beginning and isn't going to clean up
2 anything.

3 Based upon the information that I've presented
4 today taken from contemporaneous records, the Central
5 Valley Regional Water Quality Control Board is levying a
6 tax on each land owner of this district for no reason than
7 to collect revenue from the General Fund, given the fact
8 this district is already doing what you are proposing to
9 do.

10 It kind of reminds me of the Reclamation Reform
11 Act of water that was going to be used to repay the
12 federal government with facilities that were built. Those
13 that paid full cost didn't receive any credit (inaudible)
14 paying for the project. Yet, when the contracts were
15 re-written, every land owner, whether he paid any full
16 cost or not, the same charge levied to every acre of the
17 land in the district.

18 My suggestion is if there are wells that have
19 problems, I would suggest that the local districts work
20 with those communities to see how they can work together
21 to fix the problem. Taking a one-size-fits-all approach
22 is nothing more than attack on those who are monitoring
23 and making the necessary adjustments to make sure the
24 groundwater is clean and drainage does not contaminate the
25 public service.

1 CHAIRPERSON LONGLEY: Any questions from members
2 of the Board?

3 I thank the growers. And now the next panel --

4 MR. GOFF: I'll be real short.

5 CHAIRPERSON LONGLEY: You're over 10 or 15
6 minutes already.

7 MR. GOFF: I can do two minutes.

8 CHAIRPERSON LONGLEY: Okay.

9 MR. GOFF: My name is Rob Goff. I work with
10 Paramount Farming Company. Had a couple areas of concern.
11 I'm just worried that the regulation can be inefficient
12 and effective. Here are my reasons why.

13 Number one: Where we farm specifically in
14 western Kern County, the depth of groundwater is several
15 hundred feet, if not more.

16 And the number two is the quality of the
17 groundwater. Its high level of total dissolved solids,
18 high levels of boron, high levels of arsenic, and high
19 levels of sodium and sulfate and calcium sulfate. It's
20 unreasonable for drinking water currently and borderline
21 usable as irrigation water.

22 The third point to this is leaching nitrates down
23 through the water, I ask any western side farmer here,
24 what water? We have no extra water. We don't have the
25 capability to leach nitrates through the system. In our

1 farming area, we have five to seven inches of rain per
2 year. We're on micro irrigation and drip irrigation on
3 100 percent of our acres. We have no economic incentive
4 to push nitrogen or fertilizer or water through the root
5 zone.

6 So that in closing -- I'll just make it short.
7 In closing, if the groundwater is deep, the quality of the
8 groundwater is no good, we have no economic incentive to
9 push the water through. And we don't have the capability.
10 We don't have the amount of water to push it through. Why
11 use time and resources and money to regulate these areas?

12 I think there needs to be some time put into
13 identify high priority areas and low priority areas and
14 not do blanket regulations. Thank you.

15 CHAIRPERSON LONGLEY: Thank you.

16 Next are the commodity groups now.

17 MR. NELSON: Dr. Longley, members of the Board,
18 I'm Joel Nelson, California Citrus Mutual.

19 I hope all of us here today will create some
20 energy on the Board's part to ask the staff to create the
21 energy to form a partnership. What was envisioned as a
22 partnership some four years ago no longer exists. The
23 partnership that was envisioned by everybody is fraying at
24 the edges at a point in which nobody chooses to work
25 together and nobody is listening.

1 As CEO of Citrus Mutual, I have seen your staff
2 working with process since 2008. Now, while I have not
3 been actively involved, I have been working with the
4 coalitions through our staff to ensure that the
5 partnership that was envisioned and hoped for beginning in
6 '08 actually manifested itself into a solution path that
7 all stakeholders could live with.

8 As I review the material, as I hear the
9 testimony, I question whether or not we are achieving that
10 objective. In fact, I argue we are not.

11 Is there a fundamental difference of opinion
12 here? Perhaps.

13 Are we talking past each other? Maybe.

14 Or is there an effort by the staff to simply
15 listen and not take into consideration what is being
16 approached by members of the stakeholder community?

17 Today, I submit to you -- and staff will not like
18 this term -- they're attempting to create meetings without
19 listening to the substance of the conversation. Hear what
20 I said. They are holding meetings to listen to the
21 discussion, but not taking the substance to create a
22 solution path to solve the problem.

23 We at Citrus Mutual have a 30-year track record
24 of working with State agencies and regulatory bodies to
25 fix a problem and create a solution path. I'm proud of

1 that. California Department of Pesticide Regulations
2 California Food and Agriculture, Office of Health and
3 Hazard Assessment, California EPA, California Air Board.
4 In fact, two weeks ago I sent to the Executive Officer,
5 the Chairman of the Board a letter and a video in which
6 the Air Board is touting the partnership the citrus
7 industry has engaged in to create better air quality in
8 the San Joaquin Valley. I sent that to this them in hopes
9 of getting them to appreciate the fact this is what we
10 want from the citrus industry in relationship to the
11 Regional Water Board.

12 But the Regional Water Board sits in stoic
13 fashion, not listening to the input they're getting from
14 the production community. I find that offensive and
15 insulting.

16 That partnership with the Regional Air Board is
17 something we're going to tout in Sacramento, at the
18 federal level, and within the confines of other commodity
19 groups in the state of California. I want that with your
20 Board. I want that partnership. I want that public
21 relations. I want that success.

22 I can't get it as it's presently being drafted
23 and proposed. Why is that? Believe me, ladies and
24 gentlemen, it's not the citrus industry. My track record
25 and the track record of the citrus producers, all 3900 of

1 them, are too positive. It's got to be the staff has got
2 to sit down and listen to the input they're getting.

3 Here, staff creates a draft in which its
4 determination is made by themselves as to how much
5 material can be applied on the land and in the defined
6 area. These same staff members are asking producers to go
7 through an extensive analysis, which many already do, just
8 not in the matter which they have defined, and a numerical
9 subjective determination they come up with from a budget
10 perspective overrides the scientific analysis of
11 producers, many of which, thankfully, are still here.

12 Commodity groups have offered clear definitions
13 for defining product need and a solution path necessary to
14 solve the problem from a legacy perspective. Staff is not
15 listening. They want to substitute their farming
16 experience for those producers in the room and around the
17 San Joaquin Valley. That's not a trade I'm willing to
18 make.

19 Some call these activities puzzling. I call it
20 ludicrous. A so-called nitrogen budget is a numerical
21 evaluation of pounds per acre. That's exactly the
22 opposite of what we do. We take a look at the analysis on
23 what the tree needs and the plant needs to produce a
24 commodity that most of you purchase because it's a
25 nutritious healthful commodity.

1 In the San Joaquin Valley, we're proud to be the
2 number one supplier of fresh fruit and fiber in the world,
3 not in California. Not in just the valley. In the world.
4 I represent the face of evil, ladies and gentlemen. I
5 represent people who pollute the air, contaminate the
6 groundwater, contaminate the soil, waste water, and oh, by
7 the way, create other problems for farmworkers and local
8 communities. That's who I represent. And you know
9 something? I'm proud of it because the work these people
10 do in farming food and fiber in a sustainable manner is
11 something that we all should be proud of. Not denigrate,
12 not ignore, and not try to create regulations and costs
13 that have no substance and reality.

14 So in closing from my comments, ladies and
15 gentlemen, I didn't know where to begin, where to stop,
16 and what to say, because I sat here for seven hours
17 listening to some of the babble that came across from the
18 staff. That language that you heard about transparency,
19 about willing to talk, about willing to create solutions,
20 that's not the reality of the past four years. We've
21 received block walls. We've received stone walls. We
22 created stone walls between ourselves. We don't have a
23 partnership. You, ladies and gentlemen, authorize and
24 mandate that this Board creates the partnership.

25 In closing, the last example, how many months has

1 this draft proposal been on the table? How many months?
2 And last week we find out that the \$120 per acre figure is
3 wrong? Give me a break.

4 Were they wrong before or wrong now with the \$21?

5 Were they wrong before in the substance of that
6 EIR or just wrong on the numerical component of it?

7 Hold them accountable for what they're doing,
8 which is not creating a solution path or a partnership.
9 It's creating a problem for San Joaquin Valley, and it's
10 not solving the groundwater contamination issue.

11 And if you rely upon U.C. Davis report, I
12 challenge you to be careful, because that U.C. Davis
13 report has so many flaws that the University of
14 California -- inadvertently Vice President of A&R has
15 challenged the Dean of Agriculture at U.C. Davis on that
16 report and the dissemination of it.

17 Thank you for your time and attention.

18 Good afternoon. My name is Greg --

19 CHAIRPERSON LONGLEY: Just a second. We had a
20 comment.

21 BOARD MEMBER RAMIREZ: I don't know if you want
22 to answer from here or there.

23 So I appreciate what you're telling me and your
24 vigor and all that stuff. I really do. And I'm concerned
25 about what you feel has been a wall. So you know, the

1 experience that I've seen with the Board isn't what you
2 described. But I want to make sure that we put you in
3 touch with the right people who will listen. And
4 everybody is here. So if they don't listen to you, I
5 think that you have witnesses. So who have you reached
6 out to or who would you like to speak to?

7 MR. NELSON: Everybody that sat over on this side
8 of the room. Ms. Ramirez, I know how to do my job,
9 believe me. And you people have an obligation to do which
10 is extremely difficult.

11 We don't deny there is a problem that needs to be
12 fixed. We have lobbied the previous Administration to
13 release Prop. 84 funds to fix the immediate problem that
14 exists for some of these rural communities. Most of what
15 we heard here from the previous EJ panel, I will agree
16 with.

17 But what I won't agree with was the staff
18 presentation as to the nature of the production and
19 stakeholder coalitions. I will not agree with that.

20 BOARD MEMBER RAMIREZ: So I understand everybody
21 on this side. So if we have your contact information --

22 MR. NELSON: You do.

23 BOARD MEMBER RAMIREZ: Let me see. Do you
24 remember who in particular --

25 MR. NELSON: Let's start with Clay Rodgers.

1 BOARD MEMBER RAMIREZ: Good enough. So you
2 reached out to Mr. Rodgers, and you don't think that's
3 been productive.

4 MR. NELSON: Not at all.

5 BOARD MEMBER RAMIREZ: Well, we will make sure we
6 get somebody in touch with you. So thank you.

7 MR. BEDWELL: Good afternoon. My name is Barry
8 Bedwell. I'm President of the California Grape and Tree
9 Fruit League. We represent the fresh table grape growers
10 and deciduous tree fruit here in the state of California,
11 80 percent of those. Our membership goes all the way from
12 Coachella Valley through the Central Valley and Mendocino.
13 About 80 percent of our membership is in the area from
14 Fresno County through Kern County.

15 This is an issue obviously we've been getting a
16 lot of comments about. You can see the emotion from Joe
17 and you can feel the erosion in this room and the concern
18 of people that have come to us. I would just like to
19 reiterate some of the comments that have been made to me
20 by members.

21 Number one: You've heard it before. Why are we
22 guilty until proven innocent? Why was this assumption?

23 Number two: Why is there a shotgun approach to
24 this program and not looking at specific problems?

25 Number three: Why are we not aggressively

1 looking at other sources of contamination? Why is it
2 agriculture?

3 Number four: Changing cost estimates certainly
4 don't make for confidence. With what's happened recently,
5 particularly today, that has been exemplified.

6 Why is it that it appears that the monitoring
7 program is going to move forward before really determining
8 the cost and the potential economic impact on agriculture?
9 There will be huge reporting requirements. Paperwork will
10 expand. The bureaucracy will expand.

11 Why does it appear we're starting this process at
12 third base?

13 Why isn't there more logic in the process in
14 terms of trying to determine if we can create a program
15 first to either confirm or dispel many of the assumptions
16 that have been made?

17 These are all regular comments we get. Now we
18 heard from the Agency today. We heard that their charge
19 is to protect water quality. We understand that. But at
20 the same time, there were other goals listed for the
21 agency. One of those goals was the economic viability of
22 agriculture. And quite frankly, as we got into this
23 process, it seemed less and less apparent that those two
24 goals could be reconciled in this particular instance.

25 Particularly, as Joel talked about what we heard

1 was from an agency that says they want to be transparent.
2 They want to reach out. They want to involve agriculture
3 in this conversation. And yet, we have representatives
4 from coalitions who dispel and say they have not been able
5 to influence the process properly.

6 What this tells me is that the communication
7 process simply is not working. It's not there. This
8 Board has the responsibility, therefore, to review and say
9 it is broken. We should not allow this kind of
10 discrepancy to exist in this important a process. We need
11 to review that and find out why aren't we getting through.
12 Why isn't ag feeling it's getting its proper voice?

13 The reality is as you look at this situation and
14 the whole idea of a focused outcome rather than simply
15 looking at a process of additional regulations and
16 enforcement -- too many times these growers have found
17 that to be the end: Regulations and enforcement and not
18 the outcome. We need to be outcome oriented here to say
19 we recognize there is a problem. None of our members have
20 come to us and said this is global warming and there is a
21 debate over it. We know there is an issue. There may be
22 an issue over the level of nitrate contamination and what
23 is helpful or not and hurtful. But the idea needs to come
24 out this has to be solution oriented.

25 So let me just say when someone talks about --

1 and I hear it many times, well, we need regulations for a
2 fair playing field. Let's keep in mind that this Board
3 cannot function in a vacuum. These individuals are here
4 because they're concerned about their livelihood, their
5 ability to stay in business and pass on these because they
6 see ever-increasing regulations and costs which will
7 eventually strangle them. There won't be a level playing
8 field. There will be no playing field whatsoever.

9 And we have to look at this and say we have a
10 problem. How can we do it to have joint and equal dual
11 goals of maintaining the best agricultural economy in the
12 world, at the same time to correct this problem.

13 Thank you for your listening. Thank you.

14 MR. CUNHA: Good afternoon. Manuel Cunha,
15 President of Nisei Farmers League.

16 There's been a lot said. Let me show you one
17 chart that you don't have. And I will pass it to the
18 Chairman.

19 Mr. Chairman, thank you very much for having us
20 here today. I think the process in the future, as
21 recommended with some Boards, let's have the public talk
22 before the staff spends a lot of time of going over
23 things. And we've done that in some of the hearings that
24 I've been involved in, especially at this time of the year
25 because the farmers and farmworkers are out working hard.

1 But the chart here is one I want to focus on that
2 I use for the Federal Reserve Board. And in red -- in red
3 says that 47 percent of our farmers in California are in
4 debt. Banks that loan money to farmers in the
5 United States is close to \$2.7 trillion and growing. You
6 now want to pass regulations.

7 Let me talk a few minutes ago -- exactly an hour
8 and seven minutes ago, a young man from the Asian
9 community came up here and said, "I'm here to translate."
10 We represent a lot of the Mong, Laotian, Vietnamese,
11 Taiwanese from Vietnam. We're going to send them all back
12 because, in June, somebody in your staff in a meeting made
13 a strong comment that small farmers are polluters. And
14 today it was said by some folks by staff that the east
15 side small farmers are the danger people. They dump
16 fertilizers by the wagon load or by the train loads.
17 Well, if our small farmers could afford to buy
18 fertilizers, they would.

19 We've got 4,000 small farmers, Vietnamese, Mong,
20 Asian Taiwanese. In a few minutes, Scott is going to talk
21 about representing the African American farmers in
22 California. Never been touched and asked about this.

23 I have never been contacted about the Asian
24 community in its 4,000 -- and in 2008, 1,855 people from
25 Vietnam came to the San Joaquin Valley. The last group

1 from Vietnam war that left the camp, a relocation center
2 in Vietnam and those folks only know one job. Guess what
3 it is?

4 Pamela Creedon, do you know what it is?

5 It's called farming. That's all they know is
6 farming, 80, 70-year-old people. And now we accuse them
7 of polluting. We don't have the facts. We don't have the
8 science. But your staff, saying you reached out. How
9 dare you say that to me. If anybody gets on TV -- I'm on
10 TV more than even the president. And I talk about the
11 small farmers. The farmers that are trying to make a
12 life. They don't get any welfare. They don't get the 250
13 million on unemployment in this state. They're trying to
14 survive.

15 And yet, you're coming up telling me how farmers
16 need to farm. Well, in 1942 you took the Japanese
17 Americans because of their color their skin and sent them
18 to relocation centers. Okay.

19 You don't care. Not the Board. The staff.
20 You're responsible as a Board to give directions. And
21 your director has to be responsible to make sure that's
22 occurring. And it's not.

23 And to find out about this from some of my
24 coalitions is a problem. My biggest issue for this valley
25 and this state is immigration. A big concern. Tomorrow,

1 I have a big issue called affirmative action by the
2 President of the United States Executive Order, a real
3 problem that we've got to deal with tomorrow to protect
4 those families and those people in those rural communities
5 that someone spoke about today.

6 Again, staff, I challenge you, do a better job
7 because the job you're doing is terrible.

8 And I want to comment lastly, Costantino, you
9 guys did a hell of a job at the Air Resource Board working
10 with us in agriculture on the truck rule because you
11 reached out to the farmers and every farmer. And you need
12 to be commended for that, because you did one hell of a
13 job. You did a job these people should be doing. And
14 maybe a little education class on training, maybe would
15 help.

16 Mr. Chairman, thank you very much. I hope I
17 haven't offended anybody, but I challenge the director to
18 oversee your staff better and make sure there is no
19 prejudices. Thank you.

20 MR. SCOTT: I don't know if I want to be last or
21 not. But excuse my voice.

22 First of all, I'm Will Scott, current President
23 of African American Farmers of California.

24 Little bit of my history is that I retired from a
25 company as a facility engineer. But I had a love for

1 farming so I got back into farming.

2 What I found out, too, is that if you look at the
3 stats in California, African American farmers represent
4 less than half a percent of the total farmers. And I
5 think that those who are acquainted with history in the
6 country, you know why. But those few members that we have
7 a concern, too, not only about the quality of water and
8 the quality of air, but also quality of the food that
9 you're eating. And that includes also conservation of
10 this land. So we need to have an input into it.

11 Now, little nervous, but I'll get there. My
12 concern is this: What Manual said, I think that what we
13 do to the least of us will affect the rest of us.

14 Now we have a regulation that's being applied,
15 you need to get input from those people that are impacted
16 tomorrow.

17 Now I'd like to speak to you as a small farmer,
18 because I guess I jumped out of the skillet into a fire
19 and became a farmer because I have a love for it. But
20 also, too, I find out, too, is that rules and regulations
21 that are being forced down, there is an impact on me. I
22 have -- there is about 29 agencies that I took account of
23 has an impact on me that regulate and I have to answer to.

24 Now when Manny showed me this, it looks like it's
25 going to be another cost added to me. As A small farmer,

1 I can't afford it, you know. And I have no input into
2 applying. But I appreciate the opportunity to be able to
3 do that because now what you're telling me other agencies
4 are going to be telling me how to farm, but also when I do
5 and how I can do it. A farmer should do what they do
6 best, that's farming.

7 And I stand before you today, I should be
8 farming. But now I have a brother because they have to
9 watch my property because the issue -- I don't know about
10 other farmers, I have ground squirrels that are taking
11 over. Years ago, I could get a bait that would take care
12 of them. Now I have to go get educated, have training to
13 get a certificate in order to take care of this problem.
14 I have to do that. That's a financial burden on me
15 because I find out, too, is that for some reason I build
16 up a clientele that I got to please. I build up my
17 market. But I find too while I was doing this, these
18 ground squirrels are build up clientele too. While I'm
19 standing here before you and I sleep at night, they're
20 eating my crop.

21 Now you talk about fertilizer and stuff like
22 that, I can't afford fertilizer because I'm a small
23 farmer. So therefore, I have to do the best I do. In
24 order for me to get a decent crop, I have to plant more
25 rows or more acreage. That's an impact on me.

1 So when I see stuff like this telling me that
2 you're going to cost me \$120 -- and I guess it's less now.
3 But also there is going to be significant paperwork
4 involved, well, I can't farm and also spend time doing
5 this, too.

6 So as an African American farmer, I have a
7 concern, too, with not only the quality of food that we
8 eat, but also I have a concern about the availability of
9 food. And I think that with regulations that are coming
10 down with no input from me or from people like me or from
11 groups like these small farmers, I don't think it's right.
12 Because I think the people who are doing it are so far
13 removed from the situation.

14 Now, I spent time in Sacramento. Now I'm a
15 president of an organization, but I'm not political. But
16 it seemed like I'm going to have to if I know the rules to
17 play the game, because the people I'm talking to in
18 Sacramento have never been on a farm. They have no idea
19 what I do. They need to come out and walk with me and see
20 what I'm doing. When you sit there and make these rules
21 and regulations, then you have input from me because if
22 you don't -- to me, farming is a way of life. The values
23 that you have and we have came off the farm. If you get
24 rid of it, then you might as well put California on the
25 asphalt and concrete. And we rely on other people for our

1 food.

2 So I think for the input -- I don't want to get
3 too emotional, but I think that consideration should be
4 made when you put these things together, you put the cost
5 on the small farmer, farming in particular. We're are
6 providing food for a lot of people. We need help.

7 Thank you.

8 CHAIRPERSON LONGLEY: Next part of the program
9 today is testimony by interested persons. A lot of the
10 people that I have card for -- at least some of them --
11 have already spoken. And if I call them a second time and
12 they've spoken, that's fine. But I want to call names so
13 I don't miss somebody inadvertently.

14 The second part of it is, some folks have already
15 left. We'll go through this. I'll tell you who the next
16 person is so you can be thinking about that fact.

17 First person that I have is Allen Isheta. Is
18 Allen still here?

19 We'll go on to John Kirkpatrick. Is John here?
20 Dave, do you --

21 MS. KIRKPATRICK: Yes. My name is Shirley
22 Kirkpatrick. I live at 23114 Carson Avenue in
23 (inaudible).

24 I'm speaking for my husband now, who stepped out
25 for a minute. So when he comes back, maybe he -- I don't

1 know what he was going to say. And I barely know what I'm
2 going to say, because I'm totally confused.

3 I think you have the cart before the horse. It
4 sounds like you have what you want to see at the end
5 without finding out what's at the beginning. And I feel
6 like we're at the beginning.

7 We're small farmers on the east side, grow
8 citrus, specially crop citrus, and on 50 acres. As you
9 were told, that's really not a viable unit, but we're
10 making it that way. It was supposed to be our retirement
11 income because we don't have a salary. We don't have a
12 pension fund. It was going to be our retirement. And as
13 you can see, we are not retired.

14 So I just want to say I feel very deeply about
15 the communities that are having problems. I think you
16 should put your efforts there, find the solutions. As you
17 were told by the Earlimart district, they would work with
18 the communities. I would love to see all of our
19 farmworker communities have fresh, good, viable water.
20 Because we do depend on our employees. And so instead of
21 putting the burden on us, let's work together and find a
22 other resource and fix the problems that we have that with
23 know we have. Thank you.

24 MR. KIRKPATRICK: I understand my name was
25 called. Did she use up my time?

1 CHAIRPERSON LONGLEY: Go ahead, sir. Your wife
2 did a great job. Go ahead.

3 MR. KIRKPATRICK: I'm John Kirkpatrick. I'm an
4 81-year-old small east side farmer, as Shirley pointed
5 out.

6 I think we need to review the history of this 40
7 acres of specialty citrus that we grow. We bought this
8 property 48 years ago. Was unimproved pasture. Had two
9 wells on it. But it was unimproved native pasture. Well,
10 the one well of those wells is producing 40 parts per
11 million of nitrogen at the time we bought it. We now,
12 after 45 years of farming citrus on the same property,
13 have significantly reduced the nitrate level.

14 I think that it's fair to say that we resent
15 being called polluters or that we are the problem. I'm
16 not sure that's correct.

17 Thank you very much for your time.

18 CHAIRPERSON LONGLEY: Mr. Orth and Mr. Martinez.

19 MR. ORTH: I have three quick points I didn't
20 have the opportunity to speak to you this morning.

21 David Orth, Southern San Joaquin Valley Water
22 Quality Coalition.

23 I want to raise three things. We feel -- and I
24 think you've heard this today -- that there wasn't the
25 flexibility afforded to us in the development of the Draft

1 Order that is before you now that's consistent with the
2 flexibility that your Board called for. And I think the
3 best way to determine that is to take the East San Joaquin
4 Order that you will think about in October and look at the
5 Order that is before you for the South San Joaquin and
6 find the differences.

7 And throughout our 20-plus session of
8 negotiations, we often found ourselves with after
9 countless hours of negotiating language specific to our
10 area, we were told we're going to go with East San Joaquin
11 for consistency. I understand consistency, but
12 consistency doesn't give us the flexibility we were
13 seeking.

14 Secondly, you have not heard enough today about
15 what's happening at the local level through integrated
16 planning efforts, through partnerships with the
17 disadvantaged community, and our local water districts to
18 address specific problems. We heard about the problem,
19 but there are solutions being pursued in Cutler with the
20 partnership with the irrigation district. There are lots
21 of those types of opportunities ahead of us. As we think
22 about a regulatory program to protect drinking water,
23 let's also always recognize what's happening on the
24 ground.

25 Finally -- forgive me -- the numbers are

1 mind-boggling to me. The PEIR that you adopted, the
2 programmatic document you adopted last summer, says \$27 to
3 168 bucks an acre, depending on which of the alternatives
4 were going to be applied. You took that number and
5 adopted it in a Basin Plan Amendment and presented it to
6 the State Water Resources Control Board, Tulare Lake Basin
7 27 to 168 bucks an acre. You must have thought that was a
8 good number, because that became part of your regulatory
9 framework imbedded in our basin plan.

10 Today, as you heard, we have up with 21 bucks.
11 That doesn't make any sense to me at all. And I would ask
12 that you direct the staff to bring more details back to
13 you. I realize that part of it's around assumptions of
14 applying best management practices. But that doesn't
15 reconcile either, because the more that you assume best
16 management practices are in place, the less we have a
17 problem.

18 So we need to understand the economics and we
19 need to get our arms around this so that we can really
20 communicate to the farmers what we think this is going to
21 cost. Thank you.

22 BOARD MEMBER COSTANTINO: One second.

23 Let me ask -- so I think I've already asked staff
24 to discuss the cost a little in more detail, especially
25 with the expansion of the program. So I think that

1 request is already on the table.

2 And then the second point I was going to make or
3 ask a question for staff -- maybe to Pamela or Clay -- is
4 the idea that this Order has to be consistent or identical
5 to the other Orders. Can we have a general answer to that
6 question as to how consistent or how much flexibility is
7 available to us?

8 ASSISTANT EXECUTIVE OFFICER RODGERS: Do you want
9 me to answer that question? You can correct me.

10 Since I'm the one here that's been spoken about
11 as being inflexible, in the approach we have taken is that
12 there are issues that have been brought to us -- for
13 instance, like they want farms less than 100 acres not
14 covered by this program. And other things, you know, the
15 nutrient budgeting should not need to be done in certain
16 areas, that there were certain things that are the
17 regulatory structure of how we are doing this, and this
18 best practical treatment or control.

19 So on those types of things, you know, we said
20 everybody, no matter which coalition you're in, if you
21 fill this category, you're going to do nutrient management
22 planning. You're going to do a sediment erosion control
23 plan. You're going to do some of these things.

24 And certainly the difference, a lot of it, is in
25 the implementation. For instance, there are probably very

1 few farmers down here that actually need a sediment
2 erosion control plans. But for the ones that do, they are
3 needed. So part of that flexibility is in the
4 implementation, which is difficult to see when the Order
5 is just written.

6 You know, some of the other issues where there is
7 flexibility, you know, we made changes based upon
8 differences in crops, differences of soil, climate,
9 whatever here. So for, like, the Surface Water Plan, we
10 are proposing a plan that's very different than the East
11 San Joaquin. It actually is very similar to the plan we
12 have under the conditional waiver. And that includes this
13 discussion of ephemeral streams because our streams don't
14 have water in them, which we have down here because of the
15 scarcity of the rainfall. And it's usually only for a
16 short period of time.

17 So we came up with a program that actually makes
18 it more likely that we could actually catch water when
19 they're in the channels, even though they only flow for a
20 few days, rather than looking out in the future and say
21 we're going to sample on January 5th of next year. And if
22 there is water there, we'll sample it. If there's no
23 water there, we won't. So those are things where we are
24 doing that. That's kind of been the guiding light of how
25 we are looking at the flexibility.

1 It's these regulatory things that basically --
2 for lack of a better term -- is part of our best
3 practicable treatment or control so we can comply with
4 some of our policies. Pretty much creates a level playing
5 field for the different coalitions.

6 If there is something that we can change based
7 upon the specific soil, climate, crops that are grown down
8 here, essentially we want to look at that.

9 Unfortunately, on a lot of that, when we looked
10 at it, we couldn't support the changes based on the
11 differences between what we thought was in the South San
12 Joaquin.

13 We'll look at it again. We'll try to look for
14 that because our goal is to make those differences where
15 they're appropriate. But it's also to have a level
16 playing field and to implement those parts of the program
17 necessary to meet the goals.

18 BOARD MEMBER COSTANTINO: Thank you.

19 My question -- you answered it, but it was more
20 region versus region as opposed to the sub 17 and the east
21 versus the Tulare Lake. It was more general than to all
22 of them. Thank you.

23 CHAIRPERSON LONGLEY: Next, Estha Martinez.
24 After that, Blake Sanden.

25 MS. MARTINEZ: You've already given out my name.

1 I'm here representing the Tulare County.

2 My question is: What are you going to do about
3 improving the water? You will have the evidence. We've
4 been working with our representatives for a long time.
5 What more you want? You have the evidence.

6 We're low income people. And for us, the water
7 is very expensive. We have to buy drinking water. And
8 when we don't have the money, we have to drink
9 contaminated water from the tap.

10 How can I say that we want to offend anyone? The
11 fact is that the water is contaminated. You will have all
12 the proof. What more do you want? It affects me. It
13 affects my community and all the people with low income.
14 It's really a problem for us. And it's not fair for us to
15 pay for contaminated water. I hope you take this into
16 consideration.

17 Thank you.

18 CHAIRPERSON LONGLEY: Thank you.

19 Next is Blake Sanden. Following Blake is Paul
20 Gibaney. And following him is Patrick Cavanagh.

21 Mr. Sanden?

22 MR. SANDEN: My name is Blake Sanden. I'm the
23 Irrigation and Agronomy Farm Advisor with Kern County
24 Cooperative Extension. I'm coming late to this process
25 because, by choice, I try to avoid these policy issues as

1 much as possible.

2 Those of you who have spent your lives in it --
3 and my hats off to David Orth and you folks on the Board
4 that have dealt with these issues, because you know how
5 difficult it is. We can't ignore them.

6 My choice, as a U.C. Extension advisor, is to
7 take the Joe Friday face. Just the facts, ma'am. And
8 that's what I'm trying. That's why I'm here, because some
9 of the people involved in the process have said I've got
10 some information from Kern County that is valuable to farm
11 in this process.

12 First, let me say that from the late '90s through
13 2003, we did a survey of approximately 10,000 acres with
14 more than 100 fields, 21 growers to establish levels of
15 practical irrigation efficiency and leaching fractions
16 across 12 different crops and different soil types, nine
17 different irrigation systems in Kern County.

18 We had average levels of irrigation efficiency
19 from 94 to 95 percent. Water is expensive down there. A
20 lot of micro systems. And the subsequent leaching
21 fraction was virtually nil.

22 Subsequent to that time, I've been involved with
23 some very intensive fertility trials in almonds. Also
24 part of that is to establish what's been a 25-year
25 campaign for myself, starting when I used to be irrigation

1 manager of Paramount Farming in west side to establish new
2 criteria for almond BT water crops. We have found that
3 almonds use approximately -- can use about a foot more
4 water than what they were said to have used 25 years ago
5 by University of California studies. We've upped the ante
6 on fertility management and have been able to achieve
7 5,000 pound yields from this last year.

8 This is accompanied with a 95 percent irrigation
9 uniformity, 96 percent irrigation efficiency. If you go
10 on a straight crop export balance, we are at 87 to 88
11 percent nitrogen use efficiency just in crop expert.

12 My final point using very detailed chloride
13 balances, which to my understanding, if your target is to
14 really be protective, establish improvements in progress
15 being made on improving fertility management, efficiency,
16 and reducing nitrate efficiency, I have not been able to
17 turn up one single reference where first encountered
18 groundwater monitoring wells for aquifers that are deeper
19 than 100 feet has been able to provide that information.
20 The most commonly used technique has been either N-15
21 tracers or just using chloride on irrigation water as a
22 tracer.

23 We have done that in this trial I just mentioned.
24 And we have 98 and 99 percent nitrogen use efficiencies.

25 I've got some documents here, with some work out

1 of New Mexico that has similar nitrogen use efficiencies.
2 They have crops and everything from -- the lowest one is
3 57 percent and others up to 99 percent.

4 CHAIRPERSON LONGLEY: Can you submit those in the
5 letter part of the comment period?

6 MR. SANDEN: I would be happy to do that. And I
7 have copies here.

8 CHAIRPERSON LONGLEY: Thank you, sir, for your
9 testimony.

10 Paul Gibaney. And next is Patrick Cavanagh and
11 then Kimberly Brown.

12 MR. GIBANEY: Thank you, Mr. Chairman and Board.

13 My name is Paul Gibaney. I'm an agronomist with
14 NPCA, with MoCaratan in Delano where we farm table grapes.

15 If this Board really wants to make a difference,
16 L.A. continues to dump sewage sludge in a disposal
17 operation effecting water worth billions, threatening the
18 Kern water bank. When will they be regulated?

19 You propose to regulate small farms, but not
20 recreation areas. How is that equitable?

21 One size doesn't fit all. It has been stated as
22 if it is fact that surface irrigation systems are
23 inefficient and therefore contaminate groundwater. In the
24 mid-1980's, Dr. Henry Fox with the University of
25 California Riverside authored several papers proving

1 otherwise from work done in Kern and Tulare Counties.

2 Border and furrow irrigation systems, when well
3 managed, can be quite efficient here in this valley using
4 less energy. It concerns me that engineers think they can
5 regulate our dynamic biological systems.

6 I'd like to know are there any scientists on the
7 staff or people who had farming experience? Not
8 engineers.

9 The University groundwater paper was not peer
10 reviewed. The State Air Resources Board has made a
11 practice of using non-peer-reviewed work. Our industry
12 has a right to expect that real science will rule over
13 perceptions and politics.

14 Thank you.

15 CHAIRPERSON LONGLEY: Mr. Cavanagh and then
16 Kimberly Brown. Following Kimberly will be Raquel
17 Sanchez.

18 MR. CAVANAGH: Okay. Board and staff, appreciate
19 the opportunity.

20 I have a unique perspective on farming in this
21 state. As an editor of several farm magazines for the
22 last 30 years, I have traveled from Coachella Valley to
23 Chico, Napa, Salinas Valley visiting farms, walking the
24 fields, walking the orchard, spending time with those farm
25 families.

1 These farm families are often first, second,
2 third, fourth, fifth generation farmers raising their
3 families on the farm. And it's an amazing thing.

4 I've never seen any of those families do anything
5 on that farm that would jeopardize the groundwater or
6 cause anything to happen that would hurt the environment.
7 These are true stewards of the environment.

8 And I spend hours on the farms with these
9 families, over 30 years, have never seen anything happen.
10 I've never suspected. These farmers really look to the
11 future to provide a livelihood for the next generation.

12 So when you're thinking about attacking farmers
13 for doing things that are hurting the groundwater, I just
14 invite you to walk out in the orchards and vineyards and
15 fields of this state and visit with these farmers. And
16 you'll see they really have a whole different perspective
17 on what they're doing than what the regulators think
18 they're doing.

19 That's all I have.

20 CHAIRPERSON LONGLEY: Kimberly Brown. Next is
21 Steve Godlin.

22 MS. BROWN: I don't have anything additional.

23 CHAIRPERSON LONGLEY: Thank you. Is Steve Godlin
24 here?

25 And then will be Sandra Garcia. After Steve

1 Godlin will be Sandra Garcia.

2 Go ahead.

3 MR. GODLIN: Thank you.

4 My name is Steve Godlin. I'm currently President
5 with the Tulare County Farm Bureau. I'm a commercial
6 beekeeper. I depend on farmers. I depend on ranchers.
7 And I depend on water. I'll just keep it short. I'll
8 just read what I wrote.

9 Why such a grandiose plan at this time? Why
10 wouldn't you go to the known high vulnerability areas and
11 fix them first?

12 Show us what you can do. Improve yourselves
13 rather than take on this huge task with no resources but
14 to bleed the very people you claim to be helping.

15 I also put, the road to hell is paved with good
16 intentions.

17 And I'd like to thank you for being kind to us.
18 And I'd like to not say the wrong thing here. But
19 drinking Diet Coke and rolling your eyes while she's being
20 nice to us isn't endearing you to me. So I'm sorry.

21 And that's all I really have to say. Thank you.

22 CHAIRPERSON LONGLEY: After Sandra Garcia is Bob
23 McKellar.

24 MS. GARCIA: Good afternoon. My name is Sandra
25 Garcia. I'm a farm worker. I work for this industry. As

1 a farm worker, I deserve clean water so that I can
2 continue working in a health manner.

3 My mother passed away because of so, so many
4 pesticides. I have proof from the doctor she passed away
5 because of pesticides.

6 Why so much bickering? Why so much yelling? Why
7 don't we unite to look for solutions? So that we can stop
8 contaminating our water, our environment, everything? Why
9 continue having so many families that lose a father, a
10 mother?

11 It just doesn't affect farmworkers. Tonyville
12 has many sick children because of the water from the water
13 channels. And at the end, both rich and poor are going to
14 die. We won't be able to take any of our earnings with
15 us. Thank you for listening to us.

16 CHAIRPERSON LONGLEY: Bob McKellar.

17 INTERPRETER: Excuse me. Raquel was wondering if
18 you called her.

19 CHAIRPERSON LONGLEY: Yes. Go ahead.

20 MS. SANCHEZ: Hi. My name is Raquel Sanchez.
21 I'm a farm worker. I've worked in the fields. I've
22 suffered for many irregularities.

23 In several companies where I worked, I asked the
24 farmers if they can inform me how I can perform in a
25 better job. So that they can benefit from it and so can

1 I.

2 Recently, I had a problem with water. We spoke
3 to the supervisor about the water, and he said that that
4 particular water exceeded the standards. But that water
5 tasted a lot like Clorox.

6 Thank you. That's all I'd like to tell you.

7 CHAIRPERSON LONGLEY: For the record, could you
8 state your name again, please.

9 MS. SANCHEZ: My name is Raquel Sanchez.

10 CHAIRPERSON LONGLEY: Thank you very much.

11 Bob McKellar.

12 MR. MC KELLAR: Good evening -- or afternoon.

13 CHAIRPERSON LONGLEY: Just about there, sir.

14 MR. MC KELLAR: Thank you very much for
15 listening. I just want to make a couple of comments.

16 I'm a small farmer. Third generation small
17 farmer from the eastern part of Tulare County, small
18 county called Ivano (phonetic).

19 I agree with many of the things that have been
20 said. And I don't want to diminish anybody's problems and
21 we've heard that there have been some. But what I'd like
22 to illustrate is that there is a difference between
23 places, locations, and problems.

24 In my own case, my mother came to our ranch. She
25 and my father bought it when she was about 37. She drank

1 the water, lived on the farm. Passed away at 102. I'm
2 81, almost. And I'm still here. I will admit, I haven't
3 drank the water all 81 years, but most of them.

4 Our water comes from the mountains, comes from
5 the aquifers. Our water contains a higher amount of
6 nitrogen naturally from the mountains. And therefore, we
7 adjust. We don't use as much nitrogen, if any, because
8 the water already contains it.

9 So I suggest to you as others have, there are
10 individual situations and no plan fits all. And I really
11 would like to have you consider some of the suggestions
12 that have been made to you. Thank you very much.

13 CHAIRPERSON LONGLEY: Thank you.

14 Tricia Blattler, and then Christina Zamurano.

15 MS. BLATTLER: Good evening. My name is Tricia
16 Blattler. I'm the Tulare County Farm Bureau's Executive
17 Director. The Farm Bureau represents about 2300 farm and
18 ranch families here in Tulare County. And most of our
19 diverse membership is also members of groups like
20 California Citrus Mutual, Niese Farmers League. They
21 belong to their irrigation district boards. They're
22 leaders in their communities. They serve on their school
23 boards. They serve on PTAs. They're parents. They're
24 grandparents. And they're members of these communities
25 that we're talking about today, large and small.

1 I want to start with a quote from John
2 Fitzgerald-Kennedy that the farmer is the only man in our
3 economy who buys everything retail, sells everything
4 wholesale, and pays the freight both ways.

5 I think what the farming industry has illustrated
6 to you today -- and I have scribbled out my comments
7 eight, nine, ten times since we've been here since 10:00
8 this morning -- what I want to illustrate here today is
9 that farmers do care. They're here today interrupting
10 their harvest schedule. They are in the back of the room
11 on their cell phones rescheduling parent/teacher
12 conferences, probably explaining to wives why they're not
13 going to be home on time for dinner. But they care and
14 they care a great deal about telling their story to you
15 and having the opportunity to be heard.

16 I think at this late hour in the day, one of the
17 most important opportunities I could take is to ask you to
18 pause, to re-focus the energy and the passion, the emotion
19 that is in this room today and give agriculture to have a
20 legitimate opportunity to help craft the solution.

21 I heard Mr. Nelson speak earlier very
22 passionately about the partnership that agriculture seeks
23 and wants to have on issues related to water quality. And
24 I think it's really important that we be part of the
25 solution, not just painted as part of the problem.

1 I do think there are many other questions and
2 many other people we could lay blame with for the issues
3 we face here in the valley about water quality. They
4 probably don't amount to a lot in what will actually
5 happen with this regulation. But I do want to underscore
6 that I think you, as the Board, and all of us as
7 suburbanites, both living in urban and rural communities,
8 need to did a better job at reaching out to homeowners
9 when it comes to the application of materials to grow in
10 their front and backyards. That has been asked of me
11 many, many times, where is the regulations to reach out to
12 just the homeowners community about the application of
13 nutrients going into their front and backyards.

14 I also think there is a critical question about
15 our marijuana illegal operations in this state and the
16 thousands and thousands of criminal activities going on
17 growing, using illegal and out-of-date chemicals that
18 haven't been legal in California for decades. I think
19 those are some critical issues. And maybe they seem very
20 small, but I think they're really important to address.

21 And finally, I want to say when looking at the
22 Environmental Impact Report, there is a statement that
23 over 23,000 acres of farmland could be taken out of
24 production with just this one regulation.

25 We have dairy producers and farmers in this

1 valley that are bankrupt, closing their businesses, and in
2 some instances committing suicide over the economic
3 hardships they are facing. Please help us be
4 solution-oriented and not just paint agriculture with a
5 broad stroke that we're all polluters and all bad people.
6 We need to be part of the solution and we ask you to
7 engage us in that partnership. Thank you.

8 CHAIRPERSON LONGLEY: Christina Zamurano and Ron
9 Matik.

10 MR. MATIK: I'm Ron Matik.

11 The Secretary of Agriculture, Mr. Benson said
12 there's no more noble profession than growing food and
13 fiber for man. However, in California, I sure don't feel
14 like that.

15 It's been stated, I feel like a villain. I feel
16 like I got to watch out because I'm going to go the jail.
17 I to going to go to prison. I'm going to be fined. Every
18 time I turn around, there is another law or regulation.

19 You know, I want to address something about the
20 water. I know there is people here that have been very
21 emotional about the water that they have. This lady over
22 here said we all deserve good water. She's right. We all
23 need clean air.

24 But like has been said, I don't think it's
25 agriculture that's causing the problem. I live on my

1 ranch in the middle of the orange grove. I drink the
2 water. Great. Drink about a gallon a day. I love the
3 water. I'm thirsty. I feel very fine.

4 Now, it seems interesting to me predominantly
5 most of the people in this room are Anglo-European type,
6 few other nationalities. But the only people that seem to
7 have the problem are the Hispanic workers that came here
8 to testify.

9 Now, none of my people that work with me that are
10 Hispanic have any problem at all with the water.

11 I wonder, something has to be done to study what
12 is happening in those communities specifically like has
13 been brought out.

14 We want everybody to have good water. But it's
15 got to be done specifically. Do they have a legitimate
16 complaint? Are the rules or the standards, are they
17 correct?

18 I think the problem has to be defined. Just
19 because somebody says, you know, so many parts per
20 million -- I heard one of my water experts say Gerber baby
21 food has more nitrates in it than the water standard. How
22 can that be? You're feeding babies food that has higher
23 nitrates than the water standard? So is the water
24 standard for nitrates, is it correct? Is that level
25 correct? Is it causing damage? So I think, number one,

1 we need to look at the definition of the problems and see
2 if they're right.

3 I question -- I've been in other businesses. I
4 made a lot more money than farming. I love farming. The
5 only reason I do it is I love the land. My family
6 questioned me, "Why do you do it?" It's crazy. You never
7 worked so hard. You never have so much at risk for so
8 little return. It's tough, tough business.

9 I'm fed up with the rules and the regulations.
10 I'm about ready to say hey -- probably 200 people
11 indirectly will lose their jobs. Ninety percent of what I
12 makes goes in taxes. And I'm only a small percentage of
13 the people that have just had it with the rules and the
14 regulations.

15 CHAIRPERSON LONGLEY: Thank you.

16 I previously called Senaida Aguilar. I don't
17 believe she testified.

18 INTERPRETER: She left.

19 CHAIRPERSON LONGLEY: Thomas Suggs, is that
20 correct? And then next will be Juventino Gonzalez.

21 MR. SUGGS: Mr. Chairman and members of the
22 Board, good afternoon. My name is Thomas Suggs. I'm a
23 staff engineer at the Wheeler Ridge Maricopa Water Storage
24 District.

25 Our district comprises 140 square miles of

1 irrigated lands in the southern most part of the San
2 Joaquin Valley. It includes the southern shores of
3 ancient Kern Lake and Buena Vista Lake.

4 And thanks to the thick clays laid down in those
5 shallow lakes, (inaudible) conditions exists in about a
6 third of our district. Roughly 22 percent of our
7 irrigated acres are underlain by perched water with an EC
8 greater than 10,000 microohms per centimeter. Water at
9 10,000 microohms per centimeter is unfit for irrigation
10 purposes, much less for drinking.

11 The western third of our surface area is
12 underlain by sediments derived from marine rocks. And
13 consequently, 75 square miles of lands in that part of the
14 basin are underlain by groundwater with more than 2,000
15 parts per million of dissolved solids.

16 Today, shoots and vines comprise brought 68
17 percent of the cultivated acres within our service area.
18 These crops are capital intensive and they tend to be
19 irrigated almost exclusively with drip irrigation and
20 micro irrigation. Drip and micro currently serve 71
21 percent of the irrigated lands in our district and
22 sprinklers serve the rest. Furrow and border strip
23 irrigation are virtually unseen.

24 Consequently, in our county, average irrigation
25 efficiencencies have gone from less than 80 percent to more

1 than 90 to 95 percent over the last 20 years. The
2 convergence of market forces and innovation has
3 accomplished this without any outside intervention from
4 the State.

5 Based on 19 years of delivery data, average
6 applied water is three acre feet per acre per year or
7 three feet per year. Assuming an irrigation efficiency of
8 90 percent, it may be expected that 3.6 inches of water
9 percolate past the root zone in our area on an annual
10 basis.

11 In our area, the average depth to the regional
12 water table is 220 to 700 feet. And much of our district
13 is underlain by extensive clay layers that impede downward
14 migration of pollutants, including mobile contaminants
15 like nitrate.

16 Based on the random sample in our files, I found
17 thickness of clay ranging from 69 to 313 feet above the
18 water table. Clearly, downward migration of nutrients and
19 salts, if it occurs at all, must be extremely slow in
20 those areas.

21 Within the Wheeler Ridge Water District,
22 efficient irrigation practices, steep water tables, and
23 thick unsaturated clay layers combine to create a setting
24 that is protective of water quality.

25 Hear, the presumption of pollution is not

1 reasonable. Moreover, vast areas with salty perched water
2 and unusable groundwater already exist. These are
3 naturally degraded and will not be further degraded by
4 irrigation.

5 Although I speak of local conditions, many of
6 these conditions apply elsewhere this the valley. Given
7 this information, I believe the Draft General Order is
8 unnecessary to predict groundwater quality in the southern
9 and western portions of the valley floor. The Regional
10 Board is attempting to apply a two-tiers-fits-all approach
11 to the very and many complex groundwater conditions in the
12 San Joaquin Valley. This attempt should be suspended or
13 scaled back to those areas where demonstrated and ongoing
14 groundwater contamination problems.

15 Thank you for making the trip down to Tulare.
16 And thank you for listening.

17 CHAIRPERSON LONGLEY: Juventino Gonzalez and then
18 Nori Naylor.

19 MR. GONZALEZ: Good afternoon. My name is
20 Juventino Gonzalez. I'm here from the community of
21 (inaudible) is Fresno County.

22 The favor that I come to ask you for is not just
23 for one. It's for all of the Board of Directors, because
24 we are navigating through the water. I have lived in that
25 community for 41 years. And the water is contaminated

1 with quite a bit of arsenic. I ask you to please to take
2 in consideration that community. It's between Riverdale
3 and Five Points.

4 Please, I ask you to take it into consideration.
5 And thank you very much for listening to me. That's it.

6 CHAIRPERSON LONGLEY: Thank you.

7 Nori Naylor. Next will be Veronica Vicencio.

8 MS. NAYLOR: It's Nori Naylor. And my husband
9 and I have been farming for 32 years. And we've been
10 farming organically since we were USDA certified in 1990.
11 And that word has not been breached, the big "O" word.
12 And I just ask -- I agree with many, many of the comments
13 that have been stated. I even had that JFK quote handy to
14 use. So a lot of us that are speaking are on the same
15 page.

16 Our farm happens to be located in that eastern
17 section. And I learned today that that is one of the
18 vulnerable areas. So I'm very concerned, as a small
19 family farm -- and we have less than 100 acres -- that
20 this will impact us as we have heard financially.

21 And it's also been said -- and I won't repeat --
22 that we just farm because we love it. And we would like
23 to continue farming. As an organic farmer, you may
24 realize that we have a certification process paperwork
25 that we go through. Many of our -- some of our buyers are

1 requesting that we complete the gap. That's the federal
2 requirements that are being made. So that's -- we're
3 talking more paperwork again, which is another common
4 theme.

5 And so again I'm concerned that -- and my
6 question and my recommendation to the Board would be if
7 there is a way to consolidate some of these different
8 regulatory issues, because from my perspective, things are
9 getting deeper and deeper.

10 And my husband and I are the only people on our
11 farm that do all of that work, farmwork as well as the
12 paperwork. And we are currently mentoring a young lady.
13 Our sons have not chosen to go into farming. My husband
14 is a third generation farming. And we're currently
15 mentoring a young lady who we hope to pass on our farm.
16 And you know, it becomes increasingly difficult as these
17 regulations mount to be able to do what we love to do.

18 So I thank you for coming and for your attention.
19 I know I have a headache. I can't imagine -- you know,
20 from sitting here since 10:00. But thank you.

21 CHAIRPERSON LONGLEY: Thank you very much.

22 Veronica Vincencio. Is Veronica here? She's a
23 COS student. Casey Creamer.

24 MR. BRAZIL: Excuse me. Can I address the Board
25 for one quick second?

1 My name is Butch Brazil. I filled out a comment
2 card. I spent my entire day here. I've got to go back to
3 the port tonight. I've an integrated agronomist, a CCA.
4 I consult to many growers, both small and large organic.
5 I go from Coachella Valley all the way to Madera to
6 Maricopa to Arvine to Riverdale, all over this valley.

7 I write recommendations. I look at water
8 quality. I look at soil reports. And I'm going to tell
9 you, if I put one-size-fits-all program in front of every
10 one of my growers, I won't be in business. So I'm asking
11 you guys to consider a one-size-fits-all does not work.
12 Thank you.

13 CHAIRPERSON LONGLEY: Thank you. Before you
14 leave, let me get your name for the record.

15 MR. BRAZIL: Butch Brazil.

16 CHAIRPERSON LONGLEY: Thank you.

17 Carmen, did you want to say something?

18 BOARD MEMBER RAMIREZ: Sorry to jump right in in
19 front of you again.

20 I have to leave. So I live in Merced and my
21 babysitting will only hold my baby until 7:00. So I'm
22 really sorry that I don't get to hear the rest of the
23 comments.

24 But you know, this is my first time meeting all
25 of you. I hope that you'll see that the Board and at the

1 very least that I, you know, are open and happy to see the
2 involvement. And you know, thank you for such a strong
3 showing in Tulare.

4 So I hope that you don't take my having to leave
5 as any kind of disrespect or lack of interest in this
6 subject.

7 So I will make the transcript of what's going to
8 happen after I leave -- I'll make myself read that so I
9 get the full feel of the comments. But for now, I do have
10 to leave. So I'll apologize and not take up any more of
11 your time sir, thank you.

12 CHAIRPERSON LONGLEY: Casey Creamer. And then
13 next will be Ofelia Zaragoza.

14 Thank you, Carmen.

15 MR. CREAMER: Carmen, I understand your concerns.
16 I have a two-year-old and two-week-old I want get home to.

17 I'm Casey Creamer representing the California
18 Cotton Growers Association, California Cotton Ginners
19 Association, and the Western Agricultural Processors
20 Association.

21 Here today on the cotton side, we represent 100
22 percent of the production here in California. And we are
23 committed to finding solutions and working with you guys
24 in order to achieve those solutions.

25 Thank you for coming to Tulare. As you can see,

1 Tulare is a much different workshop setting than what
2 happens up in Rancho Cordova. And I appreciate you coming
3 here and listening to the affected community. I think
4 that really needs to happen. It really needs to happen in
5 every single one of the coalitions that you go and visit
6 or that you're regulating.

7 I really think that the East San Joaquin, the
8 draft that was released and had a workshop in Sacramento
9 would have been much different showing had you had that
10 workshop in Madera or Merced. And I believe there is
11 still a lot of concerns with that draft, which is a second
12 iteration, which is very similar to the draft -- the rough
13 draft that we're talking about here today.

14 So my comments are just going to focus on the
15 process. We've submitted comments along with other
16 agricultural groups. I'm not going to reiterate.

17 But along the lines of process, I appreciate
18 staff's commitment to continuing to work with the South
19 San Joaquin up until mid-November on this Order.

20 My concerns are is that that draft is very
21 similar to the one that's being voted on by the Board on
22 October 2nd and 3rd, the East San Joaquin. The major
23 components that are being voted on there are going to
24 effect all these people here. So I really -- I'm
25 concerned about the ability to really work on this

1 regulation here all the way up until November and then
2 many of the major components are going to be -- could
3 potentially be adopted in October.

4 So what I would ask the Board here today is maybe
5 that the first order is going to be the toughest. So
6 maybe we step back and all the major components that we
7 think would be applicable to all coalitions, we work on
8 those issues and come up with something that the
9 agricultural community and the other stakeholder
10 communities can accept. We get that program developed,
11 and then the rest of the coalition groups they can address
12 the specific concerns and move on from there. I think
13 you're get a much faster process after that.

14 So I just would ask you, your commitment to maybe
15 delay that East San Joaquin Draft Order to allow everybody
16 to work on this Order and move forward. Thank you.

17 CHAIRPERSON LONGLEY: Thank you.

18 Ofelia Zaragoza.

19 George Clausen. And next will be Walter Ramirez.

20 MR. CLAUSEN: Good evening, Mr. Chairman, Board
21 members. Thank you for your patience today. And I'm
22 still practicing mine.

23 My name is George Clausen. I reside [REDACTED]
24 (inaudible) Woodlake, California. I'm a small farmer,
25 little over 30 acres of oranges. And my concerns are

1 three: Cost, extra work, and the approach to the problem.

2 I'll all be very brief. I came today and I
3 understood the cost was \$120 an acre. And all of a
4 sudden, it's reduced to \$21. And to me, that's suspect.
5 These are only estimates. And my problem is government
6 programs generally underestimate their costs and they cost
7 a lot more than what is originally stated. And I suspect
8 the same may be true here.

9 The extra work, I'm a sole proprietor. I do all
10 my own work. And I see a large increase in paperwork in
11 particular through this program of recordkeeping, et
12 cetera. I keep records. I know what I do. I do a good
13 many things. I keep up to date. But I'm still saying
14 that you're going to have annual reports. I've heard of
15 one was numerous pages long. And I'd like to see some
16 streamlining to some of that.

17 And the last is your approach to the problem.
18 You've got one here and your approach is everybody is
19 guilty. And you've heard that earlier today from other
20 people. I think you ought to start out a little slower.
21 Take some -- before you blame everyone, go ahead and check
22 some of the high vulnerability areas. Find a program that
23 will work for them. And then you can follow on later as
24 we planned. Thank you.

25 CHAIRPERSON LONGLEY: Thank you.

1 Walter Ramirez followed by Don Palla.

2 MR. RAMIREZ: All right. Thank you. Welcome to
3 (inaudible) California Rural Legal Assistance Foundation.

4 First of all, I'm a former farmworker from Fresno
5 County. And currently live in Fresno. Been living there
6 for more than 13 years. And now I'm a community advocate
7 with the foundation. And I work with different
8 communities in Fresno County, Tulare, Merced, and
9 Stanislaus County as well.

10 So one of the things that's very common with
11 these communities are low income. Also that live under
12 poverty lines. Most of them live under low income federal
13 standard. And yes, they are communities of color. And
14 yes, the people that are getting affected are people of
15 color. That's something that needs to be recognized. And
16 that's a big issue we need to see because they are the
17 people that are doing the work. And once again, they're
18 the people getting affected.

19 Second, also like to say that while there is more
20 than one report, other than the U.C. Davis, that indicates
21 there is other sources of pollution for other than
22 drinking water. Most of the reports indicates that
23 agriculture is the main source of pollution.

24 One of the things I would like to suggest is that
25 those the polluters actually have to pay. People -- I

1 also respect people who have been farming for a long time,
2 they're doing the right thing and trying to do the right
3 thing. And they're working out of good faith as well.
4 They're growing jobs for a lot of the communities at the
5 same time.

6 But also I would like to recognize that there is
7 an issue that needs to be addressed that there is an
8 issue. And I would like to commend the comments that have
9 been encourage collaboration, not only with this agency
10 but also with those communities.

11 So I encourage every stakeholder on this issue
12 that includes the farming community, this agency, the
13 communities, and other agencies, such as mine and
14 Community Water Center, to work together. And I really
15 encourage the farming community to approach agencies that
16 are working towards this issue and -- you know, and then
17 we'll be able to find why we're trying to find solutions
18 and we'll be able to find the how. Thank you.

19 CHAIRPERSON LONGLEY: Thank you.

20 Don Palla and then Eric Miller, Michele Costa.

21 Excuse me if I make a mistake on this name. John
22 Schaap with the Kern River Watershed Coalition.

23 Michele?

24 MS. COSTA: Yes.

25 CHAIRPERSON LONGLEY: Go ahead.

1 MS. COSTA: Good evening. And thank you very
2 much for your patience and time today. Appreciate
3 everyone who's stuck around as well.

4 Michele Costa, Executive Director for the Kings
5 County Farm Bureau.

6 This late in the day, I will try not to sound
7 like a broken record. Everyone has made some really great
8 points today. But few key points I want to make is just
9 the first problem with this program is that it is based on
10 an assumption, an assumption that every irrigator is a
11 potential discharger. So that's obviously a huge problem,
12 and it creates what everyone has talked about with placing
13 the blame on small or large farmers.

14 Because this program has potentially so much
15 significant cost, one of the main problems and issues that
16 we have as a Farm Bureau is just the fact that our farmers
17 will not be able to continue with their operations. What
18 we are currently seeing with the dairy industry and that,
19 you know, people are losing their operations, people are
20 filing for bankruptcy, people can no longer provide for
21 their families because regulations have come so far and
22 people have incurred so many costs, and that's where we
23 see this program potentially going. So I ask that we
24 really take that into consideration.

25 Tricia from Tulare County Farm Bureau made a

1 great point as far as the acreage impacted and could
2 potentially be removed from production. We also have to
3 think about how many jobs will be lost if that is to
4 happen.

5 We rely on the valley for agriculture. That is
6 really our only economy that stabilizes this area. And we
7 really need to work to preserve that.

8 So again I thank you for your time.

9 CHAIRPERSON LONGLEY: Thank you.

10 Don Palla, and then Melanie Aldridge.

11 MR. SCHAAP: All right. Thank you very much,
12 Chairman Longley and members of the Board. Thank you for
13 coming to Tulare today.

14 My name is John Schaap. I'm an agricultural and
15 civil engineer from here in Visalia. I've got extensive
16 experience with ag and water quality. And I'm
17 representing the Kern River Watershed Coalition.

18 While water quality is definitely important, we
19 are all here to find a reasonable balance to finding
20 optimal regulation where needed based on sound science.

21 I question the approach of a blanket regulation.
22 Again, the assumption that every irrigator is a
23 discharger. I think we need to look at that very
24 critically.

25 The Draft Order has findings that are supposed to

1 be the basis for the Order. And Finding Number 18 stated
2 that studies indicate that fertilizer from irrigated
3 agriculture is a major source of nitrate pollution in
4 drinking water wells and that significant loading of
5 nitrate continues as a result of agricultural fertilizer
6 practices.

7 Now, this sited a couple reports, and I took a
8 real critical look at all of them. The one that seemed to
9 have most information was this USGS report which has also
10 the logo of Water Boards on it. And I thought it was
11 interesting in this that in the conclusions, it concluded
12 that nitrate was not correlated with agricultural land use
13 in general. And actually, there is a lot in here. That's
14 probably more complicated than I can really get into in
15 three minutes.

16 But this is very notable that nitrate was not
17 correlated with agricultural land use in general. And
18 this was for our area of the Tulare Lake Basin, and it
19 noted that there were other primary study units in the
20 Central Valley where they had come to similar conclusions.

21 Now, while correlation doesn't indicate a cause
22 and effect, it's hard to link something that's causal when
23 there is no correlation. In my mind, this casts some
24 doubt on this blanket approach, this assumption that every
25 irrigator is a discharger.

1 I believe that what we're seeing in groundwater
2 are larger than legacy issues. There's been a lot of
3 discussion about that today. I think that's particularly
4 evident in Kern County where you have long travel times,
5 very deep, deep groundwater. Takes a long time to see
6 current impacts in the groundwater. So obviously we're
7 looking at legacy impacts.

8 We need to craft a regulation, if needed, based
9 on the true assessment of legacy versus current impacts.
10 We have some current data that Blake Sanden shared with us
11 that showed we're doing good irrigation Efficiency and
12 nitrogen efficiency on our major crops. So I just
13 question whether we need to step back, focus on fixing
14 these solutions to the disadvantaged communities and just
15 take another run at a reasonable regulation based on good
16 science and a measured approach.

17 Thank you.

18 CHAIRPERSON LONGLEY: Thank you.

19 Melanie Aldridge and Donna Fenton.

20 MS. ALDRIDGE: Good evening. My name is Melanie
21 Aldridge. I'm the CEO of American Orchards, and we're
22 based in Kern County. But I also oversee other farming
23 operations in multiple other counties in the state.

24 When I was thinking about what my comments would
25 be for this hearing, I thought about two articles that

1 came across my desk. One is about Ayn Rand and the book
2 Atlas Shrug, which in the 1990s the Library of Congress
3 named as the most influential book in the US after the
4 Bible. What is Atlas Shrug about? It's about an allegory
5 in which captains of industry struggle against stifling
6 regulations in an overarching government. And one by one
7 closed down production, bringing the world economy to its
8 knees.

9 Agriculture right now is the one bright spot of
10 our economy. I see it in the everything that I read. We
11 see outside funds flocking to invest in agriculture. And
12 yet over and over, you hear people that are going to leave
13 that lifestyle and that career. And the statistics back
14 it up. I think the average age of the farmer a couple
15 years was 63. Now we're up to 68 years of age. The
16 organic farmer described her children not going into
17 farming and trying to mentor someone and they're losing
18 interest. Why? Because of the regulations.

19 The small farmers -- I work for a large
20 diversified farmer. I have a law degree. It's a family
21 operation. I report to three brothers. But we are a
22 family farm and we are large.

23 The small farmers are going to go out of
24 business. I have a law degree. People like me are going
25 to continue to prosper in agriculture, but I don't think

1 that's what we all want in our industry.

2 The other article I came across was Sacramento
3 Bee where it says, "Legal team reaches out to farmers."
4 And it starts out -- I have the laugh -- "Succeeding as a
5 farmer in today's world of complex regulations and global
6 trade takes more than a tractor and hard work. It helps
7 to have a good lawyer."

8 The increasing complexity of agriculture has
9 created a businesses opportunity for law firms in
10 Sacramento and urban centers surrounded by the world's
11 most productive farming regions.

12 The law of unintended consequences says just
13 that. There are people that are going to profit from this
14 and they're not going to be the farmworkers in the
15 communities that need the help. Funds should go to help
16 those people. There's not anyone in our farming
17 organization that would disagree with that.

18 But to require these plans on lands that overlie
19 aquifers that aren't suitable for drinking water is
20 ludicrous and a waste of funds. If we want to help the
21 people, we should focus on those things and not try a
22 one-size-fits-all plan for the agricultural community.

23 My last comment would be if someone on my staff
24 came to me and said, "Wait, I thought it was \$120. Now
25 it's 29," they probably wouldn't be very long on the staff

1 because I can trust neither number, the first number they
2 came up with or the second one. You can't have that kind
3 of range and be accurate. Thank you.

4 CHAIRPERSON LONGLEY: Donna Fenton.

5 MS. FENTON: I'm Donna Fenton with Kern County
6 Public Health Environmental Health Division. I'm the
7 Chief Environmental Health Specialist over the Water
8 Program. And I'm here to relay a few points in regards to
9 our water quality program.

10 Kern County has had a well ordinance in effect
11 since 1989 that requires a 50-foot annual seal for both
12 domestic and agricultural wells. We have maintained a
13 well inspection program to verify seal depth requirements
14 on all new well constructions.

15 The annular seal in areas where there is a
16 concern for surface water contamination may increase the
17 depth of that seal. Many times, the seal depth is greater
18 than 100 feet. In many cases, Kern County drillers are
19 required to seal ag wells all the way down to the
20 compliant clay layer.

21 Kern also requires a lower seal if the complying
22 layer is penetrated to prevent a migration into the
23 compliant aquifer.

24 Kern County requires all new wells to be tested
25 and water quality analysis submitted. Current data

1 shows -- and keep in mind that we've just started putting
2 it into our database in 2009.

3 In 2009, the 438 well permits that we issued and
4 had drilled, only nine exceeded the MCL for nitrates.

5 2010, 141 wells; 14 exceeded the MCL for
6 nitrates.

7 2011, 348 wells drilled, nine exceeded the MCL
8 for nitrates.

9 And in 2012, thus far we've had 287 wells drilled
10 and only six have exceeded the MCL for nitrates.

11 As of 9:00 this morning, we have 116 State small
12 water systems that we regulate. Those would be the five
13 to 15 connection. Anything above that, the State
14 Department of Public Health Services regulates. And we
15 only had one with a nitrate violation at this time.

16 We have not seen a significant increase in
17 nitrate contamination in Kern County in the wells that we
18 have records of. And we would be happy to share this
19 information with your Board.

20 CHAIRPERSON LONGLEY: Thank you.

21 MR. SKILLEN: I'm Bill Skillen (phonetic),
22 environmental inspector in the Lemoore area. Up until
23 last year when my father passed away at age 94, good
24 health with the arsenic in the drinking water.

25 All of this regulatory business is over my head,

1 and I got more than of it already that I need. And I rely
2 on the commodity groups and coalition and NRDC to
3 represent me and look out for my interests. I hope that
4 you will work with them and come up with something that
5 will help. I need to be farming, not over here in these
6 meetings.

7 We implement new technology and management
8 practices when they work. And that's the best way to
9 solve this problem. I kind of wonder if it is a problem.
10 But monitoring is not going to solve the problem. It is
11 going -- and I urge you not to implement a huge program
12 that's costly. I know that government programs that get
13 implemented are hard to scale back or stop once they're
14 started. Really need to think this through.

15 I don't believe that my farm contributes to
16 drinking water contamination. I drink the water. My kids
17 drink the water. And my employees drink the water. I
18 can't run that farm without good employees.

19 It bothers me that some of these groups who
20 represent -- claim to represent the farmworker collect
21 their legal fees and go back to San Francisco and Santa
22 Barbara. And the farmworker is still here, and trying to
23 penalize the person who employs them. I don't think
24 that's benefits them at all.

25 Those are my comments. I just hope that you can

1 work through science and more science and less engineering
2 because if you want to get something overdone, hire an
3 engineer. Thank you.

4 CHAIRPERSON LONGLEY: Gayle Frye and Bill Thomas.
5 And then David Brown.

6 MR. THOMAS: Thank you, Karl, and members for
7 sticking it out all day down here. I just wanted to raise
8 a couple points.

9 We submitted 35 pages of comments. I'm not going
10 to go through them all. One point, the draft allows 120
11 days to get everyone signed up under the new coalition
12 standards. This is woefully inadequate for our coalition.
13 We have about two million acres that have not been under
14 the Surface Water Program that will have to be brought
15 into the new program. So it needs more time.

16 The reason that we have two million acres is this
17 assumption that a couple people criticize that assumes
18 that if you irrigate, you are going to be a discharger to
19 groundwater.

20 Many of our areas are 600, 800 feet reusable
21 groundwater. If you're doing drip or sprinkler, micro
22 irrigation, it's just not going to get there. The way the
23 draft is, there's no process to get those people out and
24 it needs to be accommodated in some fashion.

25 Also, Mr. Sholes had on his list another

1 component that hasn't had much attention and needs to.
2 The existing waivers call for access by the regulators on
3 your ground in strict compliance with the California Water
4 Code, which says it has to either be permission or by
5 warrant. The reason the Code says that, that's what the
6 constitution calls for.

7 This new draft, however, has a provision that if
8 you sign up here, you give away your constitutional right.
9 And they have access on just some reasonable notice to
10 come on your land. That's improper. It's inconsistent
11 with the law and it's inconsistent with the constitution.
12 You should write it just as you have for the last many
13 years since '04 under the waiver.

14 The issue of cost -- just in closing, we thought
15 120 woefully understated the cost of this new program
16 going to groundwater. But we've used the 120 because
17 that's what the analysis said. That's what this Board's
18 analysis was. You've put that range also in the basin
19 plan. You can't just because you see a few hundred faces
20 out here try to walk away from that number and say, well,
21 it was probably only 20.

22 Thank you.

23 CHAIRPERSON LONGLEY: Bill, in your comments --
24 they were long -- they weren't so long. You had a lot of
25 them --

1 MR. THOMAS: We didn't write the Order.

2 CHAIRPERSON LONGLEY: One of the things you
3 talked about the CV Salts. And CV Salts program, of
4 course, focused right now on addressing basin plan and the
5 beneficial use, water quality objectives, those kinds of
6 things.

7 I think some of the points will be addressed by
8 that when we get through that exercise. You also had
9 objection to us using -- I say us -- the staff putting
10 words in there. CV Salts, since it's not an official
11 program, per se, but quite frankly I think you could
12 substitute the word Regional Board rather than CV Salts or
13 something like that. It simply is a program official
14 program of this Board. I think it probably a minor point
15 and I think it's something we can work out easily, but it
16 just struck me because the CV Salts program as I see it is
17 so critical to the overall effort that you're doing, given
18 the fact it's addressing the beneficial uses. And we know
19 that.

20 When the basin plan rolled out in the early '70s,
21 it was done in a very short period of time for a number of
22 reasons. And it really hasn't been substantially revised
23 since that point of time. And the CV Salts program I
24 think is a very important part of that is going back and
25 re-addressing the beneficial uses because that affects a

1 lot of what's expected of land owners. And when you talk
2 about 30,000 part per million water or less than that, on
3 the other hand, they'll be looking -- I only say this half
4 in gist. We'll be looking to make that as a salts thing.
5 Because as we go down the road and look how we're going to
6 manage salt in the valley, over the long period of time,
7 we have to find ways to do that.

8 Salt folks will take us out of business
9 eventually. It has in a lot of other places in the world.
10 And we can document today the fact what salt is doing.
11 And we have to find ways to manage it. As we go through
12 the exercises, I think we can find some of the answers
13 that you addressed today and in your comments. Thank you.

14 MR. THOMAS: Certainly wasn't denigrating CV
15 Salts. It was more of the legal point. And a regulation
16 shouldn't really make reference to something that's
17 non-regulatory.

18 CHAIRPERSON LONGLEY: Thank you. We have David
19 Brown. Loren Harlow. Following Mr. Harlow, Scott
20 Harrison.

21 MR. HARLOW: Thank you, Dr. Longley, members of
22 the Board, Ms. Creedon and staff.

23 My name is Loren Harlow. I'm with the Law Firm
24 of Stoel Reeves. We are special counsel to the Tulare
25 Lake Water Basin Storage District.

1 I want to thank you for the opportunity to
2 provide our comments on the Draft General Order. The
3 Tulare Lake Water Basin Storage District is an active
4 participant and member of the Southern San Joaquin Valley
5 Water Quality Coalition. We support the comments of the
6 coalition. However, due to the unique characteristics of
7 the lakebed. We have submitted separate comments and are
8 addressing today those unique aspects that are unique to
9 the Tulare lakebed.

10 The Tulare lakebed is an intensely farmed area of
11 the former Tulare Lake. It is made of four major streams.
12 That is water that comes in doesn't leave. Due to
13 potential flooding, tight clingy soils, high perched poor
14 quality groundwater, there are no permanent crops in the
15 lakebed. The poor quality perched groundwater is
16 collected in sub-surface drains and managed and disposed
17 of by the Tulare Lake Drainage District. Both districts
18 are active participants in CV Salts.

19 There currently is an integrated network of
20 irrigation and recirculation canals that have developed
21 over the last hundred years that are an essential element
22 of farming within the lakebed. It is essential for
23 efficient water use and salt management. All of the
24 channels are man-made structures with no outflow to
25 natural streams or water bodies. None of these canals are

1 reconstructed natural streams. The lakebed growers have
2 an extremely high water use efficiency to the wise
3 management practices, tight and clingy soils, and the
4 reuse of 100 percent of the water entering the lakebed.

5 DWR has documented the water use efficiencies at
6 approximately 98 percent. Our review of the Draft General
7 Order has revealed that the newly proposed Surface Water
8 Monitoring Plan includes a new program or a new term of
9 constructive conveyance structures. Such examples
10 included in the information sheet are the Homeland Canal,
11 the Lakeside Ditch and West Side Canal.

12 May I have another minute or so, Dr. Longley?

13 CHAIRPERSON LONGLEY: You have one more minute.

14 MR. HARLOW: Due to the broadness of the
15 definition, we are concerned that the expanded monitoring
16 program could include all man-made canals in the Tulare
17 lakebed. The potential inclusion of all canals within the
18 lakebed under the constructive conveyance structure
19 definition could have potentially devastating impacts on
20 lakebed growers without providing meaningful or reasonable
21 water quality benefits.

22 We have in our comments provided a suggested new
23 definition of our farm conveyance structures that would
24 clarify the canals within the lakebed are to be considered
25 similarly to other single on-farm delivery and

1 recirculation systems. In fact, that's how the system is
2 operated. Every grower is dependent upon the other of
3 water delivery and system management.

4 Thank you for your consideration and the
5 additional minute.

6 CHAIRPERSON LONGLEY: Thank you.

7 I have a card for Mr. Harrison, but Mr. Harrison,
8 he didn't want to speak. That's still true?

9 Next then is Bruce Kelsey, Rick Wegis, shirley
10 Kirkpatrick -- she's already spoken. Don Patrick. Is Don
11 here?

12 MR. PATRICK: Yeah.

13 CHAIRPERSON LONGLEY: Next will be Bill Newton
14 following Don.

15 MR. PATRICK: Thank you, Mr. Chairman and Board.

16 My name is Don Patrick. I'm here to represent --
17 I wear many hats, but I'm here to represent a small water
18 company I manage.

19 We have two main wells. I've heard a lot of
20 things going on here tonight and a lot of accusations and
21 Ms. Meraz is absolutely right on. We want to make sure we
22 have clean water for our people which we supply water to.

23 Given that, I'm not so sure about the MCLs that
24 the State and the Feds have come up with. I have a lot of
25 issues. And only because of that -- back to my little

1 water district. Our main well is what's called Wagon
2 Wheel. It's 70 feet down. There is a chamber at the
3 bottom. It's 29 horizontal shafts. It's made for vast
4 amounts of water to capture the water.

5 Well, we have to test, like every other small
6 water company. And we submit those tests to our water
7 people who use the water, of course. When we test for
8 anything high MCLs, it's mandatory for us to pass that
9 onto the water users.

10 Well, we have no nitrate problems. We have no
11 pesticide problems. But we are high in uranium, okay, as
12 is with many wells in the foothill area. It's just above
13 MCLs.

14 So I ask the county, where does this number come
15 from? Where is the research on that? They couldn't tell
16 me. "We'll get back to you. We're going to check with
17 the State."

18 They check with the State. They come back, "You
19 know something? We're not sure where that number comes
20 from."

21 Okay. Well how do they establish that MCL?

22 Now, which leads me to the next step. I heard
23 from the staff over here the word "potential." There is a
24 potential. It's very dangerous for people to make policy
25 and regulation based off potential and not true data.

1 Now, we saw in the first panel they had lots of,
2 you know, stuff up there. Yes, there are problem areas
3 throughout this valley. That's no doubt. But you're
4 taking the approach to much like a doctor, if somebody has
5 a stomach ache, you're going to chop the body off from the
6 head.

7 You need to check the facts. Look the facts.
8 And then from there, make good sound policy. And I don't
9 see that happening right now.

10 Give me just a couple more minutes.

11 CHAIRPERSON LONGLEY: One more minute.

12 MS. PATRICK: One more minute. Thank you.

13 These growers back here, you guys are one cog in
14 a big wheel. Okay. One cog. And it's documented that
15 the average grower deals with over 70 agencies, both State
16 and federal. And most of those agencies have their
17 fingers in the pot, whether it's a fee -- they like to use
18 the word "fees." Now, whether it's \$120 an acre or \$22 an
19 acre or a dollar an acre, that's a dollar an acre too much
20 based off of potential. Potential regulations.

21 I want to thank you again.

22 CHAIRPERSON LONGLEY: Thank you.

23 Bill Newton and then --

24 MR. KELSEY: My name is Bruce Kelsey. Did you
25 call me?

1 CHAIRPERSON LONGLEY: Yes, your name?

2 MR. KELSEY: Bruce Kelsey.

3 CHAIRPERSON LONGLEY: Oh, Bruce go ahead. Bruce,
4 I don't have a card here go ahead.

5 MR. KELSEY: You called my name.

6 CHAIRPERSON LONGLEY: Oh, I did. Go ahead.

7 MR. KELSEY: I'm an orange grower.

8 I wanted to expand just a little bit on the kind
9 young lady that talked about the organic program. In
10 organic farming, which I have a lot to learn about, we are
11 farming about 700 acres of organic citrus this season and
12 are in transition. And we use organically-certified
13 proven materials to add nutrition to our crops and
14 organically-approved insect growth control measures. And
15 weed control is for the most part mowing or disking. And
16 so we're in tune with nature and nature's products.

17 And I'm asking that you consider organic farming
18 that are certified with USDA and CDFA certification to be
19 treated in a little different light. And if you want to
20 regulate something, my question is: Are you here to
21 regulate nature or nature's God? Thank you.

22 CHAIRPERSON LONGLEY: Thank you.

23 Bill Stone. Charmie Hogan. Kathryn Hogan.

24 MS. HOGAN: Good evening. This is a long
25 meeting. But I did wait because I have concerns --

1 CHAIRPERSON LONGLEY: Your name, ma'am?

2 MS. KATHRYN: Kathryn Hogan.

3 CHAIRPERSON LONGLEY: Kathryn Hogan.

4 MS. HOGAN: Yes. I'm a nutritionist. I teach
5 children about health. And I'm also a citrus grower.

6 And these regulations impose onerous costs on
7 agriculture without any documented benefits to human
8 health. No documented benefits.

9 The amount of nitrates consumed by humans and
10 processed foods is orders of magnitude higher than those
11 that are found in the groundwater. And to document that,
12 I did find an article just on my little iPhone, if you'll
13 give me a moment, from the American Journal of Clinical
14 Nutrition. This is published in 2009 by the American
15 Society for Nutrition.

16 They're discussing how the nitrate levels were
17 set for consumption in food by the World Health
18 Organization. I'm going to paraphrase this. I will
19 e-mail this to you. And also how that level of MCL was
20 arrived at for the US standards in groundwater.

21 This was a concern over babies who consumed
22 nitrates in their formula. You may recall this was in
23 1950s and was used to set the standard of 45 parts per
24 million and milligrams per liter.

25 It turns out that those contaminated wells that

1 made the children/infants sick were contaminated by fecal
2 contamination. Out in the rural areas from the people
3 that we heard speak saying their water is polluted, they
4 all have septic tanks also out there.

5 I challenge you with what has been stated by all
6 the ag organizations, including, I can tell you, our
7 operations that there is no way we are putting that
8 nitrate in the water.

9 Where is it coming from? Staff needs to tell us.
10 Because our practices have been conservative with water
11 and fertilizer. We do foley. We do some injection. But
12 it's all measured. And it's all -- 90 percent of it, as
13 far as ours is concerned, our plant is going to take up.
14 I want you to tell me where it's coming from and prove to
15 us that it is, in fact, irrigated agriculture.

16 These regulations have the potential for us
17 citrus growers to go out of business. And for
18 agriculture -- California agriculture, we are already
19 facing fierce foreign competition that don't face -- don't
20 have to deal with these onerous regulations. They need to
21 be reasonable. And they need to show that there is a
22 health benefit that is demonstratable based on sound
23 science you heard all afternoon.

24 I want, and I think everyone in this room would
25 like to see, this is related to a health benefit. And our

1 costs are not ballooned up again to put California
2 agriculture out of business and bringing food in from
3 other countries.

4 Thank you.

5 CHAIRPERSON LONGLEY: Thank you.

6 I had a card also from Charmie Hogan. Okay.
7 Good. I also have a bunch of other cards here that folks
8 filled out but didn't indicate that they wanted to speak.
9 Is there anybody here who wants to speak? We'll start in
10 the front of the room.

11 MR. MC GOWEN: I have a question. My name is
12 Gary McGowen. I'm a farmer. Pistachios. And I'd like to
13 know the process of these wells that are supposedly
14 checked that have so much bad stuff in them. Is anything
15 checking those? They take the samples or anything of that
16 nature? Do you know?

17 CHAIRPERSON LONGLEY: That's a question that
18 staff needs to address. Go ahead.

19 ASSISTANT EXECUTIVE OFFICER RODGERS: Basically,
20 the data that we looked at and that map I showed much
21 earlier today for Tulare County, that's in the groundwater
22 ambient monitoring assessment database, Geotracker
23 database. So many of those wells are community water
24 supply wells. They're County Department of Environmental
25 Health samples that were collected when the wells were

1 first installed. And that data does go in. We do not
2 personally check the QA/QC. But our understanding is that
3 that data had been looked at and that's what goes into the
4 public database.

5 MR. MC GOWEN: That's the wells that we're
6 talking about that the legal group up here is talking
7 about; is that correct?

8 ASSISTANT EXECUTIVE OFFICER RODGERS: They may
9 not be the same wells. They may be. I do not know.

10 MR. MC GOWEN: What I'm wondering is if those
11 wells are that bad of shape, why hasn't somebody written
12 an NOV and followed it up?

13 ASSISTANT EXECUTIVE OFFICER RODGERS: Most of
14 those wells are not regulated by our agency. We do not
15 regulate public water supply wells. That's done by the
16 California Department of Public Health.

17 MR. MC GOWEN: Well, I mean, why aren't they
18 doing something?

19 ASSISTANT EXECUTIVE OFFICER RODGERS: I can't
20 answer that question today.

21 MR. MC GOWEN: Thank you.

22 MR. ALBERTSON: Good morning. My name is John
23 Albertson. I'm a retired ag teacher from high school
24 where I taught for 32 years.

25 If one of the previous speakers established the

1 criteria that small acreage farmer is 300 acres, then my
2 wife and I are microscopic. We have a little
3 two-and-a-half acre place between Shafter and Wasco where
4 we have some horses. When I have pasture, we have calves
5 to work the horses. We have our dogs, 35 fruit trees, a
6 vegetable garden and a flower garden for the boss.

7 We get our ditch water from the Shafter Wasco
8 Irrigation District. But besides representing myself
9 today and my wife, I also represent a Laotian strawberry
10 grower down the road, a Mexican lady that grows roses, and
11 an Indian vegetable farmer, and a friend that has some
12 bucking bulls and horses on his small piece of ground.
13 They couldn't be here because by their language barriers,
14 they're intimidated because of big government.

15 I'm concerned about the prospects set forth by
16 the powers that be concerning and inferring that
17 agriculturalists are polluters or dischargers and not
18 cognizant of the present water shortage which exists in
19 southern half of the San Joaquin Valley. We know
20 different.

21 Water is a precious resource in short supply and
22 valuable. On our place, all of our trees are irrigated
23 with drippers. We don't irrigate, we build temporary
24 lakes that breed mosquitoes and perpetuate West Nile.

25 Our small pasture ground is now foul because it

1 has to be leveled again. When it's replanted, it will
2 support calves and our horses.

3 I believe the management of our resources, of
4 which water is one, is representative of the individuals
5 who are small acreage farmers, either for-profit with
6 specialty crops and high-intensity farming practices or
7 land owners with small parcels for recreational
8 agriculture which might include the horse owners, the
9 backyard farmers, and other folks who enjoy working with
10 Mother Nature to wrestle something from her heart, such as
11 tomatoes you share with a friend.

12 I firmly believe those who enjoy and live the
13 relaxed rural country living lifestyle are cognizant that
14 they have a responsibility to treat Mother Nature with
15 gentle care as a woman should be treated and be mindful
16 that, as land owners, we are blessed to be chosen as
17 stewards of her productivity and her bounty.

18 As a small acreage land owner, I'm not
19 financially able to incur the tremendous debt you would
20 want me to bare with regards to the employment of
21 geologists, hydrologists, and other land and water experts
22 to map and monitor what is occurring beneath the surface
23 of our small and really insignificant agricultural
24 operation. Our well is domestic and for the household use
25 only. Everything else is ditch water.

1 If the chemical and Water Boards force me and
2 other small acreage land owners to shoulder this
3 disproportionate debt, I and others like me will no longer
4 be able to afford to keep our place drained and
5 productive. The tax burden is staggering. And now you
6 want to add an additional weight to an already heavy load.
7 We pay so much and get so little. Additional expenses
8 will be the death nail for folks like Juanita and I and
9 the previously mentioned neighbors who don't want to live
10 in town, who enjoy the sweat, dirt, work and worry the
11 small acreage farming who are contributors to that
12 magnificent two percent who, in the face of overwhelming
13 regulation and bureaucracy, are able to feed you, the rest
14 of America, and the world.

15 Might I ask you all to please consider our
16 perspective. These proposals are a hindrance, not a help,
17 to the most productive and progressive producers of food
18 and fiber on earth, these men and women behind me, the
19 American farmer and rancher. Thank you.

20 CHAIRPERSON LONGLEY: Yes, sir.

21 I'm sorry. I was asking for the next person to
22 speak.

23 MR. LARSON: Good evening. Thank you for your
24 fortitude this evening.

25 Mark Larson, General Manager for Kaweah Delta

1 Water Conservation District and Coordinator for the Kaweah
2 River Subwatershed of the Southern San Joaquin Valley
3 Water Quality Coalition.

4 Little different tact here, but just occurred to
5 me kind of a summary of some of the things that I've heard
6 today and maybe a plea to the Board. You've heard a
7 variety of issues today, all real issues regarding this
8 General Order that's being proposed.

9 And I heard some really key things having to do
10 with the process. One was that currently, at this time,
11 we have a draft of a draft, which means that there is
12 another draft coming out. That's encouraging to me
13 because that means that draft might have some improvements
14 to it. A lot of the objections that you've heard today
15 might be rolled into that new draft.

16 Second is that I've heard from Pamela and I
17 believe Clay an openness to look at another alternative to
18 handle groundwater. And that's very encouraging as well.

19 And third, I believe, Dr. Longley, you mentioned
20 the openness for maybe another workshop, seeing the
21 participation that we've had here today. That's also very
22 encouraging.

23 So quickly my plea to the Board is that you fully
24 vet this General Order that you're proposing, that you
25 don't sell this very complicated issue short. And if

1 necessary, delay the current schedule that you have. I'd
2 like to think that we could proceed with a schedule that's
3 been proposed. But if things don't get fully vetted, I'd
4 like you to consider a delay as well.

5 Thank you.

6 CHAIRPERSON LONGLEY: Thank you.

7 Other folks wishing to speak, would you please
8 come and sit up front? And so we don't lose a lot of
9 time. Go ahead.

10 MR. KNUDSON: Craig Knudson, Tulare County.

11 I came to this hearing today prepared to say good
12 morning and welcome to Tulare. And then I was prepared to
13 say good afternoon and welcome the Tulare. Well, good
14 evening. Why are we still in Tulare? Man.

15 Anyway, I sat through a lot of these meetings
16 over the years, and I know it takes a lot of time because
17 they are difficult issues. But listening today -- and I
18 think we're focused on too many things. You've got legacy
19 issues. You've got current farming practices. And you've
20 got drinking water quality problems. Those are three very
21 distinct issues, yet we're trying to address them with one
22 document from staff and one way to get at that.

23 And I think we need to -- I'd sure, as we move
24 down this road, like to see those maybe addressed in a
25 different way. Address the legacy issues. Address

1 current practices. Address the drinking water quality
2 problems.

3 You know, when I listened to Ms. Martinez and
4 Ms. Sanchez and others talking about the drinking water
5 problems, the State of California already has its
6 resources. Prop. 84 money is available to clean those up.
7 Now, the ruling class, whether it's regulatory or
8 legislative, has decided not to do that. And I don't know
9 why that would be. I think that's a question that people
10 should ask their legislators and their boards. That needs
11 to be taken care of.

12 And I also, when listening this afternoon, the
13 report relies almost exclusively on a third-party
14 coalitions to gather this information. That's probably
15 the most effective way to do it. But the Central Regional
16 Water Quality Control Board, who's already gone past this
17 step, they're findings those coalitions are starting to
18 resolve all this.

19 So I think a good question to ask staff if I was
20 sitting on the Board today would be that if third-party
21 coalitions aren't available to us and we've got 23,000
22 farmers to regulate, how are we going to do that? And I
23 think it's a question that needs to be answered before
24 this moves on.

25 Thank you very much.

1 CHAIRPERSON LONGLEY: I think we have to by
2 individual permits. And that's the last thing we want to
3 see. Clear back when the issue started back in 2003, we
4 were driven off by the law in the Senate which sunsetted
5 the original waivers, there were individuals on this Board
6 at the time that wanted individual permits on each farmer.
7 At that point in time, I thought that that was insane.
8 Talk about creating a bureaucracy, but it would.

9 But if we don't have coalitions, we're going to
10 have to go to individual permit. That would be nightmare.

11 MR. KNUDSON: I don't want to sit here and debate
12 that issue. I think it's something that does need to
13 be -- when you're looking at cost \$120 which is now \$21 it
14 like the high speed rail; 99 billion, 61 billion,
15 whatever. But if the \$21 is what we're saying it's going
16 to be with the coalition, if it's not, what is it going to
17 be? I think that needs to be addressed.

18 CHAIRPERSON LONGLEY: I think over the next
19 however long it takes us to get to a final permit, we are
20 going to be discussing cost quite a bit. And by the time
21 it comes up, clearly, I and I assume other members of this
22 Board want to feel real comfortable with the costs.

23 MR. KNUDSON: And again thank you for your time
24 and coming to Tulare.

25 CHAIRPERSON LONGLEY: Thank you. You raised some

1 good questions.

2 Next speaker, please.

3 MR. RUSSELL: Good evening.

4 Where do I start? You guys have heard some great
5 comments here. And everybody has great concerns about our
6 water quality here in the valley.

7 Joe Russell. I'm a small farmer/grower in Tulare
8 County for 22 years. I'm a minority. I ask why are we
9 attacking just farmers? I also am in construction, too.
10 I work around sewer treatment plants where a lot of
11 nitrate is. I work around a lot of facilities throughout
12 the valley. A lot of nitrogen is wasted, or in our waste
13 and put into our water, whether at the sewer treatment
14 plant or into canals or whatever. Why are we not looking
15 at that?

16 I ask, why are we just attacking a farmer? Every
17 one of us here is a consumer and a producer of nitrates.

18 CHAIRPERSON LONGLEY: Sir -- this is my time, not
19 your time. We'll stop the clock.

20 In fact, we do. On our waste discharge permits,
21 each and every of the wastewater treatment facilities, we
22 have quite stringent requirements on those. We have for
23 some time on nitrogen. Today, we have increasing they've
24 gone for renewal and renewal, we're putting stronger
25 requirements on them for salts.

1 So in fact -- but we regulate them through a
2 different entity. If they're discharging into a surface
3 water, they're regulated by the federal permit, and the
4 National Pollution Discharge Elimination System, or NPDES
5 for those that are familiar with it. We also have a
6 program for land disposal through the waste discharge
7 requirements. In fact, we do regulate them.

8 One big group out there that we don't regulate at
9 this level and they're supposed to be regulated at the
10 county level are the septic tanks. But in fact, this
11 Board did get heavily involved in the Chico area because
12 of septic tanks in a real concentrated area had a real
13 significant groundwater problem some years ago.

14 EXECUTIVE OFFICER CREEDON: Dr. Longley, if I
15 could just point out, there is a new State policy
16 addressing septic systems now that all our 32 counties and
17 up to 38 counties on how we implement those septics. The
18 Board will be back involved in septics.

19 CHAIRPERSON LONGLEY: Thank you.

20 Go ahead, sir.

21 MR. RUSSELL: So in hearing what you have to say
22 is that there may be -- they're not producers of nitrate
23 any more; that's what I'm hearing?

24 EXECUTIVE OFFICER CREEDON: Dr. Longley, if I
25 could just -- we regulate them directly. We have in the

1 recent past, because of the nitrate issues now being
2 raised with all the studies, are now -- if we haven't
3 been -- not putting in very stringent requirements and
4 small communities arguing about the cost of compliance
5 with those as well because of the added cost to remove the
6 nitrates from their waste stream.

7 So yes, whether it's industry, food processing --
8 this isn't against your time -- food processing or
9 wastewater or whatever it is, if it has nitrate or salts,
10 we're putting more stringent requirements on them today to
11 deal with those issues.

12 CHAIRPERSON LONGLEY: And if you're a farmer
13 using wastewater, for example, from the city of Visalia or
14 others, you fall under a separate waste discharge
15 requirement. You're not under these requirements. And
16 they're quite stringent.

17 MR. RUSSELL: Okay. I guess I would like to know
18 what the nitrates are and the dump sites or sewer
19 treatment plants, whether they use -- and I don't know
20 that we have that data here today. I don't believe we do.
21 I haven't heard anybody bring that up. We debate all day
22 long, but it makes no difference --

23 CHAIRPERSON LONGLEY: I'm sure at the next
24 meeting staff will have data.

25 MR. RUSSELL: It would be fun to hear. It would

1 be fun to hear. I guarantee you staff or the Water
2 Quality Board does not know what I have on my property.

3 Let me go on here.

4 All I hear today is that it's just the farmers,
5 they're abusers and not good stewards of the ground.
6 You're talking to a lot of people here that are second,
7 third, fourth generation farmers. If we are not good
8 stewards of the ground, we are not in business. We can't
9 pass it onto our kids or grandkids. You think we want
10 that? No.

11 You think that if we are not good stewards we can
12 grow a crop for the next year or year after or year after?

13 I don't think anybody here on staff at the Water
14 Quality Board has been out to my property to see how I
15 farm or my farming practices. Not only to see my
16 practices, my irrigation. I have no runoff. I wish I
17 did. I wish I had excess water to give. I don't.

18 Farming is a passion. I know a lot of farmers
19 here through the farm industry and through the
20 construction business. It's a passion for these guys.
21 And including me.

22 So why are we trying -- I guess why are we not
23 trying to get a global resolution to this with everything
24 instead of just saying, okay, the analogy of this is that,
25 you know what? If you're a farmer, you can only do 55.

1 Everybody else that's a homeowner, sewer treatment plant,
2 a dump site, you guys can do 75. We need a global
3 situation with global resolution.

4 Do we have the proper science? I don't know. I
5 think that proper -- if we have the proper science, we
6 would have better resolution.

7 Again, why don't we have a global resolution for
8 these matters? How many growers have been out -- let's
9 see -- how many growers have been visited by Water Quality
10 Control Board or staff to see their practices? I talked
11 about that a little bit.

12 And how are practices of nitrogen are applied and
13 when they're applied, because we just don't do it out of
14 the thin blue air, because nitrogen is very expensive for
15 us, as pesticides and as water.

16 CHAIRPERSON LONGLEY: Sir, can you summarize your
17 comments? We're going to be kicked out of here in a few
18 minutes.

19 MR. RUSSELL: You know, also, too, I think that
20 as a farmer, you guys are -- I'm guilty just being a
21 farmer before I'm even proven guilty. And I don't like
22 that.

23 You know, in closing, I have a whole bunch to
24 read here. I'm not going to because I have a headache.
25 This is unbelievable here. I'm sure I guys have

1 headaches, too.

2 The best plan should not be vague and create so
3 much grief and pain for all. That's including me and you.
4 If we have good science, would we be going through this
5 situation? But we should have a measurable result that
6 can be seen by all and a common goal for the future for
7 all. Not just the farming, but for you folks, for our
8 kids. That's what we need.

9 I hope staff takes all this into consideration.
10 And I thank you for your time.

11 CHAIRPERSON LONGLEY: Thank you.

12 The next speaker, please.

13 MS. BETTENCOURT: I'm sorry. I'm vertically
14 challenged.

15 My name is Arlene Bettencourt. I'm the Executive
16 Director of the California Water Alliance. We are an
17 organization of the next generation of agricultural water
18 leaders representing approximately 3,000 agro businessmen
19 and women statewide.

20 And you will find no greater partner in your
21 endeavors than in the next generation of farmers, not that
22 our predecessors haven't done a remarkable job.

23 But the group that I represent is the most
24 rapidly technologically evolving species on the planet.
25 If it's new and it can make us do our jobs better and more

1 efficiently, effectively, and providing equitable and
2 reliable safe water supply for agricultural, urban, and
3 environmental water users in the state, we'll do it and
4 we'll do it yesterday.

5 The concern I have today -- and I'm so thankful
6 for the young ladies to bring up -- I remember going to
7 East Orosi and being out in those communities growing up.
8 And I share your outrage. I share your outrage that our
9 State has allowed that to continue, has allowed it to get
10 to that level. And I share your fear unless the shotgun
11 blast approach to hurry up and fix it.

12 But my concern with this program is that shotgun
13 blast approach is only going to halfway solve the problem.
14 It's never going to fully create an accurate solution.
15 And I would rather see our resources focus like a laser to
16 solving that yesterday.

17 There's not much I can say that my partners in
18 the ag community haven't said already about the costs and
19 the job impact that such regulation would have, especially
20 considering that this region has suffered double-digit
21 unemployment for consecutive years now, typically in
22 result of water issues as well.

23 But I want to say that what you saw today, the
24 amount of people here today, why they're here is simple.
25 It's fear. It's a survival mechanism. It's a fear that

1 they don't know what this means. It's the fear that
2 everything that's been passed onto them and that their
3 heritage and everything that's expected of them would be
4 gone. And it's a fear they can't provide for their
5 community. And they can't provide for those communities
6 on the east side and on the west side and all of those
7 people that have their partner community.

8 So my recommendation is this: I'd like to see
9 line items of what's more specific going into this
10 program. I'd like to see more review. I would like to
11 see more cooperation and transparency because the
12 agriculture community will work with you if you're open
13 and honest with us. Thank you very much.

14 CHAIRPERSON LONGLEY: Thank you.

15 Next witness, please.

16 MR. MUNK: I have a card I'll give you in a
17 second.

18 Dan Munk, U.C. Cooperative Extension in Fresno
19 County. I'd like to address briefly some of the legacy
20 issues we talked about for some time today, maybe provide
21 a slightly different perspective, but also probably
22 repeating a few things that have been said today.

23 And what are we talking about in the legacy
24 issues? We're talking about looking at current water
25 status, looking at current water quality, and inferring

1 from that that many of those current practices continue
2 and go on. So as we look at practices 10, 20, 30, 40, 50
3 years ago, they have changed considerably today. And I'd
4 just like to try to address that briefly.

5 Previous water management practices do play a
6 significant role. And of course, in our history a lot of
7 irrigation had to do with furrow and flood irrigation. We
8 continue to use these surface irrigation methods
9 throughout agriculture, throughout the San Joaquin Valley,
10 but they have been curtailed significantly by things such
11 as sprinkler and other forms of irrigation.

12 But even the flood and furrow irrigation systems
13 have been modified over recent decades. They include
14 shortening runs to include the use of furrow torpedos
15 where we actually are able to move water faster down the
16 furrow and improve the uniformity of application and
17 therefore the efficiency. Surge irrigation and land
18 leveling have been key to this. And significant changes
19 in this area have taken place over the last 15, 20 years
20 and even up to the current day.

21 Also the statistics, and we are beginning to get
22 a better idea of the adoption of drip and micro-irrigation
23 systems. And you heard a lot about that today. But I
24 guess the question is how many of those systems have been
25 installed and how important are they looking forward? And

1 low volume systems are not panacea for good irrigation
2 management practices. They do not replace good management
3 practices. But however, as my colleague and others have
4 pointed out, they can be an important element to managing
5 our water in the future and translating some of the former
6 practices to improve practices going forward.

7 So then, of course, management and how we manage
8 all of these systems is a key element to how much water
9 ends up going into the groundwater and therefore the
10 potential for contamination.

11 So few questions that I think need to be
12 addressed or could be addressed and allow us to give us a
13 better picture of what legacy issues mean and how to
14 evaluate that is the relationship between geography and
15 water quality.

16 If I could have just another minute or so.

17 CHAIRPERSON LONGLEY: You may.

18 MR. MUNK: Thank you.

19 We have seen and we do have some good information
20 on water quality and the geography. But also what are the
21 cropping patterns and how much cropping patterns have
22 changed have played a big role and an important role in
23 how nitrate is used and how it's consumed and turned over
24 in the farming system.

25 How expectations change. We continue to produce

1 larger and larger crops, and therefore, they actually take
2 up more nutrients that are of concern here.

3 How has fertilizer use changed? In many cases,
4 fertilizer use has not changed. In some cases, it's gone
5 down. We put less fertilizers on with higher yield
6 expectations and higher crop off-take.

7 How do have water management practices changed
8 over this time period? These are all elements separate
9 and distinct issues with regard to the legacy question.

10 So if a principle goal of the monitoring plan is
11 to be economically feasible, I think it's important to
12 have a clear understanding of those legacy issues. If a
13 groundwater assessment -- appropriate groundwater
14 assessment report and plan is to be interpreted and
15 helpful to us, then we must also have a clear idea of what
16 the legacy plans are.

17 And so my question is, and a big question for me
18 is, have we really adequately assessed the legacy issues
19 or are we looking at the past to manage the future?

20 CHAIRPERSON LONGLEY: Thank you very much. Thank
21 you.

22 MR. MATIK: My name is Ron Matik. I spoke
23 before. I'll be very brief.

24 As you're well aware, California is in a serious
25 financial situation. If these regulations go through as

1 they are, it will be a devastating blow to agriculture,
2 which will further devastate California.

3 I plead with you if you have a love for
4 California, please do all you can to delay or put off or
5 minimize this burden that's going to be placed on
6 California agriculture because it will have a devastating
7 affect.

8 CHAIRPERSON LONGLEY: Sir, we hear you loud and
9 clear. We are going to have to do something. If we
10 don't, somebody else will take jurisdiction over this.
11 And it will be much worse than this Board working through
12 with the growers here and everybody else.

13 I'd like to make a statement at this point. I've
14 heard all day long about folks be called dischargers. I
15 guess I'm kind of immune to that word because I worked for
16 a long time. I started out in ag. I was a regional
17 officer in the Future Farmers of America.

18 But along about that time, I decided that we were
19 a small farm and we weren't going to make it. I couldn't
20 make it as a small farmer, and I certainly didn't have any
21 hopes of marrying the oldest daughter of a large farmer.
22 So I went to a different direction and became an engineer.
23 But I'm passionate about agriculture, too.

24 And you are good stewards of the land. And I'm
25 sorry if the language offends you somewhat. But it's

1 language that's used in the business, to so to speak.
2 It's the language the Legislature has. And it's
3 unfortunate, because I can see from your standpoint it
4 would be very insulting to be called a discharger as if
5 you were a polluter. But some folks do, and most folks do
6 an extremely good job.

7 We haven't refined -- Bill and I were talking
8 about the Basin Plan stuff. There is a lot of refinement
9 to be done so far as an example on the beneficial uses and
10 on certain parts, particularly the western part of this
11 valley. And we have a ways to go on that. But all of
12 that would take place during the initial stage of this.

13 Now, if we don't regulate, you can bet that
14 somebody else will. And it's best that we find a way to
15 work together and work through this. Because the
16 alternative would not be good for any of us. And we have
17 to find a way to make it work. So with that said --

18 EXECUTIVE OFFICER CREEDON: Karl, I think we have
19 one more.

20 CHAIRPERSON LONGLEY: Go ahead.

21 MR. AVERETT: Chairman Longley, members of the
22 Board, really quick. Maybe I'll be the last commentor
23 today.

24 My name is Eric Averett. I'm the representative
25 and Chairperson for the Kern River Watershed Coalition

1 Authority. We represent one million acres in Kern County
2 of irrigated agriculture.

3 I don't have anything to add to the comments that
4 have been made so far today, but would like to convey a
5 message on behalf of 200-plus growers when attended the
6 meeting, but for one reason or another weren't able to
7 find seating or listen or contribute testimony to the
8 Board's consideration.

9 We'd like to extend an invitation for you to
10 attend a meeting in Kern, another workshop, but one that
11 would focus on growers to provide direct input to the
12 Board as you consider this Order. Thank you.

13 CHAIRPERSON LONGLEY: Sir, could you give that
14 invitation or talk to Pamela Creedon?

15 MR. AVERETT: Would be very happy to.

16 CHAIRPERSON LONGLEY: Thank you.

17 Yes, Jon.

18 BOARD MEMBER COSTANTINO: And Jenny has some
19 comments as well.

20 But first of all, thank you for sticking around.
21 This is public policy at its finest. It's ugly. It takes
22 a lot of time. It's discussion. It's both sides of the
23 multiple sides of the same issue.

24 And the good thing is we don't have to vote
25 today. The bad news is we don't have to vote today. That

1 means a lot of work for us to do.

2 When this comes before the Board, whenever that
3 is, I want to hear there was a good dialogue on both
4 sides. And I want to hear that information that was
5 requested from both sides, that the other side was
6 responsive. That's the process. And if we end up back
7 here in February and we hear that somebody didn't respond
8 and didn't -- full hyperbole -- that will be disappointing
9 because we have an opportunity to look at where we're at.

10 This is a draft. It's the initial draft. That
11 means we have some opportunities in front of us.

12 And I know this is an opportunity to say certain
13 things. People are out in public. But it was
14 disappointing that there was -- we don't need the trial of
15 individuals. We don't need to make it personal. We don't
16 need to have any kind of overtones about demographics or
17 anything else. This is all about it is personal because
18 it's our businesses. It's what we do. I come from a
19 family that was regulated and has been regulated and
20 staffed regulators. I work with people who are regulated.
21 So this whole idea is not foreign to me. And the idea we
22 are going to get there in the end is where we need to be
23 and I look forward the process.

24 CHAIRPERSON LONGLEY: Thank you, Jon.

25 Jenny.

1 BOARD MEMBER MOFFITT: Just want to first start
2 off and say thank you for sticking it out. I understand
3 especially as a former grower that coming here, spending
4 all day is especially hard. So I appreciate that.

5 And I appreciate all of the comments that
6 everybody has made. I think that, as Jon said most
7 eloquently, this is public policy at its best. And public
8 comment is part of that process. So I appreciate
9 everyone's comment.

10 I have a couple requests for staff. I think we
11 already -- Jon has already requested about the numbers on
12 the charge, reiterate that one.

13 I continue to have some concerns about small
14 farms, especially in the regions where I guess small farms
15 are identified on the east side. And there was mention
16 something about natural nitrogen percolation coming from
17 the hills. I don't know if there is any kind of graphs or
18 any way to help explain that to me and learn more about
19 that process. Maybe something as simple as a map that
20 shows where -- and map and monitoring program, but just a
21 map of where the small farms are in relation to the area
22 that we're looking. And I request that for all regions of
23 the valley, not just here.

24 And I think that's it. I do want to say that,
25 you know, this is a very open and transparent process.

1 I'd like to see it stays that way. I appreciate
2 everyone's comments and appreciate hearing that. And we
3 are here to hear your comments. So if you still want to
4 come forward in these sessions and bring these comments
5 forward, or letters to come forward as well.

6 There have been significant modifications that
7 have been made from the beginning. And I really want to
8 commend staff for their openness for making changes. So I
9 really do -- we have a long ways to go, but been there
10 have been great strides that have already been made and I
11 acknowledge that.

12 CHAIRPERSON LONGLEY: Thank you.

13 Sandra.

14 BOARD MEMBER MERAZ: I would like to thank
15 everybody for coming. Everybody says look at the time in
16 Tulare, but are we glad we are not in Sacramento where we
17 have to drive back. And it was an informational meeting.
18 It was an informational meeting. That's why it's great.
19 And I learned a lot from it. And I thank the Board for
20 assisting -- not assisting, but getting this agriculture
21 building to come to, and staff for listening to all the
22 comments. Some are harsh.

23 But my concern still is the farmer, the small
24 farmer, and the small disadvantages communities. And
25 listening to both is very helpful for me.

1 And I thank you for listening to us and to each
2 other because I'm sure every single one of you has not
3 just coalitions as people and farmers and it was a good
4 meeting. Thank you.

5 CHAIRPERSON LONGLEY: Pamela, would you like to
6 say something?

7 EXECUTIVE OFFICER CREEDON: Thank you, Dr.
8 Longley.

9 I just appreciate the Board's comments. And I
10 appreciate all the comments made today. And I hope
11 everyone can hear me. And I appreciate the openness of
12 all the growers here today.

13 It's unfortunate we have always worked with the
14 coalition process. We've sort of been under the working
15 groups that the individuals didn't really want us to deal
16 with them. That was the impression I certainly had in
17 talking with many of the coalitions. So I apologize to
18 individual growers if you really wanted us to visit you,
19 we would be happy to visit you. It may take a while.

20 But we were reliant on a lot of the professional
21 organizations, the commodity groups, and others because
22 many who have been in meetings with me have heard me say
23 we're not growers. We're not farmers. We need the
24 industry to help us guide in that direction because if you
25 leave it to non-growers to regulate growers, you're going

1 to get exactly that. It's going to be people not informed
2 with the process.

3 I listened to everyone, and it's this Draft Order
4 and the proposed approach we have was to build in the
5 process to where it was flexible enough to allow the
6 coalition and the growers to build a program that fit in
7 their regional area. Because we need so much negative to
8 put up front, we were going to have them tell us where the
9 vulnerable areas were. They were going to tell us where
10 their priorities were. Some of the very things people
11 commented on that they wanted is contained in this Order
12 already. It's just not clear.

13 What I heard is what -- a lot of what I heard
14 today, we were trying to accomplish that. It's just not
15 that clear in our requirements. We have a lot of work to
16 do in terms of presenting it so it makes clear that we're
17 not intending people to do things when it's not necessary
18 to protect water quality. It sounds like there is a lot
19 now being done so the costs may not be that great because
20 they're already doing those things.

21 So I think we're there. I think we are at that
22 common place. It's just writing it such that it makes
23 sense.

24 And I do share Ms. Moffitt's concern about not
25 having a coalition for growers to belong in. There has

1 been some issues around potential coalitions staying
2 together or coming apart. So we really need to work with
3 those ag industry leaders in this area to make sure we
4 have coalitions for members to enroll. And that's
5 critically important for us to have that avenue.

6 But really, bottom line is to protect water
7 quality, to sustain ag, and to have drinkable water for
8 the communities in this region.

9 And one more point about the comment on the
10 global solution. While we're doing this with the Order,
11 we do have CV Salts. And I need to emphasize that's about
12 salts and nitrates. And that's our global solution.
13 That's where we're actually addressing many of our legacy
14 issues dealing with the groundwaters. And that's part of
15 this solution for what we're dealing with right now, not
16 only for ag, but for the others who were not currently
17 causing what has happened in the past. That's our global
18 solution that this Board is pursuing.

19 And that will also deal with the need for basin
20 plan amendments to deal with the Tulare Lake bottom basin
21 that is identified as a drinking water source in our basin
22 plan. Right now, that's the way it is. And that's why we
23 need to address those types of things that we need our
24 basin plan to be remedies. And that's the CV Salts effort
25 to address those issues.

1 CHAIRPERSON LONGLEY: Thank you.

2 I'd like to commend all of you who have stuck
3 through this. You all deserve gold metals.

4 I come from an academic background, so you'll get
5 an extra five points.

6 But I also very seriously want to commend you
7 Ms. Creedon, because this lady is the one reason we are
8 here today. She got -- I had the pleasure of the last
9 Board meeting, the Board did an evaluation of her. And
10 she got exemplary marks because of her dedication to the
11 stakeholder process. It was pointed out by Jon. It's not
12 pretty. It's the good, bad, and ugly all thrown together.
13 But it's democracy at work. And you're here to hear
14 comments. And we'll come back again. And we have to find
15 a common solution that works for everybody.

16 There is unintended consequences. Let me warn
17 you about that. I was talking about that earlier.
18 There's unintended consequences if we veer off course. We
19 don't want those consequences to happen.

20 We will continue to work. Once again,
21 Ms. Creedon, I thank you for your leadership that you've
22 given.

23 With that said, we are adjourned.

24 (Whereupon Central Valley Water Board special
25 meeting concluded at 6:49 p.m.)

