CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401-7906
(805) 549-3174

CONDITIONAL WAIVER OF WASTE
DISCHARGE REQUIREMENTS FOR ORDER NO. R3-2011-0006
DISCHARGES FROM IRRIGATED LANDS
_____/

TRANSCRIPTS OF PROCEEDINGS

THURSDAY, MARCH 17, 2011

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Transcript of Proceedings, taken at City Council Chambers, 275 Main Street, Fourth Floor, Watsonville, California, commencing at 8:15 a.m., Thursday, March 17, 2011, before Tonia L. Webb, CSR No. 4588.

APPEARANCES:
CENTRAL COAST WATER BOARD MEMBERS:
JEFFREY S. YOUNG, CHAIR, Santa Barbara
RUSSELL M. JEFFRIES, VICE-CHAIR, Salinas
JOHN HAYASHI, Arroyo Grande
DAVID T. HODGIN, Scotts Valley
MONICA S. HUNTER, Los Osos
JEAN-PIERRE WOLFF, San Luis Obispo

REGIONAL BOARD LEAD STAFF PERSONNEL:
ROGER W. BRIGGS, Executive Officer
MICHAEL THOMAS, Assistant Executive Officer/Ombudsman
FRANCES McCHESNEY, Senior Staff Counsel
ANGELA SCHROETER, Senior Engineering Geologist
LISA HOROWITZ McCANN, Environmental Program Manager

INDEX PAGE

March 17, 2011 8:15 A.M.

PROCEEDINGS

CHAIR YOUNG: Good morning, everybody. I'm Jeff Young, chair of the Central Coast Regional Water Quality Control Board. I'd like to welcome everybody to Watsonville for our St. Patrick's Day board meeting on March 17th, 2011.

Take roll call this morning?

MR. BRIGGS: Yes. Dr. Jean-Pierre Wolff?

DR. WOLFF: Present.

MR. BRIGGS: Russ Jeffries?

MR. JEFFRIES: Russ Jeffries present.

MR. BRIGGS: Dr. Monica Hunter?

DR. HUNTER: Present.

MR. BRIGGS: David Hodgin?

MR. HODGIN: Present.

MR. BRIGGS: John Hayashi?

He announced yesterday, he's recusing himself.

CHAIR YOUNG: Introductions?

MR. BRIGGS: Introductions. To my left is Frances McChesney, our counsel from the State Water Regional Control Board. And also from the State Board, seated in the front row is Frances Weber, the liaison, State Board member.

Seated next to her on her right is John Muller

from the -- our neighbor to the north, the San Francisco Bay Regional Board, board member, currently chair.

CHAIR YOUNG: Region two?

MR. BRIGGS: Region two. San Francisco Bay Area Water.

And also in the front is Michael Thomas, our assistant executive officer. We have other staff that we'll be introducing as we get into today's item; however, we would like to recognize Harvey Packard and John Robertson in the back of the room there.

Harvey, do you have a testimony card?

MR. PACKARD: I have a stack back here, yes.

MR. BRIGGS: Harvey has a stack of testimony cards that look like this, so if you're interested in addressing the board today -- we just have one item on the agenda today, so that would be pretty clear, but unless you submit a card, then we won't know to call your name.

And we have --

CHAIR YOUNG: And as to the cards, we want them submitted by 12:00 noon so that when we do get to public comments in the afternoon, I'm going to divide up the time accordingly so that everyone gets the same amount of time so that I can budget the time based on how many cards we have got.

The fewer the cards, the more time each individual speaker will have; the more cards we have, I'm just going to reduce time so that everybody gets an opportunity to address the board.

So if you would, please have those submitted by 12:00 noon. I would appreciate it.

MR. BRIGGS: So additional introductions. This morning we have Madeline Rios and Frank Parcello here. Here's Frank and Madeline's in the booth. And they're here as translators and they'll be making an announcement in Spanish.

You can do that now, if you'd like.

Thank you very much.

Also from the State Board, the office of public affairs, we have Dave Clayburn, who is right over here, and George Cazurco -- I don't know if I said that correctly. There's George right there.

And if there are any reporters, any folks from the media that are interested in getting information, there might be information earlier, then you can, at the end of the meeting today -- they would be your first resource in terms of getting some information, so they're to assist us today.

And that's it for now.

CHAIR YOUNG: Folks, part of the reason for

dealing with the speaker cards before noon and allowing me time to figure out how much each speaker's going to get is, if we have -- that we have to be out of this room by 5:30, so I want to allocate time fairly, and the only way to do that is for me to know how many people want to address the board that are not part of a group already allocated time early on in this proceeding.

Most of you haven't met, I don't believe, Dr. Jean-Pierre Wolff. And he is our newest board member. And Dr. Wolff is not going to be participating in this matter.

If you want to say a word or two about that?

DR. WOLFF: Yes. I'm an agriculturist, one of my professions, and part of my property is a irrigated vineyard, so I will recuse myself from today's discussions.

CHAIR YOUNG: You're welcome to be in the audience, you're welcome to join us in the audience.

DR. WOLFF: Thank you.

CHAIR YOUNG: Okay. Ready to proceed?

MR. BRIGGS: We are.

CHAIR YOUNG: Item number 14.

MR. BRIGGS: Right.

CHAIR YOUNG: Okay. Staff recommendation for an updated conditional waiver of waste discharge

requirements for discharges from irrigated lands, draft order number R3-2011-0006.

MR. BRIGGS: Yeah. You should read that first.

CHAIR YOUNG: Okay. This is the time and place for a public hearing to consider adoption of a waiver of waste discharge requirements for discharges of waste from irrigated lands.

This hearing is being held before a panel of members of the Central Coast Regional Water Quality Control Board.

I am Jeff Young, chair of the regional board. Also serving on the panel are Russell Jeffries, to my right, and Monica Hunter and David Hodgin, to my left.

For your information, board members John Hayashi and Dr. Jean-Pierre Wolff have a conflict and may not participate in this matter as board member in accordance with state law.

The official record of the testimony at this hearing will be created by our court reporter. We are also using a tape recorder and video tape recording today, but the recordings will not be the official record of the hearing.

At the end of this hearing today, I will close the record in this matter and this panel will discuss and arrive at a proposed recommended decision. This panel

will make a recommendation that will be presented to the regional board at a future meeting, when the board has a quorum that can act on this matter.

You will be notified of the date and location of that hearing. At that time, the full board may adopt, reject or modify the recommendation of this panel. Absent extraordinary circumstances, you will not have another opportunity to provide argument or evidence to the full board.

Thus, you are encouraged to present today all the evidence that you would like this panel or the full board to consider. If anyone in the audience wishes to address the panel today, please promptly fill out a speaker card and hand it to the clerk.

To allow time for board panel deliberation, I will limit the time for speakers, if necessary. I have allowed extra time to those persons who have requested extra time in advance, as set forth in the public notice for this item.

The rest of the public will have up to three minutes, but it may be less, depending on the number of speakers.

If you wish to speak, please submit a speaker card that are available at the back of the room. I will accept speaker cards until noon.

Following the lunch break, I will announce the account of time I will be able to allocate to public speakers. Please summarize your comments and avoid repetition. The board members have fully reviewed the written submittals and will consider all comments.

The hearing will proceed as follows:

Regional board staff will go first, followed by elected officials. They'll have three minutes each. The

Farm Bureau Panel will have 55 minutes. California Strawberry Commission will have 15 minutes. Coast Keeper will have 24 minutes. Environmental Justice Coalition for Water, 12 minutes. Coastal Alliance, 8 minutes. Channel Keeper, 12 minutes. Central Coast Alliance for Sustainable Economy, 8 minutes.

And then we'll have public comments and we'll see whether we have few enough people that everyone would have three minutes or am I going to have to cut that back down. I won't know at this point.

Closing statement of the Farm Bureau, 5 minutes.

After the conclusion of testimony and comments, staff will be provided an opportunity to summarize and make a recommendation. A timer will be used. To allow for the orderly conduct of the hearing, I request that you end your comments when your time is complete.

We will begin with staff's presentation.

Mr. Briggs.

MR. BRIGGS: Thank you, Mr. Chairman. Those -- those times that Chair Young just listed add up to about two hours and twenty minutes, I believe. And with the staff presentation, that -- and even without interruption of those times for Board questions and answers -- that will take us pretty close to noon.

So it looks like our individual speakers will be in the afternoon.

And I want to make a couple other announcements, since we're getting a pretty good-sized crowd here. For those folks that are standing in the back, there are a lot of seats available. I see seats here and seats over here. So, unless you want to stand, there are seats available.

And if we do get filled up, and if folks don't want to stand in the back, we have a room next door, and I understand there's audio available over there.

So in -- and, actually, if you folks and staff could help out if we do get people coming in, obviously after this announcement, if you could let them know that that's available, we'd appreciate that.

Also, the City of Watsonville, whose facility we're using today -- and I should have introduced Irwin,

who's helping us out down here in the City of Watsonville - the city has waived their parking fee for today so -- now we tell you.

I was -- I was hoping there was a little sign on the machine down there, but maybe not.

Anyway, that's -- thank you for making your donation to the City of Watsonville.

And -- let's see. That's it for logistics.

So as Chair Young said, this item that we have today -- and, by the way, we had the rest of our -- our board meeting with our items yesterday afternoon so that we could devote the day today, as much time is necessary, to this one item, very important item.

So, like I said, make sure you get your testimony cards in. And, as the Chair said, we'll cut those off at noon. So, again, if you could help out with that. If people come in and sit next to you, you might mention that to them, in case they get by without getting a testimony card.

This -- this item for updating this order for irrigated ag is a process that we actually started about two and a half years ago. And in trying to formulate a process for that, we sent out our first letter on it in December of '08, I think it was. That's two and a half years ago.

And so I won't -- I won't go through the whole process. Actually, Lisa McCann is going to talk about the process that we've used, a little bit, in the presentation.

But I just want to point out this has been a very lengthy process. The board itself has had two large formal workshops; one in the north, one in the south; an additional workshop at the regular board meeting in February, and a huge amount of comments and a lot of changes in the -- in the orders as we've gone along in terms of what we have a draft today.

But we'll be getting into the details of that. But today -- today's meeting is consistent with the schedule that we discussed late last year, in terms of how we would roll this out. And that was discussed in the board meetings with the board and with the public.

And so we're on track in terms of what we said we would be doing with consideration today of the kind of -- the fly in the ointment is that we don't have a quorum today. So today's meeting is being held as a panel hearing of the board. And then, once we have a full board with a quorum, the recommendations of the panel would go to the full board.

The new board member or members would review the record, in order to be able to vote on the -- on the

item.

This -- this issue is unique, really, in terms of the typical items that we deal with. And it's unique in terms of the -- the number of parties; although we do have programs that have actually thousands of parties, whether it's the underground tanks program, storm water program.

But it's -- it's unique in terms of the water quality issues, groundwater, as well -- as well as many aspects of surface water, and the variation and the practices that are involved with agriculture, with the different climates, soil crops and -- and all those sorts of variables.

So it is kind of unique, in terms of the scope that we have to deal with; both in terms of what's happening on the ground and then the -- what -- what's appropriate in terms of regulatory framework.

Because of that, the broadness of the issue, we have several staff here today because we -- over this two and a half years, we've had several staff who have dealt with various aspects of this very broad issue, and have different levels of expertise. And so we decided it would be a good idea for those staff to join us today and, if necessary, to provide more detailed answers to questions, and they will be available.

So those -- those staff are -- I already -- I already mentioned Harvey Packard. He's supervising water resource control engineer and our enforcement coordinator.

Karen Worcester is our environmental scientist, who manages our ambient monitoring program and CCAMP, Central Coast Ambient Monitoring Program. Of course, we've -- we've relied a lot on CCAMP data and then -- and then subsequent and concurrent cooperative monitoring program data for our water quality information for this program. Karen's right there.

Matt Keeling is a water resource control engineer in our permitting unit. He's been working on groundwater quality, monitoring and recording. That's right there.

Dean Thomas has worked in our groundwater cleanup program. And he's here about groundwater quality and recording. He's right there.

Monica Barricarte -- you're hiding behind Karen - water resource control engineer, works in our agricultural regulatory program. So she works in the -- in the program full time. And she's worked on nitrate load reduction, irrigation and nutrient management.

Dominic Roques -- is Dominic here? There's Dominic -- is engineering geologist, works in our storm

water program, focusing on hydro modification and the riparian protection issues. And he's available for questions about the cost information that we developed.

Jill North is seated next to Dominic, environmental scientist. And she is here on the riparian and aquatic habitat protection issues.

Shanta Keeling, over on the end, water resource control engineer in our total maximum daily load, or TMDL, unit. And she worked on the CEQA, California Environmental Quality Act documents.

And then, additionally, Hector Hernandez is in the back of the room; Corinne Huckaby -- there's Corinne - Steve Saiz, in the back there helping out with information management and other logistics.

Also both Hector -- Hector Hernandez and Harvey Packard can assist Spanish-speaking members of the public. And I haven't verified this, but I understand our translators will also be available to assist at the podium, if that's necessary.

So for our presentation today, in terms of staff presentation, Michael Thomas is going to be providing the opening remarks.

And do we -- we have a -- oh, we do have something on the screen. That's good. We were having a little trouble getting that going.

Michael is a -- an engineer with the board, who has worked for the board since 1985, and has worked in both surface and groundwater issues, including issues having to do with agricultural impacts, notably in the Elkhorn Slough watershed area. And he's going to be starting off.

Lisa McCann is actually third up. But Lisa is our -- she's seated next to Michael -- she's our environmental program manager and manages our watershed protection and planning section. And that section includes storm water, riparian and wetlands protection, regional monitoring assessment and planning. And she's been working with the board -- our board -- since 1995.

She worked in the Morro Bay watershed and in the Monterey Bay National Marine Sanctuary agriculture and rural lands plan programs. She's also worked on many erosion control, irrigation and nutrient management -- best management practices.

She became our region's non-point source program manager, and led the development of many total maximum daily load plans.

These programs and activities involve working with agriculturists to improve water quality information management practices, to reduce pollution loading and to establish more accountable regulatory options.

And, lately, she's been co-managing the development of this order with Angela Schroeter. So Angela is seated next to her. She's a senior engineering geologist. She manages our agricultural regulatory program within Lisa's section.

She came to the board in 2006 from -- from -- with the State Board, and has managed the grants program over at the TMDL program. She worked for ten years at the State Board, where she developed and managed the groundwater ambient monitoring assessment program, or GAMA. And worked in several groundwater regulatory programs.

And, like I said, we're going to be starting off with Michael Thomas, who's going to provide the opening remarks and the overview. That'll be followed by Angela with a -- a brief summary of the order and what it entails.

Lisa's going to cover public comments and responses. And then Michael will provide our preliminary conclusion, at this point. Michael Thomas.

MR. THOMAS: Thank you, Roger.

Good morning, Mr. Chairman, members of the board.

One of the things that has come up over and over again in the past two and a half years that we've

been working on this project is this concept of fairness.

And what fairness means depends on who you're talking to. Some people believe that fairness is recognizing that every individual is unique and that everyone should be treated as a unique individual. Other people say that fairness is treating everyone the same.

It also depends on who you are. If you're a farmer struggling to make a living today in this environment of increasing regulations from multiple agencies like ours, or if you are a fisherman who's -- like this photograph here -- someone who's fishing in Oso Flago Lake, that lake is now posted because of the contamination in fish tissue due to pesticides, or if you're a person who's relying on groundwater as a drinking water source, and that water is contaminated, picture can look very different.

So we have a lot of stakeholders involved in this process with very divergent views; much more so than on many of our other projects -- most of our other projects -- and much more so than the -- when the board adopted the 2004 conditional waiver.

And that is by design. We have tried to bring as many stakeholders into this process as possible. But in -- in doing that, we obviously raise this issue of fairness and we -- more controversy comes to the surface

because of that.

So for context, I wanted to talk to the board about relative degree of regulation. What are we actually talking about here compared to other programs? And I think you've seen this graph before. We've -- we've showed it to the board before. So I just wanted to remind you of this.

As far as relative degree of regulation, timber harvesting is one of the least regulated programs that we -- that we have, as far as degree of regulation or comprehensiveness of the regulations, and -- and it's decreasing. The -- that arrow indicates -- indicates that our direction, as far as oversight of timber harvesting, has been decreasing over the past several years.

Urban storm water is more comprehensive, in terms of our oversight and regulations, and that has been increasing over the past several years, as you know, because the board has spent so much time on it.

Municipal waste water is one of the most highly regulated activities that this board oversees. Drinking water pollution cases are also heavily regulated. For obvious reasons, they present a major threat to public health.

Landfills are also heavily regulated; though,

in comparison, the 2004 conditional waiver is at the low end of the scale. When you compare the requirements or the conditions in the 2004 conditional waiver to all of the board's other programs, it is one of the least comprehensive or the least burdensome of our regulations.

And we also have to look at the relative degree of water quality impacts from these different activities. Timber harvesting is very low because of the way it's done in our region. In other regions there are major impacts -- environmental impacts -- due to timber harvesting. But here it's relatively low because of the type of timber harvesting that is done. It's very selective.

Landfills represent a medium threat to water quality today because of the regulation that the board has imposed. For instance, all landfills have to be designed, they have to have adequate caps, they have to have adequate lining.

Municipal waste water also has a medium degree of water quality impact compared to other programs; again, because of the degree of regulation. There are some serious issues associated with municipal waste water, like contaminants -- emerging contaminants of concern, such as, endocrine disrupters.

Urban storm water presents a relatively high

threat to water quality. We're seeing whole watershed impacts or potential impacts from urban storm water, and that is why we are increasing our regulation and oversight.

Drinking water pollution cases, even though they're heavily regulated, they still represent a major quality impact and human health threat.

Irrigated agriculture on this scale is at the top of the scale. The water quality impacts due to irrigated agriculture are the most serious and severe impacts that we deal with as an agency.

The question now is:

Where does the 2011 draft order fall into place here on that top scale?

It falls into place here. Tier -- as you know, the order has three tiers, and each tier has a different degree of regulation.

Tier 1 is the least, Tier 2 is in the middle, Tier 3 is the highest. Tier 1 is slightly less than the 2004 conditional waiver. Tier 2 is similar to the 2004 waiver, but has some additional requirements. And we're going to be talking about those, and those are highly controversial.

Tier 3 has more significant requirements because those dischargers represent the greatest threat

and greatest impact to water quality.

So it's important to realize where that 2011 order is. I imagine if you're on the receiving end of it, it does not seem like you're at the lower end of this scale, it seems like you're at the other -- the upper end of this scale. But compared to our --

(Interruption)

MR. THOMAS: Because of the microphone or because of their talking? Okay.

Okay. So that's the context. And I want to talk a little bit about some of the water quality problems we have in our region.

We do have some of the most severe pollution in the United States, here on the Central Coast. And this -- the -- the information and the realization of this pollution is not new.

A report was published in 1988 by the Monterey County Flood Control and Water Conservation District. It's called Nitrates in Groundwater, Salinas, California. And it concludes some significant -- or has some significant conclusions.

One is that nitrate contamination poses a substantial threat to this industry. The re -- report talked, at length, about nitrate contamination in groundwater. And these are quotes from this report.

It also concluded that drinking water is considered the highest beneficial use of water. That sound familiar. That's -- our agency agrees with that, and that's one of our highest priorities.

Nitrate removal from drinking water supplies is costly, and we agree. That's documented in our staff report and in the order. And the State maintains a non-degradation policy.

If additional wells go out of production, the nitrate situation will become critical. And it is anticipated that additional regulations will be imposed. They also concluded that specific actions are needed to mitigate existing problems, and to reduce the potential future problem.

And the situation will merit a dedicated effort and special attention by the leadership in the county and around the state. If it is ignored, it will not go away.

Back in 1988 we recognized -- and other agencies recognized -- the significance of this pollution problem.

And I think that first quote is one of the most important, where they're saying that nitrate poses a substantial threat to the industry itself. And I think the industry is aware of that, and has become much more aware of that over the past few years.

Fast forward over 20 years, this is the condition that we have today in the lower Salinas Valley with respect to public water supply wells.

Pie chart -- I'm sorry, you can't see the -- the red very well on this screen that the -- that the public is looking at. But it shows that 23 percent of the wells in the lower Salinas Valley are contaminated with nitrates and another 37 percent are affected by nitrates.

The -- the -- the 37 percent that's in yellow here, concentration of nitrate is just below the drinking water standard, and it is increasing. This underestimates the actual threat to drinking water supplies because these wells tend to be deeper wells; they're not the domestic wells that are in shallow water.

In the Santa Maria area, we have the same situation. Twenty-seven percent of the water supply wells are contaminated with nitrate.

And, by the way, this water has to be treated before it's provided to the public, and is treated. So from these wells people are not drinking contaminated water. That water has to be treated or blended.

Forty percent of the wells are just below the drinking water standard, and those concentrations are rising.

Many of these wells that you see in red here on both these maps -- on the Salinas map and the Santa Maria map -- have been abandoned, and they've had to drill new wells to deal with this nitrate problem. As I said, the -- those -- that data underestimates the problem.

Domestic wells pull from shallow water. And we have over 44,000 domestic wells on the Central Coast. Many of these domestic wells are in irrigated ag areas, where we have these high concentrations of nitrate in groundwater. We don't know how many people are currently drinking contaminated water from these wells.

But this is our highest priority -- staff's highest priority, and something that we are taking action on right now. I think you heard a little bit about this yesterday. Some of the actions that we're taking are identifying the high-risk areas -- we actually have identified the high-risk areas.

We are currently identifying homeowners in those areas, so that we can send notices to them about the threat to water quality and options that they have for dealing with it, including treating -- getting treatment for their own water and sampling for their own water.

We're also developing a well testing program to help the homeowners get their water tested so they know

what the quality is.

We're also pursuing alternative water cases; meaning, we're -- in areas where we know there are high levels of contamination in shallow groundwater, where people are using that water, we're looking at the sources; and, in the future, we'll be bringing cases to the board, where we'll be recommending that the responsible parties provide alternative water to the homeowners. As the board has done in other drinking water contamination cases.

The human health impacts due to nitrate are serious. You've heard about blue baby syndrome before, that's well documented.

There's also growing evidence of other risks, including cancer, thyroid inhibitions, Parkinson's, diabetes and endocrine system disruption.

The costs are astronomical, in terms of treating nitrates. Water purveyors -- we've met with water purveyors, and they've talked to us about the costs that they are having to deal with are in the millions of dollars for small communities.

And the water purveyors are routinely going to the Public Utilities Commission, and asking for rate increases to deal with the treatment or the need to drill new wells. So they have to pass the cost on to the

users.

Now I'm going to switch to surface water, talk about that -- the conditions of surface water briefly. This is a map of the Monterey area. You see the Elkhorn Slough, Castroville and Salinas, Salinas River and the reclamation dis -- ditch.

In the old Salinas River area is here, we have some of the highest concentrations of nitrate in surface water for any river of lagoon system known in the literature, and they're increasing. They've been increasing for the past several decades, have been increasing over the past decade.

The Elkhorn Slough area is heavily impacted by nitrates and nutrification and cascading biological impacts that occur there because of nutrients coming into the -- into the slough.

There's a report published in 1996 by the Elkhorn Slough Foundation and the Elkhorn Slough Estuary and Research Reserve, and their conclusion was that in 1996 that there has been a significant increase in nitrate concentration since the '70s, and they have extraordinarily high nitrate concentrations in the lower Salinas River, which may be the highest recorded in scientific literature for a river or estuary.

And, as I mentioned, these concentrations are

still increasing. There are multiple organizations monitoring this area. This data is from the Monterey Bay Aquarium Research Institute, and it shows increasing concentrations from 2004 to 2011.

That data is very similar to the water board's own data, which we collect through the Central Coast Ambient Monitoring Program.

This is the Salinas River showing nitrate concentrations increasing over time. This is the Old Salinas River. The red line is the drinking water standard of 10, and you can see the -- the concentrations are over 60, or five times the drinking water standard.

They're also 50 times the aquatic index standard of 1 milligram per liter. And we see biological impacts, where the concentrations in surface waters exceed 1 milligram per liter. So these are 60 times that amount. And it's the same situation in multiple places around our region.

This is Quail Creek. You can see concentrations -- surface water concentrations of up to a hundred milligrams per liter, 10 times the drinking water standard.

Natividad Creek also up almost a hundred milligrams per liter

Blanco Drain, over a hundred and 50 milligrams

per liter in some cases.

Santa Maria River -- moving down south -- we also see very high concentrations in the Santa Maria River estuary; again, around a hundred milligrams per liter.

Orcutt Creek, upstream of Santa Maria River, very high concentrations, some -- up to a hundred milligrams, actually exceeding it in one case. We have very, very high concentrations of nitrates in irrigated ag areas around our region.

In addition -- this is again moving down south -- Oso Flaco Lake, we have the highest tissue concentration of dieldrin and DDT in the United States, several times higher than the average concentration elsewhere in the United States.

We posted that lake for health warnings, so that people that are fishing there are aware of that.

We have more recent data that -- I do not have the actual numbers here for you, but there's more recent data showing that we also have problems with currently used pesticides in fish tissue in the -- in Oso Flaco Lake.

We also have ongoing sedimentation and fish tissue contamination in other parts of the state and toxicity problems due to pesticides.

2010 state report on toxicity in California waters shows that the Central Coast streams have the highest percentage of toxic sites statewide. Fifty-six percent of our sites are toxic, 22 percent are highly toxic. Highly toxic just means much more toxic than average.

And the reason why we have this toxicity -- one of the reasons why is that - the amount of chemicals that are used in our region.

It is obviously one of the most productive agricultural regions in the world, and that requires these chemicals -- that yield requires these chemicals.

A DPR study showed the -- DPR is the Department of Pesticide Regulation. Their statewide study showed that the Salinas River area had the highest percent of study sites with pyrethroid detections, the highest percentage of sites exceeding toxic levels, and the highest rate of active ingredients applied, 113 pounds per acre, which is three times as much, as compared to other areas in the state.

We have serious problems with toxicity, but we also have overall water quality problems with surface waters. This -- this is the -- an image from our CCAMP site from the -- from the water board's data, which you can find on-line.

The dark red areas are the most intensely impacted for the list of parameters that you see there; nitrates, ortho-phosphates, dissolved oxygen turbidity, nitrates, et cetera.

So it's much more than a toxicity problem. We have an overall biological degradation problem. And the most severely degraded areas coincide with our irrigated agricultural areas.

This is why we need to renew the 2004 order. We need to address these water quality problems, and we need to demonstrate tangible improvements in these areas in the amount of pollution being discharged and in the concentrations in the receiving waters overall.

While reviewing the 2004 conditional waiver, the very first finding of the order is this:

The intent of this conditional waiver is to regulate discharges from irrigated lands to ensure that such discharges are not causing or contributing to exceedences of any regional, state or federal numeric water quality standard.

That's not new. That's the first finding in the 2004 order. So the concept of having to comply with water quality standards is not new. This is also in the 2011 proposed order that's in front of you.

Finding 16 of the 2004 conditional waiver said

this:

Although time will be allowed, increased reporting and monitoring may be required in order to ensure that water quality is improving, as what we are doing with the 2011 proposed order.

Now I'm going to build on the 2004 order. And this is one of the things that people said to us repeatedly. The board said this to us and many of the stakeholders said to us, is that we should be building on the 2004 order, not simply abandoning it. And we agree.

So here is a list of the content of the 2004 order, in terms of its conditions and its findings. I already mentioned the 2004 order requires that dischargers meet water quality standards.

They also had to file a notice of intent, which is an intent to enroll in the 2004 order, and it describes their farming operation.

Dischargers needed to develop a farm plan, and that farm plan had to have several elements:

An irrigation management element, a pesticide management element, a nutrient management element, an eroding management element, all had to be included in the farm plan, that is the definition of the farm plan in the 2004 conditional waiver.

Farm plan also had to include schedules to

implement those management practices. It also included a requirement or a condition to submit a management practice checklist, which was a form submitted to the water board which checked off the management practices that were being implemented at each farm.

It also included a requirement for surface water monitoring, and a requirement for education.

Now I'm going to add a few things to this list, and they'll be in yellow, the yellow text below:

Groundwater requirements, backflow prevention -- which means modifying a well so that pollution cannot travel back down into the well and contaminate groundwater and annual compliance information that must be submitted on-line; not submitted to the -- not submitted to the board like this, but submitted to the board on-line via a form that growers would fill out. And I'll show you that in a few minutes.

Now if you look at the top of this list, it says 2004 conditional waiver. I'm going to change the title. So watch the title. Don't blink or you'll miss it. I'm going to change it.

This is now Tier 2 of the 2011 order. This is the order that's in front of you today. This is Tier 2. It builds on the 2004 waiver, and we've added some requirements.

Notice that the management check -- the management practice checklist is crossed out. That's no longer part of the order because growers will be submitting information on-line.

Specific information and specific fields at -- with -- they'll be answering specific questions about their actions to implement management practices and the effectiveness of the practices.

So if this is Tier 2, what is Tier 3? Tier 3 is Tier 2 plus some additional conditions and requirements. Tier -- Tier 3 includes a water quality buffer plan for some dischargers; individual monitoring, which means they have to monitor their runoff; an irrigation and nutrient management plan that is more comprehensive than the requirements for Tier 2; and time schedules.

And we'll be talking about each of these in more detail in a few minutes. Lisa and Angela will be talking about these.

And what is Tier 1? Tier 1 is Tier 2 minus the annual compliance info. Growers in Tier 1 do not submit information to the board on-line in this form that I'll be talking about, which we think is -- is a significant reduction in burden from Tier 2.

Tier 1 has approximately 500 growers and about

92,000 acres, which represents 21 -- 21 percent of the overall acreage. Tier 2 includes about 1200 growers, about 25 percent of the acreage. Tier 3 is about a hundred growers, represents 54 percent of the acreage at about 233,000 acres.

This is an illustration of the documentation -- the hard copy documentation that growers will have to submit to the water board. There aren't any. They will submit no hard copy documents to us. All the information submitted to the board will be on-line in the forms that I'll be showing you.

One of the comments that we've had is that growers would have to produce documents like this by the hundreds or thousands and sub -- submit them to the board, and its staff would have to review all of them.

Not the case. There will be no hard copies submitted to the board. Information will be submitted on-line into a database. And we'll be managing the database, which is how we manage programs with many, many growers. We can't do it in this form.

It has to be done in a -- it has to be done in a database form.

What is the annual compliance form? It is very similar to the notice of intent -- the on-line notice of intent that we developed several months ago that the vast

majority of growers have now filled out. They went on-line, filled out the information and we now have that database.

We will modify that notice of intent, depending on what the board adopts. If the board adopts the order that is in front of it today, we will modify this form according to the current order -- the draft order. If you change the order, we'll modify it according to the changes that you make.

But what we will do is add fields with specific questions, and the growers will answer those questions and submit the information under penalty of perjury.

Here's an example of some of things that growers will submit to us, the kind of information they will submit, on this form on-line. All -- I'm not going to read all of these to you.

You can see that the -- just the type of information that they will submit. So all Tier 2 and Tier 3 dischargers must submit information like the date of the completed farm plan, the type and characteristics of their discharge or discharges, identify direct agriculture discharges to a waterbody, et cetera. So they will be submitting information on having done these things.

A subset of Tier 2 and Tier 3 will do photo

monitoring, and submit that on-line. They will also submit information on the total nitrogen applied at their operations.

A subset of Tier 3 will, in addition to the items above, submit proof of a certified irrigation nutrient management plan and elements, and a water quality buffer plan.

All of that information will be submitted on-line in a form like this. We'll have pull-down menus so it'll be direct and straightforward. You'll answer specific questions, and answer the information in response to those questions.

And, as I mentioned, it -- the form will be the very same type of form as the notice of intent, which we've already developed, and the vast majority of growers have already used.

CHAIR YOUNG: Question for you, Michael, before you switch screens. Are you proposing to have any explanatory material that is connected to the compliance form? Like an example of how to estimate acres just discharging to ditches or any other type of --

MR. THOMAS: Yes.

CHAIR YOUNG: -- surface discharge?

MR. THOMAS: Yes. For example --

CHAIR YOUNG: For example.

MR. THOMAS: -- there will be a question and then for example.

CHAIR YOUNG: Okay.

MR. THOMAS: This is the type of information that the grower would provide.

CHAIR YOUNG: Okay.

MR. THOMAS: Yep.

Now I'm going to hand it over to Angela Schroeter, and she's going to go into more detail about some elements of the order that's in front of you today.

MR. BRIGGS: Before Angela starts -- or while you're switching programs there, couple other things.

Anyway, there are more people standing in the back now. So I see about nine empty seats down here on this side, and I see a couple over here. Maybe you could raise your hand if you have an empty seat next to you, please.

There are quite -- there are probably a dozen seats available, if you'd like to sit down. And then, for those of you coming in later, if we do run out of seats, there's -- there's room next door.

I missed a couple of staff that I should've introduced. Dave Paredes (phonetic) is seated next to Karen Worster, there. As I mentioned, Karen's our CCAMP program manager, Central Coast Ambient Monitoring

Program.

And Dave provides a lot of help in developing that program, maintaining that program.

And thanks for assisting, Dave, as always.

Seated next to him is Chris Rose, of our staff, who is our program manager for -- and section leader -- unit leader for total maximum daily loads, TMDLs. Sorry I missed you the first time.

And then another thing I missed is that we had supplemental sheets that we provided for this item. So those are materials that went out after the agenda itself was prepared. I'll just mention what those are.

There's one that's dated March 4th, that's a -- a summary of comments and responses. And then it references Appendix E, which was on -- on our web site. And it has more detail on the comments and responses.

That also included Appendix D, which was the options considered. And then the last part of that same March 4th supplemental sheet had a few corrections that we noted that need to be made to the draft order.

And then March 9th a separate supplemental sheet is a memo from Harvey Packard regarding enforcement perspective.

So just wanted to mention that those were part of our -- our record of materials today.

So Angela Schroeter is up next.

MS. SCHROETER: Good morning. My name is Angela Schroeter, and I'm a senior engineering geologist and program manager of the agricultural regulatory program.

As Michael mentioned, I'm going to provide you with additional background on staff's recommended draft agricultural order. In my presentation, I will discuss the tiers in the draft order, the tiering criteria, and summarize key word conditions.

I will also provide you with an example of how the draft order considers a variety of information and factors to focus on the most important details to best protect water quality, while taking into account water quality priorities, local conditions and the characteristics of individual farming operations.

This is an image of the Central Coast Region -- oops -- sorry. Oop -- what am I doing here?

This is an image of the Central Coast Region. There's approximately 435,000 acres of irrigated agriculture. And currently approximately 1700 farming operations are enrolled in the current agricultural order.

A farming operation can have multiple individual farms. The 1700 farming operations enrolled

in the current agricultural order -- oops -- are represented by more than 3,000 individual farms, which are shown here as green dots.

Each individual farm has very site-specific characteristics that affect the level of waste discharge and threat to water quality. For example, each individual farm has a different size, setting and location.

In addition, each farm grows different crops, uses different types and amounts of fertilizers and pesticides, employs different types of irrigation, and implements different management practices.

The challenge is how to consider these multiple factors, which are unique to individual farms and best -- best protect water quality.

As with any other water board program or general order, the draft order simplifies this complex situation by focusing on the most important details.

Early board feedback and public input indicated that individual farming operations are unique; that the requirements should not be one-size-fits-all; and that staff should consider a tiered approach in the draft order.

The draft order has three tiers. The tiers are based on level of waste discharge and threat to water

quality. The draft order includes increased requirements for discharges with the highest level of waste and greatest threat to water quality in the most impaired areas.

The draft order also recognizes that there are some dischargers, especially smaller farms, who may present a very low to minimal threat to water quality. In response to the severity and magnitude of water quality conditions in the Central Coast region, the draft order tiers are based on the following five criteria:

Crops known to have higher nitrate-loading impacts; chemicals known to cause significant pollution -- for example, chlorpyrifos and diazinon; proximity to an impaired waterbody or public water system well; discharge to a toxic or pesticide-impaired waterbody; and size of the farming operation.

Tier 1 operations represent the lowest threat to water quality. The Tier 1 criteria include:

The operation does not use chemicals known to cause toxicity or pollution in surface waters, such as chlorpyrifos and diazinon; the operation is not located within a thousand feet of a surface waterbody impaired for toxicity, pesticides, nutrients, sediment or turbidity.

If growing crops that have a high

nitrate-loading risk, then the operation must be less than a thousand acres, and not within a thousand feet of a polluted public well.

Alternatively, a vineyard could qualify for Tier 1 if the operation is certified as sustainable in practice. The reason why staff characterizes sustainable in practice certified vineyards as low threat is because a SIP certification requires and verifies implementation of specific management practices that protect water quality.

For example, the SIP certification requires a 25-foot buffer along streams and creeks.

Tier 2 operations represent a moderate threat to water quality, and the criteria include:

The operation uses chlorpyrifos or diazinon; the operation is located within a thousand feet of a surface water pot -- waterbody impaired for toxicity, pesticides, nutrients, sediment or turbidity; operations that grow crops that have high nitrate-loading risk within a thousand feet of an impacted public well, but are less than a thousand acres.

Tier 3 op -- operations represent an increased risk to water quality. And the criteria include:

Operations that have crops that have ni -- high nitrate-loading risk and are greater than a thousand

acres; operations that use chlorpyrifos or diazinon and that discharge to a surface waterbody impaired for toxicity or pesticides.

So let me provide you with an example. In the next few slides, I will show you specific information to demonstrate how the draft order takes a large number of farms, each with different characteristics, and employs a tiering approach that is both reasonable and responsible given the severity of water quality conditions in the area.

The data I'll be showing you is from operations in the lower Salinas area. And it's based upon the information submitted by farmers as part of the recent 2011 electronic notice of intent.

In this example, I'll focus on toxicity and pesticides to illustrate staff's process in evaluating the threat to water quality and how that process relates to the tiers in the draft order.

The process simplifies a complex number of factors by focusing on the most important details that influence water quality.

This is an aerial view of the lower Salinas area. In the middle, you see the City of Salinas, and to the lower left you have -- you see the Salinas River. There are approximately 360 individual farms in this

area.

And, again, in this example, I'm going to focus on the criteria related to toxicity and pesticides. I will take you through a series of questions to illustrate staff's process in evaluating threat to water quality and how that process relates to tiers in the draft order.

This is the same area in map view. In the middle, you see the City of Salinas. The rivers and creeks are shown in blue. The Salinas River is there towards the bottom. The top left is the Elkhorn Slough and Monterey Bay.

The green dots are individual farms. In the Salinas area, in this particular image, there are approximately 360 individual farms.

Focusing on toxicity and pesticides, staff asked a series of questions to evaluate which farms pose the greatest threat to water quality, and which pose a lesser threat; or, in other words, which farms are a higher priority for the draft order and which are a lower priority.

The first question we can ask is: Which farms pose lower threat to water quality?

One way we can evaluate this is by identifying operations that are SIP certified. In this case, there are no vineyards in this area that are SIP certified.

Again, focusing on toxicity and pesticides, we can also evaluate how many farms are applying pesticides. In the lower Salinas area, there are 360 farms, and they all apply pesticides.

Recognizing that not all pesticides are a threat to water quality, staff further evaluated the extent to which pesticides are found in surface water.

As described in the order, more than 75 individual pesticides are found in surface water in the Central Coast region. Staff evaluated the use of these pesticides.

In the lower Salinas area, all 365 -- 360 farms apply at least one pesticide which has been detected in surface water.

While many pesticides have been detected in surface water, a few have been documented to be a primary -- a primary cause of toxicity and impairment, especially chlorpyrifos or diazinon. Staff evaluated the use of these particular chemicals. In the lower Salinas area, 170 of the 360 farms apply chlorpyrifos or diazinon.

We can also prioritize farms based upon location. The idea is that a farm that is in closer proximity to impaired waterbody is of relatively higher priority compared to a farm that is farther away.

In the lower Salinas area, we can evaluate

farms that apply chlorpyrifos or diazinon and are within a thousand feet of an impaired waterbody.

In the lower Salinas area, 22 of the 360 farms apply chlorpyrifos or diazinon and are located within a thousand feet of an impaired waterbody.

We can also identify farms which may have an increased threat to water quality. In this case, we looked at farms which apply chlorpyrifos or diazinon and drain to a creek that's impaired for toxicity and pesticides.

Based on the information submitted with the 2011 electronic NOI related to the use of chlorpyrifos or diazinon, the presence of tailwater and the identification of discharge points on ranch maps, staff estimates that approximately 10 of the 360 farms would fall into this group.

So, in summary, in this example of the lower Salinas area, focusing on toxicity and pesticides, you can better understand staff's process in evaluating threat to water quality. And how that process relates to tiers in the draft order.

Similar to other water board programs and general orders, this process simplifies a complex number of factors by focusing on the most important details that influence water quality; in this case, moving from 360

farms to 10 farms to prioritize those farms that are a higher priority for the draft order.

So undergoing this evaluation in the lower Salinas area provides us with information to inform tiers.

For this area, based on data submitted in the electronic NOI, approximately 151 farms would be Tier 1, 199 farms would be Tier 2 and 10 farms would be Tier 3.

Again, this is for the criteria related to toxicity and pesticides. Staff has also done a similar evaluation for the nitrate-related criteria.

As Michael mentioned, similar to the analysis of data for the lower Salinas area, this slide summarizes staff's assessment of how the tiers would apply to farming operations regionwide.

These numbers are based on information from the electronic notice of intent, the existing enrollment database, county crop maps and pesticide use information.

Staff expects that most operations would fall into Tier 2, which makes sense, given that Tier 2 is intended to include those operations that represent a moderate threat to water quality.

Tier 3 would include the least amount of operations, representing those that have an increased threat to water quality.

Again, as Michael indi -- Thomas indicated, this slide summarizes the order conditions. Tier 2 is very similar to the 2004 agricultural order, with additional necessary requirements included to protect groundwater quality and drinking water sources as well as improve reporting for compliance information via an on-line system.

Tier 1 requirements have decreased reporting, and Tier 3 requirement have increased verification and reporting, due to the increased threat to water quality.

Now I'm going to focus on specific aspects of the Tier 3 requirements, because they could be considered new, while other aspects are more similar to the existing agricultural order.

Specifically, I'll discuss Tier 3 individual monitoring, the water quality buffer plan and the irrigation nutrient management plan. Lisa McCann will talk a little bit more about time schedules in a moment.

The draft order requires all Tier 3 dischargers -- dischargers to conduct individual surface discharge monitoring for those farms that have irrigation or stormwater runoff.

Given the relative increased threat from Tier 3 operations, the purpose of individual discharge monitoring is to characterize the nature and amount of

waste that may affect water quality.

Individual surface discharge monitoring includes discharge flow and volume, temperature, Ph, electroconductivity, nitrate and chlorpyrifos and diazinon, if they're in use, as well as toxicity.

A subset of the Tier 3 operations must also develop and implement an irrigation and nutrient management plan. These requirements apply to the subset of Tier 3 operations that have high nitrate-loading risk, and only for the relevant individual farms.

The proposed nitrate-loading risk factors and requirements were developed by staff in consultation with technical ex -- experts, specializing in the field of vegetable crops; consultants, certified crop advisors and representatives from the Central Valley region.

In addition, the December 3rd proposal submitted by the California Farm Bureau Federation and members of the agricultural community proposes to use the same nitrate-loading risk factors.

Given the severity of groundwater impacts in the Central Coast region and the high-nitrate loading risk from Tier 3 operations, the purpose of the irrigation and nutrient management plan is to minimize nitrate-loading to surfacewater and groundwater.

Specific elements of the irrigation and

nutrient plan include the following:

The plan must be certified by a crop advisor or similarly qualified professional. And it must include standard nutrient budgeting tools, such as the identification of crop needs, reporting total nitrogen applied and calculating nitrogen balance ratios.

I'll talk a little bit more about the nitr -- nitrogen balance ratios on the following slide. But it's simply the total nitrogen applied divided by the crop needs.

The plan must report practices implement and it must also estimate nitrate loading to groundwater. In addition, there's also a requirement to verify the effectiveness of the irrigation nutrient management plan.

In addition, Tier 3 dischargers may -- may choose to conduct groundwater monitoring to evaluate nitrate loading as an alternative to the irrigation and nutrient management plan.

Again, only a subset of Tier 3 dischargers have to develop and implement the plan, and staff estimates that approximately three -- 30 of the 1700 currently enrolled operations will have to comply with this requirement. And only for those farmers with a high nitrate loading risk.

So this is a -- additional detail about the

nitrogen balance ratio. The draft order requires Tier 3 dischargers with high nitrate loading risk to keep specific nitrogen balance ratios.

Specifically, the draft order requires a nitrogen balance ratio of 1 for multiple cropping systems like lettuce, and a nitrogen balance ratio of 1.2 for annual crops, like strawberries.

Again, these nitrogen balance ratios were developed in consultation with technical experts and crop advisers. The nitrate -- nitrogen balance ratio is the total nitrogen applied divided by the crop needs.

To be clear, a nitrogen balance ratio of 1 is not perfection. It actually recognizes that nitrate loading to groundwater will occur. Crops are not 100 percent efficient. If you apply exactly what the crop needs to grow, some amount will load to groundwater.

Staff's goal is to improve water quality and to take steps toward reducing nitrate loading to groundwater and to maximize water quality improvement over time. These targets help us do that.

Now I'm going to show you how this works in a real example. This is a slide presented at a recent 2011 irrigation and nutrient management meeting. It shows data from more than 100 lettuce fields over the past 10 years; specifically, seasonal application of nitrogen.

Staff has overlaid information onto the slide to apply the requirements of the draft order.

Notice the spring planting for lettuce. There's a large range in application of nitrogen in this sample of more than a hundred -- a hundred lettuce fields.

Here in the left you see the maximum pounds per acre in the spring planting is 392 pounds per acre, and the minimum is 70. This is a very wide range.

Remember that the nitrogen balance ratio is a total nitrogen application of a crop needs, and the target for lettuce is 1. Data on crop needs is available for major crop types in the Central Coast region and, for lettuce, the crop needs ranges from 120 to 140 pounds per acre.

So if we use the data from the study, we can evaluate the range of nitrogen balance ratios for lettuce in the Central Coast region.

The wide range of nitrogen application yields a very wide range of nitrogen balance ratios. Remember that the target for lettuce is 1. So in the case of the maximum nitrogen application, the nitrogen balance ratio is 2.8, well over the target of 1.

In the case of the minimum nitrogen application, the nitrogen balance ratio is 0.5, well

under the target of 1, indicating a much more nutrient efficient application and reduced nitrate loading to groundwater.

We look at the average of the lowest nitrogen application fields, the average nitrogen balance ratio is 1.5, fairly close to the target.

Data from this real example indicates that a target of 1 for vegetables like lettuce is possible. And that many farms likely exceed this target and are loading to groundwater.

CHAIR YOUNG: I have a question about that, Angela, if I could just inject before it goes further.

How is soil type factored into this? I mean, it would seem to me that soil type -- how is soil type kind of factored into this? I would think that -- you know, let's assume that all farms are trying to be as efficient as possible with their use of nitrogen, and some are using higher amounts because of soil conditions. And the only way they can get the productivity they want is by using more nitrogen.

It -- it looks like, then, they are going to suffer a consequence because of their soil type because there's going to be greater nitrogen being discharged to groundwater.

MS. SCHROETER: It -- that is correct, that

soil type is a factor. The crop needs that you see here for lettuce, the 120 to 140 is a range. It takes into account the various factors that may affect the nitrogen crop needs.

The irrigation and nutrient management plan allows a grower to be site specific in their operation. So they adapt the plan to their specific crop. And, in fact, they -- we don't prescribe a crop nitrogen uptake. They determine that themselves.

They determine it based upon documentation in the literature, their own crop and tissue analysis and other factors. So the point of the plan is for them to determine their crop needs, report the total nitrogen applied and calculate a nitrogen balance ratio.

CHAIR YOUNG: But what if they can't achieve that ratio because of their soil type?

MS. SCHROETER: The --

CHAIR YOUNG: What -- what is going to happen to them?

MS. SCHROETER: Within the irrigation nutrient plan details in the draft order, it specifies that they can provide us with information about their specific crop needs, their nitrogen balance ratio and to verify that if they exceed the nitrogen balance ratio, how much nitrogen loading that would result.

For example, if they -- if you -- if you exceeded a 1.0, you can provide that information to tell us this is my nitrogen balance ratio and I know that nitrate's not loading to groundwater for these various reasons.

CHAIR YOUNG: Yeah. But what if it is? What -- what if the end result is there are farms that are discharging nitrogen to groundwater, and that's because of the soil type they have and the type of crops that they want to grow on their land, and this is going to result in a discharge to groundwater?

I'm not suggesting there shouldn't be some consequence to that if there's a pollutant going to groundwater. I just want to find out what you have in mind in terms of what if they can't achieve that ratio? What happens?

MR. THOMAS: So all this information is submitted to the board in -- into a database, as we talked about earlier.

We review that information, and where we see that people are -- farmers are not meeting this standard, we look at the overall conditions in that area.

So if groundwater is polluted in that area, and, say, there are domestic wells in that area, we follow up with that farmer and say, you've got to reduce

the loading here or we'll take additional regulatory action to make sure that you reduce it.

So it will de -- it will depend on the threat that that loading places to water quality and -- and human health. And we'll prioritize those cases.

CHAIR YOUNG: Hmm. Ad -- additional regulatory action. I -- I don't want to -- I guess we won't get into a discussion of that at this -- we want what you have in mind.

But, you know, I would think that before we ever get to that --

MR. THOMAS: Hm-hmm.

CHAIR YOUNG: -- level or stage that there's a -- a broader discussion of what would be appropriate.

MR. THOMAS: Yes.

CHAIR YOUNG: I'm not suggesting something shouldn't happen. I'm just concerned about what staff may have in mind, as what it thinks is appropriate.

MS. McCHESNEY: Mr. Chairman, I could maybe add to your -- the answer to that.

CHAIR YOUNG: Okay.

MS. McCHESNEY: The way the non-point source policy works and the way the order, I believe, is set out, is that if that is not working, the discharger would need to provide what additional management practices

could be imposed to meet the standard.

There -- I mean, the obligation, ultimately, is for dischargers to comply with water quality standards. And so, it doesn't contemplate there'll be some immediate enforcement; but, rather, look at what you're doing. Can you improve what you're doing to -- to im -- to reduce the impact?

And, you know, ultimately, if they don't do that, they could be subject to some kind of enforcement. But, basically, the approach of the non point source policy is to -- to improve your practices so that ultimately you're meeting the standards.

CHAIR YOUNG: Okay. Mr. Jeffries, did you have a comment? Question?

MR. JEFFRIES: Well, it appears with your line of questioning would kind of change -- if they couldn't meet the requirements, it would change what type of crop that they would be growing.

And I -- I don't know if I'd want to be in that position to dictate to the farmer what crop he should be growing, because that is his livelihood, he or she's livelihood.

And then, getting back to the soil conditions and -- and since we're talking about the Salinas lower -- lower Salinas Valley, where most of it is west of Salinas

itself -- which is - the people from Salinas would know it as a Blanco area, where there's a lot of tiling in that particular area, and we know that there are clay layers in that particular area that nitrate would never reach groundwater because it'd never get to the clay layers.

Now, consequently, the tiling, that would have some runoff. Is that measurement done at -- at the -- at the runoff location? The tiling where it goes into some kind of a drainage?

Then, my other question would be the followup of the type of irrigation that would -- they'd be using.

For instance, in the Blanco area, if you're a strawberry farmer and using drip irrigation, and not sprinkler or water -- topwater irrigation is that going to make a difference with the calculation of nitrates being used?

I mean, there's a whole gamut of different types of crops.

And then, how do you determine -- I -- I know you're looking at what the ag is providing you, the amount of nitrate that they're providing per acre for the particular crop.

But I -- I -- to touch on some of this -- what I started to bring up in February, is about Tier 3, where

you talked about thousand-acre farms; where you have a farm operation that might have 200 acres in the Blanco area, 200 acres in the east side, 200 acres Salinas River side and so forth.

You're still calculating in that -- that as a 1000-acre farm; is that correct - from the staff? - or are you looking at those individual farming operations?

MS. SCHROETER: Well, I -- I'll get to this in a little bit more detail in a moment.

However, in general, the way you get into a tier is by the characteristics of your operation.

So you are correct in assuming that if your operation totals up -- the ranches total up to more than a thousand acres, that's correct, you -- and -- and you grow a crop that is -- have a higher risk of nitrogen loading to groundwater, you would fall into Tier 3.

However, the requirements are specific to the ranch. So only your individual ranches that are a high nitrate loading risk would have to implement -- develop and implement a plan. And I can -- I'll show an example in a moment.

To be clear, the order doesn't dictate what crops can be grown. The goal is to reduce nitrate loading to groundwater. The target of one allows us to evaluate the relative load to groundwater. It's a

target.
So what we know here -- like in this example -- is there are some operations that have a nitrate balance ratio of almost three times that.
So the goal is to reduce that nitrate loading -- load as evidenced by a nitrate balance ratio. And clearly, there are some farms that can do that.
MS. MC CANN: Can I interrupt with --
MS. SCHROETER: And --
MS. MC CANN: I just wanted to add one thing. The order specifically says in the condition that -- that cites the ratios, that the condition is to meet the ratios or an equivalent loading reduction.
Because a reasonable load reduction so that waste isn't being discharged is what the goal of this is. So these ratios are an indication of a level of loading that represents waste discharge.
MS. McCHESNEY: Can I just --
CHAIR YOUNG: Okay.
MS. McCHESNEY: -- what you mean by that is that if -- if you don't meet one, it's not -- that's not an enforce -- a number you're going to enforce. It's -- you're looking at it as a -- as a trend or as a goal to reduce loading, not to necessarily meet some -- that number of one; correct?

MR. THOMAS: Correct. It's - it's an indication of loading to groundwater. And we are not going to look at one individual case and -- and the individual loading at -- at that location. We'll look at all of the information that is submitted, and the information in the particular area, like the lower Salinas area, or an area where we're -- there are domestic wells.
And if we find that the loading in that area is presenting an unacceptable -- unacceptable risk to domestic wells, for example, where the concentrations in the domestic wells exceed the drinking water standard, we will prioritize these areas and followup on those areas.
And you said earlier, Mr. Young, that we probably won't get into that. We could get into that, what that additional regulatory action would be. The board has many options for additional regulatory action.
We have cleanup abatement orders and cease and desist orders and waste discharge requirements with more comprehensive requirements than what are included here in this 2011 proposed order, and enforcement actions for the conditions in this order.
So you have a wide range of additional regulatory action that could be taken. And we would take those actions in cases where it's warranted, where we

have the highest risk to water quality and public health.
That's a very real part of our work and of this order.
CHAIR YOUNG: Well, what I would like to happen is that before the staff goes down that line, that we have a discussion at the board level, with the public involvement, in terms of: Here's where we're at and this is where we think we need to go -- don't -- and how we're going to get there.
MR. THOMAS: Yes. And that --
CHAIR YOUNG: So --
MR. THOMAS: -- that would happen. Because the -- the vast majority of these additional regulatory actions are done by the board, not staff.
CHAIR YOUNG: That's right. But some of them -- and there's quite a few that happen below the board's involvement -- and they just start to take place.
MR. THOMAS: Yes. And --
CHAIR YOUNG: Before that happens --
MR. THOMAS: Yes.
CHAIR YOUNG: -- I'd like there to be a discussion at the board level, with the public's involvement, so we can just see where we're at; what's the information staff has collected, what have the growers told us, how the staff - how has staff evaluated

that, and what does staff think would be the next step?
So I don't want the public or the -- especially the farming community, to think that staff is going to go down any particular enforcement path at this time, until we've had a discussion.
MR. THOMAS: I agree that --
CHAIR YOUNG: Okay.
MR. THOMAS: -- that's entirely reasonable, and it's what we would normally do. And especially in this case, where you have a lot of growers and we have a dynamic situation where we are learning, as well as the growers and the technical support people are learning about this issue.
We would be providing the information that is submitted to us to the board, as we go along. So we would be providing regular reports to the board on this and explain to you what we're finding. And then we would have to discuss about what direction do we go now.
If we're not achieving measurable improvement -- tangible improvement -- which direction do we go?
CHAIR YOUNG: Okay.
MR. THOMAS: I also wanted to follow up on one comment that -- well, let's say there's a particular crop that is being grown and you're unable to stop loading to groundwater.

We cannot say -- we, staff -- cannot say it's okay; if you're growing a particular crop it's okay to load nitrates to groundwater if you can't meet the standard. We cannot say that. We -- and we won't say that.

It may very well be that farming practices have to change or that certain types of crops have to change in order to meet water quality standards. That's another very real part of our regulation and our oversight. It could happen.

I don't want people to think that it could -- that there's no way that could happen. It could happen.

CHAIR YOUNG: Well, I understand that. And I actually expect staff to do its job, and to apply the law, bring to the board what it thinks is something that should be done or changed or modified.

I just want to make sure with this particular huge effort that we're undertaking, that everyone's well informed about what we're going to do and that there's ample time to discuss options and to consider alternatives.

I mean, there's an explanation for why we have a range from 392 to 70, in terms of nitrogen applications. And that's a whole discussion in and of itself.

MR. THOMAS: Yes. And --

CHAIR YOUNG: So --

MR. THOMAS: -- yes.

CHAIR YOUNG: You know, I -- I -- the target is fine. I'm not bickering about that. I'm just more looking down the line of what's going to happen when we have people that can't meet that.

MR. THOMAS: Yes. And part --

CHAIR YOUNG: So --

MR. THOMAS: -- part of that -- you know, the other part of the picture is, as Mr. Jeffries pointed out, what if there are site-specific conditions that a person -- where a person is -- a grower is not meeting the target, but they're not loading to groundwater because of the particular conditions there? Then we would have to consider that.

And that -- that grower can submit that information to us, in various forms. We would definitely consider that.

We wouldn't -- we would not have a -- an across-the-board opinion that if you're not meeting the target, we're going to take enforcement action. As we do in -- in every case that comes before the board, we have to consider the conditions of each individual case.

So where we have areas where our growers are

not meeting those standards, we've got to look at the particulars.

CHAIR YOUNG: Yeah, and I -- Mr. Thomas, I was referring to those enforcement actions that don't come before the board that -- that staff launches into. And I'm not saying it's not done inappropriately.

I'm just saying that there are, you know, lower level forms of enforcement that take place that don't come before the board. And so, you know, I'm just making my request known now that we have the discussion before we go down those paths. That's all.

MR. THOMAS: We'll do that.

CHAIR YOUNG: I expect staff to do what it's doing. But I expect to have a full-blown discussion about these things at that time.

MR. JEFFRIES: I agree with you, Mr. Chair.

The other thing I wanted to point is, I would say 99 percent of the farmers that I know all have professional people that advise them how much fertilizers or nitrates to put on their crop.

What are we doing to reach to those professionals to bring them into the area of -- of meeting this requirements? Have we -- have we attempted to do that?

MS. SCHROETER: There -- there's a whole gamut

of technical assistance and research going on about this exact issue.

And, as I mentioned, this graphic is from a recent meeting that was well attended by certified crop advisers and specialists and consultants, like you're describing.

MR. JEFFRIES: Okay.

MS. SCHROETER: And this was just in February. So I think as the information becomes more available, as research continues to be conducted and assistance continues to be provided, it'll help us to progress towards water quality improvement.

So I just have a few more slides.

MR. JEFFRIES: Go -- go ahead.

MS. SCHROETER: So -- so, again, staff estimates that 30 out of the 17 -- approximately 1700 enrolled growers would have to develop an irrigation nutrient management plan and attempt to achieve these nitrogen balance ratio targets here.

The draft order also requires a subset of Tier 3 dischargers to develop and implement a water quality buffer plan. Again, these requirements would apply to the subset of Tier 3 operations that contain or are adjacent to a waterbody impaired for sediment, turbidity or temperature.

And given the severity it impacts of discharges to aquatic life, the purpose of the water quality buffer plan is to prevent waste discharge, comply with water quality standards and beneficial uses in compliance with the order and the basin plan.

MR. JEFFRIES: Can I -- can I ask you about the plans? Where are they to be kept? Are they submitted to the staff? Are they on-line?

MS. SCHROETER: They --

MR. JEFFRIES: Are they accessible to the general public?

CHAIR YOUNG: The buffer plans or the farm plans or --

MR. JEFFRIES: Well, the farm plan -- and that could be all kinds of plans.

MS. SCHROETER: The farm -- there's no requirement to submit the farm plan.

CHAIR YOUNG: Okay.

MS. SCHROETER: The elements -- elements of the farm plan, for example, management practices implemented would be reported on this annual compliance form that Michael Thomas described, and you would submit on-line, similar to the electronic notice of intent.

The irrigation nutrient management plan is similar. There is no requirement to submit the

irrigation nutrient management plan.

Again, as part of this on-line reporting form, you would report on key elements of the plan; for example, your nitrogen balance ratio, the target you achieved, your description of factors influencing the target you achieved; the practices that you're implementing.

The water quality buffer plan would be submitted to the water board, as written into the current draft order.

And let me describe to you some of the -- the elements of that plan.

The specific elements of the water quality buffer plan include a minimum of a 30-foot buffer, any increases in buffer width to prevent discharge of waste, a schedule for implementation, maintenance provisions to ensure water quality protection, as well as photo monitoring.

In addition, Tier 3 dischargers may choose to propose a more site-specific alternative that is functionally equivalent.

Again, only a subset of Tier 3 dischargers have to develop and implement the water quality buffer plan. Staff estimates that approximately 10 of the 1700 currently enrolled operations would have to comply with

this requirement, and only for those farms that contain or adjacent to a -- a stream impaired for temperature, turbidity and sediment.

So this is one case where a water quality buffer plan would have to -- would be submitted. However, we anticipate, as with the other reporting elements that we described, this plan would also be submitted on-line through a series either of dropdowns, description boxes -- or could be uploaded as well.

MR. JEFFRIES: I'm sorry. I didn't mean to interrupt you.

But I just want to talk about several letters that I've read and it was -- I want to thank everybody that sent about a hundred and twenty-plus letters in to us, they're all in this binder that I have right here - talk about proprietary information and also rapian -- riparian areas.

Is this -- is that included in the 30-foot buffer area? No? Yes?

MS. McCHESNEY: I can answer that. The -- the water code specifically provides that if you are requested to submit information that's considered proprietary or trade secrets --

MR. JEFFRIES: Yeah.

FEMALE: -- that it is to be kept confidential

by the board. So it'll be up to the discharger who's submitting the plan to clearly mark the areas of the plan that are proprietary information so that the board can keep it confidential.

MR. JEFFRIES: Though the board and the staff would have access to that? How -- and it's not on-line? It --

MS. McCHESNEY: What -- correct. So there -- I don't know how they're proposing to deal with it on-line. But it would be required to be kept confidential.

But the board and the staff is allowed to view it.

MR. JEFFRIES: What kind of assurances can we give to the ag -- ag groups that this confidential information will be kept confidential?

As we know, with all the leaks and all these kind of things that our federal government is involved in, how do we know that this information is going to be kept that way? What safeguards do we have?

MS. SCHROETER: We would do that similar to any other program that we -- and/or set of proprietary information that we currently deal with.

And, in fact, if we deal with it electronically, it allows us to mark those clearly, and to not be -- not distribute those publically.

MR. JEFFRIES: Okay.
MS. SCHROETER: However, we -- staff would have to make the determination that that actually was proprietary information.
So the -- the discharger would tell us, mark those, and then if -- we would have a discussion about what elements were proprietary and which were not.
So --
MS. McCHESNEY: But I can just add --
MR. JEFFRIES: Okay. If we --
MS. McCHESNEY: -- typically what -- I mean, this is a common situation, where people submit proprietary information. The board keeps it confidential, and what we typically do is tell the person who submitted it, we will keep it confidential; if we get a request for this information -- a Public Records Act request -- we will inform you that we've received the request, and you can assist us, and I'd -- you know, in assuring that what we have to produce publically is not proprietary.
Because often they'll mark the entire report as proprietary, when it's not. And we -- you know, it's a -- it is an issue because we're required, by law, to -- to provide public records.
And so we have to be sure that we comply with

that law to provide public records, as well as to keep information that truly is considered proprietary or trade secrets by law private.
So it's -- it's -- this is not a new issue. It happens all the time, and the staff is prepared to deal with those issues.
CHAIR YOUNG: Let me make a suggestion about this point.
I'd like to make sure that once staff has reviewed what has been marked, you know, by the applicant as proprietary, that staff has had a discussion with the applicant; if you come up with a different determination that, no, this is not proprietary, we intend to release it if asked, that, at least, you have a discourse with the applicant and allow them to tell you, again, why they think it should be kept confidential.
And, if not, I -- I'd like them to know what is going to be released, if asked.
MS. McCHESNEY: And --
CHAIR YOUNG: Not so -- that staff gets the information, makes the determination, there's no further exchange with the applicant. But it just gets released somehow.
MR. JEFFRIES: Yep. Because assuming that it's accepted that way.

CHAIR YOUNG: Yeah. I want to make sure there's a closed loop on that; that, you know, if you disagree with the applicant, that the applicant has an opportunity to at least bring that to closure.
MS. McCHESNEY: And that -- and, again, that's -- that is the normal process, is to not release the information without having that conversation with the -- with the submitter of the information before -- and giving that person an opportunity to defend it, and say, no, it is proprietary and here's why.
And -- and -- it's -- it's extremely rare that it happens but, you know, it --
CHAIR YOUNG: Is that in the code?
MS. McCHESNEY: That's just a practice that the board engages in. Because it is required by law to keep it confidential if it -- and truly is confidential.
So it's a practice that -- I mean, you know, I just -- I've been the attorney for boards for 23 years, and -- and it's happened twice that we've even engaged in that issue.
So it's not -- it's common to keep it confidential. It's rare to have to deal with the issue of disclosing it. So -- but it does happen.
CHAIR YOUNG: But this is -- this is a huge effort --

MS. McCHESNEY: Right.
CHAIR YOUNG: - encompassing a lot of people -- encompassing a lot of people, a lot of acreage, a lot of issues, so --
MS. McCHESNEY: Yeah, and it's -- you know --
CHAIR YOUNG: -- I would -- would think that we -- there may be requests for this information.
MS. McCHESNEY: Right. And so, it's important to -- to be clear and -- and I've advised staff on how to do that and --
CHAIR YOUNG: Okay.
MR. THOMAS: Mr. Chairman, we would -- where -- where there's controversy -- you know, if there's a disagreement between us and a discharger, then -- if there is disagreement between staff and a discharger about confidentiality, we would definitely be talking to the board's counsel about that. We won't make the decisions on our own.
CHAIR YOUNG: Okay.
MR. JEFFRIES: I asked a question about the buffer. Can you elaborate on the buffer?
MS. SCHROETER: Can you repeat your specific question, elaborate on --
MR. JEFFRIES: Well, I was talking about riparian buffers.

Is that what you're talking about; the 30-foot buffer or buffers to be increased?

MS. MC CANN: What -- what she's talking about, in general, is a requirement to ensure that Tier 3 dischargers, that are discharging to an impaired waterbody for sediment, turbidity or temperature, are ensuring that there are no waste discharges into that stream.

A very effective and standard way to do that is to have a vegetative buffer between the edge of the area that has the likelihood of discharging waste, such as a bare field or a row between vegetative crops and the stream that's impaired.

MR. JEFFRIES: I brought this issue up before because of the requirements of food and ag that are now requiring that they don't have any buffers.

How do we -- you know, we got two -- two jurisdictions telling these folks two different things, And we're going to say that you're discharging because you don't have some kind of a buffer there; and then you have, on the other hand, food and ag is telling them you can't have a buffer because the possible contamination.

How -- how are the two agencies working together on this?

MR. THOMAS: And I'm not an attorney on this,

but --

MR. JEFFRIES: Neither am I, but I'm just asking the question.

MR. THOMAS: -- the -- there is -- there is a conflict, as you pointed out, between food safety issues and requirements or conditions of the board.

The -- my understanding of it, not being an attorney, is there isn't a agency requirement or regulation that there be no vegetation or no buffer.

There are buyers who have people in the field indicating to farmers that they are reluctant or will not buy produce if there is wildlife in the vicinity of that produce, because of the risk involved.

And the literature does not support the buyers' or auditors' position that there should be bare ground or no vegetation or no riparian vegetation. But that is the greatest risk.

The -- the literature shows that domestic cattle and pigs are the largest source of the most problematic bacteria and that -- and we -- we reference this in our letters to other agencies and in our staff report -- where there are reports and literature that show removing the vegetation could exacerbate the problem, not improve it -- the food safety problem -- by allowing the transport of this problematic bacteria.

Though the -- while there is a conflict between buyers and water board conditions or requirements, we don't see a conflict between requirements of different agencies. Those are two very different things.

MR. JEFFRIES: Well, I'm sure we'll hear more about that today.

MS. McCHESNEY: And -- and, Mr. Jeffries, just to add to that, the -- the proposed order has: Submit a buffer plan, where you would identify how it is you intend to prevent discharges of waste to waters of the state.

If it doesn't work for you to have a buffer -- to have a -- a riparian buffer of 30 feet or whatever, you would need to propose another way because you're still obligated to comply with the basin plan standards of not discharging.

And I think what you said was there would be about 10 farms in the -- out of 1700 that would be subject to that. So, certainly, staff would be able to work with those individuals to figure out how to work out the plan with them.

CHAIR YOUNG: The -- the minimum 30-foot buffer that, in conjunction with - or any alternative that a farmer could come up with that would accomplish the same end result.

So if someone says, you know, I can get something engineered within a 15-foot buffer that'll do the same thing, and we can show it to you, that would be acceptable.

MS. SCHROETER: That's correct.

CHAIR YOUNG: Okay.

MS. SCHROETER: So in conclu -- just -- to conclude here, the draft ag order takes into account the complexity of irrigated agriculture and the specific characteristics of individual ranches and simplifies the tiering criteria and order requirements by focusing on the most important details to protect water quality.

The order is reasonable, and the tiering -- tiering and requirements are scaled based on threat to water quality, similar to all other water board programs.

Tier 1 has the minimal requirements and will minimize the burden on small farms and those which pose the least threat to water quality.

Tier 2 is similar to the 2004 agricultural order, and has a reasonable level of requirements for a majority of the farms in the Central Coast region. It includes the necessary reporting of key management practice outcomes and how they are effective.

Tier 3 is necessary and responsible given the increased threat to water quality and the severity and

magnitude of water quality problems and impacts to public health.

And now Lisa McCann will speak to you more about our public input --

CHAIR YOUNG: Before Lisa starts, I have a couple other questions, Angela, for you.

If you could go backwards, you had some slides involving the 360 farms in the Salinas area, and the number of pesticides that were in use.

And I think you said there were a total of 75 pesticides in use, that you identified.

MS. SCHROETER: There are 75 pesticides which have been currently detected in surface water.

CHAIR YOUNG: Okay.

MS. SCHROETER: We evaluated -- of the farms that apply pesticides -- are all of them using those 75 or are some growers using chemicals that are not even found --

CHAIR YOUNG: Okay.

MS. SCHROETER: -- in surface water?

CHAIR YOUNG: So let's take away the two big ones. Okay? Of those 73, are any of those 73 having a toxic affect in surface waters?

MS. SCHROETER: Yes.

CHAIR YOUNG: Okay. But you're not proposing

to pull those into the same requirement as you are for chlorpy -- chlorpyrifos or diazinon?

MS. SCHROETER: No. Staff considered -- as mentioned in the staff report, staff considered a wide variety of options for developing requirements related to toxicity and pesticide.

As an example, we looked at DPR's entire list of restricted use chemicals. Looked at which of those chemicals were detected in Central Coast water and which were in use and still found that that list was very broad, and felt that that would be overly burdensome to growers to apply a tiering criteria based upon the use of 75 chemicals.

So that is why we looked at which chemical were well documented to cause toxicity and impairment in waterbodies in the Central Coast region.

And at the time of the drafting of this order, there was significant evidence in the literature about chlorpyrifos or diazinon.

CHAIR YOUNG: Okay. I -- but I think you said that the 73 do have a toxic effect in surface waters. Forgetting -- forgetting about that there may be not as much in use as the other two, how -- I don't -- I don't see you you're justifying not including them in this requirement.

MS. SCHROETER: It -- it goes to reasonableness and also because of the overwhelming amount of information for these two, so that we just wanted to start off with the two known to cause severe toxicity and impairment in the Central Coast region.

In response to staff's own thinking about other chemicals that cause toxicity as well as many, many comment letters about that, we included the finding in the draft order that specifies, as additional information becomes available and impairments are known and it becomes documented of other chemicals, we may also include those -- or consider those are part of the tiering criteria.

CHAIR YOUNG: And how is that information going to be known to staff?

MR. THOMAS: Well, these studies are ongoing, as to the toxicity of various pesticides in -- in receiving waters.

The Department of Pesticide Regulation has a draft report -- it just came out in February -- which goes to this very subject. It -- it has -- the sampling is above and beyond what has been done in the past.

And it shows that there are other chemicals that are causing toxicity and that are found in receiving waters.

And the report -- or the order, the way we've written it, allows the executive officer to take into account this new information that comes up. And change the criteria.

Mister -- Mr. Young, earlier you said -- you referred to this as a requirement. This is criteria for deciding who -- you know, what --

CHAIR YOUNG: Right.

MR. THOMAS: -- requirements or what conditions are placed on different growers.

CHAIR YOUNG: Right.

MR. THOMAS: So we would adjust the criteria, based on new information that comes out. And these studies that come out about the toxicity of various chemicals.

CHAIR YOUNG: How is it that you know that -- that there's 73 that do cause toxicity?

MS. SCHROETER: That -- that's --

CHAIR YOUNG: Haven't there been studies that have shown that?

MS. SCHROETER: There are, but to a lesser degree than to the existing.

One of the things that I didn't mention, also, is that the -- the current monitoring that we conduct in the receiving water -- and Karen can correct me if I'm

wrong -- doesn't have an extensive list of pesticides.
So, while we do have information, it's not as robust as what we have for chlorpyrifos and diazinon. And what we've done in the draft order is to include a larger suite of pesticides in the receiving water monitoring, so we get a better idea of what chemicals are being found in surface water and which are causing toxicity.
So this draft order also helps us to gather that new information.
MR. JEFFRIES: Mr. Chair, if I may, I'd like to follow up on those other 73.
Are some of those constituents banned constituents that have been identified?
MS. SCHROETER: The -- there are banned constituents that, of course, contribute to toxicity. It's actually, I think, more than 75.
The -- the ones that I'm referring to and which are indicated in the findings of the draft order are currently in use.
CHAIR YOUNG: And in the notice of intent, is there a box there for people to list any pesticides that they're using, or just whether they are using C and D?
MS. SCHROETER: The -- the growers already report to the Department of Pesticide Regulation, through

the permitting process, which chemicals they plan to use. Staff is -- has access to that data and we are using that data and evaluating that data.
Unfortunately, that data doesn't come in a very timely manner to us. And so we have put, in the notice of intent, checkboxes that allows them to quickly report whether or not they're using chlorpyrifos and diazinon.
It also provides a space for them to report their pesticide use permit number, so staff can quickly assess which chemicals they are applying, without imposing the burden upon them to report every single chemical that they're using.
CHAIR YOUNG: Well, seems to me the issue here is just toxicity, period.
MR. THOMAS: It is.
CHAIR YOUNG: Not -- not the individual components of it. I mean, that -- isn't that what the standard is in
-- in the receiving waters?
MR. THOMAS: It is. That is the --
CHAIR YOUNG: So --
MR. THOMAS: -- basic --
CHAIR YOUNG: -- I mean, if you started from that and worked backwards, you could simply say, you know, are you discharging anything that might be

contributing to toxicity?
And it seems like you're -- you're narrowly defining this criteria here.
MR. THOMAS: Yes.
CHAIR YOUNG: And so I -- I just have an issue with that, at this point. And I'll just listen to what everyone else has to say about it. But --
MR. THOMAS: Yes. It's true. What you just said is accurate. We're narrowly defining this criteria according to specific chemicals at this point in time.
The -- the order requires toxicity sampling in receiving waters. It also says that the executive officer will -- will follow up -- will -- will order follow-up monitoring to determine what is causing that toxicity, what chemicals are causing that toxicity.
And there are toxicity identification analyses that are done. Standard practice is to determine what chemicals are actually causing it. So that's built in to the order to do that follow-up monitoring, to determine what those chemicals are and where they are coming from.
We can't know it ahead of time. We do the sampling, we do the analysis to determine what that is, and then we modify our approach based on those results.
CHAIR YOUNG: But you could know ahead of time if they're using any other chemicals on the list, if you

asked, instead of the C and the D. I mean, that would start to give you some information that perhaps you should be looking a little further.
MR. THOMAS: Hm-hmm.
CHAIR YOUNG: But we can go on. Lisa, you want to start your portion of this?
Oh, actually something else for Angela, if I could.
Going back to the tiers, let's say I'm in Tier 1. How do I get out of Tier 1? Is there any way?
MS. SCHROETER: How do you get out of --
CHAIR YOUNG: Yeah.
MS. SCHROETER: -- Tier 1?
CHAIR YOUNG: Let's say I'm a farm -- farmer -- no.
MS. SCHROETER: You don't want to be in the order.
CHAIR YOUNG: Yeah. You want to -- you don't want to be under this order at all.
MS. SCHROETER: Then you would eliminate your discharge.
CHAIR YOUNG: What if you can show that the discharge is not causing -- is not violating any standards?
Yeah, I have a discharge that's water, and

before it gets into groundwater, there's nothing in it; before it gets off my land, there's nothing in it except water, or it -- it's at least meeting receiving water standards. Can I get out of the order?

MS. McCHESNEY: I -- let me answer that. The water code requires that a person who's discharging waste or intend -- or could discharge waste that could impact the quality of the waters -- not violate water quality standards, but could impact the quality of the waters of the state, must submit a report of waste discharge and receive waste discharge requirements or a waiver of waste discharge requirements.

So just saying that I am not violating water quality standards, does not get you out of that obligation to comply with the water code. If you, in fact, do not discharge anything, then you're not obligated to submit a report of waste discharge or -- or join this -- enroll in this waiver.

But the fact that you may discharge something that could impact the quality of the waters of the state, obligates you to comply with the water code and that's how it works.

CHAIR YOUNG: I -- I understand that. And I'm not -- and I'm not suggesting that someone not file something.

But let's say that people have filed -- let's say they have filed because they could possibly threaten water quality, but they're then able to demonstrate that their discharge is not violating any standards.

MS. McCHESNEY: Well, the way the order is set up now is to have a Tier 1. If you want to have a Tier 0 or a Tier «, you know, you could have a tier that has even lesser requirements if you choose.

So if they're below some threshold -- additional threshold -- you know, you could ask how that could work.

CHAIR YOUNG: I mean, it's something we could talk about. But I'd like there to be, you know, some incentive, you know, for people to try to get to that, you know, level where they can demonstrate they're not having an impact on the environment.

But --

MR. JEFFRIES: Well, Mr. Chairman, there's obviously 7 percent of the community feels that -- because we only have 93 percent enrolled in our old order. So there's 7 percent feel that they're in that position already.

CHAIR YOUNG: Well, I don't know if that's wishful thinking or not. I don't know who the -- who they are or what they represent, but --

MR. THOMAS: Well, it -- it just --

CHAIR YOUNG: -- there is a number out there that's not --

MR. THOMAS: Yeah. They may have a different opinion, then, that they're not discharging.

MR. JEFFRIES: A little levity on this issue.

CHAIR YOUNG: Right.

MR. JEFFRIES: But it just -- it brought to mind that -- since we're here in Watsonville, I do know that historically there were apple orchards up in the Mount Madonna area that didn't irrigate. They were all natural spring-fed irrigation.

There was no water applied, other than the rainfall and what springs provided to their orchards. There was no turbidity runoff. They did use chemicals to spray.

So how do they fit in that criteria? I mean, there's -- and I think that's kind of where Chairman Young was going. If you -- say, if you have a strawberry farm -- I don't want to keep picking on strawberries, but I do know they use drip.

And, also, grape. If you have a small vineyard, 800 acres, then you use drip, you have no runoff; use some chemicals, but it's all within - you meet all the requirements.

Why would you have to go through all the nosebleed of filing a -- an application each time, each reporting time?

MR. THOMAS: Well, the notice of intent is something you do once in a five-year period. And it would describe your operation. So if you have an operation, as you're describing that -- in -- in the grower's opinion, is -- is not discharging waste, then that's what they would describe in that.

And I -- I don't think that's a -- a great burden to describe one's operation --

MR. JEFFRIES: Well, there's --

MR. THOMAS: -- every three to five years.

MR. JEFFRIES: -- some letters from avocado farmers that gave that somewhat same description. And they want to know why they had to be participating in this. But -- just bring that up.

MR. THOMAS: As counsel has explained, if -- if there is a discharge, and -- they've got to be covered.

MR. JEFFRIES: And if they don't have any discharge and they can prove it?

MR. THOMAS: Then they would not need a permit.

CHAIR YOUNG: Okay. Then could you explain to us, like, if you're in Tier 3 or 2, how you could move down a tier.

MS. SCHROETER: So the -- there is a -- there is -- we -- the -- the order, as with any other pro -- program or general order, specifies general criteria, and so, we recognize that the criteria may not fit all operations, and that some operations may legitimately not belong in a particular tier.

So we included a specific condition -- I believe it's condition number 17 -- that lists ability for a grower to document why they should be in a lower tier, and it lists all the specific information they could provide.

And it's similar to other programs. For example, we evaluated what we look at in reports of waste discharge types of information. It's standard.

MR. JEFFRIES: I don't want to keep harping on this issue, but I -- I keep going back to the criteria of Tier 3. And my understanding -- and correct me if I'm wrong -- if you -- if you have a farm of a thousand acres or more, is that one of the criterias?

MS. SCHROETER: That's correct.

MR. JEFFRIES: Okay.

MS. SCHROETER: Or, I'm sorry. It's a thousand acres or more if you grow crops that are high nitrate loading to groundwater. If you just have a thousand acre

vineyard, you are not automatically Tier 3.

MR. JEFFRIES: In February I used the description, and our legal advised me that we couldn't go into that at that particular time. And I used the - for instance, the Jeffries farm. And I farm a thousand acres.

But it isn't one plot. It's a thousand acres over the whole Salinas Valley. I'm one farm, but I -- I farm several acres in different parts of the Salinas Valley; some I own, some I lease.

Does that constitute a thousand acres? Would I be required to file just because I do farm -- what happens if I farm 999 acres?

You know, why -- and so, how does the collectively -- you're collecting the amount of acres for one farming operation.

So Jeffries farm operates a thousand acres, but it's not one thousand-acre lot; it's 50 acres here, a hundred acres there and so forth.

Why would I be in Tier 3 if I had a thousand acres?

MS. SCHROETER: So I -- I -- drafted this slide that you see here in front of you. And the draft order -- the tiering system is based upon your individual operation.

We heard from many commentors that we shouldn't -- we should recognize that the -- the relative load of pollutants, and especially recognize that smaller farms may not have as significant pollutant load as a larger farm.

And, in terms of nitrate loading potential, I think the evidence shows that you -- a high nitrate-loading crop over a large acreage is higher risk than a high nitrate-loading crop on very small acreage.

So here's an example in front of you that shows how a Tier 3 operation of greater than a thousand acres - how the requirements would apply. Because requirements actually apply based upon your individual ranch.

So in this example, there is one operation; it's 1300 acres and there's three different farms. The farms may be in the same watershed or they may be in completely different watersheds.

So farm number one is 800 acres lettuce; farm number two is 200 acres of carrots; and farm number three maybe is 300 acres of grapes. I put some factors in here to help us illustrate more some specifics.

So let's say the lettuce farm does have tailwater; the carrot farm is all on drip, so maybe there's no tailwater; vineyards, of course, have very

little irrigation runoff, and let's say there's no tailwater.

But let's say that the vineyard is next to this creek, which is impaired for sediments and turbidity. So farm number one, because it's a high-risk nitrate-loading crop, would have to evaluate their nitrate loading risk factor. If that risk factor was high, they would have to imple -- develop and implement an irrigation nutrient management plan.

Because they also have tailwater, they would have to do individual discharge monitoring for their irrigation runoff and stormwater.

The 200-acre carrot farm would likely -- after an evaluation of nitrate loading risk, would likely be low and, therefore, would not require the development and implementation of an irrigation nutrient management plan.

But they have tailwater, and so they would have to conduct individual monitoring -- or, I'm sorry -- they don't have tailwater, so they would have to do irrigation runoff monitoring, only stormwater monitoring.

This farm number three in this example is a vineyard with no tailwater, but next to the sediment -- or turbidity-impaired creek.

Because they're not a high nitrate-loading ran -- or farm, they wouldn't have to do the irrigation

nutrient management plan, but they -- they would have to do the water quality buffer plan or an alternative because they're next to this sediment or turbidity-impaired creek.

So this is an example that illustrates the -- a Tier 3 operation, multiple farms over a large acreage and how we attempted in the draft order to require farm-relevant conditions.

CHAIR YOUNG: Question now. Let's look at number -- farm number one. It has been pulled into Tier 3 simply by virtue of the fact that the owner has these other two farms.

And then, if you had another farm adjacent to it, everything the same - 800 acres, lettuce, tailwater - it would not have the same requirements imposed on it; right?

MS. SCHROETER: That is partially true. Because the -- if the adjacent acreage was Tier 2, they would still have to evaluate the nitrate loading risk and they would still have to report the total nitrogen applied, which are elements of the annual compliance form.

They would not have to go through the whole process of evaluation irrigation nutrient management plan.

And, essentially, what we have done -- and this is not to say that the smaller acreage farms don't have the potential for nitrate loading, because they do.

CHAIR YOUNG: But they do. Right.

MS. SCHROETER: The -- the -- the point here in this requirement is that the smaller operations in the beginning, have to conduct less requirements. And we -- we are trying to recognize the fact that the smaller farms had several comment letters that the requirements were overly burdensome.

So it's a phasing of requirements. And starting with those operations that are larger and potentially have higher risk.

Alternatively, we also considered --

CHAIR YOUNG: Angela --

MS. SCHROETER: -- the same requirements from everybody.

CHAIR YOUNG: Excuse me, Angela. But the risk to farm -- from farm number one is no different than the risk to the adjacent farm, doing the exact same thing.

MS. SCHROETER: Right.

CHAIR YOUNG: If that's conceptual, I just have a problem with the way this is laid out; that just by virtue of an owner collectively having a lot of land, that each of these farms isn't being evaluated

independently, and is being evaluated in this aggregate.

So, I just have an -- kind of an issue with it.

MS. SCHROETER: We attempted to be reasonable in applying the requirements.

CHAIR YOUNG: And I understand. I'm just pointing out what my observation is.

Now let's look at farm number two, the 200 acres of carrots. Is farm number two having to do anything extra by virtue of the fact that it now happens to be owned by this individual that has over a thousand acres?

I mean, would -- would this be simply a -- could this be a Tier 1? Standing alone.

Got another neighbor next door, farm B, 200 acres of carrots, no tailwater.

MS. SCHROETER: It depends on if they're using chlorpyrifos or diazinon. But it's possible. It's possible.

CHAIR YOUNG: It is possible it could be Tier 1.

MS. SCHROETER: Hm-hmm.

CHAIR YOUNG: And it's possible it may not have to do individual monitoring. Okay.

So those are two examples that I -- I think there's maybe -- I mean, it's your approach to this. I'm

not saying it's not reasonable. I'm just pointing out that it -- it's something for us to talk about.

MR. JEFFRIES: I think it's going to cause a lot of confusion, in my estimation.

CHAIR YOUNG: Well, it's the fairness factor --

MR. JEFFRIES: Well, it's the fair --

CHAIR YOUNG: -- for me.

MR. JEFFRIES: -- that on top of that. But that's the reason I point it out. If you have -- one operation has multiple locations, they may not collectively be one farm of a thousand acres --

CHAIR YOUNG: Right.

MR. JEFFRIES: -- that they're irrigating or whatever they're doing at farming at the one particular location, but might be spread all over the Salinas Valley.

CHAIR YOUNG: Right, right, right.

MR. JEFFRIES: And so, consequently, why -- you know, if one of their locations meets the Tier 3, why does the whole operation meet the Tier 3? The rest of it might be in Tier 1.

And it -- and that would make a lot of difference on the type of monitoring that they'd have to report and the cost of that monitoring.

So that's -- that's my -- some of my concern.

That -- and that's what I was -- tried to allude to in February, when I started on that -- that questioning of -- of the farm being that size.

And I think that's something the staff needs to look at and define a little bit better. And maybe the board should take a little closer look at that.

CHAIR YOUNG: Well, I -- I think stated another way, the -- the level of regulation should be commensurate with the threat. Just boil it down to that.

And if you got two farms side by side that pose the same amount of threat, I think that the level of regulation should be similar, unless you can demonstrate -- better than what I've seen so far -- that it should be done any differently.

So, I mean, the only rationale I can see is that you have a -- a landowner with more than a thousand acres, that he or she has more money, possibly -- more revenue stream to deal with this.

But I don't know that that should be the criteria that should be used.

MS. SCHROETER: Before we get on to Lisa's presentation here, just to mention, staff evaluated tiering based upon individual ranches. And if you remember the figure that I showed you in the beginning, of the 1700 operations that we have, that's more than

3,000 individual farms.

And some farms have as many as 10 to 12 ranch -- farms -- individual farms, some operation - I'm sorry.

And so, what it does is it requires those particular operations to tier all of their farms individually and to comply with all those requirements individually.

Instead, what we did was to tier versus an operation, and then when it came down to the ranch level, to apply the conditions ranch -- or farm specific.

So, for example, we didn't have all of the Tier 3 operation -- farms within an operation have to do an irrigation nutrient management plan. We attempted to say, okay, only -- that condition only applies to the farm where it makes sense.

CHAIR YOUNG: Okay. Who is next? Lisa.

We'll take a break after your presentation. So -- I need to get some water.

MS. MC CANN: Okay. Well, this is the section I know you've all been waiting for.

CHAIR YOUNG: The end; right?

MS. MC CANN: Yes. Exactly. Actually, Michael -- Michael will be the end.

And since my last name is McCann, instead of

saying good morning, I'm going to say top of the day to you on this St. Patrick's Day.

CHAIR YOUNG: Okay.

MS. MC CANN: I'm going to review the public input process and summarize the outcomes of the early public input prior to us publically distributing the draft -- November 2010 draft agricultural order. And briefly discuss the alternatives that were submitted, and how those were considered in developing the draft to 2010 order.

And then I'll review the spe -- some of the specific popular comments we got on the -- that draft that led to the 2011 draft order that we're discussing today.

So we've been seeking input in discussing requirements for this order for about two and a half years, starting in fall 2008; met with numerous stakeholders that included several individuals, groups at multiple events in several different forums.

And through all these meetings and events we received a lot of input, and we've attempted to respond to all of this input.

And you might recall that the staff report included a table that had a long list of all the outreach events that we attended and participated in.

In addition to those, we had numerous follow-up phone conversations and meetings with individuals as outcomes of those particular events, as well.

So, in summary, as in that early period we heard these kind of key -- key points and key input, that we should prioritize based on water quality effects; that human health and drinking water should be the highest priority -- protecting human health and drinking water; that one size does not fit all, and that the requirements should be higher for those discharging the most or most threatening water quality, and that growers need flexibility to comply; that we should be reasonable in terms of providing timeframes that are reasonable, to control waste discharges and to meet water quality goals; that we should require reasonable amounts of implementation, monitoring and reporting requirements; and that the flexibility is needed to comply with these requirements based on uniqueness of the multitude of operations.

So we considered a -- a wide range of options. And, again, we -- we gave you a lot of pages describing all those options, in the staff report. And that was based on staff research, input from stakeholders and reviewing some readily available examples that we had, as well as alternatives submitted.

So, first of all, we used as a basis, as Michael illustrated earlier, the existing 2004 conditional waiver. We also looked back to the recommendations that we had made in our February 1st, 2010 preliminary draft order.

We looked at an alternative that was submitted by OSR Enterprises, which is a farming operation in our region; alternatives submitted by the California Farm Bureau Federation in conjunction with other agricultural organizations and the county farm bureaus; and an alternative submitted by a -- a group of environmental organizations, including the Environmental Defense Setter, Monterey Coastkeeper and others.

I've lined these up in terms of the degree of regulation or requirements, which Michael also talked about in his introduction.

In staff's opinion, the 2004 conditional waiver and the alternative submitted by OSR Enterprises and the Farm Bureau Federation are similar and provide the lowest degree of regulation, relative to this list.

And we compared all these to develop the 2011 draft agricultural order and - this is where it falls in this list as far as the degree of regulation and requirements in evaluating, compared all these options and alternatives to build an order that was responsive to

stakeholders' recommendations, while still addressing water quality problems, providing accountability, reasonableness and flexibility.

The farm bureau alternative and the environmental alternative contain some unique features or terms, which I want to mention briefly.

The farm bureau proposal led staff to add the use of coalitions as an acceptable means for individual growers to comply with the order.

But there were several other elements of the proposal that we found unworkable and we did not change anything in our recommendation.

The most unwork -- one of the most unworkable elements is the monitoring and reporting as proposed in that alternative because it did not include any indicators to show control of waste discharges; no indicators to show pollution reduction at individual farm level; no reporting on the results of groundwater monitoring; and no reporting of the results of individual discharge monitoring, which is only an option if a grower wanted to choose it anyway, but, if they were to choose it, that they wouldn't be reporting any of the results of that monitoring.

Equally unworkable was the absence of time schedules to show that management practices are

effectively controlling discharges or reducing pollution loading and that the milestones are inadequate.

I want to elaborate on what we found inadequate about the milestones, as proposed in this alternative, and explain the milestones in the draft agricultural order and compare them.

The draft agricultural order includes a general condition for all dischargers to comply with water quality standards, protect beneficial uses and prevent nuisance over time, by controlling their waste discharges.

It also includes specific conditions for Tier 3 dischargers to control individual dischargers of pesticides, toxic substances, sediment and nutrients, by specific dates. So, for example, a condition says, must control discharges -- nutrient discharges by October 1st, 2015.

Both the draft order and the farm bureau proposal contain milestones. And these milestones are indicators of compliance. They're not in of themselves enforceable. But they're indicators of compliance with the conditions of the order, and they give us some indication of whether we're making water quality improvements, both in discharges and receiving waters.

A side-by-side comparison of all the milestones

in the farm bureau proposal and the draft order is contained in the staff report, in section 7 of appendix D. I'm not going to go over all of them, but I just want to explain some of the general differences and give you one example.

The milestones in the draft order apply to both receiving waters and individual discharges for Tier 3 dischargers. The farm bureau proposal only includes milestones for receiving waters.

The milestones in the draft order for individual dischargers are indications of pollution reduction and runoff from these farms. The milestones in the order -- excuse me.

Most significantly, the draft order also includes milestones for nitrate loading to groundwater from individual farms. And there's no comparable milestone in the farm bureau proposal for groundwater.

And, most significantly, the milestones in the draft agricultural order represent greater water quality improvement over shorter timeframes.

These milestones and timeframes are necessary given the severity of the pollution.

They are also necessary so growers have shorter term indicators to inform if and how they are controlling their pollution in their waste discharges such that they

can be provided the flexibility to use adaptive management in response, and within the five-year term of the order to improve their level of waste discharge.

The milestones in the draft order are reasonably based on technical information that indicates fate of chemicals in the environment and known pollution control practices that have been measured to successfully achieve similar milestones as in the timeframes proposed in the draft agricultural order. And this information is detailed in the staff report, mainly in chapter 3C.

So I want to show how this would relate to an actual stream, the application of these two milestones over time.

In order to do that, we have to convert the farm bureau milestone, which is a 10-percent load reduction, to a concentration, in order to compare directly to staff's milestone, which is the water quality standard for nitrate in drinking water of 10 milligrams per liter.

So that's a concentration expression of the milestone over a five-year timeframe.

So if flow stays the same, a 10-percent load reduction is equivalent to a 10 percent concentration reduction.

So, assume that this stream has a current

nitrate concentration of 30 milligrams per liter. This is a typical surface water concentration for several waters in the lower Santa Maria River and Salinas River watersheds.

If the farm bureau proposal is achieved in this river reach, the concentration would go down by 3 milligrams per liter in 10 years, for an ultimate concentration after 10 years of 27 milligrams per liter.

If the draft order's milestone is achieved, the concentration will go down by 20 milligrams per liter in five years, for a 67-percent reduction.

Let me remind you again at this point, that these -- these milestones are indicators of progress. We don't expect a waterbody, necessarily, that's meeting 30 milligrams per liter, to achieve 10 milligrams per liter in five years.

But we do think that it's reasonable to expect tens of milligrams per liter of reduction, if all of the farms contributing nitrate loading to the surface waterbody actually comply with all the conditions, that that's -- it's reasonable to assume that 10 milligrams per liter or -- or something in that vicinity could be achieved.

And, again, that's -- that's related to the evidence that we have, that we have waterbodies where

people implemented management practices and were able to achieve that level of reduction.

At the rate of reduction proposed by the farm bureau group, it would take about 100 years for the river to meet the 10 milligrams per liter concentration.

So this is just a -- the -- a table expression of comparing the nitrate milestones for surface waters between the draft agricultural order and for surface waters for the farm bureau proposal. And, I apologize, these got out of order because I meant to show you this first.

Drinking water quality standard, 10 milligrams per liter over five years, as an indicator of progress and whether we're approaching that in -- in the draft order versus a decrease in ni -- nitrate loads from the current cooperative monitoring sites, which are the receiving water sites in stream of 10 percent in 10 years.

And I just want you to note here that there's no milestones in the farm bureau proposal for individual discharge reductions; and, as well, not for groundwater.

Okay. Moving on to the environmental alternative.

The environmental alternative was submitted as a letter that expressed support for the components in the

February 1st, 2010 preliminary draft order, but said the draft order ultimately should be more protective of water quality.

We incorporated some of the elements of the environmental alternative, in terms of monitoring requirements, increased erosion and sediment control requirements, riparian area protections, and clarifications to make it clear how one complies and compliance would be determined.

Okay. We received 116 letters, comment letters, by the comment submittal date of January 3rd, 2011. And those, again, were comments on the November 2010 draft order.

The comment letters themselves represent much more -- or many more than 116 comments and suggestions, because some of the letters were very lengthy and had multiple comments that spanned quite a broad list of topics, as well as the fact that many letters were signed by multiple organizations and/or individuals.

And we posted all these letters on our web site. So for - those who are interested should have by now been able to take a look at what some of the nature of those comments were. And I'm just going to focus on sharing a little bit of our response to some of the more common comments.

The focus of the most common comments were around tiering criteria, drinking water impacts, groundwater protection, monitoring and some legal issues.

Okay. In terms of tiers and tiering criteria - some of this is actually going to speak to some of the issues that we've already talked about, so I hope it's insightful and might clear up some of the -- our responses to some of your questions.

We added proximity to public water supply wells that exceed the drinking water standard for nitrate to the tiering criteria for Tier 3, so that we'd have a parallel criterion that was protective of groundwater or -- or spoke to the threat to groundwater quality parallel to those that we had already, that were about the threat to surface water quality.

We removed the size or the acreage amount relative to the use of pesticides. And this is because we agreed with comments that the size of the operation, when it comes to pesticide use, is not necessarily indicative to threat to water quality.

And, you know, for example, that goes in part to some pesticides are more toxic than others. So a little bit has a bigger effect.

MR. JEFFRIES: Lisa, before you go on, can you go back to the public water supply wells, and what is

that -- can you give me a definition of that?

MS. MC CANN: Of what a public water supply well is?

MR. JEFFRIES: Correct. Fifteen? Over fifteen?

MS. MC CANN: Over fifteen connections with people. Yeah. So that's fifteen connections.

MR. JEFFRIES: Okay.

MS. MC CANN: Okay. We replaced the term "adjacent to." So there was a criteria that said if you're adjacent to a waterbody impaired for toxicity or pesticides, that that was a qualifying criterion.

And we changed that to say, if you are discharging to that impaired waterbody, rather than just adjacent to it. So there has to be the connection there.

And, again, this -- this more adequately considers operations that are, in fact, actually affecting water quality and don't just happen to be nearby. So that'd be regardless of their proximity to an impaired waterbody. So they could be farther away, but if they're discharging directly, that would qualify.

We added this clarification that the executive officer can add specific pesticides as a criteria, as we have new information that supports that they are causing toxicity along with chlorpyrifos and diazinon.

And we added the sustainable in practice certification that Angela spoke about earlier, because we got a lot of comments that a certification such as that should be allowable, if it's verifiable and there's demonstrated evidence, which in the case of SIP certified with the Central Coast vineyard team, we have evidence that those farms are having minimal to no impact on water quality.

We also broadened that to say that others -- other -- equivalent certifications could be submitted, and the executive officer could then approve those, as also qualifying criterion for Tier 1.

Okay. On the topic of drinking water and conditions related to groundwater, we reduced the frequency of groundwater sampling for Tier 3 dischargers. I -- I think it was quarterly originally, and we made it two events in the first year, so it's parallel to the requirement the -- the number of events for sampling. And that was in response to comments that the cost of groundwater monitoring were -- were burdensome.

We also clarified that groundwater levels are only required where existing well construction allows ease of these measurements, to make it clear that we weren't intending anybody to drill a new well, change their -- their well construction or spend a lot of money

on that in order to be able to measure wells and get some baseline information from a suite of wells on levels.

And, again, that responded to comments where people said they were concerned that this sounded like they had to have new wells to meet that requirement.

And we had a requirement to install backflow prevention devices was originally three years. We made it one year because we received several comments that said: Why allow so much time to continue a practice that threatens, if not actually affects, water quality directly?

CHAIR YOUNG: Aren't they already under some requirement to do that?

MS. MC CANN: Most counties, but not all counties, in our region have ordinances that require. So that -- that covers the gap there.

Okay. We removed some parameters from being required -- or in the surface water receiving -- surface water receiving monitoring, such as, bacteria.

And this was responsive to comments, again, about costs, but also that there were some constituents that we originally had that are not -- don't appear to be directly discharged or affected from or related to agricultural discharges.

MR. JEFFRIES: Was that considered from road

discharge, highways?
Because I know there was one or two letters that talked about it, there was chemicals coming off of highways onto their waterways.
Would they -- would they be responsible for that cleanup?
MS. MC CANN: So -- so the removing the parameters is not responsive to that.
The removing the parameters was specifically because of the mismatch of the chemicals that we were asking to be monitored in receiving water not coming -- not typically being used or generated by irrigated agricultural activities.
MR. JEFFRIES: I don't think you answered my question.
MS. MC CANN: I -- I don't think I did, either. But I want to clarify that this -- this response to comments did not --
MR. JEFFRIES: Maybe listening --
MS. MC CANN: -- respond to those comments.
MR. JEFFRIES: Okay.
MS. MC CANN: So -- so if you want to restate your question, then I'd be happy to answer that. Or try.
MR. JEFFRIES: Well, I'll ask the question again. But somebody in the staff surely can answer it.

How do we handle the discharges from roadways; highways, county roads and so forth?
Well, city streets are handled under their -- their orders that they have. And whether they -- where they end up is another issue.
But I'm talking about -- well, yeah, stormwater, whatever. But, you know, you take Highway 1 between here and Salinas, you've got multiple ranches along Highway 1 that there is drainage.
MS. MC CANN: I believe Highway 1 would be covered on the -- Caltrans has a stormwater permit.
So, yeah. If it's a state road, it's covered under Caltrans for stormwater runoff and any pollutants in stormwater. If it's a municipal road, it's covered by our municipal stormwater program, and the municipality's obligation to control runoff from roads.
If they are rural roads in rural areas that don't fit into that, there might be a gap there.
MR. JEFFRIES: So you're saying that during the monitoring process, if -- and I don't know if one of the constituents is benzine -- or any hydrocarbons are detected in that waterway, they're not responsible? Ag? That farm is not responsible?
What happens --
MS. MC CANN: This -- well --

MR. THOMAS: I'm not sure that I -- I understand the question, if you're saying that - pollution that runs off of Highway 101 onto a farm, who's responsible for that pollution?
MR. JEFFRIES: Right.
MR. THOMAS: Under the law -- I'll be a -- practice being attorney here for a second -- both parties are responsible.
MS. McCHESNEY: Well, let me clarify that. So if a -- if a -- if a highway -- like, if Caltrans is subject -- is -- discharges from the highway, Caltrans has to have a stormwater permit and has to control those discharges, and they would be responsible.
The farm would not become responsible for that discharge.
MR. JEFFRIES: Well, I -- I understand that. And -- and I knew that would be the answer.
But in -- in all practicalities, if that constituent comes up with the monitoring and the testing of the water, it's initially going to go to the farmer.
Now, is he going to have to hire an attorney to prove that this is not his or her responsibility?
That -- that's the area that I'm looking at.
MS. McCHESNEY: I think it's a issue in every dischargers that monitors. That there's -- of any

program. They monitor, we get the information. Then you evaluate the information: Is there reason to believe that that particular discharger is causing that problem? Then they would address it.
But I think they've attempted -- the staff has attempted to have the monitoring program specific to the kinds of chemicals that would come from farms.
MR. JEFFRIES: I understand.
MS. McCHESNEY: Not things that would come from roads. And -- and they would evaluate that. Whether that leads to further management practices or any enforcement, would be evaluated based on the information. It's not some automatic enforcement.
MR. JEFFRIES: But when you look at -- if you take monitoring at the Salinas River or if you take it at the Moro Cojo or if you take it at the Elkhorn Slough or if you take it at Quail Creek, you're going to have all those involved in that.
And so, as -- as a farmer, as the Jeffries farm is saying, hey, that isn't my responsibility, is that going to be accepted by the staff, or do I have to argue somewhere down the line, or do I have to hire a legal representation to -- to argue with -- with you, and say, ain't my job?
MS. MC CANN: Could I make a couple comments,

now that I understand where you're going better?
First of all, be very clear that the constituents that we are recommending be monitored to inform compliance with the conditions of this draft order are those types of constituents that could reasonably be assumed to be loaded from agricultural discharges.
If we were to find in monitoring for this order that there are other constituents that are popping up somehow that are signals, then we would be working with growers to followup and figure out what is the source.
Additionally, in general, our CCAMP program monitors parameters beyond what's required in this draft order receiving water monitoring, exactly so that we can find parameters that are coming from anywhere that might be impairing our waters, and respond to that.
And my last point is, we have a parallel program -- as you might recall -- the total maximum daily load program, which is explicitly about following up from constituents that are impairing our surface waterbodies identifying all the sources to different reaches or streams or estuaries, and making all the responsible sources in loading for those.
So irrigated agriculture would continue to be responsible for their portion of the contribution, if roads or other sources are also causing similar chemicals

or other different chemicals, then we would be involved in a parallel process with those dischargers about their waste discharges.
MR. JEFFRIES: Do we have a specific language in this order that defines that?
MS. McCHESNEY: Mr. Jeffries, I'm still confused about - what is your concern?
MR. JEFFRIES: Well, I'm -- my concern is, these folks are working on a very slim margin to operate their ranches.
And if we start making them require for other people responsibilities; whether it's erosion or from some other area, or chemicals off of a highway that's responsible to Caltrans or the county perhaps -- then I think it puts undue financial burden on the individual farmer to make that happen. So --
MS. McCHESNEY: Okay. And I think that --
MR. JEFFRIES: -- and that's -- and that's where, you know, clarification and -- most of these folks out here, you know, they don't have legal staff on -- on their -- you know, to be paid to -- to analyze and interpret all these rules and regulations of exactly what they're supposed to do.
MS. McCHESNEY: Okay. And I think that the answer to the first part of your question is that the --

the proposed order requires monitoring specific to what is -- might come off of a farm. So that --
MR. JEFFRIES: Well, if it's --
MS. McCHESNEY: -- so they're not --
MR. JEFFRIES: -- if it says -- if that says that --
MS. McCHESNEY: -- yeah. And that's --
MR. JEFFRIES: -- there, specifically.
MS. McCHESNEY: -- and the -- right. And the monitoring and reporting program if -- if a farmer says that doesn't fit our farm, they can request the executive officer to revise and reduce the monitoring.
But, basically, there -- it's not requiring people to monitor for things that aren't expected to be on farms. And then, there's no suddenly jump to, oh, we're now going to enforce against you because the water body has this in it.
It's -- it's --
MR. JEFFRIES: Yeah.
MS. McCHESNEY: -- the -- the non-point service policy and the waiver requires that then you evaluate that information: Are my management practices working to control my -- the discharges from my farm not from somebody else's farm, not from the roads, not from whatever?

So it's specific to -- to that. And the waiver law requires that there be monitoring to evaluate the effectiveness of complying with the terms.
So there needs to be some monitoring and followup, but it's not suddenly we're going to do enforcement, you have to go hire an attorney. And that isn't triggered by the way the order is written.
MR. JEFFRIES: Okay. I just want to make sure that there is specific information in -- in that order that says what you just said.
MR. BRIGGS: If I -- if I could add a comment, Mr. Jeffries. The examples you're giving of major waterbodies -- I think you mentioned Elkhorn Slough and Quail Creek and so forth -- those waterbodies are - and the receiving water are measured currently through the cooperative monitoring program.
MR. JEFFRIES: Right.
MR. BRIGGS: And they are confluence points. So that is more watershed scale monitoring, which isn't just affected by agriculture.
So that's what we have going now already with the existing order, and will continue with the propose -- proposal that we have here.
So we recognize that there are going to be signals in that data -- min -- mineral results, for

example -- where some of the elevations in certain watersheds are from what comes out of the natural formations; from the soil and the rock that are -- that are in those watersheds.

So -- and -- and in other cases, it may be affected by, as you say, runoff from roads. We have coordination with the City of Salinas, municipal stormwater program, where we have up-gradient, down-gradient monitoring.

And we recognize that that will pick up different signals, depending on what's draining to those points. So we've been dealing with that already with the cooperative monitoring program.

MR. JEFFRIES: Well, I -- I gave a demonstration of large waterbodies. But I also used the demonstration Highway 1.

And you got several fields of artichokes along Highway 1, as well as strawberry fields, and brussel sprouts and a number of other crops that you look at between here and Salinas.

And they're all adjacent to a state highway or a county highway. Those are not large waterbodies that I'm talking about. But you would have runoff on those particular farms.

And if that chemical is commingled with their

testing, I just want to make sure that those folks are not responsible for that runoff.

MR. BRIGGS: Right.

MR. JEFFRIES: That -- that's where I'm going with that.

MR. BRIGGS: Right. And if -- if any of those farmers -- and that's a big if -- were required to do individual runoff monitoring from their farm -- and one of the common problematic constituents from roadways is copper from brake linings.

They're -- the growers would not be required to analyze for copper. Another one is total petroleum hydrocarbon --

MR. JEFFRIES: Asbestos.

MR. BRIGGS: -- from oil and grease.

MR. JEFFRIES: Okay.

MALE: They're not required to monitor for that. So it wouldn't even show up. It wouldn't be an issue.

MR. JEFFRIES: Okay.

MS. MC CANN: I think I'm going to start here on the second bullet.

(Off the record)

CHAIR YOUNG: Go ahead.

MS. MC CANN: All right. I think we left off

at the second bullet --

MR. JEFFRIES: Right.

MS. MC CANN: -- related to our response to comments to some comments related to monitoring.

And the second bullet is referring to the fact that we -- what did we do? What page am I on? Excuse me a second.

Oh, we changed the individual discharge monitoring toxicity test, so that they would be species that were more indicative of pesticides like pyrethroids that might become substitutes for chlorpyrifos and diazinon so that we would have a backstop for being able to track other known pesticides that are being used that are also causing toxicity.

And that was in response to the comments along the lines of what we spoke about earlier, where there were comments that, if we just overly focused on chlorpyrifos and diazinon that -- that we weren't considering the other sources of toxicity.

So this is a way that monitoring helps us indicate that better.

MR. JEFFRIES: Can you briefly say something about the -- the species?

Because I know there was a -- at least one comment letter that, you know, kind of criticized staff

for picking a flea, you know, out of the host of types of species for testing, and commented about that.

MS. MC CANN: It's standard.

MR. THOMAS: We -- we actually use --

MR. JEFFRIES: Did you guys make -- come up with this list on your own, of species?

MR. THOMAS: No. There's a -- there's a standard list of species that can be used for toxicity tests. There are fish, algae and invertebrates and that range of species available.

We use all three categories or all three species; fish, invertebrate and algae. And so, the toxicity results are based on --

MR. JEFFRIES: Who came up with the species that can be chosen?

(Reporter clarification)

MR. BRIGGS: EPA, she said.

UNIDENTIFIED SPEAKER: EPA.

MR. BRIGGS: U.S. EPA.

MR. JEFFRIES: EPA.

UNIDENTIFIED SPEAKER: There's standard test organisms under the most commonly used ones. Sometimes others are substituted; for example, in brackish water, where they're more appropriate.

MR. JEFFRIES: Okay.

UNIDENTIFIED SPEAKER: But they're extremely -- typical test organisms used in permits throughout the nation.
MR. JEFFRIES: Okay.
UNIDENTIFIED SPEAKER: And -- yeah.
MR. JEFFRIES: Okay. Thank you.
MR. THOMAS: And, Mr. Chairman, if a particular species of fish is used or a particular species of algae or an invertebrate, it is not necessarily to protect that species. That is an indicator organism for that category and for overall biological health.
MR. JEFFRIES: Okay.
MS. MC CANN: Maybe I should have clarified, too. In this specific change it was simply for indicating what type of toxicity we have. We changed from algae to invertebrates, which are more sensitive to these other types of pesticides, like pyrethroids.
So it's not the general toxicity test of all the species.
And then we -- in response to lots of comments about the -- the monitoring reporting program was confusing, and some misunderstandings about some aspects of it.
We clarified it by separating it into the three tiers so that it was really clear which monitoring and

reporting requirements applied to dischargers that would fall into each of the three tiers.
Okay. In terms of some of the common legal issues, we added language that clarified the law with respect to confidential information, in response to concerns that farm plans and some of the other plans that would be submitted might contain proprietary information. And we spoke about that quite a bit, earlier.
We deleted some prohibitions, such as the one that prohibited the use of excess fertilizer. And we revised others into general conditions.
So, for example, there was a prohibition on having bare soil that could cause erosion and sedimentation. And we changed that to a condition that says dischargers must ensure that sediment from these areas does not discharge as a waste into waterbodies and negatively affect water quality.
This was responsive to comments that blanket prohibitions are not authorized in waivers and that some of the specific prohibitions were specifically for activities that are outside the board's authority.
And, finally, we clarified that dischargers must comply with water quality standards over time, by controlling their waste discharges and reducing pollution loading; that Tier 3 dischargers must meet specific

conditions to control their individual waste discharge or pollutant loads by a specified date.
And, as I discussed in detail earlier, that the milestones are indicators of whether these conditions are being met.
And this was responsive to comments that the provisions related to water quality standards would require immediate compliance with all water quality standards without regard for the time -- for any time schedules with the other considerations that we needed to be making.
So, in summary, we considered several options, the alternative proposals, as I summarized, and hundreds of comments, and we made lots of changes. And I only highlighted some of the most common in -- in the presentation that I just made.
So, I'll now turn it over to Michael to conclude our staff presentation.
MR. THOMAS: Okay. Just touch on a few misunderstandings that we have heard multiple times.
One is that growers must drill monitoring wells to meet the requirements of this order. And that's not accurate. There is no requirement to drill wells.
The requirement is to sample existing wells. That can be ag wells or domestic wells.

Another is that groundwater sampling will cost individual growers tens of thousands of dollars per year -- per grower, per year. That's not accurate.
We estimate the cost for Tier 1 and Tier 2 growers at $790 for the life of the permit; and for Tier 3 growers, approximately $2,370, also over the life of the permit.
We also heard that there's a prohibition of tile drains. And that's -- that -- because of that, land will be fallowed. There is no prohibition for tile drains.
Also -- we've also heard that everyone has to have a buffer strip of X feet, and that -- some of the comments we've gotten are -- the high end that I've heard is a thousand feet and that all that land will be taken out of production. That's not accurate.
You've -- we've had an extensive discussion on buffer areas this morning. So I won't go into that any further.
Another is that dischargers must meet a standard of 1 milligrams per liter of nitrate in surface waters, which is not accurate. The order does not require that in any way, shape or form.
Those are some pretty --
MR. JEFFRIES: Michael, does it require any

nitrate standard in receiving waters?
MR. THOMAS: It requires compliance ultimately with the basin plan standards, which is 10 milligrams per liter, which is the drinking water standard.
There are conclusions and recommendations. A couple of things I'd like to go over and in conclusion is -- one of the things I want to talk about is the severity of the problem, or emphasize the severity of the water quality problems in our region.
As I mentioned this morning, the groundwater pollution, the threat to public supply wells and the actual contamination in public supply wells, shutting down of these wells and abandoning the wells, treating water and drilling new wells is a huge problem in our region for many communities, especially disadvantage -- disadvantaged and smaller communities. And the problem is getting worse, not better.
We've heard from -- and you're going to hear today -- from some people that are affected by this water pollution. We've heard from water providers in municipalities that say their costs are staggering. And we've documented some of those in our staff report.
And one water provider said that they cannot drill water supply wells fast enough to deal with the nitrate problem. And treatment is so expensive that

they're still trying to drill new wells, even though it can cost millions of dollars to -- for the entire process of putting in a new public supply well.
The water board is the only agency with the authority and the responsibility to deal with these water pollution problems; both the groundwater problems and the surface water problems.
And we are accountable for dealing with these problems. It's our responsibility.
There are solutions. I firmly believe that solutions will be implemented, and they will be developed. And largely by the ag industry itself.
Organizations like the strawberry commission. We've met with them multiple times, and they are a very forward-thinking organization. I think they realize that there are water quality problems, and they want to deal with them.
I think that ultimately they will be the leaders -- organizations like that will be leaders in finding solution. I don't think it'll happen unless this board takes meaningful action and establishes meaningful requirements.
If the board does establish meaningful requirements, you will find -- we will all find that there are many experts in all -- various fields of

groundwater and surface water treatment that are currently not working in this arena; working in all the other arenas that the board regulates.
And you hear from those individuals on a regular basis. We have thousands and thousands of cases that are not ag related. But we have people working on those experts in the -- in the surface water and groundwater treatment -- working on those cases. And they are not bringing their expertise to bear on this issue.
If the board adopts meaningful requirements, that will happen. I think they will be working with organizations like the Strawberry Commission and other commodity groups to solve these problems.
Dischargers are accountable for the discharges of pollution from their property. We talked about -- earlier -- extensively about discharges from roadways, Caltrans, and Caltrans being responsible for those discharges. That's true.
And all property owners are responsible for the discharges of pollution from their property.
The public has a right to clean water. This something that people have actually debated us on. I have one comment letter that said the public is not -- does not have a right to clean water, that we're wrong

about that.
Well, actually, we do. It's one of our highest priorities. It is an established beneficial use. One of our primary responsibilities is to protect drinking water supplies and to correct the pollution of those supplies when it occurs.
And no one has a vested right to pollute public waters.
We've talked about how the order is reasonable because it has three tiers and how we've been responsive to comments. And we've changed the requirements in the order and changed the tiers - actually created the tiers and then changed them multiple times, based on comments.
There is a scale of requirements. For the lower threat dischargers, there's a lower level of requirements. For higher threat dischargers, a higher level of requirements, just like the board -- just like the approach the board has taken in every other program.
It's a well established approach with respect to reasonableness.
Urgency? How urgent is this problem? I don't know how it could be more urgent. I mentioned the domestic wells, the threat to domestic wells and the fact that we know that people in our region, in agricultural areas, drinking from domestic wells, that the water is

not being treated, that they are drinking polluted water today.

When they woke up this morning, they were drinking polluted water. And at the end of the day, when we're all done talking, they're going to go home and they're going to be drinking polluted water.

And it's our responsibility. There's no other agency that's responsible for it. It's us. I don't know how it could be more urgent than that.

We're working on drafting notices to homeowners right now. And we're trying to estimate the number of people that we're going to have to send these notices to. And it may be in the 10,000 range, that number of people affected by this water pollution.

So with that, we recommend that you adopt the proposed order and that we get on to implementation. And that's something that the board has emphasized to us multiple times. That we need to get to implementation and get tangible results.

And we agree. And we're not going to get there until the board takes action and adopts an order and we can start to implement it.

Thank you.

CHAIR YOUNG: Thank you.

If we have any board comments and questions at

this point, and then we'll do the -- Mr. Hodgin, any comments or questions for staff at this point? No.

Dr. Hunter? Okay.

Mr. Jeffries?

MR. JEFFRIES: Yes, I do.

CHAIR YOUNG: Go ahead.

MR. JEFFRIES: Michael, you -- on Tier 3 -- and I -- I don't want to keep dragging this in the ground, but I have -- on Tier 3, when you have a thousand-acre requirement, you -- you said on the average it'd be $2370 for the monitoring.

Is that -- did I get that correctly?

MR. THOMAS: (Nods head up and down)

MR. JEFFRIES: And if you have multiple locations, were you considering that would be one thousand-acre parcel? Or are you talking about that would be ten 100-acre locations?

Because the cost could multiply if you have multiple locations.

MS. SCHROETER: So, to clarify, the cost that Michael indicated were -- for groundwater sampling.

MR. JEFFRIES: Right.

MS. SCHROETER: And so, the costs are based upon the -- one sample -- a minimum of one sample from each farming operation.

So a farming operation that had multiple ranches would have additional cost.

MR. JEFFRIES: So if I had ten ranches, I'd have to do the monitoring at ten -- ten ranches; is that correct? If I'm in Tier 3.

MS. SCHROETER: That is true. However, if -- if you read the requirements in the order, it clarifies that if those ranches are contiguous or in the same representative water bearing zone, you wouldn't have to do that.

MR. JEFFRIES: All right.

My next question -- I know you addressed it in your staff, and it's always been the requirements if -- I'm talking about rented land, leased lands -- that the property owner would ultimately become the responsible party.

Is that correct?

MR. THOMAS: I don't -- I don't understand the question.

MR. JEFFRIES: The question is: If -- if it's leased or rented lands -- like, for instance, I rent a hundred acres and I rent it for one year - am I required to do the monitoring if I have collectively fit in Tier 3?

And if I don't do it, then does that fall back

to that particular property owner to make sure that's done?

MR. THOMAS: Okay. So if --

MR. JEFFRIES: Say, for instance, if that land is turned over five times within a five-year period, who is the responsible person that has to turn in those monitoring?

MR. THOMAS: By "turned over," do you mean different lessees?

MR. JEFFRIES: Yes.

MR. THOMAS: The order says that the lessee and the property owner are responsible. So if there's a -- a violation and if we brought an enforcement action to the board -- recommend an enforcement action -- we would name each of the parties; we would name each of the parties that leased the property and the property owner.

MR. JEFFRIES: At that time?

MR. THOMAS: Yes.

MR. JEFFRIES: Okay.

CHAIR YOUNG: Anything else?

MR. JEFFRIES: Not right now.

CHAIR YOUNG: Okay. All right.

Folks, I have a few -- five cards for people that wanted to speak. Some of them before 11:00 because they had to go.

MR. BRIGGS: Or 12:00.
CHAIR YOUNG: Or 12:00. So I'm going to take them now. And then we're probably going to break for lunch, because we're going to be at about a quarter to 12:00.
And then because the next presentation is the farm bureau, and that's 55 minutes, so - I don't want to chop that up - so that can go all the way through.
So let me call these five.
Dale --
MR. BRIGGS: And how many minutes apiece?
CHAIR YOUNG: Yeah. That's the thing. I'm going to give you a minute each. Okay? That's the tradeoff in going now versus waiting with everyone else. So that's what you're giving up by taking this opportunity now.
So Dale Huss, Ken -- I think it's Bradley. Looks like Debra Pembrooke; Kevin Merrell and Eric Lauritzen.
MR. BRIGGS: Also, Mr. Chair there's a woman who came up to me at the break, and was -- said that she had an appointment of some kind.
And I've been trying to spot you out there, and I haven't been able to see you. So if you're -- if you're still here, you could be part of that group, as

well.
MR. JEFFRIES: Mrs. Myrick (phonetic), were you -- you approached me because you didn't get a chance to speak before. And you said you had to go back to Idaho. Is that the case? Did you leave? Maybe she left already.
UNIDENTIFIED SPEAKER: Or the other room.
MR. JEFFRIES: Maybe she's in the other room.
MR. BRIGGS: Okay. Well, they can hear us now. So if -- if -- that's -- I don't know if it's the same person or not, but if that one or two -- the one or two people hear us over there, they can come on over.
CHAIR YOUNG: Okay. Go ahead, Mr. Huss.
MR. HUSS: Yeah. I have some handouts here for the board, please. I've got a minute?
And I -- I guess I'm the lucky one.
First of all, I appreciate a lot of the questions here by the board this morning. My name is Dale Huss. I'm the general manager of Sea Mist Farms in Castroville. We farm several thousand acres in the lower Salinas and here in the Pajaro Valley.
On those 19 ranches, we have hundreds of different owners, hundreds. As growers we care very much about the water quality. We want to protect this vital resource for many reasons. First and foremost, our

livelihoods and those of our children depend on it.
We agree that improvements need to be made to water quality. We're part of a group that created what Senator Farr called a model of success.
We have shared responsibility to improve water quality in our community. For example, we use recycled water, both in the Castro project and --
That's a minute?
CHAIR YOUNG: That's a minute. But go ahead and -- if you can wrap it up.
MR. HUSS: I'll -- I'll hurry and wrap.
CHAIR YOUNG: Okay.
MR. HUSS: - and -- and the Pajaro Valley Watsonville project.
As a grower, I'm here today to tell you that I'll be a part of those that take the lead to improve water quality in our community, through the approach you've listened to this morning. And that would've been from the Farm Bureau Board.
And we have to blend science and practicality to improve water quality for sustainable environment and a viable farming community.
The update of staff's document represents a massive transformation -- and this is really important -- costs of which we cannot evaluate in just two weeks. It

does not take into account that the average grower will not understand how to implement this waiver.
The grower is going to be lost in a sea of regulation that's hopelessly flawed by its own complexity and lack of understanding of what growing crops entails; because it's not just science, but it's art.
The document ignores the risk to both personal and financial risks that the growers undertake when investing in growing a crop; for example, head lettuce for a thousand dollars an acre per crop; artichokes $5,200 per acre, per crop.
And we -- and reading the staff's recommendations, we believe they have severely underestimated the cost that will be associated with the implement -- implementation of a flawed piece of regulation.
We are evaluating whether we'll have to hire an individual, estimated $150,000, just to understand and help -- help us follow implement to regulation.
CHAIR YOUNG: Mr. Huss, I'm going to have to -- thank you for your comments.
MR. HUSS: That's the rest of my comments. And I appreciate the opportunity to have addressed the board.
CHAIR YOUNG: Thank you very much.
MR. HUSS: Thank you.

CHAIR YOUNG: Ken Bradley.
MR. BRADLEY: Hello. Thank you very much. I'll try to be real quick here.
CHAIR YOUNG: You have a minute.
MR. BRADLEY: Yes. My name is Ken Bradley. I'm a water distribution operator, level two. And have maintained a single well at a small Christian school, Anchorpoint Christian School in Gilroy, California.
It is a small non-profit with about 60 students on eight acres. We're surrounded on three sides by agricultural land.
And when I had started there, we -- I had to go and post a sign that the -- you do not drink the water; it's unsafe for human consumption.
I couldn't understand it and I couldn't explain it to my community, why the water couldn't be consumed.
So we paid for -- we paid for the water rights, and -- when we bought the property, and we pay a fee all the time -- whenever we pump the water out.
This water normally would be safe to drink, as it comes from the well, if people were not allowed to contaminate it with no regulations or sense of responsibility for their actions.
With all the potential hazards that we've had in my seven years of being there monitoring this well,

high nitrates are the only problem that we have had reported.
Our well measures between 125 milligrams per liter to 140 milligrams per liter, and our potable water, according to the Department of Public Health, can't be higher than 25 before we have to take action.
CHAIR YOUNG: Can you wrap it up, Mr. Bradley, please.
MR. BRADLEY: Yes, I will.
The basic -- in closing, not -- I was going to go into the cost of this, as well.
But, as you could imagine, that if we purchase some good, clean water, we have a glass of water, and then somebody comes to it and says, I'm going to pour some nitrates in it, for whatever reason and then tell you and your family to drink it, we would all fight not to have that -- those nitrates put in the water.
So that is why I support the regulation to protect the human health and the environment that will be strong enough to restore the water back to being clean and healthy.
CHAIR YOUNG: Thank you for your comments.
Debra Pembrooke. And then Kevin Merrill.
MS. PEMBROOKE: Hello. I'm Debra Pembrooke.
We think it is a mix-up with the cards.

Because I can actually stay. But --
CHAIR YOUNG: Okay.
MS. PEMBROOKE: -- Gina's name was -- so I think that was supposed to be Gina's card.
CHAIR YOUNG: Okay. And who's this?
MS. LANGHOWT: Okay. My name's Gina Langhowt.
CHAIR YOUNG: Did you --
MS. LANGHOWT: I have a card, as well.
CHAIR YOUNG: You submitted a card?
MS. LANGHOWT: Yes, I did. Yes, I did.
CHAIR YOUNG: Gina --
MS. LANGHOWT: Gina Langhowt.
CHAIR YOUNG: Okay. So pull her --
MS. LANGHOWT: It might be under Regina.
CHAIR YOUNG: Okay. Go ahead.
MS. LANGHOWT: Okay.
So I am here today in solidarity with the people who live in San Jerardo. I will leave their story for them to tell.
But I wanted to say a couple of things. I have a PhD in community psychology, which is essentially the public health area of psychology. So a few comments.
One, in terms of the pesticides, there are 75 pesticides in the literature that have been shown to be toxic. These regulations only deal with two of them

because the staff has determined that these are the two that are the most robust.
In the literature, however, there's a difference between a small literature and a literature where there is disagreement in the literature. So I would encourage the staff to think about that difference.
Is -- these other 73 toxins, are they considered to be -- is there argument, right now, over if they are toxic or not, or is the issue just that there is a small number of studies?
And I would encourage you to include the literature that says that there's a small number of studies, but where everything is pointing in the same direction.
And, finally, I want to say that in terms of the public health issue here, this is a public health issue. People's lives are at risk. And I understand that you need to take multiple stakeholders' perspectives into account.
I would also ask you to consider the value associated with the claims that those different stakeholders are making. The claim of a human life -- of human lives is a very high priority claim.
So I would urge you to pass a set of regulations that will protect human lives. Thank you.

CHAIR YOUNG: Thank you for your comments.
Mr. Merrill. And then, last speaker would be Eric Lauritzen.
MR. MERRILL: Thank you, Chairman Young. And thank you for allowing me to speak before lunch.
I'm here today representing the Santa Barbara County Farm Bureau, as we represent a diverse membership, from avocados to zucchinis, large and small growers that farm a variety of soil types and topography. We also represent ranching families that have been a part of the land for generations.
Much like the diverse farming operations spread out across Region 3, the key word here is diverse. Any regulatory program dealing with agricultural, needs to recognize its diversity.
I was pleased to hear Chairman Young with the comments, during the board workshop in San Luis Obispo, that perhaps a more focused approach over a longer period of time that would prioritize waterbodies specifically looking at diazinon, chlorpyrifos or nitrates would be beneficial.
Limit the scope of a renewed waiver to the highest priorities. Instead, even after several ag representatives met with staff to point out serious problems with their initial draft, no meaningful changes

were made.
In fact, staff added more regulatory language that includes storm water issues, as well.
We've done enough monitoring throughout the region to know where the impaired areas are. We need to focus our resources on those areas, partner with growers and other agency to fix the problem, utilize the best science without regulating growers out of business.
Staff proposal, as written, is far too broad and cumbersome. Adopting it will not result in water quality improvement.
I urge the chairman and the board to direct staff to focus on known areas of impairment; work together with the ag community; incorporate water quality and prudent methods found in the ag proposal, along with certain parts of staff proposal, and build a hybrid that focuses on surface water impairment only.
Thank you very much.
CHAIR YOUNG: Thank you for your comments.
Eric Lauritzen.
MR. LAURITZEN: Chair Young, again, thank you for the opportunity to speak.
As a regulator of pesticides, I just want to point out that our programs are effective because of the clarity in the laws and regulations that we deal with.

And I urge you to look at the complexity of what is proposed here and eliminate any ambiguity, as you can.
I'm also here speaking on behalf of Simon Salinas, supervisor for the third district, that takes in the largest part of the agricultural community acreage in Monterey County.
I have a letter that I'd like to submit on behalf of Simon Salinas, as part of -- of the record.
My office was just notified last week that some of the proposed aquatic buffer zones that were included in the Appendix F cost considerations did not appear consistent with our office's data. And we submitted a letter April of 2010 that outlined that -- that data.
Again, this letter that we have outlines additional inaccuracies, and we provided updated analysis in this letter related to the expected loss in gross production value, based on the new proposed regulations.
It should be noted that our GIS analysis indicates that between 5600 and 9500 acres -- depending on the 30 or 50-foot buffer of farmland -- could be taken out of production; not the -- the numbers that were outlined in that Appendix F.
So I'd urge you to take a look at this letter. I'll leave copies for you. And consider that as you make your final rule. Thank you.

CHAIR YOUNG: Thank you for your comments.
Okay. I think what we should do is break now for lunch and come back in one hour, and then we'll start with the Farm Bureau presentation.
MR. BRIGGS: So that'd be five minutes to 1:00.
CHAIR YOUNG: About five minutes to 1:00.
(Lunch recess taken)
CHAIR YOUNG: Okay. Before we hear from the Farm Bureau, do we have any elected officials that would like to address this issue; any board members, supervisor, councilmen?

(Off the record)
CHAIR YOUNG: Are we ready? Okay.
UNIDENTIFIED SPEAKER: Hello. I'm a field representative on behalf of the Assembly member Luis Alejo.
CHAIR YOUNG: Okay.
UNIDENTIFIED SPEAKER: He is assemblymember for the 28th Assemble District. And he is submitting a letter today. And I would like to just read a portion of that.
Questions on the sustain -- sustainability of the staff's most recent proposed draft ag order have been brought to my attention. The proposed regulatory

approach appears to be more burdensome to agriculture producers within the Central Coast region water quality board area, than those created and recommended for other regions.

This disparity in regulatory standards and requirements may put the agricultural industry in the Central Coast at a substantial competitive disadvantage relative to other regions of the state.

The economic impacts to our local and regional econo -- economies as a result of the loss of productive agricultural land, crop production, property tax revenue and agriculture jobs could have a ripple effect throughout our region; one that is already experiencing double-digit unemployment and an escalating economic crisis.

I understand that the initial economic impact survey estimated a loss of business revenue in the Central Coast of 231 to 298 million, and estimated lost tax revenue of 19 to 25 million.

Loss of labor could potentially range from 87 to 112 million. This survey also predicts 2,500 to 3,300 job losses.

All of these losses could total as much as 470 million from the Central Coast alone. Our agricultural industry and our communities cannot afford these losses.

I recommend the following:

Improvements must be made to water quality standards. The proposal will do that through new technology and efficiency improvements, with special attention to environmental sustainability.

Provide incentives for farmers to improve their infrastructure and practices to better meet water quality standards.

Support the all-community stakeholders' process, established under the 2004 ag waiver.

And further examine the economic implications the draft renewal ag waiver, which states that prior to implementation of any agricultural water quality control program, an estimate of the total cost of such a program, together with an identification of potential sources of financing, shall be indicated in any regional water quality control plan.

My office happily accepts the opportunity presented by farmers for water quality to join environmental advocates, social justice champions and farmers, as they begin a community-wide dialogue to find solutions addressing rural and environmental water quality concerns.

We are look -- looking forward to finding solutions that present win-win opportunities for the

community as a whole. Thank you.

CHAIR YOUNG: Thank you for your comments. And thank the assemblyman for us.

Any other elected officials or representatives on behalf of elected officials?

Okay. We are now ready for the Farm Bureau presentation.

MR. MERKLEY: Good afternoon, Chairman Young and members of the board. Happy St. Patrick's Day.

Thank you for this opportunity to present the ag proposal, a proposal that when -- when adopted would be the most protective water quality program in the world.

My name is Danny Merkley. I'm director of water resources for the California Farm Bureau.

We will -- as -- as was previously stated, we'll have 55 -- or 60 minutes to present with our panel. We will reserve five minutes for the end of public testimony today to -- to close. And I've been tasked with the lovely job of keeping -- the -- our panel on time.

So I have a fresh battery in my cattle prod, and will do my best to get that done.

First up will be Brad Barbeau to present the economic assessment on the Appendix F. Brad, thank you.

DR. BARBEAU: Thank you very much. Good morning, Chairman Young, members of the board.

My name is Dr. Brad Barbeau. I'm a -- I am assistant professor of economics and entrepreneurship at Cal State University Monterey Bay. And I've been asked to speak to the economic impacts of the proposed waiver.

When I originally began this project, I had hoped to be able to present a full cost analysis for implementing the order. However, for multiple reasons, I have not yet completed that analysis.

First, it's a very complicated project. The requirements of the order are broad and the solutions are not known. So determining the costs are very difficult.

And, I would note that, now adding in that we may have up to 73 more pesticides to deal with is going to further complicate that as we go forward.

Second, the new order published March 2nd entailed many changes in too short a timeframe to be able to respond for this meeting. I'm still working on the analysis and I will make it available to you when it is complete.

This morning -- this afternoon, I would like to address some issues related to the economic and cost analysis contained in Appendix F, the staff's document on cost considerations.

The authors of Appendix F correctly identify the classic externality problem posed by water quality issues on the Central Coast.

The important point here is that these externalities impose costs on others they might not have chosen to bear and they distort economic decisions about levels of production and consumption.

Although the appendix identifies the externality issue, it does not carry this approach forward, and presents a set of observations and data, but does not present a coherent analysis of either grower costs or economic impact.

So when externalities exist, the economic goal is to minimize the distortions caused by that externality. We need to be aware that the policies designed to address the externality will have their own costs, monitoring and enforcement that need to be taken to account as further sources of distortion.

These costs, which will be borne in part by taxpayers, in part by growers, and in part by consumers, are not addressed as such by the report.

If the objective is to address and reverse the effects of the externality, we must be aware that as we attempt to drive pollution to zero -- there we go -- we reach a point where the costs of additional improvements

rise rapidly and additional benefits become very expensive.

Further expenditures waste resources for little benefit. This point of diminishing returns is not known currently, but the appendix makes no acknowledgment that it even exists.

There we go. The implication is that the socially optimal level of pollution is not zero. Because there are costs involved in not polluting. Just as it is impossible to have automobiles that generate zero pollution, including electric vehicles, we would be unlikely to ban automobiles simply on the grounds that they pollute. The value of the services they provide is enough to justify some level of pollution.

I would also argue that the optimal level of pollution is not the current level. The optimization rule of economics is to pursue pollution abatement until an additional dollar spent on reducing pollution produces a dollar's worth of benefits from the reduction in pollution.

This principle should underlie the analysis in Appendix F. So let's look at some of the -- the factors that drive these tradeoffs, that are mostly not included in the appendix.

First of all, the value chain in the ag system

is very complex - we've heard a couple of examples of that this morning - much more so than in most industries.

This is because of the interlocking relationships among landowners, growers, processors, handlers, labor and vendors. These interlocking relationships are important to maintaining a stable, productive agricultural industry in the region.

They help participants to manage risk and to weather the ups and downs that are an inherent part of the agricultural production system; they both complicate the implementation of the order and, in turn, the order creates uncertainties for the future of these relationships, uncertainties that may threaten the viability of many of the growers that we -- we might most want to protect.

And I think a concrete example that came up this morning related to: Is it the landowner or the operator who is ultimately responsible? And the lack of priority that there was around that.

The impact of the order on these relationships needs to be understood, and are not addressed in the appendix.

The appendix is largely dismissive of external threats to the region -- region's agriculture. Although

ag in most of the region is very healthy, it is not a closed system, and unavoidably competes with alternative crops, other growing regions and in the export/import markets. And it is worth noting that agricultural exports are very important to the California economy.

In its discussion of grower income, the appendix is not careful to distinguish between the revenue generated by growers and the returns they earn on their investment. The distinction is very important.

Grower revenue is income for the region. The labor, the fertilizer, capital investment and other costs to the grower are jobs and income for other entities in the region. But what keeps the grower in business is the return earned on invested capital.

Without earning a sufficient return, the grower is unable to maintain the levels of investment necessary to support a healthy and, I would add, a well-run agricultural operation, which is what we're after here.

One of the tasks for my economic report will be to identify the necessary rates of return and the affect of the order on them. This has not been addressed in the appendix.

While policy makers tend to look at the market or industry-level impacts and outcomes, growers see the impacts on and outcomes for their individual operations.

These are very different.

If you are a grower, you're aware of your own costs and the market prices for your commodities. Survival requires you to keep your costs in line with those market prices. An individual grower does not have the power to raise market prices.

So any additional costs that they face will threaten their profitability directly. The individual grower cannot pass on these costs up the chain.

We have to remember that we're dealing with perishable crops. At harvest, the farmer must sell it or lose it; not like a car dealership, where you can leave it on the lot and wait for prices to turn around. It's gone if it isn't sold right away. We can't store them to wait for better prices.

So to the extent that cost impacts are not evenly distributed, there will be winners and losers. The appendix nowhere acknowledges that the structure of the order will create winners and losers, nor does it attempt to identify what classes of growers might be the most at risk.

The monitoring and reporting costs are subject to economies of scale. The bigger the operation, in general, the better able the operation is to spread those costs over its output.

It is common for regulation to result in a level of consolidation in the regulated market. And it's the small companies that lose.

Small growers who lease land from large owners -- landowners or who employ the wrong combination of risk factors are subject to Tier 3 status and all of the costs associated with that tier.

And further economic impact may be in shifting the patterns of land use, separate from production lost to buffers. I'll address those in a moment.

Some ground may be prohibitive -- may become prohibitively expensive to farm or become insufficiently productive under the requirements of the order. As land becomes less valuable to agriculture and, therefore, commands lower rents, owners may seek alternate -- alternative uses for the land.

No assessment of land value impacts or land use implications is contained in the -- in the appendix document.

The Monterey County Ag Commissioner's office put together, in the last few days, an analysis that was referred to by -- by Commissioner Lauritzen, that between 5600 and almost up to -- potentially up to 10,000 acres of farmland may be taken out of production for the buffers.

This is considerably different than the staff estimates of 56 to 154 acres. The loss of gross crop production value of between a hundred and $167 million per year would be represented by the creation of these buffers.

And, remember, that's a hundred million dollars a year not in lost profit to the growers, but absolutely in lost income to the -- to the -- this is just Monterey County data.

Appendix F, Section 3.2 contains a pretty extensive discussion of the methyl bromide ban, in an attempt to look at a parallel case to the water quality regulation issues.

In my opinion, the methyl bromide ban from -- at least, from an economic standpoint -- has every few characteristics in common with the issue at hand. And that discussion is largely irrelevant to understanding what's happening under this order.

Separate from several errors in the appendix discussion of elasticities -- which I don't have time to address here -- the appendix makes the claim that increases in prices that the growers will receive will be somewhat offset, at least, by -- I'm sorry - the -- makes the claim that increases in prices that the growers will receive will somewhat offset the cost of the order

to the growers.

However, we need to pay attention to the -- that's indicating that those costs are going to be passed up the line, and ultimately to the consumer. I don't believe we should be cavalier about raising consumer food costs further than they have been raised.

And we need to recognize that individual growers face far higher elasticities than the market as a whole. An individual grower's abilities to raise prices in response to higher costs is very limited.

The appendix does not take this into account in this discussion of the elasticities. The elasticities they have are all market elasticities.

Staff's economic and cost analysis, as is our own, is incomplete and needs to be completed. Currently, no one knows the economic impact of implementing the order on the growers or on the agricultural industry, on the region, or on the larger economy of the region.

Effective change processes include both clear goals and a roadmap for achieving those goals. Once the goals have been set, implementation planning has got to define the hows. As I read the order, the hows are not clear. The ag community needs time and resources to develop them.

So, in conclusion, the cost analysis needs to

be completed and then needs to be input to an economic impact assessment.

It would be a world-class contribution to the practice of environmental regulation to develop an integrated economic and ecological model for a achieving water quality objectives.

And finally, best management practices need much more development to assist farmers in cost effectively achieving the water quality goals.

Thank you very much for your time.

CHAIR YOUNG: Thank you.

MR. JEFFRIES: Do -- I do have one question for the presenter.

CHAIR YOUNG: Go ahead.

MR. JEFFRIES: Did you do a -- a study on -- for every dollar that's generated, how many times it turns over?

For instance, in retail cities, look at retail sales, it turns over $10 -- ten times.

DR. BARBEAU: Correct.

MR. JEFFRIES: Did you do an analysis on agriculture?

DR. BARBEAU: I have -- I have not gotten to that stage yet. That will be a part of the analysis. That's an important part.

MR. MERKLEY: Okay. Next we'll have Dr. Letey and then Robert Dolezal make technical comment and presentation.

DR. LETEY: Good afternoon.

Go back to the original, please.

One of the key things on there was -- and the reason I'm here today -- I can trace back to 1994. I was appointed a member of the technical advisory committee by the state water resources control board.

And our charge was to cope with the very thing they're dealing with now.

Is to come up with alternatives and ways to reduce groundwater contamination from agricultural. It is on the basis of that I can trace back ultimate events to now.

So -- click through.

The TAC, at that time, recommended the establishment of nitrogen leaching hazard as the core of the program. The hazard was to have three components: the crop, the soil and the irrigation system.

However, it was not possible for the board to implement anything because information was lacking to quantify the index for the crop and the soil.

Now, the U.C. Center for Water Resources more recently invested resources to develop the information

necessary for the hazard index related to the crop and the soil. I was personally involved throughout this process.

I looked at every soil profile. I looked at every crop and everything we knew about that crop, in putting it together, and in -- also wrote the supplementary material that is part of that.

And that hazard index can be found presently at the site listed there.

A recent development, which is very positive, because it required input for the soil series name - and many farmers may not know what the soil series of any particular field was; we now have a link to the U.C. Davis, where you can link into that and find out the soil series names for any location, which then allows them to completely go through the process of -- of coming up with the hazard index.

Now, the present three-tier approach is consistent with the TAC recommendation. However, the details of information differ greatly.

I looked at Appendix B, Table 4, which contains the proposed nitrate loading risk factor criteria. It completely guts the University of California hazard index. The soil factor is completely eliminated.

That's just like saying the body doesn't need

the heart or the lungs. Just like the heart and the lungs are vital organs to the body, the soil is a critical factor in nitrate loading.

Two major factors which contribute to the loading is -- one is denitrofication, which completely removes nitrogen from the system.

I was interested this morning, hardly anything was mentioned about denitrofication in this whole process.

The other is the water movement through the soil, which carries the nitrogen.

Those are the two main factors on the load. Both of those are intimately tied to the soil profile characteristics, and you cannot come up with a reliable index by neglecting the soil.

Secondly, nitrogen in the irrigation water has been added, so that the higher the nitrogen in irrigation water, the higher up the -- the load risk.

Well, any farmer who has a high nitrogen content in their irrigation water would be a complete idiot to allow that to increase the load to groundwater, rather than using it as a resource to decrease the amount of nitrogen they apply in their fields.

Also, there are the impact of the sprinkler -- it needs to be adjust a little bit. And I won't go into

that.
Now, as -- after the comments this morning, I had thoughts on -- on the crop part, but I'll pass because that's not part of my prepared statement.
Now, turning to another matter, one thing you need to recognize is the nitrate concentration in soil below the root zone is not correlated to the load. And what we're trying to do is reduce the load. What we're trying to do is induce management to decrease the load.
And, therefore, measuring that concentration is not even an index whether the farm management is good or bad, for the purposes that we're intending it, and that is, to reduce nitrate load to the groundwater.
Therefore, dictating multitudes of dollars that are required to measure this concentration, which has really almost no meaning to what we're trying to achieve, I consider economic folly.
And that needs to be understood, the main thing to understand, because very often we are hearing nitrate load and concentration being presented synonymously. They are not. The nitrate load is the concentration times the water flow.
And what we can measure, the concentration, we cannot quantitatively measure water flow. That is extremely difficult, very expensive and, therefore, we

cannot quantitatively measure the thing we really want to have. What we'd like to do is quantitate the load, but we can't do it.
So, the next best thing is to monitor -- let me -- okay.
Now, I have taught environmental science courses for over three decades. I completely understand the significance of monitoring, dealing with enviro quality matters.
So it's not a question of whether do we monitor or not monitor. The question is: What do we monitor?
What we really -- the thing that's going to dictate what goes down is the farmer management. And we can, and should, monitor and focus attention on monitoring the farmer management. And -- and induce those management practices that lead to reduced loading. And that the effort and attention be paid to -- to that.
And sort of summing all this up, I find there are major shortcomings in the scientific and economic content of the draft order that must be fixed if you expect that your desired goals will be achieved.
First of all, going back to assigning these things in the tier, if you mess up assigning them to the right tier, you have messed up everything thereafter.
And I propose that the criteria using to

establish the tiers is vastly flawed and needs to be fixed up.
Thank you.
CHAIR YOUNG: I have a couple of questions for you, Dr. Letey.
If you could stop the clock, too.
If you could go back a slide.
So your suggestion is to focus on monitoring management on the farm.
DR. LETEY: That is where you're going to get the return.
CHAIR YOUNG: Okay. And ultimately aren't you looking at trying to manage the application or use of fertilizer?
DR. LETEY: That becomes part of it.
CHAIR YOUNG: And what tool do you use?
DR. LETEY: What tools do we use?
CHAIR YOUNG: What tool should a farmer use, then, to know when is enough fertilizer, when is too much fertilizer, given that condition?
DR. LETEY: Okay. We have had years and years of research at the University of California.
We have a lot of technical information related to fertilizer and irrigation management that can be utilized in terms of management.

Let me now refer back to the hazard -- hazard index, when we have the crop. If -- for those -- for example, all the crops we have listed with high hazard, each crop has a different reason for having high hazards.
And on that hazard index, you can click to that crop and it will tell you what it is about that crop that makes it a high hazard. And it also, then, suggests different alternatives and practices that you might use to mitigate that particular thing.
And it's not going to be the same for every crop.
CHAIR YOUNG: Can you -- can you give me a couple of examples, for like broccoli or something else, like lettuce?
DR. LETEY: Okay. There are some -- well, first of all, if they have a shallow root system, one of the key things is that, because you have a shallow root system, you can't really get water to flow and anything -- anything that's carried below the root zone is gone.
And so you have to really, really monitor your irrigation, timing and things, not to over irrigate at any one given time.
And this is why, when you go to a sprinkler or the micro irrigation systems, it moves it down in terms of a hazard.

Now, there are some crops -- and I -- I don't remember in detail all these things -- that just by necessity to grow a good harvest, means that there's quite a bit of nitrogen left in the soil after the crop is removed.

And if you have that, then you can possibly need to grow a cover crop, before the rain comes, to remove that nitrogen so it doesn't get leached down.

Or, there's some crops that there's a lot of residual vegetative matter left on the field. And vegetative matter contains nitrogen. And that nitrogen will become mineralized during the year and available for next year.

Many farmers, in the past, ignored the contribution of nitrogen from the residue of the previous crop. That, then, can be entered into the management scheme. We have the knowledge of looking at each of these things and coming up with approaches to evolve the high yield.

And, let's make one thing straight, we are never ever - scientifically impossible to completely eliminate any discharge. That is simply not scientifically possible.

But the key is that there are many things we can do to reduce it. But it's going to be very site

specific. And this is why I'm saying the focus has to be on the management.

CHAIR YOUNG: Okay. Well, can we reduce the discharge so that it's not going to exceed a receiving water standard?

DR. LETEY: Okay.

CHAIR YOUNG: Because that's what this all boils down to.

DR. LETEY: Okay. That, then, is another -- I guess, what I want to say.

I said that the concentration below is not an indicator of good management or low management.

It is that you can have the high concentration with a very low load. Or you can have a low concentration with a very high load.

Well, any time you put a regulation or anything and stipulate a concentration, you are -- you know, if I'm a farmer and you give -- I can get a low concentration just by pouring a lot of water through and diluting it.

But you're a tremendous high load. Well, you have to back off and decide: What is the goal?

And if -- from my point of view and environmental regul -- environmental quality, it's the load that is important.

And you cannot specify concentration because, if you do, you might actually get a counterproductive result from your load.

CHAIR YOUNG: Here -- here's the conundrum.

We're not specifying new concentrations or standards. They're in the law. We -- we're trying to achieve standards that have been adopted for --

DR. LETEY: Okay.

CHAIR YOUNG: -- us to follow.

So how -- how does management address that?

MR. BRIGGS: Before -- before you answer that, Mr. Chairman, I think you're doing a little bit of this, because I believe you're talking about concentrations down below the root zone, and I believe you're talking about meeting standards wherever there's a receptor; like a water well.

CHAIR YOUNG: Well, he -- the doctor had mentioned kind of coming up with standards that may not be achievable.

MR. BRIGGS: Right. But I think your question was: Can ag be compatible with water quality standards, say, at the point of use. Say for a well.

CHAIR YOUNG: Pretty much.

DR. LETEY: Oh, okay. I --

CHAIR YOUNG: Yeah.

DR. LETEY: There's two issues. One is the concentration leaving the root zone. And what, ultimately, that resorts to, as far as the --

CHAIR YOUNG: Receipt --

DR. LETEY: -- well or some groundwater somewhere else.

CHAIR YOUNG: Right.

DR. LETEY: Now, the load is the thing that's going to affect the total groundwater. And that's why I wanted to reduce that load.

My comment on the concentration -- and I think you picked up -- is specifically on that below the root zone.

Now, you -- another thing is that you say, well, we have regulations. And we bypassed one of my first lives, which -- you know, I'm an old man. And one of the benefits of being old is you've lived many years and be able to observe.

We can write anything into law. We can write anything into a regulation. But if it is not consistent with the basic physical chemical laws, you will not get the expected results.

And so, yeah. There's a regulation there. And what we tend to -- seem to say -- oh, we have regul -- we have to follow that. As if, you know, a human law is

permanently fixed. And it is, until we change it.
But then we don't seem to worry about those laws that are absolutely fixed, that we cannot violate. And those are the scientific, physical, chemical and biological laws.
And what I'm trying to point out is the physical, chemical, biological laws, if you want to impose a regulation on the concentration leaving the root zone, will not lead you to a lower load based on these other laws.
CHAIR YOUNG: Right. And I don't think that's what staff is proposing.
DR. LETEY: Well, I'm not --
CHAIR YOUNG: Well --
DR. LETEY: -- I'm just pointing it out.
CHAIR YOUNG: Okay.
DR. LETEY: I didn't say you were. I'm just saying that if you're looking at that --
CHAIR YOUNG: Okay. All right.
DR. LETEY: -- that you shouldn't be.
CHAIR YOUNG: Okay.
And then, just so I'm clear. On one of your slides, I thought you said -- well, if we could go to one of the first ones. It was a comment about the nitrogen hazard index.

The -- the committee recommendations could not be implemented because information was lacking to quantify the -- the index.
Is there a -- an index that's in use today?
DR. LETEY: Well, it's available on that site.
CHAIR YOUNG: Okay. All right.
DR. LETEY: Now, whether you're using it or not, that's -- that's the issue.
CHAIR YOUNG: Okay.
DR. LETEY: You have that resource to use today, which the board did not have in 1994.
CHAIR YOUNG: Okay.
DR. LETEY: That's my point.
CHAIR YOUNG: Thank you very much.
DR. LETEY: Okay. Thank you.
CHAIR YOUNG: All right.
MR. MERKLEY: Chairman Young --
CHAIR YOUNG: Yes.
MR. MERKLEY: -- if I could just add real quick -- and maybe this gives you a -- a nutshell response to your -- to the very first question.
Growers today -- particularly the better growers -- do pedio samples, do soil samples to know what nitrogen, for example, in this case, needs -- there will be for that particular commodity.

In addition to that, we will add soil amendments and things to change the Ph, change the makeup of that soil to increase the -- the ability of -- of that particular commodity to uptake those nutrients.
As a farmer, I know that. If you ask me much more, I'm going to get in trouble.
CHAIR YOUNG: Okay. Thank you.
MR. MERKLEY: Well, okay.
MR. BRIGGS: Stop the clock, please.
MR. DOLEZAL: Chairman Young and honorable members of the board, I'm Robert Dolezal of Dolezal Consulting in Rocklin, California.
I'll testify today regarding my concerns about many serious flaws I found in the scientific justifications provided by the staff to support the draft order.
My 35-year career has been primarily in publishing and media. As a journalist, and later as a publishing executive for many national publishing firms, I edited, fact checked and verified accuracy in hundreds of books, publications and wire service stories. And I managed and evaluated the work of staff that performed similar duties.
As vice president for Harcourt, Brace, Jovanovich legal and professional publications, I oversaw

the accuracy of the Gilbert Law outline series and the Herbert Constitutional Law series, as well as medical journals for our medical division, including their peer review and check of citations of law.
In the course of my career, I have edited hundreds of books in which highly complex and technical science, including those across many fields of expertise, had to be communicated clearly.
This experience makes me especially aware of how facts and citations can be subtly manipulated and twisted, while still retaining a cloak of truth, and when they cross the line and assume new meaning.
I brought this expertise and my skills to the work of reviewing the staff report and the draft order for technical accuracy.
I've also performed highly sensitive technical work for the government, and have previously held a top secret code word national security clearance with a special prefix.
In this assignment, I performed my work at the request of the California Strawberry Commission. I verified the staff report and scientific citations. I also performed comparative literature searches of other authoritative sources. And I randomly tested data samples for accuracy.

The goal of this work was to determine if the information presented by the staff was accurate and correct, and whether it was timely; that is, whether it reflected the most current understanding of science at the moment.

My review -- my review found numerous distortions. Here's an example:

In one -- one place staff says that nitrogen from fertilizer applied annually in the region totals 50,449 tons. Elsewhere, they say that it causes nitrate loading to groundwater of 75,000 tons. Both are correct.

This exploits the public's ignorance of the conversion factor between nitrogen and nitrate, and allows the staff to inflate the apparent amount of pollution they can attribute to crop production.

4.425 pounds of nitrate equals 1 pound of nitrogen; the rest is oxygen. That allows the staff to claim numbers in their May 2010 presentation that appear to be over four times higher than they appear in the 1978 AMBAG chartered study, seen at the upper left.

But apparently this process was confusing. They made arithmetic calculation errors in the conversion of nitrogen here and in Appendix G of the order. And the cropland estimate for current use of the -- in the presentation does not agree with the number in the -- in

the appendix.

Restating nitrogen as nitrate makes the public think ag's contribution to the problem is worse.

Staff presents alarming maps, like this one of Santa Maria Valley, to show drinking water wells with nitrate contamination.

But when overlaid with all public drinking water wells tested annually for nitrates by the California Department of Public Health, in blue, many more wells appear; 266 not 155.

Over the past 25 years, many wells with nitrates either improved or were taken out of the system and are no longer in the state water resources control groundwater ambient monitoring and assessment program's GeoTracker GAMA database.

A larger universe of wells means smaller percentages in the pie chart. And I could find no health standard for the yellow dot symbols used by the staff to denote elevated nitrates.

Let's take a closer look at three data points I sampled in Santa Maria: Arroyo Grande, a city in the north; Siquoc, a little hamlet in the south; and Southern Santa Maria itself.

In a single cluster in Arroyo Grande -- sorry -- in a single cluster in Arroyo Grande, three out of 112

drinking water wells have present nitrate exceedances. There's no ag land nearby, just city.

Four other nitrate exceedance wells, in the upper right, provide shallow monitoring for a site with leaking underground storage tanks.

Let's look at them.

A red triangle marks that monitoring well cluster, down in the lower right. Possible contamination sources include the leaking tanks, a cemetery, an outdoor landscape materials yard, school playgrounds, and nearby Highway 101. It's unlikely that their nitrate readings are caused by agricultural.

Staff emphasize -- excuse me.

The staff emphasizes the possible health impact on small communities. And I share that concern.

I looked next at Sisquoc, a tiny agricultural town in the southern valley. Where the staff's map shows four wells, GAMA shows 89 wells in six clusters. The offending well is in a cleft up -- up in the hills, upstream from agricultural, but downstream from a Chevron oil field.

In GAMA that well last exceeded -- excuse me -- last exceeded the health standard for nitrates more than 10 years ago. Thereafter, it failed to qualify as even elevated by the staff's own standards.

As we've seen, many alternate causes exist. Here's another:

In Santa Maria, red dots surround a former World War II army airfield, used today as a commercial airport. Cal Fire also uses it as their base to load aerial tankers with nitrate fire retardant.

In the Salinas Valley, in northern region three, we see similar distortion. Staff shows 348 drinking water wells; GAMA has 953. And DPH requires annual testing for nitrates of each of these wells.

In this close look at -- at Castroville, which is surrounded by farms, there are 12 Department of Public Health public drinking water wells, plus 12 other drinking water wells. All are in compliance for nitrates.

If agriculture invariably leads to nitrate groundwater contamination, why not in this agricultural setting?

These findings are all troubling. Digging deeper, as this slide -- which is a bit difficult to read, for which I apologize -- the ag waiver states on the right:

Across region three, irrigated agriculture is the primary source of nitrate pollution. They cite, as a reference, a 1999 -- excuse me -- a 1990 report of the Ad

Hoc Salinas Valley Nitrate Advisory Committee.
When I checked that source, it referenced only the Salinas and Pajaro Valleys, not region three. It said:
Agricultural operations represent the greatest potential source of nitrate contamination. And that reference was drawn from an earlier report in 1978, the -- the, now familiar, AMBAG Study.
So what did AMBAG say 33 years ago? Quoting:
Agricultural land use contributes the highest quantity of nitrogen in both valleys. Other land use may have a more significant impact.
That's all agricultural land use, not just irrigated agriculture. And they're talking about nitrogen at the surface, not nitrate contamination of groundwater.
And they say, agriculture is one -- one among many significant sources, not the primary source.
The staff footnote made it appear that the 33-year-old finding was just 21 years old, and they altered its meaning.
In the process, they also ignored millions of dollars of research, funded by taxpayers of this state and industry over the last 33 years, that shed light on nitrate groundwater contamination, its sources and

potential solutions.
They turn 1978's nitrogen source to nitrate groundwater pollution. They widen Pajaro and Salinas results to encompass all the Central Coast. They twisted numerous causes into an ag-only responsibility. And they changed agriculture's role from contributor to primary source.
My sampling of these and other anomalies can be found and read in my report, which is part of your public record. My analysis of the data used by staff as scientific basis for the ag waiver led me to the following conclusions:
The draft order findings are not supported by the staff's evidence and information provided to this board.
The evidence, as data cited in the draft order, should receive further independent review.
The board should obtain independent review of all findings and information supporting those findings.
In performing my work on this peer review, it's clear that agricultural might pay -- play some role and bear some responsibility for measures seeking to limit nitrate contamination of region three's groundwater.
I think there's no one in this room that would disagree with that. But that role is not accurately

portrayed by this staff in its report, nor do they provide substantiation for their prescriptive remedies.
In the end, we're all environmentalists and responsible stewards of the waters and soil of this California. You and we deserve better science than this.
Thank you. I'd be pleased to answer any questions.
CHAIR YOUNG: Yeah. The question I have for you here:
Are you saying that all of the draft order's findings are not supported by staff's evidence and information, or just some of them?
MR. DOLEZAL: I said -- I am saying that those that I tested --
CHAIR YOUNG: Okay. And those are the ones --
MR. DOLEZAL: I -- I found -- this is just a --
CHAIR YOUNG: Okay.
MR. DOLEZAL: -- small sample - found significant difficulties in virtually every single citation I looked into.
And I saw a repeated pattern of using data from 1978, 33-year-old data, and 1980, '85, rather than use information for -- that was readily available from 2005, 2006, 2008 and 2009.
CHAIR YOUNG: Do you have any information of

what the other sources might be?
MR. DOLEZAL: There's -- I've listed a number of them on my earlier slides.
Livermore National Laboratory, U.S. Geological Survey.
For example, in responding to comments of the Strawberry Commission, there was a discussion made of U.S. Geological Survey information encompassing agricultural use of lands across the entire United States.
Why not concentrate on the two studies that were done here on the Central Coast, in the Salinas/Santa Cruz/Pajaro area, Paso Robles area, and Santa Maria/Santa Ynez areas, in 2006 and 2009, which specifically show, with a scientific grid, where the nitrate contamination is?
And it's substantially different than the map you see in the staff report.
CHAIR YOUNG: Is it related to irrigated agriculture?
MR. DOLEZAL: Some is related to irrigated agriculture and some is related to the kinds of causes I showed -- showed you here today.
CHAIR YOUNG: You mentioned Livermore.
MR. DOLEZAL: Yes. Livermore National

Laboratory is conducting a radiological isotope analysis of the age of groundwater basins, and they've been -- they've finished one, which is cited by the staff, over in the Gilroy area, that was done for the -- in the Santa Clara water area.

They are working on another one -- since their wells are dotted all over the place here -- and are in the GAMA database. And they're working on the age of aquifers. And many of these aquifers are 30 years old or a hundred years old.

So when you look at the specific information that you -- you find in the -- in the reports or you look at studies that are done over in the Central Valley - on a dairy, for example, where you have absolute proof of nitrate de -- denitrification in the soil, you've got a six-foot layer of soil that's 20 -- 38 feet deep; between 38 and 45 feet, all of the nitrate disappears, it goes from 200 -- roughly 200 parts per million down to .2 parts per million.

CHAIR YOUNG: This is in the Central Valley?

MR. DOLEZAL: In the Central Valley, but it shows the same process.

So there's a whole body of evidence that's not being cited in any of this reference material.

CHAIR YOUNG: Thank you very much.

MR. DOLEZAL: Thank you.

MR. BRIGGS: I have a couple of questions.

CHAIR YOUNG: Sure.

MR. BRIGGS: So you -- you verified our -- our figures, as you said. In the first couple of figures you show the tons per year of nitrogen, you said those were good.

And we have lots of contaminated wells. You say we didn't show all the wells. But we showed wells that are contaminated.

And wouldn't you agree there are too many well that are contaminated?

MR. DOLEZAL: Yes.

MR. BRIGGS: So --

MR. DOLEZAL: The percentage -- your percentages are wrong.

MR. BRIGGS: Okay. So with whatever the figure was
-- 77,000 tons per year of nitrogen in contaminated wells --

MR. DOLEZAL: Nitrates.

MR. BRIGGS: Nitrate.

MR. DOLEZAL: Eight-five hundred tons of nitrogen.

MR. BRIGGS: Right. It's a lot.

MR. DOLEZAL: It is a lot. It's --

MR. BRIGGS: Yeah.

MR. DOLEZAL: -- it's about 35, 40 pounds per acre.

MR. BRIGGS: Right. And --

MR. DOLEZAL: Irrigated --

MR. BRIGGS: -- with contaminated wells in the same are, you think there are other more significant sources than that, generally speaking in the ag -- agricultural areas?

MR. DOLEZAL: There have been a number of point sources identified that specifically have added to nitrate and there have been a number of practices that are no longer used that are represented on your map in the timeframe of '78, that are no longer -- no longer practical.

There -- there were a number of wells taken out of commission for the -- for -- because they could not protect the well bed. And those wells were contaminating the aquifer.

MR. BRIGGS: Can we run back to the Arroyo Grande slide example, that you had -- you had the close-up of several areas and -- so the Arroyo Grande one.

MR. DOLEZAL: Not this one. This is the EPA monitoring well. The one --

MR. BRIGGS: No. This is the Arroyo Grande one.

MR. DOLEZAL: Yes. There's one pre -- this is not a drinking water well. This is an EPA lust (phonetic) well.

MR. BRIGGS: Okay. You said the staff has selectively used information to portray a different picture, I guess.

It seems to me that the nearest, most likely nitrogen source in this picture would be the ag field to the lower right. That's the closest thing compared --

MR. DOLEZAL: That would be true of the hydrology for the area didn't show that the high mountainous terrain immediately to the left and up on the -- on the picture showed the water flow towards the -- the Arroyo Grande Creek in the lower right.

There's also water from Arroyo Grande Creek that is penetrating up into the area.

MR. BRIGGS: But you chose not to show that there's an ag field immediately adjacent to this monitoring well?

MR. DOLEZAL: I -- there -- it's downgrade in the -- in the -- in the aquifer.

MR. BRIGGS: Yeah. I don't know exactly what the gradients are, but we know that gradients --

MR. DOLEZAL: I do know what the gradients are.
MR. BRIGGS: We know the -- we know --
MR. DOLEZAL: The gradients are down --
MR. BRIGGS: -- the gradients change.
MR. DOLEZAL: According to the hydrologist of Arroyo Grande --
MR. BRIGGS: We know the gradients --
MR. DOLEZAL: -- they come from about where the schoolyard is up there and it goes straight southeast.
MR. BRIGGS: Right. And we know that gradients change with pumping patterns.
If you could go to the Castroville one.
MR. DOLEZAL: This is -- this is an EPA monitoring well. They don't pump this well.
MALE: I didn't say they did. I said gradients change with pumping patterns.
If you could go to the Castroville one.
MR. DOLEZAL: Yes.
MR. BRIGGS: These -- now, are these just monitoring wells?
MR. DOLEZAL: Those are DPH drinking water wells. Plus, I believe, 12 other public drinking water wells.
MR. BRIGGS: So these are pumping wells that are being used.

MR. DOLEZAL: According to GAMA.
MR. BRIGGS: Isn't this in the seawater intruded area?
MR. DOLEZAL: It is in the --
MR. BRIGGS: Wouldn't those --
MR. DOLEZAL: -- in the sha --
MR. BRIGGS: -- wouldn't those --
MR. DOLEZAL: -- in the 180-foot aquifer. Yes.
MR. BRIGGS: Wouldn't those wells necessarily then be much deeper, because they want to avoid the seawater intruding?
MR. DOLEZAL: I didn't see any evidence that they were any deeper. They were in the 180-foot aquifer.
MR. BRIGGS: In the intruded 180-foot?
MR. DOLEZAL: Yes.
MR. BRIGGS: Drinking water wells?
MR. DOLEZAL: Well, you -- this is also an area of reclamation.
MR. BRIGGS: Okay. That doesn't make sense to me. Thanks.
CHAIR YOUNG: Okay. Thank you.
MR. BILL THOMAS: Mr. Chairman, members, the -- Roger, Frances, the -- Bill Thomas. I represent Ocean Mist and RC Farms, that have a long history of dealing with water quality issues here in this region.

We are very disappointed there wasn't an afforded opportunity to really try to get together and narrow the ag -- the very aggressive ag proposal and the staff proposal and has resulted in this schism of interested parties in front of you.
The -- I was asked to point a couple of the most pressing of the problem areas. And I think they're very limited. It calls out for the -- trying to resolve this.
The -- the most pressing -- and I won't speak long on this because you've heard quite a bit about it -- there is nowhere in the world there is a regulatory program limiting fertilizer to any particular level, much less this 1.0 and 1.2, the proposal that is in this.
The -- we saw that there is a wide margin of fertilizer use. I can certainly imagine some may be using more than would absolutely be necessary, and we need to deal with those situations.
But you can't just have staff pick out their favorite fertilization level and impose it on agriculture. There are reasons that there is a wide separation in fertilization use.
Staff failed to point out the other, and even more damning, provision; says that after three years, that won't be the 1.0 limit, but it will be a restriction

to only apply nitrate to the level that was removed in harvest of the crop.
That will bring nitrogen levels way down, way below the necessary level, the -- for effective plant growth. The nitrate problem is an issue.
The other problem, major problem, is the tiering system. As has been pointed out by members of the board, this is absolutely an arbitrary -- the provision - arbitrary on acres, which particular chemicals you use or your location of growing.
If there is a tiering process, it has to be tied to actual risk, not just saying these are our favorite things, because we think big is bad and, therefore, we're going to say that's probably risk.
Tiering should be tied to water quality problems, not the size. Clearly, a 200-acre farm can have significant problems and a 2,000-acre farm may not.
The other point under tiering, the -- and was pointed out by members -- though classifications of any tiers should be on each specific farm, not just add up all your farm acreage from Santa Maria to here, the -- and if you hit a thousand acres, you're in Tier 3. Each farm should be independently evaluated.
The -- it was pointed out by staff that there are significant differences between each farm location.

Again, it has to do with risk.
I would observe and thank you for the clarification relative to tile drains, are not affected here. Tile drains are very important. Our operations, as Dale Huss pointed out, the -- do a lot of reclamation -- the water reclaim work. And that's all present in the tile drains.
A couple of things on the more legal side that I would like to point out to this board, is: This board does not have the authority to tell a farmer the -- what particular crop you grow where or what particular management effort that you input to do that.
You can't require that, under Porter-Cologne, of a farmer, any more than you can tell PG&E how much cooling water to use or Chevron how to operate a diesel cracker.
The -- you can't -- this fertilizer-specific, you have no specific authority in that area. And Porter-Cologne doesn't let you get inside the operation. It gives you unending authority to say what you can't discharge. But it doesn't say, you know, what you can input.
The -- it's true also of the riparian area. You can't tell a farmer where to grow what, and where he can't grow what. The -- you are not the land use

authority.
The -- there are certain -- the benefits that riparian vegetation can bring to water, there is no question about it. There is also important considerations -- the -- for human health -- the -- which has been brought up here, and we need to find a balance. And the -- but clearly, you just don't have that authority.
The -- in the interest of time, I will end there. I will say this:
You ought to fix this here in this region. It's going to make no sense to have this controversy go beyond an adoption, whatever you adopt, and go to the state board. That is not the location to fix this.
And certainly, going from there to a Sacramento Superior Court is not where this should be fixed. It should be fixed here.
Thank you.
CHAIR YOUNG: I have a couple of questions for you, Mr. Thomas.
MR. BILL THOMAS: Yes, sir.
CHAIR YOUNG: If you could stop the clock.
With respect to the criteria in the tiering, was your comment that -- that the size criteria alone was the arbitrary factor; or were you also commenting on the

proximity to a 303-D listed body, the use of certain pesticides as also being arbitrary criteria?
MR. BILL THOMAS: There's level of arbitrariness in each, frankly.
The picking two pesticides -- and I would agree that these pesticides -- because I do this water work in a number of regions, the -- have been implicated.
If you were starting somewhere the chlorpyrifos and diazinon, and maybe diaron and simazine, would be, you know, on your first list.
But it's gone further here. You've said two are terrible and everything else is fine. Pesticide regulation has shown that there is a great deal of risk that comes about by just shifting pesticide use from pesticide A to B.
So, there are some arbitrariness there.
CHAIR YOUNG: Would -- would you prefer that we just use the whole list?
MR. BILL THOMAS: The -- no, I think that we need to, on all of these things, be guided by water quality data, and deal with the specific problems where they exist.
CHAIR YOUNG: Well, I agree with that. But I -- my shift in -- in looking at this, is we should use the whole list, because each of those have been

identified as potentially causing toxicity.
MR. BILL THOMAS: And -- and --
CHAIR YOUNG: And we have data that shows toxicity.
So --
MR. BILL THOMAS: I'm not sure that we have data on toxicity of that many. I think that what they would tell you is their data shows some evidence that there might be some presence of them.
There's a difference between president -- presence and the exceeding the water quality standard.
There's certainly more than just C and D.
CHAIR YOUNG: Right.
MR. BILL THOMAS: The -- and that's one level of arbitrariness.
CHAIR YOUNG: Okay. How about the proximity to a public water well?
MR. BILL THOMAS: The --
CHAIR YOUNG: Now --
MR. BILL THOMAS: -- that's a brand new provision.
CHAIR YOUNG: Right. But it appears to be based on, not staff's favoriteness criteria, as you mentioned --
MR. BILL THOMAS: The --

CHAIR YOUNG: - but on the public health department's criteria.

MR. BILL THOMAS: Well, certainly this: We absolutely need to do things more aggressively than has been done on nitrate to water. Not just here. I deal a lot in Tulare County, it's a big problem there.

They have found there that dealing with those things locally makes a lot more sense than having any sort of, you know, grand regulatory effort, first off.

Secondly, the -- the -- it's a very new provision that was put in, only a few days past, to have the proximity to a public water source, which I think they're using the definition that would lead you to 15 connections.

The -- there is still some arbitrariness in that. Because are you up-slope are you down-slope, et cetera? All these things have level of head scratch in them, Mr. Chairman.

The -- but, again, that should only be to those where there has been a linkage, a nexus, if you will, between that well, that location and that particular impediment, which here will probably be nitrates.

CHAIR YOUNG: Thank you.

MR. BILL THOMAS: Thank you.

CHAIR YOUNG: Okay.

MS. FISHER: Good afternoon. Kari Fisher representing California Farm Bureau and the seven county farm bureaus throughout the region.

Similar to Bill, I'm going to quickly go over some of the legal concerns that we have, in addition to those previously raised in oral and written comments.

One big one is the fact that in this latest draft, the notice of intent has been transformed into a report of waste discharge.

We are concerned that the notice of intent, as it is the form which growers complete stating their intent to comply with the conditions within the order is now being transferred into a report of waste discharge.

As we're all aware, reports of waste discharge in -- in themselves, require certain -- or have certain conditions and requirements; specific requirements, conditions, certifications and CEQA compliance, as well as fees.

And so, this new addition has some concern, especially since no explanation is given as to why this addition has been added.

There's concerns with the annual compliance form. Today we saw just a preview that the annual compliance form will be based on the electronic notice of intent.

However, we have not yet seen any form of what that will be. We had no opportunity to review it or provide any comments on it.

We have a lot of concerns about the expansion of discretion that's been given to the executive officer with this new draft. And that would be their discretion without any board oversight or board involvement.

Some of which Chairman Young -- you've already talked about earlier today - some of these inappropriate expansions and delegations are with regards to revisions of the MRP, should they be needed; updates to the current -- excuse me -- tiering criterias, what those criteria are in themselves and who would fall into what criteria.

Similarly, we have concerns with additional monitoring and reporting requirements, the arbitrary nature that can go along with that, and the follow-up monitoring that could be then required; all of this without any board involvement or any information brought to the board, rather -- besides just: Look what we did earlier.

There are also some issues with site specific -- site specific nitrogen balance ratios, as earlier described, due to the fact that soil is not utilized in the determination, depending on where you're located and your soil type, the fact that you may need to have

additional ratio for your specific operation.

Additional concerns include the addition of stormwater requirements in this latest draft -- draft, which completely expands the breath and the scope of the order. And also, along with that, the new riparian vegetation requirements.

Some additional concerns include CEQA compliance for the March 2011 draft, and if CEQA has been complied with.

One big concern is the fact that this new draft is so significantly different and deviates from the -- the November draft and the fall CEQA scoping notice, that CEQA recirculation requirements have been triggered, and CEQA recirculation was not conducted.

Therefore, it deprives the public, at large, with an opportunity to test, assess and evaluate data, and make an informed judgment as to the validity of the conclusions to be drawn therefrom.

Therefore, there needs to be a full-on additional CEQA review period, in which all public is -- has the opportunity to comment.

Additional concerns relate to retention ponds and the fact that they are being required to be lined, and how that conflicts with other portions of the order, which call for groundwater percolation.

Thus, this inherent conflict will definitely affect the ability to recharge groundwater and also, how you're going to capture stormwater if your water within your ponds is not able to be percolated.

We have concerns with groundwater and individual discharge monitoring requirements. What is -- within each of those requirements, there's a lot of uncertainty regarding your quarterly samples with your nitrates for groundwater and also, all of the individual components of the surfacewater, its use.

And then, finally, I'm going to just touch briefly on the false impressions of the order being a phased approach.

The order gives a false impression that it contains proper time schedules for compliance and it is a reasonable, phased approach.

This is a false impression, because the conditions actually apply immediately. Throughout the order itself, it specifically says that on the day that the order is adopted, these compliance schedules and time schedules are in affect.

Therefore, there really isn't a reasonable time period in which growers can actually have any time to utilize the best management practices to be -- come into compliance.

So you're setting up a failure to comply. And there isn't adequate requirements built in, in which growers are produc -- protected, as the executive officer can use his discretion -- discretionary authority whenever he wants to enforce it or look the other way.

So I'm going go to conclude there.

MS. DUNHAM: While Abby is doing that, I'll go ahead. I'm Tess Dunham. I'm representing -

CHAIR YOUNG: Yeah. Your mike isn't on.

MS. DUNHAM: You want to actually hear me? No, you don't.

My name is Tess Dunham. I'm with Somach, Simmons and Dunn, and I'm representing the newly-formed Farmers for Water Quality.

And now that we've had the opportunity to express all of our concerns, we do want to also provide you with some discussion as to a third-party group alternative, that, you know, like your staff we have further worked on our alternative in this time period and want to share with you what we would propose as an alternative to what you have set forth today. Or what is in the draft order.

So, first, I want to say that, you know, we do appreciate that the draft order has included a finding that recognizes that there may be an opportunity for

third-party groups.

And the finding is -- is that the dischargers may comply with this order by participating in third-party groups.

We've taken that finding and have decided to help -- help all of you because we like to be helpful; talk about what would that be, and how would that work within the order.

And to that end, just so you know, if there's any interest, we have prepared complete strikeout and underlines of the draft order, an MRP, as well as a new Attachment B that we're going to talk about, that would be that functional third-party group within the confines of the order that has been put forward to you today.

We have those available, if you are interested. But, we'll go ahead and explain, at this point in time, what that includes.

Abby, help.

So in setting up the alternative, what we would propose is kind of an example of a new proposed order provision. It would go -- something that would be within the order and it would basically say that, you know, within 90 days or -- or otherwise allowed by the order, a discharger who is subject to this order could indicate their intent to join the third-party group, similar to

how it is done now with Cooperative Monitoring Program, as long as that third-party group meets the requirement specified in Attachment B.

And if they join this third-party group, they would basically no longer be subject to the Tier 2 and Tier 3 requirements within the order; and, instead, through the third-party group, we could provide for some of that monitoring and management practices and the accountability that the board is looking for, as we understand, with trying to set forth requirements in Tiers 2 and 3.

So in our Attachment B, just to kind of set it up for you, then Abby's going to talk about it, it -- it would be a whole new Attachment B. It provides -- it's a logical outgrowth from our December proposal. But, again, like - like with yours, it's been refined to better reflect what's before us today.

It implements the draft order finding, as put forward by your staff for a third-party group, it fits within the format that you currently have before you, it simplifies requirements, and it clarifies accountability.

And Abby's going to tell you all about what actually those terms and conditions would be.

MS. TAYLOR-SILVA: Hello. Abby Taylor-Silva,

Grower-Shipper Association of Central California.

So what does that mean? For the participants, and may include the owners and operators of land, who choose to participate, the third-party group would work with farmers to identify risks of operation for four categories.

These include toxicity and irrigation runoff, toxicity and sediment in stormwater, nutrients and irrigation runoff, and nitrate leaching to groundwater.

Landowners and growers would be required to implement management practices to achieve best practicable treatment on control for those areas, with medium and high-risk determinations.

They'd be subject to audit evaluations of the enhanced farm plan and management practices being implemented on their farm.

They would also be required to amend farm plans and implement management practices based on the results of their audit. And they'd be subject to termination if they fail to amend their farm plan and fail to implement management practices.

Just to reiterate, 100 percent of those who sign up will be audited, subject to termination if they fail to do what is asked of them in their audit.

Enhanced farm plans would include, for all

participants, irrigation management practices, pesticide management practices, sediment management practices, and nutrient management practices.

For the third-party group, they would be required to submit a notice of intent to be recognized as a third-party group. A notice of applicability would then need to be issued by the executive officer.

Within six months of receipt of said notice, the group would be required to submit a general report, outlining their process of priorities for audits. The group would be required to audit all participants within the term of the order.

They would also be required to make annual reports -- which I will further explain -- submitted to the Regional Water Quality Control Board. And they'd be required to terminate and report terminations to the board for participants not implementing management practices in good faith.

This group would also work with participants to provide technical services. Those might be in the form of aligning growers with technicians that match their management needs outlined in their audits; it might be looking for grant opportunities or bringing in experts.

It would also assist participants in updating farm plans and implementing appropriate management

practices; encourage and provide assistance for implementing collective treatment systems, such as an engineering wetland; conducting educational workshops for participants, and collaborating with a research committee.

Reports to the board would include names of participants in good standing in the group; number of operations audited in that most recent 12-month period, identification of watersheds or sub-watersheds where audits were conducted, aggregated summary of the audit results, general summary of assistance provided to participants, summary of any educational workshops conducted and a list of participants in attendance, and summary of any other activities conducted by the third-party group for the improvement of water quality.

I just want to state that, looking at these elements, this -- these are an important illustration of how this third-party group would provide the highest level of individual farm accountability of any irrigated lands program in the nation.

MS. DUNHAM: So we're always asked, well, how does this comply and -- and comport with the law in Porter-Cologne?

And we are running short of time, and hoping that the Chair might grant us an additional five minutes

for closing later on, since we -- we are going to be hardly -- highly pressed.

But -- so it does comply with Porter-Cologne. It -- it includes conditions and participants on the third-party groups as required by Water Code Section 13.269.

It includes monitoring and it maintains the current surfacewater monitoring program, but it also includes an actual auditing, monitoring function of the management practices and their being implemented just as Dr. Letey has recommended.

It includes reporting requirements for that third party. So it, itself, has accountability directly to the board. And the executive officer maintains the authority to terminate that third-party group if it is not properly functioning.

And, at that point in time, all those participants go directly back under the regional board's order, as -- as it currently -- or however it ends up being adopted.

And it requires implementation of prac -- of management practices. But it provides that key assistance to folks to teach them how to do what they need to do. And that's something that we can do as industry, that not necessarily that the board can.

Big question is always: Does it include accountability?

Absolutely. The third-party group has to be approved. There's general reports that have to be approved so you know what the third-party group's going to do.

They have to submit annual reports. They have to terminate participants if they are not participating. And the third-party group, itself, can be terminated. And, most importantly, that third-party group will -- will audit all of those participants, which is something that the regional board administratively and functionally just can't do.

And we're offering to do that, to make sure people are implementing their farm water quality management plans, which is something that the board, unfortunately, can't do, even with a electronic annual compliance or notice of intent.

And, just for interest of time, I mean -- go for it, Abby. Why don't you end it up.

MS. TAYLOR-SILVA: All right.

This proposal supports our shared goal of clean water in region three. It does not accept or endorse staff's March 2011 draft order. And it very much supports the third-party alternative.

And with that, that concludes our panel presentation. And we're very happy to answer any other questions you might have.

CHAIR YOUNG: Okay. Does it include a groundwater program or element?

MS. DUNHAM: Well, the -- the management practice in the farm plan would include a -- a nutrient management plan component that would be part of the audit function.

So management practice is related to protection of groundwater would be included.

CHAIR YOUNG: How about groundwater monitoring?

MS. DUNHAM: It does not include the groundwater monitoring.

As we discussed at the workshop, we would, you know -- folks would be encouraged to do voluntary groundwater monitoring.

But as your staff indicated -- staff counsel indicated at the February workshop, any volunteer groundwater monitoring that a farmer would do, if it was required by your order, would have to be submitted as a -- as part of the public documents and would become public information.

And there's just not a -- an interest at this point in time that individual domestic and ag wells

submit that type of data publically to the regional water board.

I mean, I think it's kind of interesting. I believe that information is proprietary for Department of Public Health. So, it would seem, that you would think that information should be proprietary here, as well.

CHAIR YOUNG: And then the accountability part.

What you're suggesting is that the growers, themselves, are not directly accountable to the water board; they're only accountable through the third party. And --

MS. DUNHAM: They're -- well, they're -- they're both.

They're still accountable to both. The -- the growers will still file a notice of intent with the regional water board and would still be subject to -- generally -- as laid out -- although, we don't agree with all of them - generally, with all of the conditions that apply to Tier 1 and Tier 2 and Tier 3, or at least those that we believe -- believe are appropriate.

So they would have some of that direct accountability to the regional board. The regional board would still maintain all authority and discretion to go forward and inspect any farm. It would still take any enforcement action for any violation of the order.

What it does do is it -- but it -- it sets up that third party to actually -- to go out and audit on the farm, to make sure that those management plans and those management practices are being implemented; and would guarantee that every participant is subject to that type of audit within the term of the order. Which I don't know is something that the regional board and their staff, could guarantee or do within a five-year time period.

But there would still be a dual accountability between the board and the individual growers and the third-party group functioning in that fashion.

CHAIR YOUNG: Oh, okay. I think early on you said that if anyone enrolled in the third-party program would automatically be dropped out of Tier 3.

MS. DUNHAM: They -- they -- we -- the idea would be that they would not be subject to the Tier 2 or Tier 3 requirements, as you currently have set forth in the order.

And, in lieu of that, they would be agreeing to be subject to audits by the third-party group. They would be agreeing that they're going to implement management practices and --

CHAIR YOUNG: But -- but the same requirements within Tier 2s and 3?

MS. DUNHAM: Would not apply.
CHAIR YOUNG: Okay. All right. Thank you very much.
Hello. Dr. Hunter?
DR. HUNTER: Thank you. Just a couple more questions.
So Mr. Bill Thomas mentioned -- really emphasized the idea that solutions need to be identified that are local. And I'm taking that to mean that we're talking about the individual operation.
And so maybe you can help me understand how the monitoring and the audits that you would do as -- in this third-party effort -- which I think is an excellent idea to help assist the technical support that comes with that and so forth -- coordination and so forth.
But how do you see the local solutions first being identified? And if -- without understanding where the actual source of the worst problems are occurring, how are you going to encourage -- maybe you have a group of 10 or 15 growers involved in one of these third-party groups.
How then do you identify which one of the 10 is going to have to do more? Where do those local solutions come from? How do they get defined?
And what kind of timeframe, then, do we --

would -- would we see coming out of this third-party process?
Because I don't see that happening. I see monitoring of implementation of management practices, which is a huge step and very important.
But then where do we see what's effective and what's not effective?
MS. DUNHAM: The -- and -- and we do have a lot of detail in the strikeout and underlining and we just don't have time in order to go through all the detail that we have thought about.
A couple of the things that I think go to answer your question, Member Hunter, is:
So the third-party groups, first of all, could be one third-party group for the whole Central Coast, or it could be on a commodity basis or it could be geographically.
You could end up with a third-party group that says, I'll take care of Monterey County. And, therefore, you're focusing in.
One of the things that we have built in is that in doing the audits, the third-party group would require to -- to conduct them, first prioritizing in the most impaired areas.
So we can try to focus in where are the

problems and get to those growers and audit their farm plans and their management practices in those impaired areas to see: Who needs the help the most and who do we need to work with?
And the third-party group can then assist them in finding out: Who are the appropriate people at Cooperative Extension or the NRDC or even the regional board, that they should be working with to come up with solutions, and what are the appropriate management practices to address those high-risk impairments; whether it's groundwater for one grower, and irrigation runoff for another?
Because each -- every grower may have different risks, based upon their operation. And so the third-party group would be set up to function in that manner.
And -- and I don't know if Abby wants to add in, you know, some effort has gone into start building a base for that third-party group now so it could hit the ground running, or at least try to get something going if the board was to go down this path.
So, Abby, I don't know if you want to add anything on the work you guys have done.
MS. TAYLOR-SILVA: Sure. We're just looking at -- we're also looking community partners, bringing

community partners together and talking to different researchers, different people representing sectors of the community that are very, very diverse - social justice organizations, people representing different watershed organizations - and bringing them together to have discussions so that we can understand the common goals, priorities and needs for the future.
So that -- that would definitely be a -- a big part of these groups.
DR. HUNTER: Well, I really do appreciate the idea of doing things collectively and trying to maximize resources and then the collaboration that may come in sharing knowledge and experience.
But, on the other hand, it's been five years, six years, seven years of seeing this program take shape, with a lot of education going into the process. And I think someone else also referred to Congressman Farr and his view of the water quality coalition that's -- I don't think it's the water quality coalition -- but the Monterey Bay work that's gone in with the farmers.
And yet, we don't see improvement. So on a collective level, we haven't seen that kind of targeted response. And I -- I -- you know, I'll be interested in seeing more detail on this new iteration.
But, again, I think to get to the individual

level -- and I was glad to hear Mr. Thomas say solutions are local. Yes, we know that individual operators need to be identified in these areas, whether it's because of the soil conditions -- not necessarily bad practices, but because they are dealing with conditions that are inherently going to result in greater contribution to groundwater contamination, which is one of my biggest concerns.

And I'm hearing that your program won't address groundwater contamination. So --

MS. DUNHAM: Well, our program --

DR. HUNTER: -- there's some gaps here. I think there's --

MS. DUNHAM: Our program does address --

DR. HUNTER: -- some gaps here.

MS. DUNHAM: -- groundwater contamination. It just doesn't have a requirement for groundwater monitoring.

And I think that's a key difference, is -- you know, having a monitoring function doesn't necessarily address groundwater contamination either.

But the -- the program and the third-party group would definitely be looking at risks to groundwater for people's implementation of management practices. Absolutely. That is a very key component of it.

And, I guess, we would also contend that in -- in working with individuals directly, we think this program does that probably better than what the -- than what the regional board could do on its own.

Because it is built and designed to get to every participant within that term of the order. And I don't think that's something that the regional board, with its resources, can do.

And I'm not sure that just the, you know, electronically filing of annual reports necessarily guarantees that's being done either.

You know, I mean, to -- this is a sit down, go out, look at the grower's operation, meet with them, see what they're doing, tell them what they need to do differently.

And that's something the third-party group can do, that I'm not sure the regional board can go out and inspect and say, you have a problem and you're violating the order.

But they can't necessarily sit there and say you should be doing X, Y and Z instead. The third-party group can do that.

DR. HUNTER: One last question.

What is the timeframe? Because the -- what you're talking about is below the sub-watershed level.

You're talking about individual operations.

So are you talking about five years or ten years? What is the --

MS. DUNHAM: What do you mean --

DR. HUNTER: -- timeframe?

MS. DUNHAM: -- a timeframe. I mean, as far as -- I mean, we would -- if -- if the board was to adopt this type of a program, we've built in proposed time schedules where the, you know, participants or those wishing to choose this -- this is a voluntary alternative.

The grower would not have to make this choice. But if they wanted to make this choice, then they would have to declare their intent to the regional board within 90 days of adoption of the order.

And at the same time -- and it's a parallel process -- the third-party groups would be basically declaring and putting in a notice of intent to the regional board within 90 days to say we want to be a third-party group and do this function.

And then a general report would have to be back to the regional board within -- I think it's six months -- of the 90 days. And I would say you would have audits up and running within the first year, at the very end of the first year of the order.

And so, you, basically, would be auditing 25 percent of the participants in a year, to reach 100 percent by the term of the order in five years.

So we're talking within the term of the order, every participant would be audited at least once, with the highest priorities going first.

DR. HUNTER: Okay. Thank you.

MS. TAYLOR-SILVA: And I -- if I may, I'd like to just touch on what we've learned in the six years.

So we know that in -- in 2004, the ag waiver was created to identify, qualify, quantify and evaluate water quality. This proposal is really designed to implement what we've learned.

And it's going to blend science and practicality to improve water quality for a sustainable environment and viable farming community. That's our goal.

DR. HUNTER: So, I guess, the main difference is creating the third-party structure and allowing -- because I don't think creating a third-party structure is going to change which dischargers are operating with the high-risk factors, that we're all concerned about.

So what you're proposing is a way to identify these high-risk operators within your own process. And you're saying that within a five-year period those people

will be identified and practices will be developed, or some alternative management practices will be designed specific to that location.

And then, what kind of information would the board see in order to understand what changes were being implemented, how effective they are, what kind of projected -- you know, where will we see projected changes that are significant enough to --

MS. DUNHAM: Well, we --

DR. HUNTER: -- we could start to see the -- the standards being met?

MS. DUNHAM: What we would anticipate would be that the third-party group would be required to report back to the board annually, of, one -- and it would be here's kind of what the annual report elements would be - but, you know: Who are our participants who would - the operations that were audited within this last, nearest 12-month period?

We -- it would be an aggregated summary of those audit results; i.e., you know, 10 percent of the operations are implementing appropriate management practices for their high-risk area, 90 percent are not.

But, now, where the accountability -- and I think it's really important to understand -- is it then wouldn't just end there.

And the -- what we would propose is that the third-party group would work with those individuals that aren't implementing the appropriate management practices and tell them and teach them, you know, this is what you should look to be doing.

And if that participant doesn't follow through and doesn't look like they're going to be implementing, then the third-party group would terminate that person's participation in the third-party group.

They could no longer participate in that group. And we would notify the regional board that participant X is no longer participating in the third-party group in good faith, or in good standing, and they come directly back to you.

Which is, you know, in all honesty, is going to be a key to the regional board staff that we got someone we may need to go inspect and check out. Because, obviously, they're not wanting to implement third-party practice -- you know, get appropriate management practices.

So there is that direct accountability and reporting function back to the regional board for those that are not implementing management practices.

The idea is not to be a shield, an umbrella protection, but to really help people conduct

on-the-ground improvements.

DR. HUNTER: Okay. Thank you.

MR. JEFFRIES: Mr. Chair.

CHAIR YOUNG: Yeah. Mr. Jeffries.

MR. JEFFRIES: I also read your letter that -- from the Farm Bureau. And I thought that was an interesting concept -- concept of using that type of third party.

But, I'm sure you also read the staff's response to that. And, you know, we talked about economics and cost.

And who is going to fund this third party? And who -- who is the third party -- the responsible people -- who are they going to be?

And what is the cost? Where -- where are you going to generate the funds?

MS. DUNHAM: I'll take part of it. And then I'll -- I'll hit it over to Abby.

I would first say that, you know, as we said early on, there -- from the December proposal that was submitted, this keys off of that and has taken many of the elements. It has been refined, and I think it has tried to be responsive to some of the comments that staff has made.

But, understand, we actually didn't get the

staff report and the responses until about two weeks ago, so we've been a bit limited on time. So we have tried to respond to some of those concerns. And we've made some -- some changes within this context, in order to be responsive to that.

With regard to the cost and funding, Abby, you want to --

MS. TAYLOR-SILVA: Sure. This would be a -- a funding mechanism that is covered by the -- the growing community.

The growing community that chooses to be a part of one of these groups would then fund the group and fund all that goes with it.

In terms of what would the qualifications of the people carrying out the group's orders be, that would be part of the professional requirements that would then be submitted to the executive officer.

So that would be well understood, when the executive officer makes their decision on the group itself.

MR. JEFFRIES: Well --

MS. DUNHAM: It -- it would be self-funded, much like the Central Valley groups are self-funded, and for those participating, and it would be a similar mechanism. Probably based upon risk.

MR. JEFFRIES: Well, if you didn't have enough participating, it wouldn't be worthwhile, because you wouldn't be able to have the funding to do the things that you need to do.
MS. DUNHAM: Typically, yes, that --
MR. JEFFRIES: But the letter that you sent to us -- the Farm Bureau sent to us -- and there was a lot of signers on that -- are those all going to participate in this particular third party?
MS. DUNHAM: I don't know. I don't know if -- if that would be the case or not, Mr. Jeffries.
I mean, I think that our indication there are -- are probably some groups that would encourage their members. But it has been set up so it is a voluntary choice -- choice by all individuals.
Because as -- if anything, you've probably learned in your time on the board, farmers are an independent lot.
MR. JEFFRIES: Okay.
MS. DUNHAM: So we've made it a voluntary choice for each individual as to whether they would want to participate in this or not.
MR. JEFFRIES: Well, you must have some idea, or else you wouldn't have proposed the proposal to us, that there was a large number of -- of groups that were

interested in this concept, or else, you wouldn't be pursuing this.
MS. TAYLOR-SILVA: Well, absolutely. And we've formed a group called Farmers for Water Quality that includes a number of different organization; Farm Bureaus, commission -- Strawberry Commission, Western Growers, our grower-ship organization, grower-ship organization in San Luis and Santa Barbara Counties.
So all of us together have come together to look at the coalition framework. And work with Tess on these elements that have been presented to you today.
And so, in that regard, you have a large group of people representing the growing community, and members of the growing community, who have come together to make this presentation, too.
MR. JEFFRIES: Yeah. I -- I wish you would have proposed this back in July of last year and then had some kind of chart that -- flowchart to show us how this would actually work and the responsible parties.
CHAIR YOUNG: Well, it -- this can be part of a recommendation --
MR. JEFFRIES: Well, I --
CHAIR YOUNG: -- to staff --
MR. JEFFRIES: -- understand --
CHAIR YOUNG: -- to take their Attachment B and

look at. So...
MR. JEFFRIES: Well, but I -- I think it would have simplified the process we're going through right today, if we'd have had some of that prior to.
I mean, that's hindsight. That's Monday-morning quarterbacking. I understand that. But it's not too late.
And if, you know, the rest of us are going to -- I would personally like to look at it further. I think it's an interesting concept.
MS. DUNHAM: We have the documents that we can provide to you.
CHAIR YOUNG: Well --
MS. DUNHAM: I'll let that --
CHAIR YOUNG: -- we're -- we're gonna need to discuss all these things --
MR. JEFFRIES: Absolutely, Mr. Chairman. I --
CHAIR YOUNG: -- as to what -- Mr. Thomas.
MR. THOMAS: I have a question for --
CHAIR YOUNG: Oh, okay.
MR. THOMAS: -- the group. If that's okay.
MR. JEFFRIES: But, let me one -- one of -- I have two, one for the staff and one back to the farm.
Michael, didn't you say that you weren't going to require drilling wells for groundwater monitoring?

MR. THOMAS: Correct. The order --
MR. JEFFRIES: Okay.
MR. THOMAS: -- proposed order does not require that.
MR. JEFFRIES: So the groundwater monitoring wouldn't require any additional cost, other than the testing.
Now, are you contemplating on doing surface monitoring, surfacewater monitoring?
MS. DUNHAM: The -- the end -- the surfacewater monitoring would basically remain as it currently is, which would be the cooperative monitoring program. That would -- that does not go away, and that would remain.
MR. JEFFRIES: Okay.
MS. DUNHAM: There would no -- there would be no individual discharge monitoring, like there is now being proposed for Tier 3 participants.
MR. JEFFRIES: Well, I -- I'm also interested in the groundwater monitoring part, as well. So think about that. And we'll just go further.
MR. BRIGGS: Mr. Thomas.
MR. THOMAS: Thanks.
So, Ms. Dunham, you mentioned requirements that the coalition would be implementing on the grower.

And have you done an economic analysis of those requirements, how much it would cost.

MS. TAYLOR-SILVA: I can speak to that.

Yes. We are -- as -- in working with Dr. Barbeau on the economic analysis of the staff proposal, we will also be doing an analysis of this group -- third-party group.

MR. THOMAS: But you haven't done that economic analysis yet?

MS. TAYLOR-SILVA: It is in process. But it has not been done. It is not complete.

MR. THOMAS: Okay.

And you mentioned that groundwater sampling is voluntary under your approach?

MS. DUNHAM: As in our original proposal, we would -- we would not require that the groundwater monitoring component that you have in your draft order be required.

MR. THOMAS: Okay. So you also said -- if I heard you correctly -- that this approach would allow you to follow up on groundwater problems.

MS. DUNHAM: Absolutely.

MR. THOMAS: How would you know there were groundwater problems if you're not doing the sampling?

MS. DUNHAM: Well, first of all, we would be

looking at it based upon people's monitoring practices. And as -- as been exposed previously, there are lots of information data, GAMA data, et cetera, to identify areas where there are impairments.

And we would be able to help those in using the nitrate hazard index that Dr. Letey has put forward to determine the risk to groundwater for their area, to know who is in the most vulnerable areas for groundwater, and the need to work with making sure they are implementing appropriate management practices to be protective.

MR. THOMAS: Okay.

CHAIR YOUNG: Okay.

MS. MC CANN: I just wanted to get clarification. I spoke earlier about the Farm Bureau proposal that was submitted on December 3rd.

And I think I shared, very clearly, that the milestones did not include any -- any indicators of effectiveness of management practices of individual farms to show control of discharges or pollution reduction.

And from the proposal -- from the presentation I just heard

(Reporter clarification)

CHAIR YOUNG: Slow down.

MS. MC CANN: I'll start over.

I just wanted to clarify that I didn't --

CHAIR YOUNG: Slow down.

MS. MC CANN: -- that this presentation sounds like it has the same milestones as the December 3rd submitted alternative that we evaluated, and that earlier, in my presentation comments, I demonstrated that relative to the draft order, does not have any indicators of effectiveness of management practices or pollution control reduction from individual farms included, and none of that to be reported to the regional board.

Could you explain that.

MS. DUNHAM: I guess I could say, other than having every individual actually having their operations audited to determine what they are actually implementing and if they are implementing appropriate and effective management practices in conjunction with professionals, I would consider that a fairly large milestone to make sure that people are actually implementing management practices.

So that would be a -- a major part of the program here. As compared to any, you know, milestone that has been discussed in other orders.

MR. THOMAS: The difference being our milestones are water quality based. The -- the difference being our -- our milestones are water quality based, largely.

And in your proposal, they are not. They are implementation management -- implementation of management practices. And as your slide here says, for instance, you provide names of participants in good standing.

So one of the comments we would get if this was our proposal is: What does "good standing" mean? And number of operations audited in a 12-month period. Audited for what?

Those are the kind of questions we would get.

MS. DUNHAM: Well --

MR. THOMAS: And what we have to tie it back to, is water quality standards and meeting water quality standards, not implementing practices.

CHAIR YOUNG: You know, I'd like to just draw this portion of the proceeding to a close because we have so many others to get to.

It's important. I -- I think, at least, for -- from my perspective, I think, we're going to ask them to submit their attachment to you so that we can have you look at it.

And we're going to have more opportunity to discuss it, when we continue this meeting. Because we're not going to finish it today. There's no question about that.

I just want to get through with as many

presentations as we can today.
So, thank you. The Strawberry Commission is up.
And, how is our reporter doing?
(Off the record)
CHAIR YOUNG: Okay. Go ahead. If you're ready, go ahead.
Okay. Folks.
MR. TOMLINSON: Okay. Chairman Young --
CHAIR YOUNG: Yes.
MR. TOMLINSON: - Vice Chairman Jeffries, Member Hodgin, Dr. Hunter, for the -- my name is Rick Tomlinson with the California Strawberry Commission. I have Dr. Michael Cahn with me today.
We wanted to address several specific issues related to strawberries.
First, before I even begin, I want to make clear, we strongly support the previous coalition effort that was just described. We think there are so many errors with the current staff proposal, that it is -- it is not implementable.
And so I'm going to point out some errors in the staff proposal that we would like specifically addressed regarding strawberries; but, overall, we believe that -- that the only workable resolution is that

coalition approach that was previously described.
So the first part is just on Appendix F. The staff did an economic analysis. I think you're all familiar with the -- the profile of strawberries in region three. Roughly half of all the nation's strawberries come out of region three.
There's about 320 family farmers, with an average farm size of 75 acres. Out of the whole area, we only represent about 5 percent of irrigated acreage. That's our 2011 acreage.
In Appendix F, the staff developed a case study on strawberries. We were the only commodity that they did that with.
We went to verify that case study, and the first thing that we identified was that the source data that was cited doesn't exist. There is no 2010 document. There's a 1999 document.
Dr. Bardeaux (sic) also identified that there -- the -- the information that does come up on the web site that you click was not understood well and misused.
We had Dr. Richard Green, a professor at U.C. Davis further evaluate it. I have a -- a letter from him I can submit so I don't have to take the time to read it. I have some excerpts here in the presentation.
But I think the header on the top there in the

staff analysis says that strawberries are inelastic, that consumers will attempt to buy it no matter the price.
I have 320 farmers that would love that to be the truth. We all know that's not the truth.
Another part of the strawberry profile, I mentioned we're 5 percent of the irrigated acreage. And the staff really focused on chlorpyrifos and diazinon - we're about 1 percent of the combined use of chlorpyrifos and diazinon in the entire area.
But, to trace back, the -- the previous staff proposals, if you'll recall, the one that came out in May 2010, that proposal would have eliminated all strawberry production because it included a standard that we couldn't achieve.
It's since become something that is, I'll say within the range of possibility; but, again, still many problems.
Relative to the groundwater and nitrate, I'd like to turn it over to Dr. Cahn to describe some of his recent work.
DR. CAHN: Good afternoon, Chairman and the board.
My name's Michael Cahn. I'm a irrigation water resources advisor for the Central Coast. I'm with the U.C. Cooperative Extension, work with many of the growers

in the room here.
Because of a lack of -- of information on current practices on -- on management of nitrogen and water in strawberries, for the modern varieties that are now grown on the Central Coast, Tim Hartz -- who's with U.C. Davis -- and myself, worked collaboratively with the regional board; we received a grant from the board - to evaluate current practices.
And one of the first aspects or objectives of this project was to evaluate how much nitrogen is actually uptaken by the modern varieties that are grown in the Watsonville, Salinas and Santa Maria area.
Through a number of fields, we -- commercial fields -- we followed the -- the crop uptake through monthly whole-plant samples. And these samples were divided in vegetative material, as well as fruit material, to determine the nitrogen content.
This data here shows, for the fields that we monitored in Santa Maria and in Watsonville, this linear uptake of nitrogen sort of peaking out at about 100 pounds of nitrogen per acre when we get to the end of the production season.
We also evaluated the amount of nitrogen that's uptaken by the fruit, exported through the fruit, and that amounts to about 92 pounds of nitrogen per acre.

In total, we reach about 200 pounds of nitrogen per acre through the season, through the production season.

Then we surveyed commercial growers. We had 28 in total, about their nitrogen fertilizer use records. And this graph just shows the -- the variation in nitrogen inputs by different growers.

On average they put in -- they used a total of 192 pounds of nitrogen per acre for the whole season. This is roughly in balance with the uptake pattern of strawberries.

So the nitrogen that's actually put on the field is being taken up in the production.

If we look at the soil nitrate levels through the season in some of these fields, we see, once we get into the main part of the production season, April through August, the soil nitrate levels are quite low.

And this is just more evidence that what's being put on the field, in terms of fertilizer, is quite in balance with what's being taken up by the crop.

Another question is: The vehicle for moving this nitrate down into the aquifer is -- is water; right? Through percolation. So we wanted to know, how much water a grower is applying to strawberry fields.

We worked with the industry to put flow meters

on roughly 34 commercial fields. And 17 of those fields we more intensively monitored with data loggers and evaluated the crop water use, through ET estimates. And you can see the data logger right there, in the middle of the field.

This is a summary of the data for these 34 fields. Roughly a average of 21 inches are used. We see quite a range in water use. But we can put that terms -- in terms of crop ET, to look at what the water requirements were of the strawberry crop.

When we put it in terms of crop ET, for the 17 more-intensively monitored fields, we see, on average, growers are applying 93 percent of crop ET; in other words, there are actually under irrigating a little bit.

Only a small minority are -- are -- are applying more than 120 percent of crop ET. So, again, the amount of water that's being applied --

Do you have a question?

DR. HUNTER: Yeah. Just quickly. ET.

DR. CAHN: Oh. Crop ET is evapotranspiration or the water use requirement of the crop. Okay?

So roughly what's being applied is what's being used, in terms of water. So that would also suggest that very little drainage that's happening below the root zone of the strawberry fields that we evaluated.

But, just in summary, what we've learned so far -- and there's a report also available that we submitted to the board and to the staff -- the nitrogen uptake of strawberries, the applied fertilizer and the uptake are -- are in balance in the majority of the fields that we looked at.

The average soil nitrate levels were below 10 parts per million nitrate. And many of the fields actually were below 5 parts per million; suggesting, again, the -- the crop is doing a good job of scavenging most of the nitrogen that growers are applying.

Applied water volumes are in check with the water use of -- of the crop.

And so, as a whole, if you take these results, they do indicate in their preliminary study that currently how growers are managing the fields has pretty minimal risk to -- to nitrate loading to groundwater.

DR. HUNTER: And so what -- was -- was there any part of your study that looked at the post-harvest period? And I don't -- if you could define what that is, how long a period it is.

And is that -- does that occur during the rainy season? And are there factors there that we need to know more about?

DR. CAHN: After harvest, that field's going to

be rotated to another crop of either - strawberries, or it will go back to vegetables.

It goes to strawberries -- you -- as you end that crop, it has very low nitrate levels in the soil, so there is low risk when the rainfall comes to leach what's in the soil.

DR. HUNTER: And -- and so is there any -- there's no -- what's the longest fallow period for a strawberry field?

DR. CAHN: The longest fallow period?

DR. HUNTER: Yeah.

DR. CAHN: They -- they would, typically, probably plant the next -- put a cover crop in.

DR. HUNTER: Hm-hmm.

DR. CAHN: If they're going to go strawberries, strawberries.

DR. HUNTER: Hm-hmm.

DR. CAHN: And then, probably in June or July, at least in this area, start setting up that field for planting again.

In many cases, they're rotating with vegetable crops. So it might go right into vegetables in as early as, you know, March or April.

DR. HUNTER: Hm-hmm.

DR. CAHN: Or it could be a little bit earlier.

But that soil would come with low nitrate levels.
DR. HUNTER: Hm-hmm. Okay. Okay. Thank you.
CHAIR YOUNG: Mr. Jeffries.
MR. JEFFRIES: Yes. Am I understanding that you're saying that there is no nitrates or nitrogen going below the root zone with strawberries?
DR. CAHN: We're not saying there's nothing going down. We're saying these are indicators based on the criteria you -- the staff was talking about before, that strawberry growers are already meeting.
Okay. The -- the -- the 1.2 balance, the majority of the growers are meeting that balance. That's all we're -- we're saying. There -- there could be some loss of -- of nitrogen, because there is nitrate in that soil.
MR. JEFFRIES: Right.
DR. CAHN: And we monitored for the whole season. I'm giving you numbers that are the average for the whole season. There can be individual irrigation events. You might lose a little water.
But the indication here is that the current practices growers are using in strawberries is fairly well in check with what we understand of best management practices.

And, in fact, if you're asking growers to reduce their water use or their nitrogen use from where they are now, in my opinion, they wouldn't be able to do that without reducing yields.
MR. JEFFRIES: Okay.
DR. CAHN: They're already using very good practices, is what --
MR. JEFFRIES: The -- the water use you showed 21 inches plus.
DR. CAHN: What's that?
MR. JEFFRIES: Your water use was 21 or 22 inches per year; is that correct? On the average.
DR. CAHN: That's right.
MR. JEFFRIES: And that was from January through October?
DR. CAHN: That's correct.
MR. JEFFRIES: Is that including rainfall or is that pumped?
DR. CAHN: That's pumped water.
MR. JEFFRIES: And you don't include the rainwater?
DR. CAHN: No. That's just applied water. The rainfall occurred roughly from January to March last year. That was when 90 percent of the rainfall occurred.
Growers didn't irrigate significantly until

about April.
MR. JEFFRIES: And rotation of strawberry crops is what, usually three to five years? Depends the type of plant.
DR. CAHN: Meaning how often --
MR. JEFFRIES: Yes. How often do they rotate --
DR. CAHN: I'll let the Strawberry Commission answer that question.
MR. TOMLINSON: It's going to vary dramatically, depending upon --
MR. JEFFRIES: By the type of plant.
MR. TOMLINSON: If you're the owner and you're just growing strawberries and doing a cover crop, and just coming back in -- in eight months, or if you're going immediately into vegetables, and then coming back to that ground in a couple years.
MR. JEFFRIES: Well, are you indicating that you transplant strawberry plants every year?
MR. TOMLINSON: Absolutely.
MR. JEFFRIES: So there's --
MR. TOMLINSON: We -- we plant every year. And it's a roughly 14-month cycle.
So there's no immediate back-to-back. You have to constantly be rotating with something else, whether

that be a cover crop or whether that be with vegetables.
And so, we're in constant rotation with vegetables.
MR. JEFFRIES: Okay.
MR. TOMLINSON: And -- and just to add; right. This is an example of what Dr. Letey was talking about. And why we wanted to address this as -- as I called it -- an error in the report; where the staff did not do a -- a comprehensive nitrate evaluation to identify risk.
So what you see in the staff report is that strawberries are designated as high risk for leaching nitrate to groundwater.
And, when, in fact, the -- the evidence here is we're making it no worse. Right? This is just the first year of a study. We need more work.
But, certainly, to characterize us as high risk would not be fair.
MR. JEFFRIES: Let me get this straight, Mr. Tomlinson.
And you're telling me that you rotate strawberry plants every 14 months, and then those plants are disked up and there's a cover crop or there's another type of crop that's put in for another season, and then you come back and transplant the strawberry crop back in again.

MR. TOMLINSON: Yes.
MR. JEFFRIES: Is that what you're telling me?
MR. TOMLINSON: Yes. There's roughly -- depending upon where you're at in Santa Maria or in -- in the Watsonville/Salinas area, anywhere from, say, 21 to 24,000 plants per acre to maybe up to 30,000 plants in one acre that are planted each year.
And in -- and in each growing region, it's at different times because they're trying to hit different market windows, and go with the climate.
And so, yes.
MR. JEFFRIES: Okay.
MR. TOMLINSON: All right? But a big -- but part of that, the reason why that works is -- right? -- it's not a magic crop. We're not -- we're not the only crop that can somehow absorb 100 percent of the fertilizer that's applied. Right?
It's because we're in this constant rotation system. It's because maybe there might be some -- some nitrogen, in terms of the water that's coming up. There might be some in the residual.
When you asked questions of Danny Merkley about what does a good farmer do, this is an example. They look at what's already there. They don't apply more than what they need. They don't make it any worse than what

they got it. Right?
This is an example of what I would characterize as low risk to groundwater. Certainly, I would ask you to make -- to make the changes to the order that would say we're not high risk.
MR. JEFFRIES: Well, listening to Dr. Letey -- Letey -- is it Letey?
UNIDENTIFIED SPEAKER: Yeah. L-E-T-E-Y.
MR. JEFFRIES: I was going to ask him the question, because he talked about nitrogen or nitrates getting down past the root zone.
Would that mean to a farmer that he should subsoil every year and bring that up, turn the ground over?
MR. TOMLINSON: And -- and that's what he was -- part of his answer - right? - is that each crop is going to have a different set of practices to try and reduce risk for groundwater because we all need to -- to achieve those goals. But it's all going to look different for each commodity.
For here, for strawberries, we have a drip irrigation system that's highly efficient.
MR. JEFFRIES: That's obvious.
Thank you.
CHAIR YOUNG: Mr. Hodgin.

MR. HODGIN: Dr. Cahn, your statement here suggests that strawberries really are not a major contribution to groundwater pollution.
But -- do you have any figures on the same fields of -- to know what the level of contamination is in the groundwater?
DR. CAHN: Did we evaluate the nitrate level of --
MR. HODGIN: Did you evaluate that -- where -- where I'm going is -- is that an area that's -- in -- the local strawberry fields, is that contaminated groundwater under there, which may or may not have anything to do with the strawberry production?
DR. CAHN: We did evaluate the irrigation water for nitrate levels. I can't recollect exactly the levels. But none of them were very high.
I -- I mean, they were meeting the water quality standards -- the drinking water standards of 10 parts per million, you know, in these fields.
MR. HODGIN: So you were testing the water that's being used to irrigate the fields?
DR. CAHN: That's right. So I don't know if there were other wells around that are shallower. They might have higher nitrate. I have no idea.
MR. HODGIN: Thank you.

MR. TOMLINSON: Member Hodgin, your question is a excellent question. Because it's an example of why I say, even strawberries here, with the low risk that we're describing to you, how challenging it would be for us to comply.
Because the vast majority -- 70, 80 percent of strawberry farmers -- are leasing their ground. They're constantly moving.
And so, in any given year, they might be on a farm where the groundwater below has nitrate in it from production practices 20 or 30 or 40 years ago, that have no correlation to them or maybe even the crop before it or what was going on.
So trying to tie that correlation to groundwater and then what's going on on top, it doesn't -- there isn't that immediate correlation. That's why a whole-systems approach is more effective than an individual farm measuring groundwater and somehow suggesting that -- that there's a correlation between that farm and that groundwater.
CHAIR YOUNG: If -- if I'm not mistaken, I thought staff put up a -- a slide that showed that the nitrate levels in groundwater in this area were increasing year by year.
MR. TOMLINSON: I think if you look at the GAMA

database, what you'll find is that varies dramatically well by well. And it's shifting.

I think the -- you had testimony at your previous workshop that suggested that it was shifting. And, certainly, in some wells it's increasing in some areas. In some areas it may be decreasing, as well.

CHAIR YOUNG: Well, shifting in what way?

Well, I know shifting means moving. But I mean going up and down. Okay.

So how -- what about if you're looking at the groundwater basin, and you averaged all these wells so you were taking into consideration the ups and the downs?

MR. TOMLINSON: I think that would've been an excellent analysis for the staff to do. But, instead, what they presented to you was the highest level of detection ever in 25 years.

And so they presented you data that, in some cases, was decades old. So you're left with the impression that all of these wells are above drinking water standard.

When, in fact, you go to the GAMA database today, and it'll show that the vast majority are not. And if you go to those USGS studies, that were done just a few years ago, it'll show that -- that the vast majority of wells are in compliance.

That, yes, there is nitrate in groundwater; yes, it needs to be addressed; yes, we need to work on it. But it's not the picture that you've been presented.

CHAIR YOUNG: Well, are there nitrate levels that are exceeding drinking water standards?

MR. TOMLINSON: I'm sure there are. And some of it, I'm -- I would estimate -- I -- I'm not a groundwater hydrologist. But I would estimate that agriculture has contributed at some point. Maybe currently.

There are many other sources, as well.

CHAIR YOUNG: Let me -- I just want to ask staff:

What's with the GAMA data? I mean, we're hearing people claim that staff has kind of picked and choosed data, you know, ignored GAMA data.

I mean, can you guys clarify what we're hearing.

MS. SCHROETER: I -- I can --

MR. HODGIN: Go ahead.

MS. SCHROETER: Let me try and answer that. And maybe Matt can provide some additional clarification, if necessary.

So the -- what -- what the GAMA data set is -- and there's -- there's several parts to GAMA. There is a

groundwater basin public supply well study, which is these deeper wells, which is these -- what we call mezo (phonetic) maps showing you here on the screen.

There is special studies, which are focused on contaminants, typically, like nitrate, like - which is what the Lawrence Livermore studies are doing.

And then there's domestic well studies; for example, those studies that detect a - high levels of nitrates; for example, in Tulare County.

The groundwater public supply well analyses, those are all deep public supply wells, typically from older groundwater, and so it takes some amount of time, because they're deeper wells, for contamination to reach them.

What is missing from that data -- database, is the shallow wells. And so we don't see the shallow well impact; although, the special studies part of GAMA has looked at shallow wells and has found that nitrate impacts are happening in shallow groundwater within the last two to ten years, so in the current timeframe.

In addition, what the GAMA data set is challenged by is that as wells are abandoned -- because they go out of service due to high levels of nitrate contamination, for example -- they drop off the radar screen.

And what DPH presented to the state board last month, is that those wells are no longer represented. It's an artifact of the data set. It does not mean that groundwater is getting cleaned up.

And, in fact, most of those wells -- if you sampled on a -- a bore right next to where the well used to be, is still high levels of nitrate.

Nitrate pollution doesn't assimilate very quickly. And so that's the complicate -- some of the complication of the data set.

MR. THOMAS: I would -- I would agree that the situation is not exactly as we presented it. In the sense that it's worse than we presented it.

It is worse than we presented it. Old wells that are contaminated go out of production and they are not sampled any longer, they are abandoned.

New wells come into play. And if you sample those new wells, it's going to present a picture of cleaner water than is actually there.

CHAIR YOUNG: Okay. I -- I think his name -- is it, Dolezal? Mr. Dolezal had presented two side-by-side slides comparing the Santa Maria area.

Yours was on the left, his was on the right. There was a marked difference in the number of blue dots, if you want to just characterize it that way.

What's the difference, from your perspective, on the presentation of those two data sets? One suggests that you didn't include a whole bunch of wells and, therefore, the percentage of contaminated wells from his presentation should be much lower than what you presented.

MS. SCHROETER: We -- we would have to look at the data sets side by side. I -- you know, the slide's no longer here in front of me. And I'd have to look at it in greater detail.

However, it would depend upon which wells were being represented in each study, at which time period. So in any given five-year timeframe, there's whole different set of wells that come into play.

CHAIR YOUNG: Well, he had the same timeframes, from what I remember; at least, it was a number of years compared identically, if I'm not mistaken.

MS. SCHROETER: I think what's important here to remember, is that the fact that there's a nitrate groundwater pollution problem is not being debated.

We can talk about the level of pollution that there is. But I can show you several slides from presentations and technical service providers, just recently, which are all conveying the same thing about the nitrate groundwater pollution problem.

What we don't have great data about, is the shallow groundwater pollution that's going on, which would be representative of current practices. And the data that we do have also shows a problem.

I am interested in the Strawberry Commission's data, and taking a closer look at that. And what I'm also interested in understanding is:

For those growers who do not meet the nitrate balance ratio of 1.2, for example, what amount of nitrate loading is coming from those -- those fields?

DR. CAHN: There was a very small minority that were above that 1.2, I believe maybe 5 out of the 34 fields. So it's a small, small number. I think it came out to about 12 percent.

MR. TOMLINSON: And I think previous reports that the staff has cited would suggest that about half of nitrate that might go below the root zone gets -- goes through a denitrification process naturally.

And so, the amount that then leaches to the groundwater is going to be a function of the amount of surfacewater applied. So it would be a combination of a grower, one, having excess fertilizer, and then, two, overwatering.

If those two things didn't happen, if you just had the excess fertilizer, then it would be the rate that

-- of natural rainfall or the rate of flow from a subsequent crop.

And then you'd have a certain amount -- I think the studies that the -- the staff have cited, about half, that gets through a natural denitrification process.

CHAIR YOUNG: Okay. You -- you guys still have six minutes.

MR. TOMLINSON: And -- yes. If I could just add one more thing. Because you asked

CHAIR YOUNG: You have six minutes, so --

MR. TOMLINSON: Okay.

CHAIR YOUNG: -- ahead and --

MR. TOMLINSON: Well, the -- okay, I will. Thank you.

One of the questions that you had asked previously was about the Dolezal report. I was concerned that if we were going to present that information to you today, that we triple-checked it.

We hired a groundwater hydrology firm to peer review Mr. Dolezal's work, his memo. And I'll read a quick sentence:

We agree with the conclusion of the Dolezal report that the presentation -- the staff presentation -- distorts the facts related to the source, degree and extent of nitrate contamination in groundwater. And that

additional unbiased analysis is needed to support policy decision and development of best management practices for nitrate sources to groundwater.

I'll offer that, as well, to you.

If I could return to the presentation.

So in regards to nitrate, we would ask that you please correct the order, if you move forward with this version or any other version, regarding the designation of strawberries as high risk for loading to groundwater for nitrates.

Also, I wanted to talk briefly about the tiering criteria. And this would be a typical strawberry farmer.

So if -- if you consider the square box a strawberry farm and the blue line on the bottom a river - let's say that's the Parajo River, let's say the left is some tributary, let's say the right is the Lower Parajo with a levee on it - that -- that would be a typical strawberry farmer who would be in Tier 1.

If you happen to have that same strawberry farmer -- whether he had an organic field or a conventional field -- that, again, was not applying chlorpyrifos or diazinon, who was 500 feet away from that river -- maybe even a river that's got a levee on it, or maybe, instead of 25-foot buffer or 30 or 50-foot buffer,

they decided to put a berm or a ditch or a retention pond - it wouldn't matter - that farmer would be Tier 2. Same farm.

If that farmer happened to be in a co-op, and that co-op had other farmers that were over a thousand acres, they would now be in Tier 3, even if they were 2,000 feet away from the river; same farm, no chlorpyrifos, no diazinon.

This is an example of the arbitrary nature of the currently proposed tiering criteria, where the overwhelming focus on toxicity, the evidence that's currently been accumulated over the last five to six years, is that chlorpyrifos and diazinon are the -- the two pesticides that are the primary source of -- of toxicity.

What the others are, what the detection versus toxicity, I don't know. But, clearly, the staff has identified that these two have.

But when you look at how the criteria applies to a farmer that doesn't use them, you could have the same farmer be a Tier 1, 2 or 3. And -- and that just doesn't make sense to us.

That's an example of why I was saying, at the beginning, Dr. Hunter, about why this is just so problematic for us.

You could then have another strawberry farmer -- because I -- remember, I mentioned we represent about 1 percent. There are some farms -- some farms about 6 percent, Mr. Jeffries.

You asked about crops going back to back. About 6 percent of the strawberry crops stay in the ground for two years. Those folks have a higher pest pressure. They might resort to something like chlorpyrifos and diazinon to deal with that. That would be a very important product for them to be able to use.

They might be 3,000 feet away from the river. They'd be in Tier 2.

So if you were to stick with the current staff order, the one thing that you might do is delete the definition of operation. And everywhere it appears in the order, just simply replace it with landowner or farm.

And that eliminates all those Tier 3 people who, you know, would otherwise be just fine, having no risk but somehow being captured in this def -- this definition of operation.

Another thing that you might do is, if you look at your tiering criteria for 1A and 1B, about not using chlorpyrifos and diazinon. If you're not using it, if those are the primary source of toxicity, then what does it really matter whether that farm not using is 500 feet

away or a thousand feet away?

Again, there's other tools they can use besides buffers to -- to come into compliance.

Also, a lot of the sediment management requirements are all in Tier 1. So there's not some big dramatic difference there between Tier 2 and Tier 1 in terms of sediment management.

So if you remove the 1,000 foot from -- from Tier -- from Tier 1, that would allow some of those folks from Tier 2 to move back down into Tier 1.

The last thing you might do is look at Tier 2, A and B, and then look at Tier 3. If you just simply removed the Tier 3 language for surfacewater down to Tier 2, that's what your -- what the staff is identifying as something that they're trying to address, which is, they're trying to address an immediate discharger, someone who's immediately discharging water with chlorpyrifos and diazinon into a waterbody.

Again, our -- we would suggest that the overall coalition approach is much better. I'm just saying, if you're going to move forward with the order that's been presented to you, these are the type of changes that need to occur.

CHAIR YOUNG: And do -- do the other farms that are not using these two chemicals - are they using

another pesticide in that list?

MR. TOMLINSON: I'm sure -- I'm sure some of them are. I'm sure some of them are.

But the -- the data, again, is not conclusive on what is -- is it a detection? Is it toxicity? But these are the examples why a coalition -- when we would look at an audit for a coalition approach, we would be looking at all of the pesticides.

We wouldn't just be looking at chlorpyrifos and diazinon.

CHAIR YOUNG: Okay. All right.

You've got about another minute and 15 seconds.

MR. TOMLINSON: All right.

This is a summary of the changes that I've described.

CHAIR YOUNG: Yeah.

MR. TOMLINSON: First tool regarding Attachment A, Page 13, Paragraph 51, and Attachment A, Page 48, Paragraph 10, regarding the -- the nitrate component.

The other two are in regards to the surfacewater, the changes to the tiering criteria.

The last one, which is Page 13, Paragraph 12, this is a brand-new paragraph that just emerged two weeks ago that would give the executive officer authority to -- to completely change the tiers at any time, over the next

five years.
We can't live with that type of unpredictability. Whether it's adding the next 10, the next 73, adding five more tiers, collapsing two tiers or whatever, that type of unpredictability is -- is just -- we can't live with that.
And so, we would ask that you strike that paragraph, too.
Lastly, I would just say, relative to the coalition approach, if you think about what was described to you in terms of audits, I would -- I would suggest that you look at the other clause that referenced the sustainability program because it is very, very similar.
So if it's good enough for a wine grape grower to move from Tier 3 to Tier 1 or Tier 2 to Tier 1, why isn't good enough for any of the other commodities?
CHAIR YOUNG: Are there other commodities that have developed sustainability certifications?
MR. TOMLINSON: There are -- we are -- there are many other commodities working on those right now. There's a -- a sustainability stewardship index.
And, in addition to that, though, if you just simply look at the -- the practices that are required, the coalition approach is very similar to what that sustainability program looks like.

In fact, there's no groundwater monitoring in the sustainability program. And the staff recommended that as a vehicle for a wine grape grower to move from Tier 3 or Tier 2 into Tier 1.
So, again, if you -- if you just simply look at that, you'll find that what we've proposed to you is what the staff has said is acceptable in other situations.
CHAIR YOUNG: Thank you.
Frances, did you have a question or comment?
MS. McCHESNEY: I just have a request that -- and maybe it's already happened -- that you leave your Power Point presentation with the staff.
And, Tess, the same with yours -- your Power Point presentation is --
Okay. We just need it -- need it for the record.
MR. TOMLINSON: Okay. And did you want me to leave these three letters?
MS. McCHESNEY: You can give them to Michael.
MR. TOMLINSON: Okay.
CHAIR YOUNG: Yeah. Okay.
Thank you for your presentation.
Coastkeeper is next.
We've given 24 minutes to you.
Want your break, Ms. Reporter? Let's take a

ten-minute break.
(Recess taken)
CHAIR YOUNG: Okay. Coastkeeper is up.
Folks, please take your seats. If you want to continue talking, you can do so outside.
No -- no more cards. Okay. Well -- water standard for groundwater...
Is it -- is it in Spanish? The NOI.
Okay. Just, Steve, before you start, question for Lisa and staff. I think this is a good question someone just submitted on a card here.
Is the NOI form and the annual form -- any reporting forms -- are they also available in Spanish?
MS. SCHROETER: That is a great question.
The NOI form -- the annual compliance form is not yet developed.
CHAIR YOUNG: Right. I --
MS. SCHROETER: It's included as part of --
CHAIR YOUNG: How about the --
MS. SCHROETER: -- the order.
CHAIR YOUNG: -- NOI?
MS. SCHROETER: The NOI is complete. Fourteen hundred of the 1,700 operations have already submitted an update via the electronic NOI.
The instructions are all in Spanish. We have

provided assistance to Spanish growers in three different opportunities, now. Also, they have come to our office.
The form, itself, on-line is not yet in Spanish. But we plan to put it on-line in Spanish.
CHAIR YOUNG: It might be helpful. I mean, I -- I think people should be responding in English. I mean, submitting forms in English.
But I think that there should be maybe something on the form, itself, that lets them know that they can get explanatory information that's in Spanish. And where that is.
MS. McCANN: On the transmittal form there is a number that you call --
CHAIR YOUNG: Okay.
MS. McCANN: -- if you need Spanish assistance. As well as the instruction form that's in Spanish.
CHAIR YOUNG: Okay. All right.
Mr. Shimek, 24 minutes.
MR. SHIMEK: Good afternoon everyone.
My name is Steve Shimek. And I'm here representing a -- a kind of a collective group of comments, although, some of these people will be offering individual comments.
So I'm here representing Environmental Defense Center, Environmental Justice Coalition for Water,

Monterey Coastkeeper, Santa Barbara Channelkeeper and environments in the public interest.

First of all, just very quickly. Times have changed. Things are no longer the way that they used to be. But there used to be a lot of water in areas like the Lower Salinas and some of these other watersheds. The watersheds have changed a lot.

Some of the -- the way that the landscape looked, it used to be able to -- it was much more resilient. And, in some ways, what - with new regulation what we're trying to do, is not go back in the way-back machine. We can't do that.

But we are trying to restore some of the function of our watersheds. There are also uses that no longer exist on some of our rivers and streams.

And, again, the rivers and streams, they just don't look the way they used to and they just don't function the way that they used to.

This is Tembladero Slough. This is not the Salinas River. But that's the condition that we have on some of our waterways today.

You have lots of algae. You have rodent traps. You have bare earth banks. You have farming very near the waterway.

Just as a note, this is a dead sea otter. I

kind of, as you know, I -- I represent environmental interests to a great extent. And last year, 26 dead sea otters washed ashore and they died of microcystis poisoning.

Microcystis is a freshwater algae that becomes toxic and blooms in high nitrate conditions, washes into the ocean, is concentrated by mussels and bivalves, the otters eat it and die.

So, in other words, the toxicity that we're seeing in our -- and -- and high nitrates that we're seeing in our freshwater is reaching into the ocean.

I'm about -- I think, in retrospect, I'm about to add some -- to some of the confusion on wells and -- and water. But this slide existed before I showed up here today.

In the Salinas Valley, in Monterey County, as some of you know, we have been trying to work cooperatively -- although, it has not turned that way -- with Monterey County Water Resources Agency, trying to get their well water data.

The data that we have received is old data. This data does exist by aquifer. So I do have that. I don't have it on this slide.

But it's essen -- but essentially, 28 percent of the wells in Monterey County in the -- in the Salinas

aquifer are above drinking water standard; 28 percent.

CHAIR YOUNG: Are the public wells or --

MR. SHIMEK: So, it's not clear. And we could not get clarity. They -- it is a mix -- I believe, it is a mix -- so what the statement reads in the report is that some are domestic wells, some are irrigation wells.

There is no breakout of what -- how many of each.

We also know that we had a economist up earlier. And he talked about the impact of nitrates to -- and -- and resolving this problem to farmers.

Well, I want to make the point that there is impact on people, as well. And this presents real costs. This is a study that was literally just released. I have copies of the executive summary that I can leave, I guess, with Michael, is what I've heard. And for you to have.

But, basically, it's talking about costs in the millions and millions and millions of dollars. And this isn't cleanup. This is to treat the water so that it is in a drinkable situation.

When we set out on this process, the goals were quite simple. The goals were to eliminate toxic discharges of ag pesticides to surface and groundwaters, reduce -- and I want to emphasize that word -- nutrients

discharged to surfacewaters, reduce nutrient discharges to groundwater, minimize sediment, protect aquatic habitat.

Frankly, I believe, that these are goals that can be embraced by everyone. These are the goals that were set out in the letter that was sent out in 2008. These are still the goals that we're trying to achieve today.

There is sometimes a lot of rhetoric that talks about the fact that we can't do this tomorrow.

No one's asking anyone to do this tomorrow. That is pure rhetoric.

So if you look at no regulation versus total regulation -- now, this is my opinion -- but the 2004 waiver was kind of a three, you know.

So then there was the February 2010 waiver, which I think was somewhere right around a seven. Then there was the November 2010 waiver, which I think was right in the middle. And then there was the March 2011 waiver, which I think, again, was somewhere right in the middle of regulation.

But, I think, this misses the point. This is the slide that you saw earlier. And this is the elephant in the -- in the room.

Where are you -- if -- if that 2011 draft

agricultural order is a slider, where are you going to put it? That's the elephant in the room.

And I would suggest it needs to be further out to the right. Agriculture would suggest it needs to be further to the left. That's the tension. That's the reality.

But if you compare it to the other programs, I think -- I -- I think that it needs to be at least as much as what the municipal -- what you're asking municipal cities and stormwater permits to do; at least at that same level.

You're asking the cities to do it. Why aren't you asking ag to do it?

So our organizations continue to support adoption of the February 2010 draft order, as it is the most protective. It's the one that basically says the long list of -- of toxic chemicals, everybody needs to do individual monitoring, everybody needs to do the same thing.

We need to do a lot, and we need to do a lot more.

Our organizations do support the -- this order -- this current draft with certain conditions. So my talk is about to get very dense, and I'm sorry.

So tiering. According to Table 5 on Page 23 of

the staff report, Tier 3 is expected to include about 54 percent of the acreage, 13 percent of the farms.

So how do we keep that from sliding if people -- if it either doesn't capture enough because the staff estimates are slightly off, or if people start to maybe gain the system a little bit or change the pesticides that they use?

How do we backstop and make sure that we capture enough people in Tier 3?

So we are suggesting -- this is all going to be in underline/strikeout form, underline being new language.

This order shall be scaled adequately to regulate discharges to impaired surfacewater and to groundwater. And then it basically says, after one year, if you don't have 40 percent of the total acreage or 10 percent of the growers in Tier 3, the executive officer can -- can adjust that tiering structure.

We think that's appropriate. There's some people out there saying, oh, no, we can't live with that uncertainty.

Well, I'm saying: Well, what happens if people start to gain the system? How do you backstop that? And I'm saying that this is reasonable.

You've set an expectation of 54 and 13.

Backstop that.

Also, as it goes to tiering, order -- the order adds proximity to public water supply wells. I think, here's one of our most serious concerns.

You, basically, move those people that are near public supply wells with high risk from Tier 1 to Tier 2. But if -- if you remember the statements made by staff, Tier 2 does about the same as the old order.

So, was the old order adequate to deal with nitrate pollution? And I would say the 2004 order was not enough to deal with nitrate pollution.

I would suggest to you that it's Tier 3 where people actually need to do things. In other words, there's additional reporting requirements in Tier 2, but there's very little that people need to actually functionally do on the ground to change their practice.

They need to report where their -- their nitrate loading or their nitrate index. They need to report some things. They need to do very little.

So what's our suggestion? Occasionally, this board has challenged me to - instead of just say I don't like it, to say: What are the changes that I want?

So what we're saying is, that these should be -- this requirement should essentially be stricken from Tier 2, and put in Tier 3.

So, in other words, you have a new requirement for Tier 3 if the discharger grows crop types with high potential to discharge nitrogen to groundwater and the operation totally irrigated acreage is less than a thousand acres - because if they're in -- if they're over a thousand acres, they're already in Tier 3; right? - and they're within a -- and they're near a contaminated well, they get moved to Tier 3.

This deals with groundwater. Moving them from Tier 1 to Tier 2 does not.

So now, moving on. I do want to say, please stop me if you want to dwell on some of these. I should say that.

So now I'm going to be talking about, kind of, some vocabulary. And I'm jumping around in a numbering system because I'm kind of dealing with things as far as tiering, toxicity and aquatic life. Okay?

So the -- the numbering system -- I'm not following the numbering system.

But you've changed language from the November draft to this March draft. And it basically says effectively control. I can find no definition of what in the heck "effectively control" means. That bothers me. And I want to know what "effectively control" means.

And especially if we go back to the slide over

what are the goals. There is a fundamental difference between how we are dealing with toxicity and how we are dealing with those things that we want to reduce and minimize.

We want to eliminate toxic discharges. I don't know if "effectively control," when it's applied equally to toxicity, groundwater, surfacewater, that makes it all seem the same, where there were fundamental differences in the goals, and we are supposedly eliminating toxic discharges to surface and groundwaters.

So, the vocabulary change is:

On Tier 3, dischargers must effectively -- must eliminate -- I'm sorry -- individual waste discharges of pesticides and toxic substances to waters of the United States.

"Effectively control," I don't know what the means. I don't know that anyone knows what it means. And you're applying it to nitrates and toxics. I don't think they're equal, under the law. Not a lawyer.

Toxicity. Continuing along the line of toxicity - this is going to get a little confusing, but applies -- we are worried about this chlorpyrifos and diazinon thing.

Let me make it clear that we prefer going back to the February solution of including the entire list.

We prefer that solution.

The problem with that solution, frankly, is that it will throw a whole bunch of people into Tier 3. It'll throw almost everybody into Tier 3.

And I'm not sure that -- that -- that Regional Water Quality Control Board staff is prepared to handling -- to handle all the growers being in Tier 3.

So that's the tiering structure. How do we concentrate on some people?

But let's say this another way. How do we, again, backstop this idea so that we eliminate toxicity? How do we disincentivise (phonetic) switching to a toxic pesticide?

And so here's our suggestion -

Now, the reason that this is confusing is, remember, we had this proximity to contaminated well being a new 3C. So, in order to keep everything on this slide, I just kind of noted that.

But here's what we're saying:

After October 1st, any operation that discharges to a waterbody impaired for toxicity and continues to show water or sediment toxicity in the previous two toxicity tests, immediately moves to Tier 3.

In other words, if your water continues to be toxic after two and a half years -- and, remember, this

also accomplishes that idea that we offered up, that you liked a while back, that basically said, you know, if they don't have to show their data - because, remember, these guys are not doing individual monitoring. These guys are in Tier 2.

But then what happens is that they don't eliminate toxicity and they move to Tier 3. So this is a way to backstop, again, them just switching to something equally toxic.

Again, I'll reiterate that our group prefers the February solution of the entire list. This is an alternative to that.

Vegetated buffers and aquatic life. This is kind of the way -- this is the way it reads now. This is cut and pasted.

And, basically, it says, you know, that -- that -- there's a couple paragraphs here. And it talks about the basin plan. And it talks about how there's -- construction needs to have 30 feet.

Again, we don't really understand what making a plan really does and what the requirement is.

And -- and we also have to keep in mind where we have moved from. The environmental folks came into this room saying that aquatic life was one of our core concerns, partly because of the environmental things that

we represent.

But also because we don't think that you can improve water quality if you don't restore the vegetation between the receiving water and the pollution source.

We think that having rip -- healthy riparian, healthy wetlands, vegetated buffers is essential to excess -- to -- is essential to success. Thank you.

So in the February draft order you had 70 -- or 100, 75 and 50-foot buffers. In November it went down to 30 feet, just around impaired waters.

We don't see -- maybe we missed it. But we don't see any requirement in this order. It basically says that you'll have a plan. And you'll basically talk about, you know, how -- how you're going to protect.

But we don't see an actual, you know, specific buffer. And we think that that is important.

So we basically eliminate all the chit-chat. And we, basically, say a vegetated buffer stip of at least 30 feet shall be maintained. Now, tier here, means something different.

Tier 2 and 3 streams based on the National Hydro -- Hyd -- Hydrography Data Set -- Data Set Plus. And a vegetated buffer strip of at least 50 feet shall be maintained along lakes, wetlands, estuaries and other natural bodies of standing water.

We simply believe that without a buffer regulation, you're not going to be able to protect water from sediment, the toxics that are attached to that sediment. We think this requirement is essential.

Let me basically end -- and I think I'm well within my time -- so I'll do kind of what Mr. Merkley said - not that it will happen - but that's that I will reserve time for after everyone has gone, to make remarks. That's what he asked for. If I have some time, I'll do the same thing.

CHAIR YOUNG: We're not going to have time today for that.

MR. SHIMEK: I --

CHAIR YOUNG: So --

MR. SHIMEK: -- agree.

CHAIR YOUNG: -- if there's anything you want to say today, you better say it now.

MR. SHIMEK: I will.

CHAIR YOUNG: Okay?

MR. SHIMEK: Let me, basically, say that -- that -- that, you know, there's a difference of approach.

One approach is: Look, let us install some management practices. Let us go out there and do some good things.

One of the things that you've heard from the

growers is that they need certainty.

You know, frankly, I think, that regulatory certainty is one of the best things that you can offer these guys. That's my opinion.

I know that they don't like that idea. But to have a set of baseline regulations that say here is what we're to achieve, you know, go out and do it.

That, to me, is your role. Your role is not to protect lettuce. Your role is not to protect agriculture. Your role is to protect water.

And I agree that protecting agriculture is important. It's a value that we all share. If that land moves from agriculture, it could potentially be developed. That doesn't serve my conservation interest well, either. And it probably doesn't serve water quality well, either.

But groundwater, it's hurting people. Surface waters, it's hurting otters. It's -- things out in the ocean. It's certainly hurting -- the toxicity is hurting the streams themselves.

Let me just finish up by -- by quoting from this study, which -- which is what I have copies for you. And this is for the Central Valley.

But it says -- and it's peer reviewed. Both the methodology and the results were peer reviewed.

With the cost of public water service added, the average total household water costs constitute 4.6 percent of the median household income, more than three times the affordable threshold for drinking water recommended by the U.S. EPA.

I'll para -- take another quote:

Currently, 100 projects -- this is within that region -- to address nitrate contamination in community water systems are on the CDPH waiting list, with a total cost of $150 million, and an average project cost of just over one million.

These are costs that -- that the discharger is not having to bear. Other people that cannot afford it are having to bear these costs. There is a fundamental right to clean drinking water.

There is a big portion of your population, in the Central Coast, that is not realizing that fundamental right.

Thank you.

CHAIR YOUNG: Okay. Thank you.

MR. SHIMEK: Any questions?

CHAIR YOUNG: Any questions for Mr. Shimek? Okay.

MR. SHIMEK: Come on. You asked questions of everybody else.

CHAIR YOUNG: Okay.

MR. JEFFRIES: I'll ask you one question.

You had stricken out part of it and put in eliminate --

MR. SHIMEK: Yes.

MR. JEFFRIES: -- contamination. And if you can't achieve that elimination totally, even if you lay the land fallow and don't farm it, and you don't -- still don't achieve the elimination, what is your suggestion then?

MR. SHIMEK: Well, I think, first of all, part of the suggestion is in the language there. Because if it goes fallow, you're -- you're going to be dealing with legacy contaminants; right?

And it basically excludes -- it says, look, if you can show that it's legacy contaminants, you're out. You don't have to deal with it.

And -- or -- I'm sorry. That was probably a different place.

So you do have to -- but let me answer it a different way.

I'm not a lawyer. But I believe that it is within the law that basically says toxic discharges are illegal, you can't do it.

So I think we have to find a middle ground. I

think the goal that we are setting for this five-year period is to eliminate toxic discharges.

I don't think we will achieve that every place along the Central Coast. The goal for -- that goal of eliminating toxic discharges is fundamentally different from the other goals of reduce and minimize.

MR. JEFFRIES: Well, I think the strawberry people were pointing out that with their use, they wouldn't be adding to or causing the problem and so, consequently, they shouldn't be totally responsible for what's there.

MR. SHIMEK: I -- I --

MR. JEFFRIES: And -- and just to follow that up --

MR. SHIMEK: I'm sorry.

MR. JEFFRIES: -- it -- it -- and I know somebody said it's going to take a hundred years to probably achieve everything that we'd like to achieve.

It probably took us 150 years to get to this point in time today --

MR. SHIMEK: Right.

MR. JEFFRIES: - with the problem.

So it's obvious that we can't sure all this overnight. And it's going to take a long period of time. It may not take -- it may take more than five years. It

may take more than 10 years. It may take more than 50 years.

I don't know. I'm not a scientist.

MR. SHIMEK: So, I guess I would -- I would just answer that in two ways.

First of all, I think, that you -- we need to parse out the difference between toxicity and nutrients.

Toxicity, you're talking about half-lives of the current pesticides in use being weeks and months. Certainly, they can adhere to sediments and last a little bit longer. But we're not talking years.

And, with nitrates, it's a much literally deeper problem. And will be with us for a long time.

I don't -- I think the growers would say, the toxicity is a much easier problem to deal with.

The second place, that I would say as far as the Strawberry Commission goes, is, if you recall, at the meeting in this room -- the last time we had -- when we had the public meeting, you had one of the larger strawberry growers in the region stand up and say -- and this is where the -- the question from Ms. Hunter is very appropriate - what happens during -- not during the growing season, but in between?

And he stood up here and said: If I don't have the opportunity to flush the salts that have accumulated

below the root zone, I can't grow strawberries. That's what he said.

Flush salts. That's a discharge.

Now, I'm not saying that we need to send everybody to jail. I'm simply saying that I think that -- that the list of high risk is appropriate right now. And I think that there's abil -- the ability for, especially in an industry as progressive as the Strawberry Commission, to prove their way out of Tier 3.

And I hope they have -- take that opportunity and will do just that.

MR. JEFFRIES: Well, I got you one question, anyway.

CHAIR YOUNG: Okay.

MR. SHIMEK: All right.

CHAIR YOUNG: Thank you very much.

MR. SHIMEK: The drinking water stuff is -- this is also the letter that -- that you received from California Department of Public Health.

I think that reinforces the importance of dealing with something about nitrates.

Thank you so much.

CHAIR YOUNG: Okay. Is Ms. McCarthy here? She leave already? Mibs McCarthy (phonetic). Okay. All right.

MR. BRIGGS: Okay. So want to keep going on with our list of --

CHAIR YOUNG: Yeah. Next would be the Environmental Justice Coalition for -- Coalition for Water.

(Off the record)

CHAIR YOUNG: Okay.

MS. BHATNAGAR: A lot of people that came with me, have left. They were not able to stay the whole day.

Unfortunately, they have been here since 8:15, as, of course, a lot of other people have.

But I will try my best to represent their comments, and the people that are remaining will try their best to do so, as well.

Thank you for this opportunity to speak.

My name is Dipti Bhatnagar. I work with the Environmental Justice Coalition for Water. And, I wanted to stand up here and speak because the energy, I thought, was going a little low. And I -- I have a colleague to help change slides. I hope that's okay.

CHAIR YOUNG: Yes.

MS. BHATNAGAR: Next, please.

The Environmental Justice Coalition for Water is a statewide coalition of more than 80 groups. Which includes, non-profit organizations, community --

community-based organizations, as well as Native American tribes.

And our mandate is to focus on water justice statewide. And that looks like different things in different places. And it has become really clear to you, I'm sure, that in the Central Coast of California, water justice has to do with drinking water contamination issues.

So that's what we've been focusing on in this region.

Next, please.

We convened a -- a -- a water and climate justice, convening in Oakland last week. And one of the conclusions that the group came to was that irrigated agriculture in California uses 80 percent of California's developed water, which means, it's a very significant greenhouse gas polluter, as well.

The reason that I'm bringing this up and the reason that I'm in the room today is that I care very much about agriculture in the Central Coast and in the rest of California.

And I'm here because I want it to stay and I want it to become sustainable. And part of how it will become sustainable is what I'm going to talk about next. But I wanted to set that up, that it's not just the water

quality issues, it's also irrigated ag, as a whole, that's very unsustainable currently.

Next, please.

This has been talked about before, but I wanted to reiterate it because these are the people that I represent and it's my responsibility to bring up that these are real impacts happening to real people.

And the last line of this statement is the -- is what I wanted to focus your attention on; that the disproportionate burden of nitrate-contaminated water is falling on the most vulnerable; the babies, the infants and the elderly.

And it is very much an issue that needs to be addressed.

Next, please.

And I wanted to focus -- so there's been a lot of conversation, I know, about well data and all of that other stuff. There's been some kind of -- some efforts to raise confusion. But I don't think there is confusion.

I think that the nitrate contamination problem and its effects on people is very clear. And I wanted to follow up on something that Angela said, which is that, even if the date that we're looking at is public supply wells, which cost a lot of money to drill really deep and

to clean up nitrate contamination before providing it to cities.

Really, what I am here to focus on is the smaller systems. And there are thousands of such small systems in the Central Coast region. And these are the ones that are most vulnerable.

Next, please.

So we made a public records request to Monterey County Environmental Health, just as a -- just as an example. And we didn't look at 10-year-old data or 20-year-old data. We looked at their latest data source, which was 2009 to 2010.

And we looked at their data for nitrate contamination for all the wells that they sampled in this particular year. We made a public records request, and then we also found out the information is available on the web site. So that link is up for anyone to see.

They found 83 water systems with nitrates that were over 45 milligrams per liter.

Next, please.

But I wanted to point out two additional facts about the data. One of those is up on your screen right now. And I want you to see the scale of the problem.

So the red bars represent 83 different water systems. And the 23 in the first bar are actually in

addition. They are 40 to 45, 45hich means, they're also very close to the limit.

And I want you to see that this goes all the way till 300-plus. This is the extent of the problem that we were talking about a little while ago.

Next, please.

And this is the other thing I wanted you to focus on. It's a scatter plot looking at how many connections were -- was that particular well feeding versus the nitrate contamination.

As you can see, the most severe nitrate contamination is in the wells with the least amount of connections. Which means that it's -- as I was saying earlier -- it's the small systems that are being very negatively impacted.

And the cost of treating every single individual, small system, as you can imagine, would be very high. And I'll come to that in a second.

Next, please.

So this is it. How do small communities get clean water? We don't have a lifeline water rate in California. And you've heard people come up here and talk to you about either drinking contaminated water, paying a whole lot for replacement water or -- what was the third thing? -- paying very high water rates.

And you'll hear, hopefully, testimony on all three of those today.

And I wanted to bring up one fact, which is not in the slides. Because I also just received this information. It's an extension of the report that Steve Shimek just showed to you, which was for the Central Valley.

But I had the Pacific Institute look at the Clean Water State Revolving Fund, and see how many applications were pending for nitrate cleanup drinking water projects for the Central Coast region. And that number is 61.4 million.

These are just the people who have applied. And we use the Clean Water State Revolving Fund quite a bit. If we encounter a small community that does not have a safe drinking water source, we would try and apply to that fund.

So, actually, it's very interesting the point that -- that got brought up earlier -- Dr. Hunter brought it up - about acting at the local level. And we have this phrase, think global, act local, which means, keep your think -- encompass everything while you're thinking about the problem and then you act locally on it.

So we are acting locally with small communities that don't have clean drinking water right now. Because

we think that's unpardonable.

At the same time, I'm here to tell you that this is what it costs. Right now, the applications pending with the Clean Water State Revolving Fund for nitrate-contaminated water in the Central Coast is 61.4 million.

So when we are talking about undue financial burden, I think that would count at undue financial burden to the state and to everyone of the state, as well.

Next, please.

So I wanted to address which draft provides true environmental justice. Which means, which draft will be truly protective of groundwater quality and of the people that depend on it.

We truly support the February 2010 draft as the most protective of groundwater and surface water quality. And there have been many rollbacks since last year's draft.

But we do still support the March 2011 draft, but with the required revisions that you heard Steve Shimek just talk about. We are signed on to that letter as well. And we support those -- we support the March 2011 draft with those required revisions.

The ag alternative. I have had conversations

with ag representatives about it. And I have been told that we cannot meet water quality standards.

Hence, there are -- there are no water quality standards in the plan because we cannot meet them. Which -- which tells me, when I think about eyes on the prize: What is the ultimate reason why we're here in this room?

We want to clean up water. We want to have acceptable water quality standards and for the water to meet it.

And if I'm being told that we cannot meet it, hence, there are no water quality standards, it is not acceptable to me, which is why I do not support that draft at all and I do not support the process that has been outlined here, because it does not have that element of groundwater monitoring and then following up to see how to improve that data that has been received.

And I wanted to take it a little bit broader to what's going on at the state level. Because we're a statewide organization, we have those perspectives, we are working in different regions on the same irrigated lands issues.

The human right to water bill has been filed in the legislature. And it's actually a package of bills that works to ensure water justice.

And one of my colleagues from the Central

Valley said that declaring a human right to water is one thing; figuring out -- figuring out how to guarantee access to it is essential. And I think that's where this board comes in.

Next, please.

And the reason I bring this up, is that I feel what's happening -- this -- this process that's being undertaken by the regional board is very much in line with this positive water policy that's being worked at at the state level, and including elements of environmental justice.

This is happening at the state level. So the fact that it's happening in your ag order process is very important.

And I want to say that your task is very difficult. As we've heard in the room today, there's been tons of heartbreaking testimony. There's been tons of very angry, very difficult testimony. And I -- I -- I know that your task is very difficult and very politically charged, not to mention.

But it's really commendable. And I think there have been some attacks on the staff today. And I want to say that we stand with staff and we support their -- the work that they've been able to do in prioritizing human health and drinking water concerns.

And you are a regulatory agency. So I would really urge you to do exactly that, to regulate; and to regulate ag, in this case.

There are -- I was listening to the radio in the morning. And there are really big things happening in the world. There is earthquakes and tsunamis and nuclear threat in Japan; there is -- god only knows what's happening in Libya. And Jean-Bertrand Aristide is going home to Haiti today, which is a really big step.

And for us to have to worry about whether or not the water that we drink or that we feed our babies will kill us or will impact us in the long term, I think is -- is something - we deserve more than that.

And I really urge you to accept the staff to -- the March 2011 draft with the required revisions, in the interest of environmental justice and drinking water protection. Thank you.

CHAIR YOUNG: Thank you for your comments.

Any board questions?

Okay. Thank you very much.

Next speaker is with the Coastal Alliance. And then, Channelkeeper after that. And then the Central Coast Alliance versus --

UNIDENTIFIED SPEAKER: I'm with the Central Coast Alliance. Is there a different Coastal Alliance?

CHAIR YOUNG: It says Coastal Alliance.

Roger?

MR. BRIGGS: There are two. Yes.

CHAIR YOUNG: Okay.

UNIDENTIFIED SPEAKER: It's 16 minutes. I'm asking -- I'm with the Coastal Alliance United for a Sustainable Economy. But I don't know if somehow that got, maybe, written --

MR. BRIGGS: Okay. Maybe that's a shortcut. Eight minutes.

Yes. Eight. Right.

UNIDENTIFIED SPEAKER: Sixteen.

MR. BRIGGS: I saw right through it.

UNIDENTIFIED SPEAKER: I think there's only one Coastal Alliance in the room.

CHAIR YOUNG: Yeah.

UNIDENTIFIED SPEAKER: Is there two?

CHAIR YOUNG: Okay. All right.

MR. BRIGGS: All right.

UNIDENTIFIED SPEAKER: Okay. That one.

MS. MORALES: Good afternoon, members of the board.

My name is Maricela Morales and I serve as deputy executive director of the Central Coast Alliance United for a Sustainable Economy; CAUSE, for short.

We are based in Ventura County but we serve the six-county Central Coast region. For us, the Central Coast region includes Ventura up through Santa Cruz County.

For the purposes of this presentation, I'm sharing information about the Central Coast, as you identify it geographically, from Santa Barbara up through Santa Cruz County.

And I want to share also, as well, that separately I'm a retired city council member and mayor of a coastal community in Ventura County and served on the Ventura Council of Governments and was a representative from that body to the Southern California Association of Governments.

So for us at CAUSE, our mission is to realize social, economic and environmental justice. And these eight minutes will focus on that.

This board, this body is a -- is a public board. And, as such, its constituents, per se, are the public. And we spent much of today focusing on -- from my perspective -- on the concerns of a hundred growers that may or may not fall into Tier 3.

This body's constituents as, again, I see it, are the 1.2 million people that are in the Central Coast Water Board region.

In particular, there is the low income communities of color in this region. And I'm going to share some 2010 census data for the Central Coast Water Board region, with regards to water quality, agricultural and people.

And, for me, this visual is very powerful because it's showing what is pitted against one another, unfortunately, and what we have to resolve.

But in the middle, ultimately, it's children and families. And more and more in our communities, it's children, such as this little girl -- she's from Oaxaca; so indigenous, low-income and -- and people of color.

As has been said before, there are many issues to address, one of which is our coastal resources. The 300 miles of the California coastline, covered by this board, accounts for about 27 percent of the total coastline.

And that, too, has an impact on the economy locally. And to the extent that beaches are closed or that people cannot enjoy that recreation, that is an economic impact to the community, as well.

So the Central Coast accounts for 8 percent of the state's total land area, but 26 percent of the state's crop market value - and this information came from USC's program for environmental and regional equity - so 26

percent of the state's crop market value.
Nevertheless, we see food justice. So access to these foods is no -- no more difficult or easier in the Central Coast than it is for other parts of California.
So these very same communities that are low income, many of them farmworker families concentrated in the Central Coast, who are working these fields, are not having access to the very fruits and vegetables that they're growing, for -- for health.
And, yet again, there is a large percentage of the wealth, in terms of crop market value, in this region.
So on top of not having access to the very fruits of their labor, literally, they are pressed with the environmental concerns that then become very personal, physical health concerns for them, including pregnant women; and that being pesticides.
And we've talked about the impacts of pesticides to waters. But I want to point out that these communities are facing not only that, but on top of that the exposure directly when they are working in the fields; the majority, 86 percent, being Latino.
So, I'll read just some of these. These are directly from the report. It's a -- it's a litany. And

it's only part of the litany of the impacts.
The concentration in the Salinas Valley and Santa Maria, in the Hollister groundwater basin, the California Department of Public Health has identified over half of the drinking water supplies there is vulnerable to -- because of discharges from agriculture-related activities; the costs of groundwater pollution, as has been stated before. The excessive concentrations of nitrate or nitrite in drinking water being hazardous to human health.
Moreso -- these are more statistics from the report - 82 percent of the worst water quality sites are in the Salinas and Santa Maria areas.
So that gets us to the concentrated poverty, so the people that are dealing with these problems.
In this community, there has been prosperity for some. But the lowest income workers -- and, again, the farmworkers would fall into this -- have seen losses in -- in income, while the wealthiest in the region have seen gains.
And while I understand that growers have a short -- or a small profit margin, I doubt that they're in the lowest 10 percentile. And that's where these families are at.
So this community -- this is 2010 census data

-- Central Coast is now 47.8 percent people of color. And that includes Latino, Black, Asian Pacific Islander and Native American; do almost half, one out of two.
But if we look at the communities in which the concentrated contamination is, they are over-represented by people of color; 69 percent in Hollister, and in the Salinas Valley, the community of Chualar, which I've heard since 2001 has had difficulties with health -- quality water - almost 100 percent people of color; Gonzales, 91 percent; Santa Maria, 76 percent; Salinas, 83 percent. Salinas is, by far, the largest city in the region; 150,000 people. The next largest city is 100,000, and that's Santa Maria.
So, by far, the people impacted are the poorest, and people of color.
Median income. Central Coast it ranges anywhere from 58,000 to 66,000. Nevertheless, again, poverty in -- concentrated in these areas, you know, as low as 41,000. That's 20,000 -- 25,000 actually -- less than the -- the high median income.
Big, big differences. And these are the very communities that are having to pay out of pocket or the municipalities, where they are concentrated in, having to pay, somehow find the revenue in order to cover the costs.

The point being that we continually hear from the industry: Where is the money?
And yet, you know, we haven't seen here today that the people have had the money to -- to pay for studies from universities, to pay for attorneys, to pay for independent scientists to come here, because these folks don't have the money to do that. They don't have the money to defend themselves. And that's why we're here today.
So to end, echoing what has been said by the Monterey Coastkeeper Coalition, as well as the Environmental Justice Coalition, we -- our first choice is the February 2010. But if -- if not that, then the current version, with the modifications communicated by the Mon -- Monterey Coastkeeper.
One recommendation. You know, little has been said about small farms. But in speaking with Dr. Steven Gliessman, the chair of agroecology at U.C. Santa Cruz, he saw a need to further actually look at the impacts to small, sustainable farms.
And so, that would be a recommendation.
Thank you very much.
CHAIR YOUNG: Thank you for your comments.
MR. JEFFRIES: Mr. Chair, can I ask her where she got her data from?

MS. MORALES: Yes. Which -- which data was that?
MR. JEFFRIES: Well, you gave percentages of cities. Then you gave -- this is the median income.
Where did you get that information?
MS. MORALES: Yes. So this is from the U.S. census for the larger communities. But communities that are either under 20,000 or under 50,000, you have to go to the American Community Survey, ACS, data.
And that's a survey that's done either every three years for the cities over 20,000 or every five years for communities under 20,000.
MR. JEFFRIES: So was this taken off the 2000 census, or the 2010 census?
MS. MORALES: For -- actually, for what is available for the larger communities is 2008 data.
Again, what is available for smaller communities, it's the American Community Survey, which is done -- it's a survey that's done either on a three-year basis or on a five-year basis.
So that's -- that's most current information available.
MR. JEFFRIES: That's -- so Salinas on this is the only one that meets the large city? It's the only one that's over a hundred thousand.

MS. MORALES: Right.
Well, let's see. Yes. Yes.
Santa Maria might have fallen into -- into that. They're at about a hundred thousand right now.
But most -- most of the Salinas Valley, with the exception of Salinas, that information came from ACS data.
MR. JEFFRIES: And your previous slide to this one, where does that data come from?
MS. MORALES: That -- that comes from 2010 census data.
MR. JEFFRIES: 2010.
MS. MORALES: Yes.
CHAIR YOUNG: Any board comments or questions?
MR. JEFFRIES: Thank you.
CHAIR YOUNG: Thank you very much for your comments.
Okay. Channelkeeper.
So, folks, this is our last, kind of, group presentation, if you want to call it that, or extended presentation. And then, we'll talk about how to divvy up the rest of our time with whatever's left.
MR. PITTERLE: Okay.
Thank you and good afternoon.
I'm Ben Pitterle. I'm the watershed programs

director with Santa Barbara Channelkeeper.
I run our water quality monitoring programs. We've been doing watershed monitoring in our area since 2001. I'm quite familiar with water quality issues in our area.
I also served as a member on the stakeholder panel that met from December 2008 to September 2009. And I followed this issue closely throughout this entire process and throughout the multiple drafts and revisions that have been made.
Because of these experiences, I feel as though I have earned some perspective, that I want to offer today. I think it's important to consider perspective, given some of the reoccurring themes that I keep hearing from the agricultural community, who has been largely opposed to this process.
And one of those themes -- what -- what I keep hearing -- is that the agricultural community has not been represented and that their concerns have not been considered by staff or incorporated into the order.
Now, what I want to do with my time here, is just briefly do some comparisons of early versions of the order and the current draft and give some examples of what the latest draft will actually mean for growers in my area.

And when we do this, what I'm -- I'm hoping that this will help some people realize just far -- how far we have actually come since that first draft and, for better or worse, how much the agricultural community's input actually has been incorporated.
And I think what you'll see is that this draft proposed today is -- is very far from the broad brush stroke set of regulations that the ag community has -- has voiced concern about.
And, in fact, the reality is that the latest draft will likely not pose any significant additional requirements on growers in my area at all and, in some cases, might even make things less stringent.
So my area -- my work covers the watersheds from Point Concepcion east to -- for this region's sake -- Rincon Creek or the edge of Santa Barbara County. We do some work in the Ventura River, but that's the L.A. region.
We cover the frontal rain. So these are the coastal streams that drain to the Pacific, not the Santa Ynez River. There are many more streams than are actually shown here on this map. But it gives you a sense of -- of the area.
And we do have significant agriculture. Primarily, in the Goleta and Carpenteria vallies.

So let's talk about the tiering system we're all familiar with by now. There are three tiers. Now, a useful comparison that's been made by staff and others is how the tier system compares to the existing 2004 order.

Tier 1 is less stringent. Tier 2 is about the same, and we can expect that Tier 3 growers will likely have more requirements than -- than they do today.

Now, back in February, we didn't have such a thing as a Tier 1 category. But there was something called low risk. And I want to look closely at what it took to get into that low risk category.

Growers A had to eliminate all tailwater. B they had to be more than a thousand feet from any impaired surface waterbody.

So today, Tier 1 -- it's actually much easier to get into Tier 1 today. Growers do not need to eliminate all of the -- their tailwater. They can't use chlorpyrifos or diazinon. They have to be more than a thousand feet from these specific types of impairments.

And if they grow high nitrate risk crops, then they have to be less than a thousand acres and more than a thousand feet from a public supply well.

This is important. Tier 1 is less stringent than the existing 2004 order primarily because they won't be required to submit annual compliance forms.

Now, I want to give you an example of what this could mean for a -- our area. So this is San Jose Creek. This is an aerial photo, and you can see there, that yellow tack represents one of our monitoring sites.

You can see from this photo, there's really not a whole lot in the way of development upstream of that monitoring site.

If you zoom in a little closely, you see there is some development, and it's pretty much, entirely agricultural development. And it's highlighted here in orange.

Now, these operations are not high-risk crops. They are not within a thousand feet of a nutrient, sediment, pesticide, toxicity or turbidity-impaired water.

And the first thing I would expect a grower to do, is if they're using chlorpyrifos or diazinon, they're probably going to switch to effectively put themselves into Tier 1.

Now, San Jose Creek isn't listed for those specific impairments. But it is listed for many water quality impairments. And you can see what they are here. They're -- they're displayed.

And I know that there are probably several people in this room that will immediately start arguing

and say that these things actually aren't agri -- agricultural contaminants. But that actually just isn't true.

We know salts can be. And the fact is, that un -- uncomposted or -- or partially composted cow manure is a source of fecal bacteria. And studies have shown that pathogenic organisms can persist for long periods of time, up to almost a year, even in properly composted manure.

Okay. I'm really not here to argue whether or not these specific impairments are caused by ag or not. And -- and I will give them this, that where there's smoke does not necessarily mean that there's fire.

But it doesn't mean that there, necessarily, isn't. Okay? And if this -- you wouldn't simply ignore a smoke alarm if it went -- if it went off in your house.

And if you look at this map, you look where our monitoring site's located, and you look at the condition of this stream, are we really prepared to put this type of operation in Tier 1? And are we really ready to do that without considering, in fact, a single thing about what actual practices are occurring?

All that we're considering, all that we know, is that they're not using two specific pesticides.

Please keep in mind, that this isn't a

discussion about requiring more of this operation. What we're actually talking about is putting them in a category where there will be less required. And, frankly, we think that's extremely generous to the agricultural community.

And, in fact, we think it's neither wise or appropriate. We think Tier 1 should be reserved for sustainability in practice certified or other certified programs approved by the executive officer or, at a minimum, require elimination of tailwater.

And I want to run, quickly, through some of the other requirements. So individual discharge monitoring. In February, all dischargers were going to be required to do discharge monitoring. Today, it's reserved only for Tier 3 growers.

Milestones. Back in February, all dischargers were required to eliminate discharges to any waterbody from toxicity, sediment, turbidity, nutrients and salts.

Today, only Tier 3 dischargers are actually required to demonstrate reduction through actual monitoring, and the percentage of production has been reduced from all to 75 percent for turbidity and sediment and 50 percent for nutrient loads.

Nutrient and irrigation management. Back in February, all dischargers through any waterbody were

required to include very specific irrigation and nutrient management information in the farm plan.

Today --

(Reporter clarification)

MR. PITTERLE: I'm sorry. I'm trying to -- I'm trying to get through my presentation.

Well, today, only Tier 3 dischargers are actually required to submit nutrient -- irrigation and nutrient management plans.

It's -- it's apparent that Tier 3 is very important in this order. So I want to look closely to what it actually takes to get into Tier 3.

We're familiar, at this point, I think, with the -- the two things that will get you there. First, the growers who grow high nitrogen-risk crops and are greater than a thousand acres in operation size.

Or, B, they apply chlorpyrifos and diazinon, and they discharge to a 303(d) waterbody listed for toxicity or pesticides.

So I want -- I'd like to look at one more -- another example.

This is a list of waterbodies in our area that are officially impaired by either nutrients -- and they're shown there on the left -- or pesticides or toxicity, shown on the right.

And now, the first thing you'd notice, if you tour our area, and that you might notice if you take a careful look at this background image, is that we don't have a lot of high nitrate risk crops, as defined by staff.

We have nutrient impairments. But most of the ag activity in our area is actually orchards. It's -- it's citrus and avocados, and they aren't on the list.

We do have some row crops. But, again, if you look closely at this example, which has some parcel boundaries drawn, we do not have operations anywhere near a thousand acres.

What does that mean for Tier 3, in terms of nutrient requirements? It means we don't have any. Not a single operation will be enrolled as Tier 3 for nutrient risk from the Gaviota Coast to Ventura County.

And that means there will not be any irrigation and nutrient management plans and no nitrogen balance ratio targets.

We still do have pesticides and we have toxicity listings. So we should expect that there will be some additional requirements.

Except, to be honest, what I'm fully expecting and what I guess many people in this room, either publically or secretly, expect is that within two years,

each grower along these toxic streams will simply switch pesticides to avoid additional regulation.

They will not use chlorpyrifos or diazinon. And, as a result, we will have no individual discharge monitoring requirements in our area.

Now, will this solve the toxicity problem in our area? Probably not. And we think this is another huge gap. And to fill this gap, in addition to the language that was presented earlier by Monterey Coastkeeper, we feel as though pyrethroid pesticides, at a minimum, should be added to the Tier 3 criteria.

So ag's own CMP study found that pyrethroid pesticides were the most prevalent and severe sources of toxic -- of toxicity to sediments in the region.

So why would you link Tier 3 requirements solely to two other pesticides? We don't know why, because it really doesn't make sense.

Finally, I want to speak quickly about riparian buffers.

In February, all growers were going to be required to have 50-foot buffers, minimum.

Today, only growers adjacent to sediment turbidity temperature-impaired waterbodies must develop a water quality buffer plan. That's not the same thing as a minimum buffer.

And I should add to this -- it's not shown -- but you almost must be in a Tier 3 discharger.

So what does this mean for our area? Here's the list of all major waterbodies in our area that have irrigated agricultural activities, and how many of these waterbodies will be subject to the riparian buffer plan requirements based on today's draft.

There's one.

So, again, this idea that the board is taking broad-brush strokes that are going to significantly affect the agricultural community at large is simply not accurate.

And, again, this is my -- my main point. I -- it isn't that I think all of these operations should be heavy -- heavily regulated. But it's that board staff has taken great pains to incorporate the concerns of agricultural community into this draft.

And, in our opinion, the proposed order swings even too far in the oper -- in the opposite direction it -- to be effective.

This draft has so many loopholes and is so selective in how it applies its protections, that there will be very large areas throughout the region that will not benefit at all from the additional accountability and enforceabil -- enforceability that was intended.

To wrap it up, this is my son Wyatt. And this is a picture of him in our backyard on Carpinteria Creek. The creek runs through our property. And we're near the bottom, near the -- near the ocean.

And you can tell from this photo that Wyatt is very concerned. You can tell by that look on his face -- that's his concerned look. And he's concerned because he found out that Carpinteria Creek is polluted and he feels like he should be able to play in a creek that runs through his own backyard, on his own property, without having to worry about pollution.

And, frankly, I'm concerned, too. So are a great many other people. And we're concerned that if this process keeps dragging on - which is how it looks like it may - if it keeps going the way it's been going, pretty soon this order is going to be so watered down and it'll be so toothless, that there will essentially be no change at all.

I -- I think that's just the way ag wants it. Frankly, I'm surprised -- I've been surprised so many folks even bothered showing up today. I think they've already won, and they don't even know it.

You know, in conclusion, I -- I ask you, please consider what's been presented here, consider how far this thing has swung since February.

We don't think farmers are bad people. We really don't. We -- we do strongly disagree about what it's going to take to solve our water quality problems. And we believe our water quality problems are -- are very serious.

It's really time we move this thing along. And we hope that you'll consider incorporating our recommendations into the draft and -- and you recommend its approval.

Thank you.

CHAIR YOUNG: Thank you for your comments.

Any questions for Channelkeeper?

Okay. Thank you very much.

I thought Wyatt was actually saying, hey, Dad, I'm hungry. Where -- where's the snack you promised me.

Okay. Folks, we have not enough time to give everybody three minutes. There's no question about that. We don't have enough time for that.

We don't have enough time for staff -- I mean, for the board to even kind of deliberate and decide what, if any, recommendations to give.

And so those are both two very important functions that have to get completed. I don't really want to short circuit either of them.

I am thinking that we need to continue this

meeting. And it would be sooner than the next board meeting. Now, the next board meeting would be May 5th in San Luis Obispo.

But we've spent a lot of time on this now. And I think we're hopefully beginning -- at least, the board is beginning to kind of narrow down some things in -- in its mind, as to what it would like to see addressed by -- by staff.

I -- I'm thinking we should have a board meeting just to deal with the balance of this -- whatever we can't finish today -- sometime in April. Because there's -- I don't trust that we can really finish this if we, you know, attach this to another board meeting.

So I thought we were doing pretty good today, just allocating one day for this. And look how wrong I turned out to be. And we started at 8:15.

So we're going to need to think about another day, Mr. Briggs and staff, as to when we could continue this. What I would like to do is finish as much of the public comment that we can today.

And then we'll talk about how much -- how we're going to allocate that time. And I think we're going to end up completing that -- the continuation of this board meeting -- and then we'll have board deliberation and comment and recommendations.

So -- and just for the public, what would then happen -- because they're -- because there would be another board meeting after that.

So once we get staff recommendations, staff is going to need to do what it does, make changes, analyze, possibly receive more public comment on that. And then there would be another board meeting.

So that's what I'm thinking. Does that make sense, Mr. Briggs?

MR. BRIGGS: Well, it makes sense. Although, the part about additional public comments -- my understanding is that would be if there was something that was significantly outside the realm of what we've been discussing.

If it's -- if it's something within the scope of the various options and alternatives that have been already talked about and in our written materials, then that would not necessarily prompt another round of public comments.

CHAIR YOUNG: Okay. Well, we'll see --

MR. BRIGGS: Right. Because of the --

CHAIR YOUNG: -- after we get through --

MR. BRIGGS: -- because of the nature --

CHAIR YOUNG: -- the next --

MR. BRIGGS: And then -- and then what that

would also allow is in April, then, essentially, you would hope that -- assuming we don't have another board member -- that then the panel would be able to vote in terms of bringing a recommendation to the full board.

And that would be direction of staff, in terms of what you want to see in that -- bringing that to the full board.

CHAIR YOUNG: Right.

MR. BRIGGS: Right. Okay.

CHAIR YOUNG: So...

Any board comments or suggestions? Or you don't like, you like, you want it different?

DR. HUNTER: I agree, that there's no way to finish today. And -- and to try to squeeze it into another regular board hearing, I don't think is doable either.

I agree with you completely. So we need to find another time --

CHAIR YOUNG: Okay.

DR. HUNTER: -- to do that between now and then.

CHAIR YOUNG: Mr. Hodgin, any thoughts on --

MR. HODGIN: I'm concerned that we use as much time as possible for those who are here that want to speak to -- let's -- let's get that on.

And then, certainly, we're going to have to have another meeting.

CHAIR YOUNG: Okay. All right. Mister --

MR. JEFFRIES: Well, I agree with that, Mr. Chair. But I -- I think that another question would be, since this order is going to terminate on -- the end of March, then what happens? That hasn't been addressed today.

CHAIR YOUNG: Mr. Briggs is going to have to deal with that in an administrative function.

MR. JEFFRIES: Yeah.

CHAIR YOUNG: We can't vote on it.

MR. JEFFRIES: No. We can't vote on it.

CHAIR YOUNG: It's not in our hands. No.

MR. JEFFRIES: I agree.

CHAIR YOUNG: Mr. Briggs will have to figure out with Frances what can be done about it.

MR. BRIGGS: Go to the mountaintop.

CHAIR YOUNG: Okay. All right.

Now, here's what I'm thinking about with the speakers. We've got -- how many? -- 70. We have 70 cards. I don't know how many are still here.

I would like to make this suggestion, that those of you that cannot make a continuation of this, that perhaps you allow the others that are not going to

be able to come to another board meeting --

Well, it would be in San Luis Obispo. Okay.

When? In April?

UNIDENTIFIED SPEAKER: Yes.

CHAIR YOUNG: You want us to pick a date now? Does that help everyone's decisionmaking?

(Multiple speakers)

CHAIR YOUNG: Can't do that now?

MR. THOMAS: Mr. Chairman?

CHAIR YOUNG: Yes.

MR. THOMAS: One -- one consideration is that you -- instead of adding a board meeting in April, add a day to the May meeting --

CHAIR YOUNG: Okay.

MR. THOMAS: -- in San Luis Obispo.

MR. BRIGGS: May 4th, for example, 6th.

CHAIR YOUNG: Well, May 4th is a Wednesday. What's that? You like Friday better.

MR. HODGIN: If we do it with the May board meeting, then there won't be a chance for staff to make adjustments after the panel discusses and -- and makes suggestions.

CHAIR YOUNG: Well, see --

MR. HODGIN: So we won't be able to bring anything to the board for approval.

CHAIR YOUNG: That's right. I mean, at the May meeting what would happen is, we would only be able to tell staff the recommendations we think are appropriate.

And then, they still have to come back at a later board meeting.

The question, really, is just: When do we have the next board meeting to finish this?

Do it, like, on May 4th or 6th, or do we do it in April?

And I'd rather get this over with be -- just because this is taking a lot of time. And I have a lot of thoughts in my mind right now. And now, I've got to reduce it to writing.

And, you know, the -- the immediacy of it leaves a little bit. And I don't want to wait too long to complete this part of it. And I want to give staff direction.

But if you -- if you want to back it up to the May board meeting, then just tell me.

Mr. Hodgin?

MR. HODGIN: Well, I just have to comment that the May board meeting is also the National Day of Prayer. That -- that may --

CHAIR YOUNG: Maybe we can do that instead.

MR. JEFFRIES: I think we'll do a lot of that

between now and then, anyway.
MR. BRIGGS: It's also Cinco de Mayo. So we've got to have a party.
CHAIR YOUNG: Okay. So I need some help, you guys. And it's the board that's going to, kind of, decide this, somewhat.
You guys want to do it in April. April? Can we -- can we find a date, Roger, and --
MR. BRIGGS: I don't think we can do that right now.
CHAIR YOUNG: Can't do that right now?
MR. JEFFRIES: For a continuance?
CHAIR YOUNG: Well --
Yeah. I think they're trying to --
MR. BRIGGS: Why don't we go -- go ahead with comments.
CHAIR YOUNG: Okay.
MR. BRIGGS: So we --
CHAIR YOUNG: Well, okay.
MR. JEFFRIES: And how much time do we have left?
CHAIR YOUNG: How -- how about it -- it -- can we say that we can do this either the week of April 18th or 25th?
Can we find a day to do this during the weeks

of April 18th or April 25th? Can't do those two weeks? You're out of town.
MR. BRIGGS: The difficulty with trying to do it now is we have to --
CHAIR YOUNG: Yeah.
MR. BRIGGS: -- compare a lot of schedules.
CHAIR YOUNG: Okay. All right.
So that's not going to work.
So it will be in San Luis Obispo. That's all I can tell you.
CHAIR YOUNG: Okay. Okay. April 7th is out.
But -- so we'll have to come back with a date, and notice it. But -- so let's do this:
I'd like to give people that cannot make it to San Luis Obispo and that are here as much time as possible. Okay? I don't know how many there are of you in that category.
So maybe you could give me a show of hands of those that aren't going to show up in San Luis Obispo.
And, let me just say this, we're -- I'm going to keep these cards. So that, you know, if you get the time to speak now, this is just a continuation of this board meeting.
And you're not going to be able to speak during public comment in San Luis Obispo. It's the only way to

make this fair.
So who can't make San Luis Obispo?
Okay. Good.
So let me -- and you've all submitted cards to me? So I have cards? Okay.
So let's do this.
MR. BRIGGS: I'm sure -- have them --
CHAIR YOUNG: Line up.
MR. BRIGGS: -- have about five line up and --
CHAIR YOUNG: Okay.
MR. BRIGGS: -- say their name, and we'll pull them out.
CHAIR YOUNG: Okay. So let's do that.
What I'd like to do - we'll -- we'll try this.
You'll get -- I think we can do three minutes each; on the hands that I saw.
So if people could line up -- and I'm not going to call names. I'm just going to let you come up, just five at a time, and when there's five -- and you can line up all the way to the back, if you want. But -- however you want to do it, and that'll expedite this.
MR. BRIGGS: What we'll do is we'll just write -- we'll write their names down. We can't -- we can't sift through these every time.
CHAIR YOUNG: Okay.

MR. BRIGGS: So we'll just write their names down.
CHAIR YOUNG: All right.
MR. JEFFRIES: Bob, that's the quickest I've seen you move in a long time.
CHAIR YOUNG: Okay.
MR. MARTIN: Thank you very much. I appreciate --
CHAIR YOUNG: Hold -- hold on, one second.
Okay. So what staff is going to do is write your names down. And that's what we're going to keep track of. Okay.
So the cards, I'm not going to be looking at now.
MR. JEFFRIES: Just give your name and --
CHAIR YOUNG: Just give your name.
MR. MARTIN: Yeah.
CHAIR YOUNG: All right.
MR. MARTIN: Thank you. My name is Bob Martin, general manager or Rio Farms in King City.
I just wanted to comment on -- on some of the things that we've done in the past and where we're going.
Over the past 15 years or so, our operation, along with many others, has taken water quality protection seriously. We farm over 6,000 acres in the

King City area.
As technology brings us information that we can use to lessen negative impacts on water quality, we listen, we learn and we improvise.
The shear size of our operation allows us to experiment and utilize improved methods. If they've proved successful, we're not shy in -- in sharing these results with fellow farmers.
I have 15 growers that are raising onions for -- for our company, right now. And I -- I share everything with them.
Quick nitrate soil testing has been in our program for close to 15 years now. Backflow prevention devices have been in all of our wells for as long as I can remember.
I can't understand why our large operation is singled out in the draft -- staff's proposal, as the highest risk category.
As if that isn't bad enough, your proposal doesn't allow for any possibility for operations over a thousand acres to move into a different tier, without the exclusive written permission of your executive officer.
Where is the incentive for someone in Tier 3 to improve their impacts on surface and groundwater?
I submit, that allowing for a true assessment

of an operation's impact on water quality can only be made objectively by a comprehensive review process of an audit committee offered in the ag proposal.
Over the past 15 years, I have impressed upon farmers the need to contain and capture their irrigation tailwater. This hasn't been discussed here, yet, today.
In staff's proposal, all of these ponds must be lined to not allow for percolation of this tailwater back into the groundwater.
Typically, these ponds will contain a fair amount of sediment that must be cleaned out at least annually. If they are lined, that doesn't allow for that activity. Can't do it.
First -- first of all, how does staff know that the quality of the water -- that -- what is the quality of the water in that pond? Why are they taking for granted that it is laden with nutrient -- nutrients and pesticides?
Even if there are some nutrients in that water, why do they believe that the same constituents -- and at those concentrations -- will penetrate multiple clay layers above deep aquifers over a period of 30 to 50 years, to contaminate that deep groundwater?
What data currently exists that supports staff's theory?

At a recent nutrient and irrigation management seminar -- and this is the one, I think, staff referred to as all CCAs were there. No. They were all farmers. And there was a -- there was about two or three CCAs there - Dr. Thomas Harter, foremost authority on groundwater in California, showed some very interesting slides. And one, I grasped -- I grabbed onto real quickly.
There's a graph showing nitrate changes of shallow or young water in Monterey County.
Now, understand, young -- young water is shallow water in sandy areas that can be reflected from which you're applying, on the surface, to where you're pumping from in a matter of a year to five years. That's considered young water.
It showed a marked improvement regarding nitrate contamination in each of these three 5-year samples taken.
What does this show?
It was pretty obvious to me that whoever was farming in that vicinity was -- was -- had made mark -- marked improvements in their fertilizer and irrigation management practices.
CHAIR YOUNG: Can you -- can you wrap it up, Mr. Martin.

MR. MARTIN: So -- that -- that's it. I -- I got more.
But you have the copy -- you have the -- the -- the graph from Dr. Thomas Harter. And if you need more information, you can probably contact him to find out what it's all about.
CHAIR YOUNG: Okay.
Thank you for your comments
MR. MARTIN: Thank you very much.
MR. HARTMAN: I'm Dick Hartman, president of Biosphere and Enhancement Corporation out of Portland, Oregon.
I have patents throughout the United -- through United States patents and throughout the world regards clean water fertilizer additive.
I drove eleven hours to get here. This 25 years, this is a culmination of wanting people to want to be interested in this concept.
Submit, follow the money. Regards current incentives to reduce the costs of government.
If I were a grower here, I think I'd say: What? The nitrogen I paid that much money for is getting on my neighbor's place? What?
The pesticides that I want just to be on my farm is going somewhere else?

I'll tell you. That stuff's expensive. They don't want to lose it -- any money on it. They don't want to lose that to anybody.

These -- there's somewhat of a rumor that a upcoming congressman, or something, said maybe change the EPA to the EHA, the environmental help association -- I mean, agency.

The 50 - NRCS 501/590 program for best manages -- management programs just learned is offering $36 per acre to any farmer who will try enhanced efficiency fertilizers and -- check strips that can be checked.

Now, I submit a thought. When you monitorize the activity that this staff is going to have, all your time, all the groups here, and for the next five years -- when you monitorize that, I just submit a simple thought:

The Farm Bureau supported independent operation here to look over things. What if they had a small function -- small portion of the money that's going to be spent, in following something up as nebulous as nitrogen and made an incentive to growers, to say, if you'll do a nitrogen and/or pesticide improvement tools, one of which would be ours, then you will be able to get an incentive pay? This $36 on a 1,000-dollar - acre farm would be $36,000.

I think they could gladly -- and they will be

glad to implement any modern tools that can -- can take care of that.

So I submit that it will only take one person about a year, with these incentives out here, to have the growers know that that's possible to implement. And that then would be accounted for easily by saying, here's the record of all the growers who have done these improvements.

Submit that would be cost effective and totally effective. Thank you.

CHAIR YOUNG: Thank you for your comments, Mr. Hartman.

MS. LEE: Robin Lee. I'm from Salinas.

CHAIR YOUNG: Your last name?

MS. LEE: Lee.

CHAIR YOUNG: Lee? L-E-E-?

MS. LEE: Correct.

Well, I want to -- I'd like to know that -- that the creek I live on is Santa Rita Creek. It's close to north Salinas.

And it's been very -- I've seen a death -- it's in the throes of death from the last, I guess, 20 or 30 years.

People I've talked to, who grew upon the creek, will no longer let their children play in the creek that

they did as kids because they're concerned about pollution.

So this -- the creek is highly degraded by ag runoff. There used to be ranch land in the headwaters, and that is converting to row crop.

And with the increase of row crop acreage, the -- the -- the degradation has gotten greater and greater.

And now there's sediment problems causing flooding and damage. And the -- and the people I've talked to, they've talked to all officials in their area, and they have no recourse.

Now, it's directly related to the sediment coming off the row crop land -- irrigated row crop land, that was once ranch -- range land.

So what recourse these people have that now they're getting damage to their property and their structures because of sediment runoff from irrigated ag land through stormwater and irrigated water runoff.

It used to be an intermittent stream. Now it's perennial, because ag runoff. And every time the water hits the stream, it's carrying massive amount of sediment.

And then, we know sediment transports all manner of other things with it.

So what recourse these -- do we have with this

sediment issue?

We also want to do some creek restoration work on the -- there. And we can't do it because of the sediment. The -- they're now requiring dredging because of West Nile virus.

If we could vegetate and put trees up to keep the -- the growth down in the creek channel, we wouldn't have an issue. But we can't do that because they have to dredge the sediment.

So what are supposed to do? I'd like to know if there's recourse, and this -- and what you're proposing to this tiered system that you're -- you're proposing to pass.

Can -- can someone answer me that?

CHAIR YOUNG: Well, we can't answer that now.

What I would suggest to you -- because I think those are great questions -- that you, maybe, contact staff when we're not dealing with this particular item.

Because I don't think there's anything in the order that's going to address the issues you're raising.

MR. BRIGGS: It does, as far as sediment.

CHAIR YOUNG: Well, it does --

MS. LEE: Well, this is --

CHAIR YOUNG: -- but it sounds --

MS. LEE: -- it's a 303(d) stream.

CHAIR YOUNG: Right. But it sounds like she has some specific issues with property owners receiving sediment.
MS. LEE: Yes. And causing --
CHAIR YOUNG: Yeah.
MS. LEE: -- flooding and structural inudation (phonetic), actually.
CHAIR YOUNG: Frances?
MR. BRIGGS: The order does include sediment.
CHAIR YOUNG: Right.
MS. McCHESNEY: You're -- I -- I think you're correct that this isn't appropriate to answer the questions, and that they should call staff or me.
You can call me and --
MS. LEE: I thought the Tier 1 had a sediment component to it, to control the sediment coming off the property.
MS. McCHESNEY: Well, all the tier -- they have a sediment -- they have to do sediment management in part of their farm plan, correct. Yeah.
MS. LEE: And they have to implement --
MS. McCHESNEY: Yes.
MS. LEE: So then it should be -- if -- if I were to contact staff and say, look, they're -- they're discharging sediment, they're dis -- they're not meeting

their permit, then they should be able to go and talk to them, to get them to do what they're supposed to do; if not, then it'd be fines.
Isn't that what would happen?
CHAIR YOUNG: Do you -- do you live in the City of Salinas?
MS. LEE: Yes.
CHAIR YOUNG: You do.
Well, you have an issue there, you know. I mean, if someone is discharging sediment onto your property, that's a trespass.
MS. McCHESNEY: Well, you know, I don't --
CHAIR YOUNG: It would --
MS. McCHESNEY: -- think we should give her legal advice about it.
CHAIR YOUNG: I'm not --
MS. McCHESNEY: She should talk --
CHAIR YOUNG: No. It's --
MS. McCHESNEY: -- to the staff. And see if they can address the problem.
MS. LEE: But I thought it'd be tied into this --
CHAIR YOUNG: Yeah. But I don't --
MS. McCHESNEY: You've made your comment. And we really have to move on. But you can talk to staff to

see what your particular issue is. And if --
MS. LEE: It's -- it's doing two things: Structural damage preventing restoration for recreational and habitat purposes.
CHAIR YOUNG: Right. You should talk to staff, though. And they should -- they can talk to you about that.
We just can't get into a individual solution right here to this. But it's a legitimate problem.
I don't want to de - minimize that by anything I've said. But -- and -- and who knows what's going to happen with this permit, or what it's going to look like and whether it's going to take care of the issues that's -- that are going to satisfy you.
That I don't know, either, at this point. So -- but talk to staff after this meeting. And they can help you more directly.
Okay. Next.
MS. BENNETT: Good evening. I'm just here because I care. And --
CHAIR YOUNG: Pardon me.
MS. BENNETT: My name is Joan Bennett --
CHAIR YOUNG: Okay.
MS. BENNETT: -- from Salinas.
And I like to eat. So I like the farmers. But

everybody here -- what a monumental task.
You know, we're -- I've been told that there's supposed to cover crop all around us in Salinas. I've seen two farms with cover crop. If we can't even get the people to put the cover crop, how are you going to solve this issue?
But, anyway, think about this: The Salinas River. We have these rubber dams so that we can collect water and use that water to irrigate. But then there's other areas of the Salinas River where we don't have the dam because the water is so polluted, they won't let it go into the rubber dam area and it has to go into the river, so it goes into the bay.
Well, if I had 100 trucks of polluted water and sprayed it on a farmer's property, I would get thrown in jail or fined. If I did the same thing and took it to the bay and sprayed it in the bay, I would get thrown in jail or fined.
We all want to have a winning situation. I'm just saying, please, maybe somebody should start thinking with their heart a little bit and not just their pocketbook.
Think of a little scenario. Your child is dying from cancer. We know that the -- the children and the senior people, they're more susceptible to

carcinogenic substances.
This diazinon, I -- I've heard that 83 percent is used in the Salinas Valley, out of the entire state of California. Well, that's a lot of carcinogenic substances.
I'm not saying this farm's doing it, that farm's doing it. I'm just saying, this is an issue. We're all trying to resolve it.
But just think, if your son looked at you and said, Dad, I'm 10, my sister's 4, I don't want any more chemotherapy because I'm dying? And they say this is -- this is why it's happening. Can't you do something better, so maybe my sister won't die?
So I'm just saying, when you're thinking about all this and you're -- you're figuring, okay, how much money, how much profit I'm making, are you really making that much profit, if your child is dying.
Thank you.
CHAIR YOUNG: Thank you, Mrs. Bennett, for your comments.
MS. WARD: My name is Elizabeth Ward. I appreciate the chance to speak. I live in Monterey.
We live in a free market, but not a free-for-all. The public has the right to set conditions for use of shared resources, like water.

And growers have the choice of whether and what to grow, given the conditions set. In the end, the cost of monitoring is borne by the public through free market prices. And that is a cost I'm willing to bear for health.
Stopping the public from deciding how shared water is to be protected is as repressive as stopping farmers from choosing what to grow.
The farm lobbyists working to weaken the draft standards to a level where there's no individual reporting or progress milestones, would gut the public's ability to protect public health.
Without individual progress, there can be no collective progress.
I support working with farmers to ameliorate the financial and logistical impact of testing, but I cannot support reliance on the creators of toxicity, themselves, to investigate their own impacts.
Please stand up for taxpayers by supporting our right to set conditions for health and independently monitor compliance by the largest-scale users of shared water.
You start with the large-scale users. If you find that a lot of the impact is not done by them, then you go to the smaller scale. But you got to start

somewhere.
If the feedback today is dominated by large farm families and corporations, instead of individuals, like myself, keep in mind that they are effectively paid millions of future dollars for every public health concession they can wrest from you today.
I, for missing a whole day's worth of work, I'm out $800 instantly. But it's worth it to me, and I'd do it again, because the health of children and the health of the marine life that floats our tourism economy is worth every penny to me.
I beg of you to stand behind monitoring and reporting of nitrates and any toxin suspected of affecting the health of communities larger than 100 people, and I specifically ask you to go back to the draft standards prior, two years ago, that had a lot more chemicals for monitoring.
And I ask you to add those back. And I ask you to make a place for citizens, who are affected, to get in the system and ask for monitoring of specific chemicals that they suspect.
Thank you for listening. That -- I'm done.
CHAIR YOUNG: Thank you for your comments, Ms. Ward.
MS. GUZMAN: Good afternoon. My name is Martha

Guzman. And I work with the California Rural Legal Assistance Foundation.
And I wanted to speak on behalf of some of the communities I've had the privilege of working with in the past 10 years or so, and some of the folks that were here today, but they couldn't wait around, and other folks work.
One was mentioned earlier today, Chualar, Camp Jimenez, Campora, San Gerardo, San Lucas. And San Lucas -- and these are communities that are groundwater-dependent. They can afford one well, and struggle for the financing of additional wells because, frankly, they don't have the option of much more than drilling a little deeper.
There is actually more than just a drinking water situation that is impacted by not having water. In San Lucas, there's an affordable housing project that is being held up because of the water situation.
So it's not just drinking water and health impacts. It's actually, you know, habitability. And having people have decent housing, is a big piece of this, as well.
I want to mention -- more of my comments were on the nitrates. But I will say that we are very concerned. Although, we agree that diazinon and

chlorpyrifos are some of the worst acting pesticides, we're very concerned with the swap effect, if you will.

So we do prefer the February 2010 proposal for that, and other, reasons.

Returning to the nitrate situation on these communities -- and it's really, you know, hard to explain to people sometimes about how this is not just a simple fix about drilling a -- a new well.

Sometimes it is. And that lasts for about 5 to 10 years. And sometimes you have to go really far out and put in a big pipeline.

So one of the clear solutions that is in this proposal -- and maybe it is for the long term -- is the nitrogen management plans and giving farmers the tools to know, you know, how -- how overcompensating is sometimes not even cost effective for them or not necessarily yields anything -- well, that's probably not true.

But the point being is that they could have this more efficient tool. And you can go about it two ways.

I think Steve was recommending that it go into Tier 3. But you could conversely require everyone from Tier 2 to having these nutrient management plans.

And it's something that is so basic from our perspective, to have a nutrient management plan, that we

don't think it -- it's -- you know, some of the other triggers, other than really having this trigger universally for Tier 2 and Tier 3, especially, because we're concerned about how the swapping will work, and how a farmer will move from one tier to the other.

And finally, something that has been loosely mentioned is -- is really addressing this drinking water problem now and having some way that this order is going to provide for that mitigation today.

So that in the interim of 20, 50 or a hundred years, when we can, once again, drill into a well without treatment, you actually have an alternative for these communities today. I mean, you wouldn't need this regulation if people could drink from their groundwater wells.

So we really hope that the industry could support us in that and really focusing on a solution for potable water today.

CHAIR YOUNG: Thank you for your comments.

REV. RAMSDEN: Good afternoon. I'm Reverend Lindi Ramsden. I'm the senior minister and executive director of the Unitarian Universalist Legislative Ministry in California.

And, since I don't think I'll be able to make it on the day of prayer, to your meeting, I will at least

share with you a cartoon about Moses.

There's a cartoon with Moses, and he's looking at the burning bush. And in his hand is a fire extinguisher. And the -- the comment at the bottom says: Moses blows the job interview.

Moses blows the job interview. You all here, and those in this valley and all along the Central Coast, in a certain way, have been called into a moment in history, where we're facing climate change; where we're looking at the human right to water; where we're seeing the difficulties that farmers face, and the terrible problems faced by the communities that don't have access to safe, affordable water.

And you are being asked in your regulatory authority to step into a very, very important moment in history. And an important moment in time.

I applaud the staff for their work, others who have made their presentations, and I wish you well in coming to your discernment.

I do want to say that, in addition to all of the challenges and -- and costs that growing food in an unsustainable way creates to our water systems, our health, the abilities of communities to get loans, there's also a cost to the fabric of community that we see here; sectors torn apart, one from the other.

But I think that we can't turn a blind eye to what is going on. And those of us who are consumers of food, need to start realizing that we have to pay a lot more at the grocery store. In a sense, we've been getting off cheap for what food really costs.

We need to be able to get the right price signals from the market for those of us to seek to live an ethical life, about what the actual cost is of what we are buying.

And it's very important that those who are creating waste are the ones that end up taking responsibility for that waste, rather than putting the costs on the lowest income members of our community.

Implementing strong agricultural regulations will help to assure that responsible growers will not be at a competitive disadvantage with those who take less care to avoid polluting our water.

Education is important, and voluntary farm plans are important, but they're not sufficient. It's only through the regulation of pollution with measurable outcomes, timelines and enforcement that a whole industry can make the move to the next level of safety, accountability and predictability.

Unitarian Universalists in California have been active in efforts to realize the human right to water.

In early March, we were privileged to accompany the United Nations' independent expert on the human right to water and sanitation during her mission to the United States.

She learned about the situation in the Central Coast and visited several similarly affected communities in the Central Valley.

At the end of her mission, she gave an initial report to the U.S. Government at the Lantos Commission for Human Rights. She'll be giving a complete report in September in Geneva.

Protecting drinking water from agricultural runoff is, indeed, a part of realizing the human right to water. And what you decide here will be felt throughout California, and throughout the state -- excuse me -- throughout the nation and throughout the world.

Thank you for your efforts. We wish you well. Godspeed.

CHAIR YOUNG: Thank you, Reverend, for your comments.

Okay.

MR. OVEREEM: Mr. Chairman, members of the board. My name is Eric Overeem, O-V-E-R-E-E-M.

I'm a licensed pest control advisor, a certified crop advisor, and I've had the opportunity of

working in the Salinas Valley for almost 30 years, now.

In my experience, there have been substantial changes to the overall nutrient management, to grow some of the cash crops that we do.

Tissue and soil tests; a quick nitress test, prior to sidedress; suction lysimeters to determine what's in the root zone, et cetera, et cetera, I think these have all gone a long ways to improve the nitrogen use efficiency.

Also, the adoption of irrigation monitoring programs and drip irrigation have significantly improved the -- the irrigation use efficiency in this valley.

These are all practices that a -- that growers have adopted to this point. And I think the Farm Bureau ag alternative will continue to encourage growers to make these changes on their farms.

I have many other things to say, but I wanted to bring your attention a -- a potential conundrum with one of the growers I work with. They are a -- a container nursery in the Salsipuedes area of Watsonville.

Their operation is entirely self-contained, as far as irrigation runoff and stormwater runoff, for that matter. However, due to the quarantine imposed on them from the light brown apple moth, they are required to spray their operation with Dursban, which is a commercial

formulation of chlorpyrifos.

This is kind of an interesting situation, where they have spent the money, made the effort to come into compliance with potential runoff issues; but yet, through another regulatory agency, are forced to use a somewhat undesirable pesticide in that situation.

That -- that'll summarize. That'll wrap up my comments. Thank you.

CHAIR YOUNG: Thank you.

MS. CHAVEZ-WYATT: Good afternoon, Chairman Young, honorable board, staff and fellow concerned community members. My name is Christina Chavez-Wyatt.

I am past chairman of the Central Coast Young Farmers and Ranchers. And I'm here today to offer you the opinion of the San Benito County Chamber of Commerce, as the organization's government relations committee chairman.

The San Benito County Chamber represents 450 business and community members. We feel that staff's proposal is unduly oppressive, discretionary, baseless, fiscally and practically infeasible.

If implemented, it would result in the -- in the removal of hundreds of acres from production of our county alone, not to mention the increased production costs and resulting job losses. And the lost ability to

compete with foreign imports.

We understand staff's intentions to protect water resources.

However, the proposal is not based on scientific standards; contains inadequate discretion on best management practices to meet goals; is devoid of necessary metrics to analyze impacts post-implementation; and is not amenable to alteration or modification in the event of ineffectiveness.

We believe that the agricultural coalition alternative recognizes and satisfies the aforementioned concerns and is a far superior program for actual monitoring, testing, treating, improving regional water quality.

We urge you to adopt the agricultural alternative and hope that you will consider a multitude of individuals, agencies and businesses, who feel that the alternative is a superior and effective means of improving water -- water quality.

Thank you.

CHAIR YOUNG: Thank you for your comments.

MS. KAY: My name is Margie Kay. And I live near the Elkhorn Slough.

As a volunteer, who attends many meetings on water supply and water quality, I keep asking: How much

will it cost to clean up, and who will pay? Who will pay the public health costs? How many San Gerardos are there?

I was invited a few years ago to join Salinas Valley farmworkers and health care providers in a water quality seminar, to learn more about it. From that, many of us made appointments to meet two county supervisors; Fernando Armenta and Simon Salinas, separately, and we also met with Assemblywoman Ana Caballero.

It was obvious to us that the assemblywoman and Supervisor Fernando Armenta did not understand the issues or what was needed to get the water better. Simon Salinas advised us to go to you.

Here we are. I support the Monterey County Coastkeepers and Environmental Justice Coalition for Water comments. I support regulations to protect human health and the environment and that will be strong enough to restore clean water.

Dipti said it: Keep your eye on the prize and what it will take us to get us there.

Thank you.

CHAIR YOUNG: Thank you for your comments.

MR. MESQUITA: Good afternoon. My name is Horacio Mesquita. And I'm with the San Gerardo Cooperative.

As you may know, there's 300 -- 350 people there, 64 families, and a child care center.

There's -- there's been pollution there since 1990. There -- there's three wells that been already disappeared because of high nitrates and the people there were getting very, very sick; you know, skin rashes, hair falling down, a lot of red spots on their skin.

And, until we prove to them -- you know, they almost took their clothes off and prove to the supervisors that there was a big problem there.

The supervisors put in a filtration system. And as soon as they put it in, the sicknesses were gone.

It -- it cost around a million dollars, just for the filtration system. And then, the community got a grant because of the federal stimulus act of five million. And it cost five million dollars just to get a new -- a new well, two miles away from the community.

If this next well that is -- right now, that we tapping in the community there -- gets polluted, then there's going to be more problems.

I'm a farmer. I've been farming all my life. And I think that we should put water first because water is -- is the main source of -- of life. And we should take care of the water.

I know that farming is hard and there's a lot

of complexity on economics. But water is the fundamental liquid of life.

So we need to take care of it. And I know you guys have a -- a very hard -- you know, a very hard decision that you guys got to make because there's two sides.

And I'm in both sides. So I can -- the only thing that I -- I wish, is that you guys find a good solution for the well-being of humans and all the living organisms that they need water.

Thank you.

CHAIR YOUNG: Well, we're -- we're going to try to get to that solution.

MR. MESQUITA: Good.

CHAIR YOUNG: And everyone's input helps us to try to get to that solution. So thank you for your comments.

MR. MESQUITA: Thank you.

MS. ARAJO: Good afternoon, Mr. Chair, board members. I'm Karen Arajo, a lifelong resident of Salinas, fifth generation, native of what is now Monterey County.

And I, like most -- most all folks in this room -- I love this area, and I care about its future. No one's paying me to be here today. I lost a day's work -

less than $200, but a day's work and very important, nonetheless - to be here.

I'm so grateful to have the opportunity to speak to you.

Someone jokingly, as I interacted with someone wearing a green button here, referred to me as the enemy. I checked that joke and found that he was serious.

I call no one here enemy. I believe everyone here cares deeply about the community. We just have very different strategies and fears and ways of moving forward. And we're going to do this together.

And thank you for -- for what you're doing. It's very important. I commend you on this process.

I support regulations that benefit a sustainable economy and protect human health and the environment -- maintaining the environment.

Tourism and ag are very important to this region. A key factor to such good regulation is that we must be -- they must be strong enough to restore clean water for the community use; the whole community, not just one distinct part or one industry. That's key.

It's a common denominator. And I think this board, for all your great work, is moving forward. And I look forward to a very sound outcome at the end of this process.

I serve on the planning commission for the City of Salinas, the largest municipality in this region. And I was saddened and shocked when an applicant came before us, the water company, asking for a drill permit to go down to 1500 feet.

In the presentation, it was noted that the first two higher layers were contaminated and unusable -- made unusable, primarily because of nitrate contamination, perfectly good water.

We don't have any more water coming to this planet. This is it, folks. And while it is true that the damage has not occurred just by folks who are here trying to earn a living and do the right thing now - that's true - generations of error, much of the error done in ignorance and, quite frankly, much by choice for short-term profit - just because that was done in the past, we don't have to do it now.

I'm sorry that those of us who are now have to shoulder this heavy burden. But it's us, folks. Your job is probably a lot more cumbersome than the board that came before you because this is a critical time.

Batter up. It's you. It's us. It's this community. It's this ag community. It's these environmentalists. It's these residents. It's this community now that has to make this tough choice.

I support the -- the plan that was put forward by Mr. Shimek, the Coastkeepers and the Environmental Justice Group. I loved what you did in February of 2010. I thought that was great. I was so excited.

But I understand we're not going to get that. Okay. Let's take -- let's take what we've got now. I hope people will be happy with the compromises that are being made.

Thank you very much for all of your hard work.

CHAIR YOUNG: Thank you for your comments.

MS. PEMBROKE: I want to say thank you to the board and the staff. My name is Debra PEMBROKE.

CHAIR YOUNG: Thank you.

MS. PEMBROKE: I'm a member of the Unitarian Universalist Fellowship of Santa Cruz County. And I'm a resident of the Live Oak neighborhood of San -- in Santa Cruz.

There were about -- there were two other members of our congregation and a Monterey congregation that had to leave, so I just wanted to share with you that -- that they -- they had comments they wanted to share but weren't able to stay.

So members of our two congregations and a few others recently went to visit San Gerardo to learn more about nitrates and how that affected their community.

After that visit, I went in my dentist's office. And one of the women who worked as a dental assistant asked me what I'd done over the weekend. And when I told her about the visit, she shared with me that she lived in a winery in Gilroy that has well water.

Her landlord had told her that the water coming out of her tap had very high levels of nitrates, and what that meant was that she shouldn't give the water to infants or small animals.

She followed that direction. And -- because she didn't have children that were that small. But because that was the only information she had, she continued to drink the water herself, and to give it to her two children.

When I asked her further about this, she said that she knew that she had the option of buying bottled water but that it was a hassle and, also, that it was very expensive. She said maybe that's why I'm having all these gastric problems.

I wanted to share this story with you because when we don't take steps to protect people's water, these individuals and these families often don't have the information, let alone the financial resources, to be able to take -- to protect their own safety.

That's why I'm here. I'm here to -- I want to

say, specifically, I -- I support the proposal -- the amendments that were put forward by the Coastkeepers and the Environmental Justice Coalition for Water.

And I support regulation that protects humans' health, the environment and will be strong enough to restore clean water.

Thank you.

CHAIR YOUNG: Thank you for your comments.

MS. STANFORD: Good afternoon. My name is Pallas Stanford. I'm another Unitarian Universalist. I am the minister at the Unitarian Universalist Fellowship of Santa Cruz County, which is over in Aptos.

I, personally, live in Watsonville.

And you've heard a lot of great testimony in just the last few minutes. I don't want to repeat it. I want to affirm it and emphasize that -- and I'm coming here as a faith leader, as a religious person, but most of all, just as a human being.

As Unitarian Universalists, we -- we -- we support the right of human beings to live on this planet and to enjoy the fruits of the planet together, and emphasize that it is our responsibility, as a human community and as a human family, to come together and figure out how we're going to share our resources for the benefit of all of us.

As has been said, you have an incredibly difficult job in front of you. You are facing a question that is of immense complexity at a time of -- of what is a looming crisis for us, as a planet, in terms of our ability to have adequate access to clean, fresh water.

So I just want to say to you, please, as you are deliberating, as you are working, I know that you're committed to your task. But remember that most of the values that are being lifted up, when people are talking about this issue from the perspective of agriculture, are business values, values of profit and values of -- you know, that have to do with how to -- how to do business.

Those are important values. But those values are ultimately trumped by the value of -- of human life and the value of life on this planet.

And we -- as someone said before, water is the fundamental thing. We have to have water before we can have anything else. Only air is more important than water to our ability to sustain our life together, here on the planet.

So I -- I urge you, when you -- when you're deliberating, to remember to lift up the value of human life as being the ultimate priority, and the life or our ecosystem.

And also, to remember, as someone has said

also, the burdens of our unsustainable system fall unfairly on the shoulders of those who are not here today, those who don't have the ability to hire high-priced consultants and put together, you know, great Power Point presentations for you.

So, remember, that those are the folks that, you know, we are trying to speak for in our -- in our small way, when we are here.

And also, I want to say to the members -- to you and also to the members of the agricultural community, we love our farmers, we love agriculture. We think it -- I mean, it's an absolutely essential industry. It's an honorable and -- and -- and historic lifestyle. We want to be in support and in solidarity with -- with those folks.

But we absolutely believe that the regulation of this issue cannot fall on the industry itself. Just as in any other industry like in the mortgage banking crisis or, you know, in the oil industry; you don't leave the reg -- the matter of regulation to the people who are actually -- you know, have an economic interest in it.

So that's your -- your responsibility. And I thank you for taking it on and look forward to the solutions that you come up with.

CHAIR YOUNG: Thank you for your comments.

MS. NIGGEMEYER: Chairman Young and fellow members of the board. My name is Heidi Niggemeyer.

I just wanted to thank you for staying late and listening to all of us. I really appreciate that because I know you all have a long drive.

I'm here representing the City of Monterey and Monterey Regional Stormwater Program.

This letter is from Fred Muir, from the City of Monterey. And he says:

Dear Chair Young:

I am writing to ask you, as you and your fellow board members consider this item during your meeting on March 14th, 2011, that you also keep in mind striking a reasonable balance between what you're requiring the urban areas to do under their stormwater NPDES permits and the pollutant loads resulting from urban areas and the pollutant loads that are received from agricultural lands.

Urban areas, such as Monterey, are being required to comply with ever stringent requirements, including the extreme requirements of the ASBS, special protections, which is going to require a 1.2 million-dollar monitoring program over the next five years for just the peninsula cities.

Yet, recent research conducted by the State

Water Resource Control Board and SCCWRP, which is the Southern California Coast Water Research Program, has disclosed that in most cases the ocean waters off our coast are being polluted from sources outside of our urban control.

Agricultural is one of those sources. Both agricultural interests and the municipal permitees should be held to the same maximum extent practical standard.

Sincerely, Fred Muir.

Some other comments that I'd like for you to consider simply is coming from the regional stormwater program manager, which I am.

I just learned today about the collaborative approach that was being presented by the grower-shipper association. And just some comments that I have on that.

First of all, how can the grower-shipper association involve the public, via outreach, to work together to develop solutions to problem areas, if the public cannot even access their data to see what the issue is or where the problem is?

And if the growers have the money to fund third-party oversight, why can't they just use that money for groundwater monitoring?

How can a third party be objective and enforce the process, if that third party is also being paid by

the growers they oversee?
There are no numeric action limits or numeric goals to achieve and measure effectiveness by. Third party only audits once a year for implementation actions.
How do they determine the B & Ps they are using are effective or not, since there isn't any groundwater monitoring or any method for effectiveness assessment, as the rest of us that are regulated have to do?
Reporting is done on a group basis by percentage, instead of reporting who is noncompliant. So they'll tell you 10 percent didn't follow the rules, but you don't know who those are.
Tier levels should be congruent with risk level, not size. The construction general permit use risk levels -- I'm sorry -- the construction general permit uses risk levels for construction projects.
And the new phase 2 permit, may be assigning risk levels to watersheds. There should be similar risk levels for ag.
Ag and your report should be -- should include effectiveness assessments. Phase 1 and 2 MS4s have this requirement.
Monitoring should be equal across the board; ag, MS4s, everyone. The -- the regional water board, the -- region three has a vision for watershed health. I'm

not sure if it was the 2020 or -- but they have a vision for watershed health.
And it's very difficult for those of us who are already regulated. You've got industrial. You've got commercial. You've got Phase 1 and Phase 2 MS4s.
The only loophole is ag. So you're trying to have watershed health. And you get all of these great programs going throughout the watershed. And you've got these big holes, and they're called agriculture.
And I think it's just about time that we leveled out the playing field and everybody had the same requirements.
Thank you.
CHAIR YOUNG: Thank you for your comments.

MS. MYHRE: Good evening, afternoon, members of the board. I am Ann Myhre, M-Y-H-R-E, from San Ardo.
Running late. I'm facilitating a meeting at 7:00. So I'm not too happy to be so late.
I have prepared some written statements for you, but I want to deviate from that for a moment.
First, I would say that I will participate in some sort of monitoring program that is cooperative, if that is available.
I'm a very small grower. I consider myself a

small operator with trees on drip. I don't think there's anything I can do to improve my operation. But I would appreciate an independent audit.
And, so far -- I mean, I don't think that's going to happen from the Regional Water Quality Control Board, if they think I'm in compliance.
So I would appreciate someone coming and talking to me on my farm to tell me what I could do better.
The second thing I would say, is I have become alarmed by what the strawberry people said today because I think I am now Tier 3. And I have gone along, thinking that if I have 40 acres of walnuts on drip irrigation, I am Tier 1.
But I happen to own some other property, with my husband, that lease -- is leased by another operator; small property. Fifty-five miles from my home, my sister and I own a very, very small property with four very, very small operators.
We do a kind of a rotation, a dry land irrigated, and for one of those irrigators, I write the farm plan. Okay. I'm still Tier 1.
It just occurred to me, that a hundred and sixty miles from my home, but still in this region -- and I hate to divulge this stuff in public -- I -- because I

don't think it's any of your business.
But I own over a thousand acres of irrigated property, a minority interest - a minority interest - with my cousin and other family members. But that probably puts my 45 acres of walnuts into Tier 3.
That's not fair. That is not fair. And it's something you haven't been thinking about. And I don't want to be burdened with it. So I don't know how that happens.
But I will read my prepared remarks, to the extent that my minutes remain.
For many of us who appeared before you today, we are representing ourselves, paying our own way, giving our own time. To help this board and staff understand the impact of your actions.
We typically operate small acreages and we are in very limited income. And we are going to be required to absorb additional expenses and take on additional duties without compensation, dependent upon your actions.
As such a person, I am responsible for farm plans required by the current ag waiver program. I can honestly say, that I resent the time I spend formalizing these plans, because, to my way of thinking, they serve absolutely no purpose.
That is not to say that I am not mindful of the

unique characteristics of my property; that I have been continuously developing and revising informal management plans in my mind, since I attended my first conservation meeting in 1955.

Certainly, water quality is among the things I consider.

However, I oppose staff recommendations to change the current plans and process. And it would be helpful if this board would exercise restraint when considering modifications to that expiring plan.

The properties I represent are not going to be better managed because of these new demands.

Furthermore, I cannot justify additional management expense. And still, under this order, it seems designed to impact my operation in just that way. Requiring more time, more money and the intent ultimately being that it take away my historic use of this property, some of which has been irrigated since 1900.

Would somebody like my written comments?

CHAIR YOUNG: Okay. Sure. Thank you for your comments.

MS. CLARY: Thank you. My name is Jennifer Clary. I'm with Clean Water Action and Clean Water Fund. And I hope to stun you with my brevity.

I want to speak in support of the Monterey

Baykeeper and Environmental Justice Coalition for Water proposal.

And I also had a chance to listen to the -- to the Farm Bureau's new proposal. Unfortunately, it -- it sounded a lot like the one that they presented in November. And, I think, the big -- my biggest concern is groundwater.

I should tell you that I come from a drinking water perspective. I serve on a -- on several stakeholder groups representing drinking water interests. And one of the stakeholder groups I've served on for years is the GAMA Public Advisory Committee.

So I just -- just wanted to clarify a few misconceptions about the GAMA database.

GAMA database is a collection of -- of the data that several public agencies gathered. It has data from drinking water supply wells, DPR data, state water board monitoring wells, and it does have some data about -- from USGS.

USGS has been doing monitoring for the GAMA program for several years. And one problem with that monitoring program -- it's a great program, we've got lots of information -- but it is voluntary. The participants elect to do it.

So there's always been a concern that the data

is going to be skewed by the fact that it's sort of a self-selected group.

The other difficulty is one of the -- one of the purposes of the GAMA program was to develop a trend analysis, like: Which way is water quality going, and whether we have to worry about it?

But, you know, between all the funding problems, we never got to the trend piece of it; we're just barely getting through the first set of data.

So I should say that I've been active in the Central Valley ag waiver process. And one thing that I worked with Pacific Institute on, for that process, was to do a regression analysis.

So what we took from the GAMA data, is we took wells for which we had a significant amount of data over 10 to 20 years. And we took a look at what the nitrate concentrations were and how they -- and how they sort of penciled out if you kept drawing the line.

And I have no idea -- I'm sure it's not scientifically accurate. But it's the best we could do, in the form of trend analysis.

And under that analysis, it looked like -- we just did Kern County because it has -- it had the biggest nitrate problem. And it showed that the number of wells exceeding the drinking water standard would double in the

next 10 years.

And I think that's something that we have to understand as part of putting this program in, is we don't just want to solve the problems we have; we want to prevent the problems that are coming up.

And so, one way we have to do that, is we have to have a strong monitoring program. And the biggest shortcoming of the Farm Bureau proposal is that it doesn't have that information.

And voluntary groundwater monitoring doesn't work because it isn't going to go into the GAMA database, you're not going to be able to do trend analysis.

And if they're concerned about information getting out, that shouldn't get out, I should tell you that the GAMA program doesn't reveal well location. And it wouldn't reveal well location for any of the monitoring done here, as well.

Thank you.

CHAIR YOUNG: Thank you. Thank you for your comments.

MS. DAMRON: Good evening. My name is Sarah Damron. And I'm speaking on behalf of the five Surfrider Foundation chapters here in the region three.

CHAIR YOUNG: Could -- could you repeat your name, again.

MS. DAMRON: Sorry. Sarah Damron.
CHAIR YOUNG: Sarah. Okay.
MS. DAMRON: Thanks.
And I kind of foresaw this moment coming, so I actually have typed statements. But I will paraphrase.
So, obviously, our members care about the protection of coastal ocean ecosystems, which are impacted by aquatic conditions, and the ability of people to use and enjoy coastal waters beneficially.
So that's the context in which I'm making comments today.
We really care about what's in front of us, which is the continued impairment of our coastal waterbodies and groundwater that's occurring by irrigated agriculture as a class.
We realize it's, you know -- some folks are doing really well, and some folks maybe aren't.
We do appreciate the fact that a number of folks really have taken it upon themselves to make improvements. But that's not why we're here today. We're here because there is continued impairment of our waterbodies.
And, specifically, waterbodies that are identified as supporting other beneficial uses, such as contact recreation, fishing, drinking water, these types

of things, need to be protected and cleaned up to support those uses.
So we believe those efforts need to -- to prevent and remediate pollution should be implemented, and in as timely a manner as possible, to support those other beneficial uses.
We do support the change from the existing waiver to the proposed waiver that does require individual discharge monitoring because we do agree that it will facilitate a measure of changes; both, you know, what -- where are the problems, exactly, and -- and how are we doing better, and let us know that, you know, these management practices that we're putting into place, actually are succeeding. Or maybe they're failing.
And we appreciate that that's included for Tier 3 dischargers. But we feel that this really is the, kind of, a bottom rung. This is the very least amount of individual discharge monitoring that should occur if we're really looking to -- to solve the problem.
We're generally concerned that the tiering criteria might be too narrow. Tier 3 is not necessarily inclusive of all operations that could be significant contributors of pollutants to 303(d)-listed waterbodies.
For example, Tier 3 errs in focusing on two specific pesticides, ss opposed to considering a range of

substances that cause toxicity, when toxicity is really what we're seeking to eliminate here.
And, in doing so, we feel like -- as a number of speakers on all sides have pointed out -- that people are just going to switch to other pesticides. And that's not what any of us, I don't think, want to do.
So there are a couple options. You could expand Tier 3 to be more inclusive of operations that discharge into 303(d)-listed waterbodies, that also include the broader list of pesticides that have been identified as harmful or that are causing toxicity in these waterbodies.
Or, you could extend individual discharge monitoring requirement to Tier 2. Or, we could go back to the February 2010 option.
Just putting some things out there for you. But, basically, we support what we're trying -- I think, what we're all trying to do here, which is eliminate toxicity, reduce pollution.
So, thank you for the opportunity to comment.
CHAIR YOUNG: Thank you for your comments.
MR. OMPA: Roy Ompa. I live in Hollister; farm in Fresno, Merced and San Benito County.
CHAIR YOUNG: And that was Roy -- and the last name?

MR. OMPA: Yeah.
CHAIR YOUNG: Your last name, sir?
MR. OMPA: O-M-P-A.
I would like to make a couple of proposals.
Number one, if all these people that have been here speaking today, that eat the -- the chow that we produce, think that we're doing such a bad job keeping them fed, I suggest that they all be -- they're not calling this a tax. They're calling it a fee.
So I think they all should pay a fee to be sure that we can afford to keep the water the way they think it should be. I'd like to remind them, also, that a lot of our nitrogen comes from thunder showers, from God's domain, that nobody's talked about.
Also, this watershed starts in San Benito County, in the San Benito River, Pajaros, about 28 miles west of Coalingo (phonetic). And between here and Coalingo -- and I'll be nice -- I'll say feces from the cattle and the horses, the deer and the pigs, create a hell of a lot of nitrogen. And water runs downhill, and we're on the bottom.
And nobody's addressed that. And that water, basically, on light years, what little -- when the river does run, percolates down into the aquifers, which are fed from Salinas west. They don't get much percolation

above that.
And that would be my recommendation; that all these people, who've got all these good ideas in town, contribute to see that we have this done.
The other thing is, there's two other possible solutions. In Fresno County, where I farm, these -- part of these same people, the environmentalists and the fish and game, are proposing within the next 12 years to take out 1.5 million acres out of production. And put it back in habitat.
So if we took 1.5 million acres out of production here in Salinas, put it back to habitat, their water would be beautiful. That would be one proposal I'd make.
And the other one is, that nobody's mentioned -- only that some sea otter ate some moss out there and died -- that's because the sea otter have ate all the clams and abalone there is for 50 miles up and down the coast.
Because I'm 84 years old, and I used to come over here clamming all the time and catch some beautiful six and eight-inch clams, abalone. There's none around. The sea otters ate them all.
So I think that somebody on that committee should check into see how much influence Monterey Bay

Aquarium and that lab -- whatever they call it at Moss Landing -- is input -- is having in -- inputting it in to blame the farmers for putting all this nitrogen in the water.
They don't want it in there. And they're passing it off as screwing up your drinking water. If the truth was really found out, you'd find out that they have a big input in what's going on here today.
Thank you very much.
CHAIR YOUNG: Sir, I didn't -- sir -- sir?
I didn't catch your -- over here.
MR. OMPA: Well, it don't make any difference. I'm alive and well. Thank you.
CHAIR YOUNG: No. Wait -- wait a minute.
Okay.
MR. BRIGGS: I think we got it close enough.
CHAIR YOUNG: Okay.
MR. BRIGGS: And we'll remember him.
CHAIR YOUNG: I just wanted his last name. That's all.
MS. MC CANN: I heard O-M-P-A.
CHAIR YOUNG: Okay. Okay.
Last speaker. Go ahead.
MR. ALLEY: Thank you, Mr. Chairman. My name is Nathan Alley, just like the bowling alley.

Excuse me. I'm a little congested.
I'm with the Environmental Defense Center. And I'm basically exactly who we all want to see at 6:00 at night. I'm an attorney about to talk about process.
And I can guarantee that no one else has brought up these points today. So at least it's a little refreshing.
The current order -- the current, existing agricultural waiver, R3 2010-0040, expires on March 31st. The section of the water code, 13269 subsection F, that refers to renewal of conditional waivers, says that those decisions must be made at a hearing; which means that if you continue today's hearing, you cannot make that decision probably prior to March 31st, which means, that, defacto, this order is going to expire.
Now, I've also heard a -- a consideration of a -- a, quote-unquote, administrative renewal of this process. And I refer back to the water code. Section 13223 authorizes your board to delegate some authority to the executive officer. However, it contains several enumerated exceptions.
One, is that the executive officer may not promulgate any regulation. And I think a lot of these folks would be surprised to hear someone say that the ag waiver is not a regulation.

In fact, the government code, which defines such thing, says that a regulation is essentially any order that comes from an agency, which implements the laws that that agency is tasked to enforce.
So by that plain definition, the waiver is, in fact, regulation. Even if you were to operate under the fiction that it's not, the second enumerated exception says that the executive officer may not issue, modify or revoke any waste discharge requirement.
Now, it's nonsensical to me that the executive officer is prohibited from doing those things and, yet, has some authority to waive a waste discharge requirement.
And that's exactly what a conditional waiver is. It's a waiver of waste discharge requirements. I've seen these green buttons that says, waive -- or don't waive agriculture. If you take that literally, that means everyone has to get a WDR.
So that doesn't really make sense to me.
Anyway, bottom line is, the only way for you to renew this waiver is for your board to constitute a full quorum and make a decision at a hearing, after notice.
Now, what's the import of this? Well, after March 31st, there's no more waiver, there's no more waiver of waste discharge requirements.

That means that everybody who's discharging or threatening discharge has to file under 13260 a report of waste discharge requirements. And then your board has to, under 13263,prescribe waste discharge requirements.

Now, none of us really wanted to get to this point, where every single individual discharger enrolled under the waiver has to file for a WDR. Unfortunately, it's been two years or more since we've been in this process.

And things have been renewed and renewed and renewed - inappropriately, I might add - and, unfortunately for everybody involved, we've kind of backed ourselves into a corner.

And so I am looking forward to this requirement being implemented on April 1st. Funny day for it. But until you can renew the waiver -- i.e., until your board constitutes a quorum -- I'm looking forward to all these reports of waste discharge, and I'm looking forward to you guys issuing waste discharge requirements.

Thank you very much.

CHAIR YOUNG: Thank you for your comments.

MR. ALLEY: You're welcome.

CHAIR YOUNG: Okay. That concludes our public comment session for today. We will give notice, as soon as possible, as to when we're going to continue this

meeting.

Speak up louder? Okay.

We're going to give notice, as soon as we can, as to when this meeting is going to be continued.

And we have some idea, Mr. Briggs, as to when we can do that? At least, when we can make the decision.

MR. BRIGGS: Well, we'll do that as soon as possible. I don't know if I'll be able to check everybody's schedules tomorrow. But possibly Monday.

CHAIR YOUNG: Okay. All right.

And I just want to thank everybody who spoke today, even those that have left, that can't hear my comments.

But it -- we've been through a couple of years of this already. And I appreciate everyone's input into this. We do have some divergent perspectives on how to deal with what the issues are.

And I'm grateful for being in -- involved in the process at this point in time. I look to being -- I'm grateful for being involved in the solution to this.

And the board is going to ferret out everything and deliberate and come up with recommendations for staff to consider. And I anticipate, maybe in the summer, we'll be ready to really have a vote on something, that has been through a lengthy review.

MR. BRIGGS: Once -- once we do have a day, we'll post that on our web site. And the -- a lot of you are familiar with the ag page that we have on our web site. So we'll post it there.

CHAIR YOUNG: Okay. We're done for today.

Thank you very much.

(WHEREUPON, the proceedings were adjourned at 6:00 p.m.)

REPORTER'S CERTIFICATE

I, TONIA L. WEBB, CSR NO. 4588, Certified Shorthand Reporter, certify;

That the foregoing proceedings were taken before me at the time and place therein set forth;

That the proceedings were recorded stenographically by me and were thereafter transcribed;

That the foregoing is a true and correct transcript of my shorthand notes so taken.

I further certify that I am not a relative or employee of any attorney or of any of the parties, nor financially interested in the action.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated .

TONIA L. WEBB, CSR NO. 4588