CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SANTA ANA REGION

CAROLE H. BESWICK, CHAIRPERSON

In the Matter of:	)
	)
Public Hearing re: All items on the Agenda, including but not limited to, Renewal of Waste Discharge Requirements, County of Orange, Orange County Flood Control District, and Incorporated Cities of Orange County, Urban Storm Water Runoff Management Program (NPDES No. CAS618030); Public Hearing on Clean Water Act Section 305(b) Integrated Report/Clean Water Section 303(d) List of Impaired Waterbodies; Other Business	)

TRANSCRIPT OF PROCEEDINGS

Santa Ana, California

Friday, April 24, 2009

Reported by:

ALLISON SWANSON
CSR No. 13377

Job No.:
B1632WQWB

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TRANSCRIPT OF PROCEEDINGS, taken at 220 Civic Center Plaza, Santa Ana, California, commencing at 9:00 a.m. on Friday, April 24, 2009, heard before the CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, SANTA ANA REGION, reported by ALLISON SWANSON, CSR No. 13377, a Certified Shorthand Reporter in and for the State of California, pursuant to Notice.

APPEARANCES:

CHAIRPERSON:	Carole H. Beswick
BOARD MEMBERS:	William Ruh Fred Ameri Steven PonTell Richard A. Freschi
EXECUTIVE OFFICER:	Gerard J. Thibeault
ASSISTANT EXECUTIVE OFFICER:	Kurt V. Berchtold
LEGAL COUNSEL:	David Rice Frances McChesney
ENVIRONMENTAL PROGRAM MANAGER:	Joanne E. Schneider
SUPERVISING WATER RESOURCE CONTROL ENGINEER:	Michael J. Adackapara
CHIEF OF STORMWATER:	Mark E. Smythe
INFORMATION SYSTEMS ANALYST:	Kevin Heinemann
EXECUTIVE ASSISTANT:	Felipa Carrillo

I N D E X

I N D E X (Continued)

Santa Ana, California, Friday, April 24, 2009

9:00 a.m.

MS. BESWICK: We can begin.

I would like to welcome board member PonTell.

Steve, if you wouldn't mind introducing yourself to the audience.

MR. PON TELL: Hi. I'm Steve PonTell, Recreation. I live in Ontario, but have a keen interest in Big Bear Lake.

MS. BESWICK: Thank you.

All right. We're now going to move to item 12, the Removal of Waste Discharge Requirements, County of Orange, Orange County Flood Control District, and Incorporated Cities of the County, Urban Storm Water Runoff Management Program (NPDES No. 618030).

This will be a public hearing with the potential of action to adopt the permit.

Mark Smythe, good morning.

MR. SMYTHE: Good morning, Madam Chair, members of the Board. I'm Mark Smythe. I'm a Senior Environmental Specialist. And I'm chief of the Coastal Stormwater Unit.

As the Chair said, we're here for a public hearing for the Orange County MF4 permit. What I plan to

do today is give a brief history on the 19 years of stormwater permits in this region and describe the process that led to the tentative permit before you today.

Stormwater permits are part of the natural solution to discharge elimination, or MPDS system. It was established in 1972 with the Clean Water Act. For the first 15 years, the regulations primarily dealt with major point sources such as sewage treatment plants and factories. But as those came under better control and water quality was still an issue, it was expanding to include other point sources including stormwater.

The three regional board MS4 permits, one for each county, were adopted in 1990.

Stormwater run off is regulated under four different permits. The first is a statewide general construction permit which deals with runoff from construction sites over one acre within our region and within the state.

The second is a general industrial stormwater permit. This permit deals with runoff of industrial sites as identified within the permit.

The third is the Cal Trans permit. That deals with runoff from Cal Trans construction sites and runoff from highways.

Most of the rest of the stormwater discharges

are regulated through the MS4 or Municipal Separate Storm Sewer Permit. This includes runoff from municipal activities, from industrial construction activities taking place within the city's and county's jurisdiction, runoff from commercial and service activities within their jurisdiction, and runoff from residential activities within their jurisdiction.

Stormwater permits and the MS4 permits, in particular, are different than most MPDS permits.

A normal MPS permit is based on a numeric ethical limit. That is, they're allowed to discharge a certain amount of copper, a certain amount of trico chloroform. And that's how you determine whether the facility is within compliance with the permit.

But for MS4 permits and stormwater permits, in general, because of the complexity of these flows, historically, they have not had numeric ethical limits. Although, MPL, and I'm going to be discussing that later, are beginning to change that.

But for the most part, these permits are based on implementing best management practices, or BMPs, to the maximum extent practicable. Where MEP, maximum extent practicable, takes into account such issues as the gravity, the severity of the problem, the societal benefit from addressing the problem, and technical and economic

feasibility of addressing the problem.

The MEP standard is addressed through an iterative process. That's if water quality standards are not being met, the permittee is expected to implement best management practice. These can be anything from public education-type best management practices to actual structural best management practices such as trash booms.

Those PMBs are implemented and monitoring is done to see if they're addressing the problem. If there are still water quality exceedances (sic), then they are to improved BMP, monitor, and continuing in that process.

So back in 1990, the first MS4 permits were adopted here in this region. Because it was a new program, it was -- the first permit was really a developmental program-type permit. They were to develop -- their plan for implementing this permit, this drainage area management plan, and identify the PBPs they would be implementing to meet the permit requirements. Such as catch basin stens line and cleaning, street sweeping, fertilizer, pesticide management within their own operations, and runoff from post-construction -- well, runoff from post construction.

They also were to eliminate illicit connections and illegal discharges, set up a public education program, and start up a water quality monitoring program.

Six years later, the permit was reissued. And

pretty much stayed the same because it was first issued in 1990. In general, it didn't change. The emphasis was on getting the program right. What did change was that there were water quality ordinances and enforcement consistency guides that were developed at the end of the first permit. And those were adopted by the City and County as their means of enforcing on illegal -- or illicit discharges and connections.

And they required that statewide general construction permit coverage would be shown prior to issuing grading permits. This was kind of a hand-in-hand type operation to make sure that prior to them issuing grading permits, they had the proper permitting with the state.

As I said, not a lot changed between 1990 and '96. But six years later, the 2002 permit, there were some major program additions at that time.

Of course, the dam was still being implemented. They were still required to address illicit discharges and connections.

Public education added a standard in that they needed to provide a certain number of impressions. That is, if you put an ad on the radio, there's the estimate of how many people hear the ad. That's added up to if you put fliers in water bills, the number of people that receive those water bills. So that would add up to a minimum number

of impressions to try to educate the public attitude, the difference between sanitation drains and storm drains. And they continue the water quality monitoring.

One of the new sets of programs started in 2002 were municipal inspections of construction sites, industrial facilities, and commercial businesses.

There was also new development, structural BMPs required. At that time their water quality management plan, the plan they had used to address post-construction, not the runoff pollutant during construction, but after a site's been in -- is in use, the PBP that address the pollutant flows coming from, say, new residences, from commercial facilities, and from industrial facilities.

And for the first time, TMDLs were incorporated. In 2002, there were three TMDLs in place for Newport Bay and San Diego for nutrients, nitrogen and phosphorus, and for sediment.

Because of the new programs that were implemented in the 2002 permit, regional board staff implemented an audit program of the 26 cities within the region. And it took a month per city to do our initial workup and analysis of the program up to that date. A two-day audit, where we went over the program with the permittees, went out in the field to ensure that their inspectors were doing the job they were supposed to, and

then a period to write the report and to work with them on addressing the problems we found within the program.

What we found was that most of the cities were trying. No program was perfect, but most of the programs were well on their way to getting to the point they needed to be. However, there were five cities that had substantially deficient programs that set them apart from the rest. And those five cities received administrative civil liabilities with assessments ranging from $48,280 to $126,480. And all five ACLs were paid by the cities without needing hearings.

While the audits were going on, the end of this permit was coming up. And so the County filed their report of waste discharge, telling us what they had done during the last permit term and what they wanted to do during the next permit term.

The 2002 permit expired in January of '07 and was administratively extended. And then during '07 and '08, there were a series of meetings held between stakeholders and regional staff, trying to flush out what the next permit would look like.

The first draft was released November 10, 2008, shortly followed by a public workshop. From that public workshop it became apparent that the new development standards would need work to get buy-in from all the

interested parties.

So a series of stakeholder meetings were set up that ran for approximately three months. Meeting with -- I'll get to that later -- with the stakeholders. Because of those meetings, and the progress of those meetings, the comment deadline on that first draft was pushed out two times, and finally on February 13th, we received comments on the first draft.

The comments were addressed. A second draft was released. Comments were received until April 9th on that second draft. And finally, a third draft was released on April 13th.

MS. BESWICK: Mark, just so I'm clear. There was one deadline and it ended up being February 13?

THE WITNESS: It ended up being -- yes. We had initially asked, at that public workshop, that the deadline be December 30th because of the progress being made with the stakeholders in the meeting, and kick it out, and then, in fact, we kicked it one more time to February 13th.

All toll on comments, staff received 37 comment letters on the first two drafts from which 244 comments were extracted and are listed in the response comments you have before you.

Now, even though that may seem like a lot, by the time we hit the second and third drafts, the area of

concern was limited to two or three subsections of this permit. And the majority of the permit has gone unchanged through the last couple of draft permit cycles.

The three major areas that have seen change are the commercial inspection program, the new development program, and the addition of new TMDLs to the permit.

What I plan to do is to go over each of these three sections, tell you what is in the current permit, the 2002 permit, and how these sections have changed over the last three drafts.

For the commercial program, the 2002 permit, the one that they're under right now, listed a certain number of commercial entities that the cities and county needed to inventory, prioritize, and inspect. Those included automotive-related businesses, mobile cleaners, painting operations, nursery operations, landscape, and water feature cleaning enterprises.

And as I said, they were to be ranked on the overall threat to water quality. Ranked high, medium, and low. And that permit required that all high ranked commercial entities be inspected by July 2003. And then for the permittees to establish a program -- a framework for an inspection and priority based program.

Now, when staff started writing the first draft of the permit, and also during the audits, we saw some

problems with this program with some of the cities.

As I said, there are 26 cities. And by the time we looked at the 2007/2008 annual report, we found approximately a third of them had very few high prioritized commercial facilities. This showed us there needed to be changes to the program. And, therefore, within the first draft of the permit, these were the changes that were made.

First, we moved mobile cleaners to their own category. Mobile cleaners are kind of a beast among themselves. They don't have headquarters in the city that they operate. And they are there for a limited amount of time. And so, really, it needed to be pulled into its own program and a framework established to address those mobile cleaners.

We also added some categories to that initial list that you saw, including plastic pellet storage and transport. And this works kind of hand-in-hand with the whole statewide plastics initiative. There was also pest control yards added to it, building materials retail. And whereas the last one had automotive-related commercial facilities, this one added other vehicles such as planes, boats, and heavy equipment to the list.

And there were standards added to the number of commercial facilities ranked high, medium, and low.

In this case, based on the city or county's

inventory, the top ten percent that represent the worst water quality threat, based on the first draft, were required to be ranked high and inspected annually. The next 40 percent with the highest water quality threat needed to be ranked medium and inspected every two years. And the remainder would be inspected every permit term.

As you imagine, we received comments on this portion of the draft. And for the second draft, made some changes. First of all, we acknowledged the possible limitations on refusal of access.

We dropped some of the business categories. We changed the mobile business program to a pilot program to give them an opportunity to get a program off the ground.

And in the past permit restaurants were being inspected on an annual basis. And while it was implied in the first draft of the permit, we put it specifically in the second draft of the permit so it would explicitly state that.

Based on comments received on the second draft, additional changes were made to the third draft. For one thing, we dropped the medium category to 20 percent and pushed the other 20 percent to low. But probably more importantly, we provided an opportunity for the permittees to develop an alternate inspection framework, a reporting framework that would be approved by the executive officer.

All right. The second major area of change deals with requirements for best management practices implemented at new development.

Our first permit required structural best management practices to address post-construction runoff from new and significant development. Those types of BMPs would include such things as catch basin inserts, bio-filters, porous pavement, infiltration galleries, that type of an actual structural BMP. Rather than site design BMPs like putting a plant a certain way or reducing foot prints.

Now, those BMPs really are only addressing one effect of new development. And that's the increase of the pollutant loading. What it is not affecting is the increase in runoff. While there were requirements within the current permit, the 2002 permit, that addressed the increased runoff, they were general in nature and dealt with things to be considered during the sequence process and when issuing conditions of approval.

The thing to note is as development takes place -- as you can see, on undeveloped land you have a lot of infiltration, less runoff. As you get impermeable surfaces, you decrease the amount of infiltration and increase the amount of runoff. And not only do you increase the amount of runoff because the structures are there to

speed stormwater to its ultimate receiving waters, you also get flashes of high flows that can cause downstream erosion, hydromodification, hydrological conditions of concerns, all kinds of terms regarding scouring and downstream erosion from this increased runoff.

One of the best ways to address that increase in runoff is through low impact development. The goal of low impact development is to mimic the hydrology that existed prior to the development. By implementing BMPs that increase infiltration to both evapotranspiration, harvesting and reuse, and bioinfiltration, one can reduce the effective impervious area of a site and reduce runoff.

Now, the effective part of EIA is where hydraulic connectivity comes into play. If a building is built, the pad and the roof form an impervious surface. The water that would have normally infiltrated now runs off the roof and does not have an opportunity to infiltrate. If that runoff is directed directly to the gutter and then goes into the MS4, that is part of the effective imperviousness of the area. It does not give it a chance to infiltrate. It's gone straight to the MS4.

However, if that downspout is connected to a rain garden, to a cistern, to rain barrels, it is then given the opportunity to infiltrate, and so does not add to the effective impervious area. So LID was incorporated into the

first draft of the permit.

It required the use of LID BMPs where feasible to address the pollutant loading and increase flow. And why might it not it be feasible? If you have areas of ground water contamination or subsurface soil contamination, you don't want to be infiltrating over that and spreading it. You have a situation where you have high ground water and increased infiltration may cause flooding. There may be clay soils that even with soil amendment may not be amenable to infiltration. And you may have issues of hillside slippage due to increases in infiltration. Those are the things that need to be taken under consideration when using LID.

There was a standard for that LID. And that was a 5 percent effective impervious area. That site needed to look -- it looked like there was only 5 percent of it with impervious surface. And the other 95 percent would allow infiltration, be it through natural infiltration or rerouting of other impervious areas to infiltrate other areas.

There was ground water protection components within this first draft, including a ten-foot vertical separation to seasonal ground water. A 100-foot horizontal separation of any supply wells. And that infiltration not be used in high pollutant areas. There were alternative

requirements when LID would be infeasible, something else would have to be done. It wouldn't be, "Well, we can't do LID, so we're not doing anything."

Finally, public agencies were required to inspect 50 percent of these structural treatments of BMPs going on that will be developed to make sure they're being properly maintained by the owners of those facilities.

Now, that was looking at pollutant load issues. How did we address --

MR. PON TELL: Quick question. Inspected by whom?

MR. SMYTHE: Inspected by -- it was, at the time, inspected by public agencies, by the city or by the county. That has changed through the drafts, but that was the initial requirement.

To address runoff issues, hydrological conditions of concern, to make sure we were not getting downstream erosion, if that 5 percent EIA was met, then it was assumed that site, after its development, was mimicking enough of the predevelopment conditions that there would not be downstream erosion.

But if it was higher than a 5 percent EIA, then there would be potential for downstream erosion, and so additional studies were required. And if that downstream erosion was to take place, then additional controls would be required on-site.

MR. AMERI: Maybe you said it, but I didn't understand. What if LID is not feasible, what would be the alternatives?

MR. SMYTHE: There would be the potential for doing it offsite. Michael, have you heard any other --

MR. AMERI: Regional --

MR. SMYTHE: Yes.

MR. AMERI: -- treatment. What else? What if not regional not --

MR. ADACKAPARA: You have a few options.

One of the options is they could actually establish an urban runoff fund and contribute to that fund.

The other option, you could go offsite and do some other mitigation measures.

So there were a few options included. And those are included in Section E of the permit. And I think Mark is briefly going to go over that.

MR. AMERI: Okay. You are. Good.

MR. SMYTHE: All right.

So based on this first draft, this is where the stakeholder groups got together and met the main group, met eight times, maybe three, four hours each time. And other sub groups got together and put together white papers. This was the topic that predominated those discussions.

And, in fact, one of the first things that came

out of those discussions was we had multiple definitions of what effective impervious area, EIA, really was. There were a lot of different permutations that were brought up. And kind of through the questions, used that as a standard.

One of the things that were incorporated into the second draft was a shift from the 5 percent EIA to a capture volume of the 85th percentile, 24-hour storm event.

There were also additional requirements for prioritizing the LID BMPs. With preventative techniques taking the highest priority, preserving natural drainage features, so you don't have to mitigate. Or where mitigating measures are needed, those were ranked too with infiltration and evapotranspiration being the highest, going down to harvest and reuse, and finally bioinfiltration.

And with regards to hydromodification, the standard was changed from the 5 percent EIA to a capture volume based on a two-year storm event.

A change was made -- in the first draft, if all downstream waters were engineered so they could take the flow, the first draft said it was assumed, then, there would not be a hydrological condition of concern, and studies weren't needed.

The second draft altered that so there was an exception. If downstreamed water to the US -- or if downstream waters included waters of the US, then a

hydrologic condition of concern study was needed, even if those waters were engineered because of potential for restoration.

And, finally, there was an option added to -- for the permittees to develop a watership master plan to deal with hydrological conditions of concern, hydromodification on a watershed-type basis rather than on a site-by-site basis.

And, finally, some criteria were added to the method for determining whether LID BMPs would be infeasible prior to allowing the alternatives or in lieu program.

Again, we received a number of comments. This has been the issue that has continued to have comments come in right up until last night.

And the third permit -- third draft, made the following changes. To address ground water concerns, regional board staff added that a pile monitor -- ground water monitoring program be started by the committees to address infiltration concerns. And all infiltration activities be coordinated through the local ground water agency.

The ten-foot vertical separation was changed to a five-foot, based on comments received saying that if it were at ten-foot, much of Orange County would be ineligible for infiltration because of seasonal high ground water. The

model WQMP was -- that will be created by the permittees, which was for EO approval, will be available for 30-day public comment period prior to EO approval.

And it would change if all downstream waters are hard to engineer to accept the proposed low, then, again, we're going to the fact that it is assumed that hydrological conditions of concern would not take place. And so no hydrological conditions of concern analysis are now needed. And the post-construction BMPs will need to be inspected every four years instead of every two years. And there's provision included for third party inspection of those facilities.

The third portion of this permit that saw changes were with the addition of new TMDLs. In 2002, the only three permit -- three team deals adopted were the nitrogen and phosphorent or nutrient TMDLs of San Diego Creek and Newport Bay and the sediment TMDLs for San Diego Creek and Newport Bay.

Real brief primer on TMDLs. It starts with beneficial uses. "Beneficial uses" are the -- Beneficial uses are the various waters in the region are established in the basis plan. Those beneficial uses include things like municipal drinking water supply, contact recreation, non-contact recreation, warm and cold water fisheries, wild life habitat, ground water recharge, and there's a number

more.

The basis plan lists water quality objectives that need to be met to protect those beneficial uses. You don't want too high tricho chloroform in waters that are swimmable.

If water quality standards, that is, those water quality objectives are exceeded or beneficial uses are not supported or because there's degradation within the waters, the water quality standards are not being met and the water's placed on the impaired water list or the 303D list. And that's something Pavlova Patally (phonetic) will be speaking about in the next item.

When water goes on the 303D list, the total maximum daily loads need to be calculated for those pollutants for those waters. What the total maximum daily load is is the amount of pollutant that can be discharged to the water and still support the beneficial use.

That load is then split up among point sources in the form of waste load allocation and non-point sources for load allegations to meet that TMDL. For those waste load allegations that address urban runoff, they're best implemented through the MS4 permit.

So for the first draft of TMDL -- the first draft permit, the TMDLs, we included the ones that had been in the previous permit, the nitrogen, phosphorus, sediment

TMDLs for San Diego Creek and Newport Bay and added the waste load allocations for the TMDL for Coyote Creek that was adopted by Los Angeles Regional Board. And those were for copper, lead, and zinc. This is a rather controversial one.

If you take a look, Coyote Creek runs within our region and then runs right along the LA and Orange County -- and hence the LA Regional Board and Santa Ana Regional Board boundary line. The majority of Coyote Creek and the San Gabriel River, which it's contributory to, are all under the jurisdiction of Los Angeles Regional Board.

Los Angeles Regional Board determined that there were impairments along the section of Coyote Creek, and hence, the cities that discharge, even though they're within our region, are part of that TMDL. Their discharge goes into the water that's impaired.

Consequently, our MS4 permit requires the cities within our region to comply with the LA Region's TMDL for Coyote Creek. And it is not a one-way street. North of this are the cities of Claremont and Pomona. Those are within the LA Region. They're Los Angeles County cities. They discharge, eventually, to Chino Creek, which is in our region. And there are TMDLs coming up for Chino Creek that we are going to expect the LA Regional Board to write into

their permit to address our TMDLs.

It is going both ways on this. It is a tricky one because it's a political boundary between the two regions rather than a watershed boundary between the two regions.

Also some of the other TMDLs that have been adopted since 2002 include fico coliform TMDL in Newport Bay, organophosphorous pesticides for San Diego Creek and Newport Bay, and an organochlorine compounds for San Diego Creek and Newport Bay.

After we released this first draft, we received comments from US CPA. Their comments stated that while the Regional Board TMDLs for organochlorine compounds and for selenium and for some other metals had been adopted by the Regional Board, they had not yet been adopted by State Board or approved by the Office of Administrative Law or EPA. So they had not gone all the way through yet. And EPA had promulgated TMDLs already for those waters. They had already established numbers for those waters.

What was required was that those technical TMDLs be listed within our MS4 permit as water quality standards, or water quality objectives.

The second thing is they wanted -- it clearly stated that permittees must comply with TMDL waste load allocations and water column targets as water quality

objectives.

So those EPA-promulgated water column targets for metals, that you see there, were included in our second draft tentative permit. And also for the organochlorine compounds.

After those changes were made, no further changes were made in the third draft of the permit.

Comments. Most of the comments that we received -- or all of the comments we received prior to April 9th were included in your response to comments that are part of your package. We received a number of comments after April 9th, and I will address those one by one.

The first one was on April 9th, memo from Geosyntec. It was a memo in response to a memo that had been put out by Dr. Horner, who represented NRDC and had -- let's just say it was in response to his memo. It argued with some of the points made in the memo and made additional points of their own, regarding these issues.

The second was an e-mail from the County of Orange, their counsel, asking that finding J52 be changed for TMDLs. That change is actually in your errata sheet. It is change --

MS. BESWICK: Is it the map one?

MR. SMYTHE: No, it is -- Michael, which is the J52, which on the errata sheet? The finding 52, what errata

number is it? It was a reference to 40 CFR.

MR. ADACKAPARA: Finding 52, that was provided, actually, by the county counsel.

MR. SMYTHE: Right. Is it on the errata sheet?

MR. ADACKAPARA: Yeah, it is on the errata sheet.

MR. SMYTHE: Which one is it?

MR. ADACKAPARA: It's number one on the errata sheet.

MR. SMYTHE: Thank you. Sorry.

That's number one on the errata sheet. So that one was addressed.

And they also commented that the technical TMDLs, the EPA-promulgated TMDLs, should not be included in our permit. However, it is Staff's -- Staff's found state and federal regulations require implementations of EPA promulgated TMDLs within that permit.

The next letter we received was from Geosyntec on behalf of Orange County. Oh, it was in response to another NRDC memo, where it -- NRDC had stated that the report of waste discharge issued by the County of Orange does not include assessment of controls implemented during the previous seven to five years. And Geosyntec's letter stated that it had and showed evidence of that.

The next comment we received was from John Kemmerer of US CPA and NRDCA, asking for changes to the LID timeframe as to the adoption of the

permit. And concern when LID doesn't capture the full 85 percent.

It's not shone on your errata sheet, but at this time Staff is recommending the following change to items 12C1 --

MR. AMERI: What page, can you tell us?

MS. BESWICK: It is on the errata sheet.

MR. SMYTHE: This is not on the errata sheet.

MR. ADACKAPARA: Page 53.

MR. SMYTHE: Page 53 of the permit.

MS. BESWICK: Page 53. Okay.

MR. SMYTHE: So it is 12C1 and 2. So those are the changes --

MR. AMERI: One more time, please. Page 53. C what?

MR. SMYTHE: C1 and 2.

MR. AMERI: Changing the time table?

MR. SMYTHE: Right. If you take a look at that last sentence deleting --

MR. AMERI: No change to one.

MR. SMYTHE: Yeah, there's a change to one.

If you look at the screen. It is deleting the phrase that "meets the feasibility criteria established pursuant to section 12E." That's the portion being deleted from C1, being proposed to be deleted.

And on C2 --

MR. THIBEAULT: Mark, why don't you read the sentence as it will read after the change?

MR. SMYTHE: All right.

MS. MC CHESNEY: Mark, can I interrupt for a second?

MR. SMYTHE: Yes.

MS. BESWICK: Do you have spare copies, because the the people in the audience do not have the errata sheet.

MS. BESWICK: It is not the errata sheet. It is actually in the permit.

MS. MC CHESNEY: All right. Do you have spare copies?

MR. ADACKAPARA: We don't have extra copies of this is correction. It is not in the current errata sheet. It is the only item not included in the errata sheet.

MS. MC CHESNEY: Do you have extra copies of the errata sheet? Do you have copies of the errata sheet?

MR. ADACKAPARA: Yes, we do.

MR. SMYTHE: For the public?

MR. ADACKAPARA: Yeah.

MR. AMERI: Can you please read what the original language was and how it compares.

MR. SMYTHE: Yes, I will.

The final sentence in C1 will read, or proposed to read, "Priority development projects shall implement LID

principles described in this section, Section 12C."

MR. AMERI: What does that mean? I'm confused. It said met the feasibility pursuant to section --

MR. SMYTHE: Michael?

Go ahead. Would you repeat that?

MR. AMERI: You said that the last sentence had changed. "Priority development projects" -- what? I can't read it on the screen.

MR. ADACKAPARA: Essentially, what it is saying --

MR. AMERI: What are we changing to what?

MS. BESWICK: You're taking out the "meet the feasibility criteria established pursuant to Section 12E." That phrase would potentially come out.

MR. AMERI: Okay.

MR. RUH: Just priority development projects shall employee LID principles in this section, Section 12C.

MR. AMERI: Okay. I got it now.

MR. SMYTHE: And for number two, the second sentence will read -- there will be -- okay. Maybe I should just read the whole thing.

"The permittees shall reflect in the WQMP and otherwise require that each priority development project infiltrate, harvest and reuse, or evapotranspire the 85th percentile storm event, capture design volume as specified in section 12B4A1 above."

We're inserting, "Projects that do not comply with this requirement shall meet the requirements established in section 12E for alternative or in lieu compliance. Any portion of these design capture volume, or this design capture volume, that's not infiltrated, harvest and reused, evapotranspirated, or captured on site by LID BMPs shall be treated and discharged using LID or conventional treatment BMPs or mitigated as set forth in 12C7 below."

MS. BESWICK: Let's keep that at hand. Let's keep that one so it's easy to pull back up.

MR. AMERI: I have questions on that.

MS. BESWICK: Absolutely.

MR. SMYTHE: Okay. Shall we go on to the rest?

MS. BESWICK: Yeah.

MR. SMYTHE: All right.

Now, that 12C1 and 12C2 were in consideration of comments made by NRDC and US EPA. All right.

So shifting, we received comments from Latham & Watkins that LID should include the word "filter." And the regional board staff has included the biofilter and believes that if properly designed and maintained biofilter will be appropriate. It may not be as effective as evapotranspiration or infiltration BMPs. And we'll address this through the model WQMB approval process in

12 -- identified in 12E.

And CIWQ -- the California, or the Construction Industry Coalition on Water Quality, I believe it is, also said LID should include filters. And, as I stated, it does include biofilter now.

Pronto Wash had provided previous comments and additional comments requesting additional controls on mobile washers. Regional board staff feel that the prohibition on unauthorized non-storm water discharges as well as the language in 67B that requires cities in the county to have authority to prohibit mobile wash discharges sufficiently address this concern.

Orange County Water District provided comments asking that the five-foot separation, vertical separation between seasonal high ground water and infiltration galleries be increased back up to the ten-foot. At this point, Staff is purposing the five-foot.

Orange County Coast Keeper and the County of Orange had requested that the watershed master planning process be changed from a conditional to a requirement. That staff has accepted. And it is item 9 in your errata sheet. And that shows the replacement language.

And the final comment we received was from the County of Riverside. And the thrust of their comments, there were some recommendations to findings which have

already been made. The primary portion of their comments were, there were several sections they did not want incorporated into their MS4 permit, which will be addressed when their MS4 permit comes up.

One of the erratas also was to include the maps, which I believe is included in here by reference -- yes. Item 12. And those are the maps, the city map and watershed map that will be included in the permit.

Conclusion. Staff recommends adoption of the R820090030 with the changes purposed in the errata sheet and presented in this presentation.

Staff's prepped to answer questions.

MS. BESWICK: And we may have some for you.

Gerry, did you want --

MR. THIBEAULT: Just to finally, hopefully, clarify that one issue in the errata sheet.

Are there any other changes other than the two items that were not included in the errata?

MR. ADACKAPARA: No. We don't have any other changes at this point.

MR. THIBEAULT: Okay. We can leave that one screen up there, and everyone can see very clearly what the change is, and can copy it down or -- so let's go ahead and let's leave that up there. This is the only change that was not included in the errata sheets.

MS. BESWICK: Got it.

Are there questions? Any board members have questions of Mark before we open the public hearing?

No?

Yes, Steve.

MR. PON TELL: I guess the question is one on the process. Should I -- if I do have questions throughout the permit, just wait until after the public hearing and ask all the questions at the same time? Will that be an easier process?

MS. BESWICK: It might be because we may find that some of these come up during the course of the discussion. And I think we should feel free to ask people who are making comments, questions -- if questions arise during their presentation.

All right. So with that in mind, we'll open the public hearing.

Thank you, Mark.

I have a great number of cards. And, also, I think that there's a potential for a group, if you will, presentation. So when we get to that, we'll see if we can comment.

What I'd like to do first -- I've had a request. Mayor pro tem of the city of Lake Forest, Peter Herzog. And Peter needs to be somewhere else. I'm going to ask him

if he would like to make comment first.

MR. HERZOG: Thank you very much. I wasn't expecting a comment that quick. Thank you very much.

My name is Peter Herzog. I'm the mayor pro tem in the City of Lake Forest. And I'm glad to be here before the members of the Board.

Obviously, we certainly appreciate all the efforts of your staff and yourselves in working with the permittees and the cities of Orange County and, quite frankly, everyone who's very heavily involved in the committee enforcement of the implementation aspect.

I submit that the proposed permit before you -- obviously, the discussion this morning has changed on the screen, but otherwise -- that this purposed permit does add a great deal of progress to what has already occurred previously. So it is a step forward. It is moving forward in looking at the overall perspective of the watersheds. That is what we're all interested in.

And quite frankly, from my standpoint, I think your staff and this board exceeded what is required. And that's an option you have. So that you're well within the bounds of the parameters.

And I'll be very frank, there are various portions that I don't like, and we would like to see deleted. You know, just be frank, that I do think, in light

of all the work that has been done, that today's the day. It is time to move forward and start getting back to moving forward with progressing with the quality of the basin.

Now, there are changes. You're aware of the economic goings on. And cities are not immune from that. And unfortunately, even in the current budget cycle, cities have cut 10 to 15 percent from the actual spending. And had that be -- now, in the current budget cycle. And, unfortunately, it doesn't look any better. It looks worse.

In this 09/10 budget cycle, you're going to see further decrease in budget. And, frankly, what we see over the life of the permit, that probably the financial recourses of the city's not going to improve that greatly.

We want to really focus on projects that will actually go toward the health of the watershed. And that requires maximum flexibility so all parties come together and move forward with that goal.

The reasons I point that out again, is I think that the need for flexibility -- I think it's important for this Board to actually expand the best management practices to provide the cities and the developers with as much flexibility to meet the overall check list. Again, the big picture is the health of the watershed. That's what we're trying to achieve, and the water quality involved in that.

So let's create as much flexibility as possible,

so we can get there. Restricting it and pulling back or adding additional problematic issues is not really looking at the ultimate goal. And I think it is important to keep that heavily in mind.

And that's important with regards to the soil retention of water and requiring homeowners and businesses to mechanically infiltrate.

As the staff pointed out, there are certain areas where nature has made that extremely difficult. At my neck of the woods, down at the south end of our district, we live with that every day. Our area is not really all that excited or compatible with that kind of infiltration. There may be other areas that are, but our area certainly is not.

And that, again, goes to the flexibility aspect that's extremely important so that we can continue to do the work that Lake Forest and other cities down in my area have done to try to improve the watershed.

I respectfully submit that there has been a great deal of work done. Today's the time to make a decision. Not tomorrow. Not next month. It is time to move forward. The cities look forward to working with your staff and the Board. And looking to the health of the watershed.

And, again, I think extremely important, particularly when the economy we're in and we're going to be

facing over the life of the permit that the maximum flexibility be provided not only to the developing community, but to the cities as well who are the ones -- particularly in Orange County, where we essentially cover all of the geography of Orange County, over 90 percent of that we're ultimately responsible.

So I appreciate your time, appreciate your efforts. And thank you for this opportunity.

MS. BESWICK: Thank you.

Richard Boon, you want to come up?

And, Richard, it is my understanding -- you can help me with this. You might have a presentation that is going to be comprehensive as to the counts.

MR. BOON: That's not correct. I had some written remarks to present verbally only.

For the benefit of the room, Richard Boon with the County of Orange. I'm responsible for the countywide elements of the Orange County stormwater program.

MS. BESWICK: You're speaking on behalf of yourself at this point?

MR. BOON: I think -- I believe -- I'm certainly speaking for the county.

MS. BESWICK: Let me tell you why I'm confused. I have a note, the permittees 20- or 30-minute time slot for the presentation. And my impression was it was in part for

the counties and cities, that this was part of your presentation.

MR. BOON: No, we didn't ask for that.

MS. BESWICK: Okay. And you asked for 15 minutes.

MR. BOON: I was anticipating ten minutes. I speak on behalf of the County of Orange. I also represent the cities in the Stormwater Project.

MS. BESWICK: Thank you.

MR. BOON: I'm not going to start on my prepared remarks. I think -- I respectfully ask for an opportunity for a recess to think very carefully about the language that has been put up here. There's one defining paragraph in this program. And it is section C2, the one before you.

The red line version you have there, regrettably, does not reflect the change that's been made to the full draft permit. There's a word that has been struck, that's not shown as struck on the overhead. And I think, for all the parties in the room, we need an opportunity to think very, very carefully about what is being proposed here, and what is not provided on the errata sheet to us.

MS. BESWICK: Right. What word are you telling us -- which word, so we're on the same --

MR. BOON: Yeah, the word "capture" has gone. And it is not shown as a deletion. And that's a key word.

MS. BESWICK: In paragraph two?

MR. BOON: In paragraph two.

MR. ADACKAPARA: I think "capture" -- it is a mistake, actually.

The version we put over there did not -- "capture" should not be there. That's in the paragraph of the permit.

MR. BOON: But this is the defining paragraph that the force and permit for Orange County. We need to be absolutely clear on what we're all considering.

MS. BESWICK: So let's just renew it.

If you had even -- you're talking about after evapotranspire; right? It should say, "Or capture," is not there. And Mike's saying it should be there?

MR. BOON: Yes.

MS. BESWICK: It should say, "Or capture," still.

MR. THIBEAULT: So Mark Smythe, is this correct as it's shown on the screen?

MR. SMYTHE: No. That's not what we're proposing.

MR. THIBEAULT: What is it you're proposing?

MR. SMYTHE: Right now, Michael's changing it. It should still be in there.

MS. BESWICK: It should still say, "Or capture the 85th percentile."

Thank you for catching that. That's a big difference.

MR. THIBEAULT: And this is now as staff proposed it?

MR. SMYTHE: I will look through it now, but, yes.

MR. BOON: I still think we would benefit from having an opportunity to think very carefully about what is being proposed here. This is truly the defining paragraph of the permit.

MS. BESWICK: I think we'll give you that opportunity. We'll take the subsequent speaker card. Some of them that are different aspects of the permit. So I'll keep your card. All right?

MR. BOON: Okay.

MS. BESWICK: All right. And then when we get to you, you can give me a sign that you're ready to talk about -- or come back to you as we get through the speakers. Is that going to work?

MR. BOON: Thank you very much.

MS. BESWICK: Thank you.

Dr. Walrod, are you still with us?

MR. RECUPERO: Just one moment.

MS. BESWICK: You had mentioned you needed to leave. I hope I'm not catching you as you're walking out the door.

MR. RECUPERO: Thank you, Madam Chair.

My name is Michael Recupero. I'm not Dr. Walrod. He did have to leave. I don't know if you're going to take a recess now.

MS. BESWICK: I don't intend to take a recess, unless there's a reason that people can't converse with each other while we are doing this.

MR. RECUPERO: No.

My name is Michael Recupero. I'm representing the Orange County Business Council this morning. We appreciate the opportunity of presenting this. And appreciate all the work you've done with the stakeholders.

I think that the primary concern of the Business Council relates to -- if we could get pushed to the end that would be appreciated.

MS. BESWICK: Okay. Let me try it this way. Is there anyone in the room that would like to speak to us now? I'm going to invite you up and let you come back later.

MR. RECUPERO: Madam Chair, I think the 11th hour language has changed a lot of dynamics. I think the big concern -- I agree with the County of Orange, if I could have a few minutes to look at it, that would be appreciated.

MS. BESWICK: Go right ahead.

John, did you want to speak?

MR. KEMMERER: Yeah.

MS. BESWICK: Great.

MR. KEMMERER: Good morning, Madam Chair and board members. I'm John Kemmerer with the Environmental Protection Agency. I was out here in November

at the workshop on this. Nice to see you again. And introduce myself. I'm an Associate Director of the Water Division in EPA Region 9. I'm part of a small group working out of Southern California.

I'm glad to be here today. In November I provided brief remarks in support of this permit. And, again, today, to express EPA strong support for the work Staff has done on this program.

To reiterate some of the things I mentioned back in November. We recognize that controlling stormwater is one of the more challenging aspects of the Clean Water Act. As a nation, we need to improve the management of stormwater and better control the impacts towards that end.

We believe the revised permits, like the one you're considering today, need to take advantage of the previous permit. You're considering the fourth round here today. It is important to take advantage of what we learned over the last 20 years.

There was mention of the audits your staff has done here in Orange County. In addition, EPA Region 9 has done 59 audits in our region. And we've concluded -- one of our main conclusion from the audits is these permits need to include more quantifiable requirements to ensure that we're following these respected from stormwater discharges.

Really, across the country, the permits often have fairly vague, frankly, requirements in them, and we really think that the work your staff has done here really has addressed the historic problems with stormwater permits and are including more focused and measurable requirements so everybody knows what is required and we can ensure that the water quality is protected.

When I spoke in November, I highlighted two specific aspect of the permit. And those were the LID provisions and the incorporation of maximum daily loads. And I would like to get into that today.

Back in November I expressed support for what was then in the permit, which was the 5 percent effective impervious area requirement for LID. The version you have before you today has been revised.

And I want to make sure you realize we are fully supportive of the revision that's been done here in the design capture volume approach for the measurable implementation of LID. We think that your staff and stakeholders here really made some admirable efforts to get together and come up with this approach. And we think its a very good one and meets our objectives to have measurable LID requirements in permits.

We also made some suggestions back in February about the in lieu programs. Everybody recognizes that

implementation of LID is not going to be something that's practical in every single project. But if a development cannot implement LID, there still needs to be some efforts taken to protect water quality.

We believe what you've come up with and what staff came up with as an alternative approach is really important and very meaningful and realistic approach for addressing those situations where that's impracticable.

I do want to say, since this is staring me in the face, this language up here, that this is really critical to our support of the LID provisions of the permit.

Frankly, we were supportive of the March 25th version of the permit. And felt it had LID provisions. We saw that there were ways of improving it. And I think the best intensions were made in trying to improve the last version of the permit. But when the April 10th version came out, there were these two sections in particular that became very problematic for us.

And we feel like these changes up there -- and I apologize for missing the word "capture," that was totally my fault. I believe these changes need to be made.

I'll mention -- this probably has taken a little bit more time than I claim --

MS. BESWICK: That's all right. This is very important. I think this is the most -- discussion we're having.

MS. MC CHESNEY: Maybe -- because the people out there want to hear.

MS. BESWICK: I was thinking the same thing.

MS. MC CHESNEY: They may want to come in and you can explain your --

MS. BESWICK: Why don't you do that. Let's just take a breath.

MR. THIBEAULT: Larry's going out there.

MS. BESWICK: And asking them to come back in. I think this is awful important to them.

You may want to back up and start over about the part where it was you that didn't get the word in there.

We've asked everyone to come back into the room because I think there's some enlightenment to be offered here. Mr. Kemmerer's comment from the EPA. So I'm going to ask him to revisit what he was just telling us.

MR. KEMMERER: I was -- as I was mentioning, I'm really impressed with what's been done on the permit with the LID. EPA's fully supportive of this 85 percentile capture volume rather than the 5 percent EIA. We believe --

MS. MC CHESNEY: Can you speak into the mic?

MR. KEMMERER: But we do -- and actually, the way the LID provisions were incorporated into the March 25th version of the permit was acceptable to us. But we had major concerns with how -- the last minute changes that were made

in the April 10th version which led us to suggest the changes here.

And I take full responsibility for missing the word "capture" in item number 2. I'm sorry about that.

But let me tell you what our rationale is for this. In Section Number 1 of this -- on the screen here, basically, what was added to the permit for the April 10th version was some language that basically said if -- those projects that meet the feasibility criteria in that alternative section would need to comply with the LID provision of this program.

Like I mentioned earlier, that we really are supportive of that alternative section. I believe that's a critical part of the permit. We don't believe -- we believe that this language that was inserted on the April 10th version puts the cart before the horse in how the feasibility analysis is done.

Right now, with that language in the April 10th version, the LID -- the numeric LID provision, which we applaud in the permit, would not apply until the feasibility criteria were approved by the EO. And although all of us here today, I'm sure, hope that the feasibility criteria can be developed in a timely manner and approved, we see the down side of this being that there's a possibility that if the development of these feasibility criteria drag out and

aren't prepared in a timely manner, or are not approved in a timely manner, the numeric requirements, the numeric LID requirements of this program will not apply.

So our view, if you delete that line there that's on the screen, all of the provisions in section 12E still apply. You still have that alternative available and, ideally, again, it will be done in a timely manner and we will move forward.

We've seen, in these permits, things don't always go the way you like and take longer than you expect. And we don't feel it's worth the risk of including that language in there and having the possibility that the feasibility criteria could be a disputed item and drag out over time. And then those revisions in Section 2 would not apply.

MS. BESWICK: The concern is primarily the timeframe for the feasibility criteria. That is going to be developed by the executive officer.

MR. KEMMERER: It's going to be developed by the permittees and approved by the executive officer.

MS. BESWICK: Do you want to comment on it?

MR. THIBEAULT: If I could. It is relevant to the context here.

The permittees are required to provide this feasibility study within 12 months. Failure to do that --

and I know things drag on, although we never had it happen here, things can. If they don't submit that within the 12 months, they are in violation of the permit and subject to enforcement, including monetary penalty.

It is not like if people don't feel like getting it within 12 months it is okay. It is an enforceable permit requirement.

And also, with all due respect, the alternative, without these language changes, still required LID principles to be considered for all development elsewhere in the permit. It is not like there was a free ride. Although EPA -- and I suspect others -- wanted it specifically identified with this language change. Even without this language change, there's still a requirement for new development to be -- to have LID principles considered, even without the feasible study.

MR. KEMMERER: I guess I have two quick responses to that.

I agree with you, Gerry, that the feasibility study needs to be submitted. It would be a violation of the permit if they don't submit it within 12 months. It is not in place until it is approved. You could get an inadequate set of criteria for the feasibility determinations and want to make sure it is scientifically sound and that you are comfortable with those criteria.

And I could see you providing some comments on the feasibility study criteria. I could see this going back and forth for a while. It doesn't seem to me, or us at EPA, that there's any reason to include this in here because you are going to have these requirements in the permit. And, again, you're unnecessarily leaving a door open if there's a delay if you go back and forth on that.

On the second point, I agree there's other LID provisions in here. Our support of this permit is really predicated on having the numeric and measurable requirements. As I mentioned up front, we supported the 5 percent EIA approach. We support the approach that all the stakeholders on this 85th percentile, controlling the 85 percentile.

It is my understanding -- you can correct me if I'm wrong -- that that 85th percentile requirement will not kick in until you approved the feasibility criteria under the permit. That's why we feel that language in Section 1 should be removed.

So why don't I go on and explain the second one. The second one, actually, I thought was really a great example to me. I've kind of -- good intentions sometimes don't work out the way you like.

I think the intent here was to clarify the language. I think this was actually overall by moving --

this language was further down in section 12C before. It was moved up and made prominent. And I think it was a good idea. The problem is with the language that's in there now. It leaves -- basically, equates the use of LID tools and the alternative section, 12E requirements, and the use of conventional BMPs, conventional treatment control BMPs.

You could read the language before that change was made and say you meet the requirements of this LID section of the permit by using treatment control BMPs only. And I know that's not the intent of the permit. And I know -- in one of the stakeholder meetings, it is my belief it is not the intent of anyone here.

I think the language as is is, frankly, a little messy. And it needs to be clarified to make it clear that you need -- that the permit requires compliance with either the controlling the design capture volume or complying with that alternative section, 12E. If you don't do those two things, you're not complying with the permit.

The way the permit was worded in April, the implication was there that you could also comply with the permit by using conventional treatment BMPs.

That's the logic for the input on these two sections of the permit. And it is -- my belief is, and I was trying to talk, working with Mike on this -- I believe this language change makes it clear, you know, if you're

going to comply with the permit, these are the two ways of doing it, using controlling the design storm volume or meeting the alternatives in section 12E.

So I'm sure there's other ways of dealing with this and other languages to be made. This is what I came up with as I thought was the cleanest way of not having to change a bunch of different sections in the permit.

So why don't I finish -- so, again, on the LID, I think you have an opportunity to improve a rarely effective permit here on requiring LID. And I think it is going to result in some major improvements in water quality in this area.

The other aspect of the permit that was mentioned in the opening remarks here that we commented on was the TMDL section of the permit. We provided a lot of comments on that. And we -- we're very encouraged by the way the comments were addressed by the permit. We made suggestions that the permit language -- make it clear how the waste load allocation's assigned to the admissible stormwater was addressed by the permit.

And going back to my first point about the need for clear measurable requirements, we believe TMDLs are a perfect example of how we really need clear requirements in these permits. We've been implementing stormwater permits across the region. And lots of permits that have vague

language about incorporation of TMDLs that are not working.

And this language that your staff put into the permit is very clear. It makes -- gives everyone the understanding what needs to be gone to meet the TMDL waste load allocation.

And in our view this will enable the Board to ensure that the pollutant discharges from municipal stormwater to impaired waters in this region are being appropriately controlled with the ultimate objective of obtaining the water quality standards.

We don't agree with some of the comments made about -- the legal comment about not being able to incorporate a technical TMDL. That's not at all our legal view. We disagree with some of the comments that have been made about relying on more of an iterative BMP approach. We feel like that's the way things have been done in the past and have not worked.

I really encourage you to adopt the permit.

I want to end by just saying, your staff has done just incredible work bringing this to you today. We've seen across the region how long it takes. The time frames they worked under are just incredible.

I want to commend Mike Adackapara on his patience and tireless efforts.

And I'm glad to answer any other questions.

MS. BESWICK: If there are no questions, I think it will be appropriate after this input for us to take a break.

So we're going to break until 10:45.

(Pause in the proceedings)

MS. BESWICK: Now, you know what I'd really like to do is I'd like to go back and ask if either of the earlier speakers that came up and wanted time out, is at this point interested in coming back up or proceed with other speakers.

Richard, what would you like to do?

MR. BOON: I think if -- I just need five more minutes. So to proceed with other speakers.

MS. BESWICK: That works for me.

I asked earlier if there were other speakers who wanted to be taken at this time. I'm willing to do that now.

Anyone else want to -- do you need another minute, too?

And while he's coming forward, did you want to make any comments?

MR. THIBEAULT: Is John still here?

MS. BESWICK: Is John Kemmerer still here? He's sitting in the corner.

MR. THIBEAULT: Excuse me, Jason, before you get started. It seems to me that -- and I should point out that

this is why we don't like to argue these things in front of the Board. This is why we look to do it in stakeholder sessions. Because they are complicated things that are just not best done in this kind of setting.

But in this case, it seems like a huge gulf between two opposing sides here. When really what it is is a 12-month plus approval process for LID consideration.

And it is not as though the LID process would not come in to play if John's language is not adopted. It is that it would be implemented 12 months, plus whatever time it takes for approval after adoption of the permit.

Now, in that interim time, the conventional process is still proceed. There are susump language in the permit that requires the 85th percentile treatment through structural BMPs, in the interim, anyway, it is not like the existing process has stopped. The difference is LID would be considered for new projects, but it would not be a required captured volume.

The same capture volume would still be required under structural BMPs. 12 months, plus approval. That's the difference in the language.

Now, also with the language that's proposed here, in all fairness, this requires LID principles to be kicked off now. But it doesn't mean that anybody goes into non-compliance this afternoon if this permit's adopted. The

process requires that LID principles be considered for new developments, be considered in the new process.

So it is a 12-month, plus approval time, difference in approach.

A lot of energy is going into this difference here this morning. It is really not that big of a difference.

MS. BESWICK: Okay. Jason, good morning.

MR. UHLEY: Thank you very much.

My name is Jason Uhley. I'm with the Riverside County Flood Control and Water Conservation District. I'm providing my comments today on behalf of the Riverside County MS4 program.

We would like to start by thanking the staff and the Board for continuing to work directly with the permittees, the Orange County permittees and the stakeholders to develop a permit that's objective and really considers the issues that all the different stakeholders and committees raised.

I think the statement I'm about to make is preaching to the choir. But this was an issue that was important to the city manager, management steering committee. They asked me to come here today and ask that, similar to the process that Orange County went through, that our permit be based on our 2002 permit. That to be

specific to our water quality issues. That we would be afforded the same opportunity for input and comment on our permit that Orange County has been provided.

The main concern is it's very typical for the permits to be written in stone and cut and paste to different areas. We want to ask that the Board consider that and work with us off the 2002 permit.

Thank you.

MS. BESWICK: Thank you. All right.

MR. BOON: Okay. We'll hit the reset button.

MS. BESWICK: Okay. Great. I hear the printer at work, if that helps any.

MR. BOON: Good morning. My name is Richard Boon. I'm with the County of Orange. And I manage the county-wide elements of the stormwater program.

As an initial matter, I want to emphasize our overall support for the adoption of this permit. We do have two areas of concern that I will get to.

My comments today will focus on the permit re-issuance process today. Highlight the technical changes presented by this transformative fourth term provision. Bring to your attention, as I said, was one, but now two areas of concern. And include with the statement with what the permittees think is the next and final step in the permit process.

For the permittees, this process, as Mark already laid down in his presentation, started in early 2006 with preparation of our report of waste discharge, more commonly known as the ROWD. This document presented a comprehensive assessment of the Orange County Stormwater Program which was compiled using a multiple lines of evidence approach.

We included your own audit findings, facilitated permittee workshops, the cast work effectiveness assessment guidance, and a comprehensive analysis of all available environmental quality and program performance data.

Now, ROWD identified many positive program outcomes, proposed a few changes, and included commitments to further develop the programing key areas, including a number of significant source control initiatives and development and commitment to a watershed based approach to water quality planning to complement the countywide program.

The ROWD and its recommendations were the subject of public workshops as well as stakeholder consultation meetings through the second half of 2006 and early part 2007. The staff acknowledges their receipt of this document. And it is clearly informed on the development of the tentative order.

In November 2008, we received the first draft

of the order before us. In response to this document, we readily acknowledged that your staff accepted, and indeed, incorporate many of your specific recommendations. However, the response also pointed out the permit additionally presented many new requirements.

I think were intended to ensure greater permittee accountability, extend local regulatory oversight of our community, established a new performance standard for land development, and also incorporate additional total maximum daily loads.

So the significant technical challenges. While the opportunity to engage with staff and discuss the draft order has resolved many of our concerns, and we appreciate the many stakeholder meetings. I think there were five or six of those as well as stakeholder sub working group meetings, there were another five or six of those.

There will certainly be significant challenges ahead for the permittees in developing and implementing programs to fulfill the requirements of the transformative fourth term permit.

At a time of unprecedented fiscal constraint, a number of these changes need to be explicitly recognized. The order before you significantly increases the administrative burden of the Orange County Stormwater Program by establishing additional reporting requirements

and extending our local regulatory reached.

The universe of commercial facilities, as Mark has noted, subject to inspection, is broadened by a significant number of new categories.

Mobile businesses are specifically targeted. And development and redevelopment become subject of verification of site practices for water quality protection over the lifetime of each project.

For example, we currently inspect an inventory of over 30,000 commercial and industrial facilities. For three of our largest cities alone, a broadened universe of commercial sites would entail an additional 1100 site inspections each year.

We welcome the inclusion in the draft order for alternative verification mechanisms, that Mark pointed out, to continue to work with the staff to examine how we may better prioritize or target our scarce inspection resources and also to refine the reporting processes. Nonetheless, these new provisions will require the allocations of additional resources to maintain compliance.

The land development provision certainly represents the greatest area of challenge to the permittees. The 85th percentile storm event in Orange County deposits 17.3 million gallons of rain water on every square mile of landscape. Historically, we sought to convey most of the

rain water directly to the ocean.

The order seeks to have us fundamentally rethink the urban storm management. Such that in 12 months we will have to deliver to you a model planning approval process for implementation across North Orange County that's intended to deliver landscapes capable of substantially absorbing this volume of rain water in every square mile in every storm event. It is, indeed, a transformative fourth term permit.

Certainly, we see on embracing the regulatory momentum behind low impact development approaches for stormwater management. We also recognize that the overarching water act goal and the need for more sustainable patterns of urban development require us to address the hydrologic as well as water chemistry impacts of stormwater runoff.

However, at the same time we see concerns being communicated about ground water protection from the Orange County Water District and redevelopment challenges. Also, we need to look very carefully at this desire to see the infiltration of large volumes of surface waters at rates far in excess of a natural landscape. Where up to 95 percent of rain volume would be expected to be lost back to the atmosphere through evapotranspiration. And also infiltration in the landscape underlined in much of the

Central Orange County area by shallow perched aquifers and areas of subsurface contamination.

We also have concerns about the long term viability of a disaggregated lot-by-lot approach for stormwater management.

While we believe that the land development section of the permit poses very significant challenges for the permittees, we believe the draft order sets an appropriate approach for beginning the shift from treat-and-release to low impact development approaches and for introducing new requirements for hydromodification.

It also appropriately obligates the permittees to development the detail of this program. It will be a hugely challenging undertaking, and the permittees may very well be back before you within the period of development this program element to report progress in this direction.

So that takes me to the two areas of concern. On the TMDL issue, we entirely agree that available waste load allocations should be implemented through an iterative BMP process. We do, however, need to indicate for the record a disagreement with the inclusion of technical TMDLs.

Only TMDLs with implementation plans adopted into the Santa Ana Basin Plan are enforceable and thus appropriately implemented through an MDS permit.

So the issue that has arisen this morning, I

think we have a lot of concern about the due process aspect of seeing language presented to us that was not part of the errata sheet in the first cut. And this is no reflection on the staff. We're all human. It wasn't actually correctly written.

With regard to the first change that's being suggested by US CPA, I think if there's a concern that these criteria ultimately are not forthcoming and there are projects that continue to be approved under the existing regime in the interim. I think we can better get to the concern by establishing a date, 18 months from now, whereby these default conditions would kick in, if we haven't gone to an approval of the model program. Rather than saying they apply immediately in the interim.

That said, I think the preference would be for that language to be struck in the first paragraph. But we offer an alternative for that particular instance.

And then with regard to the change in C2. There's some key words in there that have tremendous significance to everyone in the room. And with your permission, I would like to ask County's environmental legal counsel to make some clarifying remarks on that.

UNIDENTIFIED SPEAKER: Good morning, Ms. Beswick, members of the Board.

So this shows you you shouldn't come with

prepared remarks because everything is on the fly here.

So following up on Richard's comment on C2, and just generally these changes in section C. You know, I'm sure for members of the Board and, you know, for most of the general public, these -- what appear to be minor changes actually, potentially, have a fairly significant impact on everybody, all the stakeholders, everybody interested in this stuff.

It is very difficult, on the fly, to know exactly what those implications mean. And so that's why everyone's struggling with how to respond to the changes when it is not quite understood what the intent of the changes were -- and not withstanding the EPA's attempt for clarification -- what the effect is going to be.

I think -- I believe it is our understanding that EPA's proposed change to C2 would essentially require that LID principles, consistent with EPA's definition of LID, be required for this 85th percentile storm event, the design capture volume.

Again, it's EPA's proposed change. It is our understanding this provision, C2, would be interpreted consistent with EPA's definition of the principles of LID.

And that's the clarification and the comment that we wanted to make at this point.

Richard, did you want to continue or -- and

I'll just add one other point. On the striking the language in the first C1. You know, it does appear to be really a timing issue, as the executive officer was indicating.

I think it is a practical matter. I'm not sure if the feasibility criteria are meant to determine when the LID principles are feasible, it seem -- it is hard to understand how projects are going to start implementing LID principles before the feasibility analysis is done.

We understand the concern. We don't want that process to drag on too long. It seems to me, makes more sense to figure out a way -- if EPA's concern is that process, that back and forth process is going to take too long. Let's figure out a way to cap that rather than taking away the feasibility criteria.

How do projects know whether the LID principles are feasible or not if you don't have a feasibility criteria?

I think, again, as a practical matter, striking that language from C1 is not the way to do it. It would be better to -- again, as the executive officer was suggesting -- figure out a way how to make sure that process doesn't drag on forever.

And, again, these are fairly significant changes. You know, let's not get caught up in the fact that rather than them implementing in 12 months, they might be

16 months or 18 months or 6 months, you know. Let's work on the time rather than striking the criteria all together.

And I do have additional comments, but I believe -- well, following also on Richard's comment on the TMDL issue. It is -- there's a lot of tension, as you might be aware, between MS4 permits and TMDLs. And the tension arises from the standard that it is applicable to the MS4 permits. You're all familiar at this point with the maximum extent practical standards. That's the standard applicable to MS4 permits.

There's -- it is not a clear nexus between MS4 permits and TMDL implementation. But what is clear, under state law, under California, before TMDLs were enforceable, it must be incorporated into the appropriate basin plan. So in this case the Santa Ana Basin Plan.

You have to amended the basin plan in accordance with the state law. That includes getting state board approval, OAL approval, and ultimately EPA approval. If the TMDLs -- again, according to state law -- are not incorporated into the base plan, they have no legal standing, they are not enforceable by the regional board.

The tentative order in section 18 -- I think it is 18B. Yes. 18B has a whole section on the technical TMDLs.

Technical TMDLs are TMDLs that don't have an

implementation plan. Under state law, TMDLs are not enforceable until it has an implementation plan. And these technical TMDLs don't have an implementation plan, they're not enforceable.

It is not appropriate to try to implement them through an MS4 permit. They're not enforceable. Until they're enforceable, they shouldn't be implemented through a MS4 plan.

And, finally, I want to touch on the Coyote Creek TMDL. That's rather unique. The Los Angeles Regional Board came up with a waste load allocation for Coyote Creek.

There's a portion of Coyote Creek that's impaired. The portion of Coyote Creek that runs through Region 8 is not listed as impaired. TMDLs are applicable to water quality segments, water segments.

So the segment of Coyote Creek that runs through the Santa Ana Region has not been listed as impaired. So it is fine for the Los Angeles Regional Board to say, "Sources upstream are contributing to the downstream segment."

That's fine. That's happened in other places. San Francisco Regional Bay area is dealing with similar issues.

What would be appropriate for them to do is

come up with a waste load allocation that they think would help with their segment for the Santa Ana segment.

But then the next step that has to happen, rather than adopting that into an MS4 permit, the Santa Ana Board has to go through the process of listing their segment as impaired and developing their own TMDL for that segment.

That's the final step that has to happen. You can't short circuit it by relying on the waste load allocation developed from a sister region. This region has to do it itself. Implement it into its basin plan. And ideally, that's going to be consistent with the Los Angeles Board's basing plan. And everyone's happy.

You can't short circuit the process. You need to go through the process of listing the Coyote Creek segment in Santa Ana Region as impaired, develop TMDLs, and waste load allocations, and implementing those through your own basin plan.

I think that basically touches on the issues that have arisen so far. But maybe we'll have additional issues coming up throughout the day. I ask for time for clarification later on, unless there are any questions.

MR. THIBEAULT: May we respond?

MS. BESWICK: If you want to make a comment, you may.

MR. THIBEAULT: There are a couple of things.

One, with respect to paragraph C1 and C2, and, you know, and the difference that we've talked about, 18 months or whatever.

The fact that there are no feasibility criteria yet and take time period to develop them, doesn't mean that LID approach still can't be taken. What it means is that for individual projects there would have to be engineering evaluation and analysis.

And then if it turns out, as a result of that analysis, that the engineering professional feels that LID principles are inappropriate, then there's a section in the permit that we've all read, Section 7: "If site conditions do not permit infiltration, harvesting and reuse, and/or evapotranspiration of the design capture volume at the project's site as close to the source as possible, the alternative discussed below should be considered and credits in lieu programs may be implemented," so -- "may be considered." And then it goes on to Section 9.

So there's an off-ramp. If LID is feasible, as a result of the individual project evaluation, then you implement it. If it is not feasible, then the permit provides the alternative that can be taken to address the fact that certain areas are -- certain projects might be infeasible for implementation for LID principles.

MS. BESWICK: Thank you.

Any other questions or comments for the speaker?

If not, I'd like to move along, if we could.

Richard, you have more?

MR. BOON: No, I'm finished.

MS. BESWICK: Thank you.

I'm going to ask Paul Singarela to come forward now. And Paul will be followed by Mark Grey.

If people want to, again, get ready to speak.

And followed by Eric Strecker.

MR. SINGARELA: Good morning, Madam Chair, members of the Board, Executive Officer Thibeault.

Paul Singarela here this morning on behalf of the Construction Industry, Coalition for Water Quality.

I want to say I was a participant in the process that the executive officer described, went on for about four months, a number of those meetings. It was very good faith, earnest process. Everybody really participated productively. And we all learned a lot about the terms. What LID means. What EIA may or may not mean.

And here we are today. I think the process has run its course, and there was fruits of it.

We're adjusting to a permit that's in flux. And that's always very difficult.

I came here to talk about one permit. And I'm

going to have to address a different kind of permit here this morning. So bear with me. I'm going to have to make two presentations. I'm going to go as quickly as I can through this.

I think on this page, here, it is a very important page with C1 and C2. I understand that US CPA's overarching concern is simply to make sure that conventional BMPs, you know, putting in trash interceptors in an existing catch basin or something like that, are not elevated to the same level as the low impact PMBs, what we've all been calling LID BMPs.

We understand that. We have no intent of trying to use a trash interceptor struck into an existing catch basin as a way to comply with these new LID requirements. We agree with EPA on that.

I also understand that EPA would not stand in the way if this Board wanted to recognize the broader conception of LID that we're asking you to take under serious consideration. And that broader conception LID simply introduces, in addition to the onsite, keep it onsite, retention BMPs, simply introduces what we call "biotreatment." Which, in essence, many of you are familiar with the IRWD.

Biotreatment is natural treatment. Running stormwater through some vegetative system that allows some

runoff to flow offsite.

Our understanding is EPA is fine if this agency and this staff get behind biotreatment and elevate it to the bask of LID BMPs that are available. I think there's a question over whether you're doing that. It is a significant question.

One way to get at that issue would be in C2, the first sentence, in addition or in replacement of "capture" to substitute the word "biotreatment."

And understand why we're focusing on the first sentence of C2 that's perhaps the -- or one of the few penultimate sentences in this permit. And we very much need to know what it means. And right now the BMP options, you can read them, are infiltrate, that's keep it onsite; harvest and reuse, that's keep it onsite -- that's rain barrels and cisterns; evapotranspire, that's keep it onsite and make it disappear -- I'm not quite sure how that happens -- or capture.

Capture, kind of ironically, seems to be the only vehicle through which a new development is going to be allowed to have runoff. But it is an ambiguous term that calls for some articulation.

You can think of capture of perhaps, you know, trout fishing, catch-and-release trout fishing. You catch the fish. You lovingly release it back into the stream

after proper treatment. That's our view of what "capture" means. Catch and release. You catch it onsite and then you treat it with biotreatment and then you actually can still have some runoff leaving your site.

We don't think that EPA objects to that. We think some work can be done on that first sentence. Perhaps just a word change or perhaps some delineation on the part of the Board to make it clear.

Going to the first paragraph, I think what the County meant to say is that it is in favor of seeing that language restored. They were speaking of the stricken language. I know that my client very much would like to see the language restored. I didn't see -- I didn't hear US EPA making a substantive objection to this language.

This language is huge for us. We're talking about feasibility criteria. And how do you judge all the BMPs in this new world of LID BMPs. If it is a timing issue, there are many ways to address a timing issue. But just eviscerating the issue doesn't seem to be the logical outcome of Mr. Kemmerer's comment on that provision.

And then thirdly, this new sentence in paragraph two, C2 -- by the way, you should know that this paragraph, without all these changes, pretty much came from NRDC and their recent comments. There were a few changes.

For example, the word "capture" was not NRDC's

word. That word was recommended by the County. But we're talking about, basically, an NRDC paragraph here. And now we've got the new NRDC sentence added to it.

And going back to EPA's concern, EPA's concern is to make sure you're not elevating, you know, the catch basin trash interceptor to a LID BMP. I don't think you need to do this, this new sentence, to accomplish that.

By the way, what this does accomplish, I think -- and we're, you know, interpreting on the fly -- it means that Gery Thibeault is going to be a very busy man. Because when you get referred to 12E, that's a waiver upon a vigorous showing -- that's a permit term, vigorous. I've never seen that word in a permit -- a vigorous showing of technical feasibility, you can get a waiver from Mr. Thibeault.

Well, Gery's a busy guy. I'm not putting a lot of stock in the waiver provision. If you went to 12E, you may forget about it, especially given how long it takes to process things like that. So for a real project in the real world, 12E is not where you want to be.

I asked the staff and Board to consider, can we actually accomplish what Mr. Kemmerer wants without that sentence?

And I think what he may be trying to do is avoiding several off-ramps to having to do it onsite, having

to do LID onsite.

Those off-ramps are in paragraph 8 of what is in front of you. 8A, 8B, and 8C -- those are off-ramps. They're not meant to be off-ramps for LID. I think EPA is interpreting them to be off-ramps for LID. And they're not meant to be.

I think there's a word in there, perhaps distasteful to Mr. Kemmerer. It's the word "treat." I think he looked at 8A, 8B, and 8C and said, "Oh, boy, 'treat.' Well, that's the catch basin insert. We don't want that. EPA doesn't want that. We don't want that." So perhaps some work on those paragraphs -- 8A, 8B, and 8C.

By the way, with your errata, are 7A, 7B, 7C, and 7D. Whatever you're looking at, you need to work with some shifting paragraph numbers there.

But, perhaps, just change the word "treat" to "biotreat." And make it clear it is not the conventional BMP that Mr. Kemmerer was concerned about. And maybe we can save the off-ramps.

What are the off-ramps from? From having to do the LID stuff onsite all the time. Just ain't going to happen. There are going to be plenty of circumstances where we need to move a little bit offsite. We need to move subregional.

What does this Board care if the LID is

accomplished within the four corners of an acre or even ten acres if a developer can avail itself of something nearby to accomplish the same water quality benefit.

I'm responding to this now. I see three major issues there. Perhaps they can be worked out today. It is a little bit difficult to do this on the fly. We want to be constructive, as we've been all along. And we wanted to present some ideas to you that will clearly require some further discussion as this day proceeds. The day becomes much more complicated by this.

What I really wanted to talk about --

MS. BESWICK: This better be good.

MR. SINGARELA: What we'd like to do today is persuade you that there's a major fork in the road here. You know, the Robert Frost, The Path Less Travelled. There's a fork in the road here.

And that fork has to do with LID stuff. Are you -- and this is a matter of policy. Are you going to embrace a broader conception of the LID? Or are you going to embrace and adopt and require this narrow conception of LID that's not consistent with the EPA definition?

The narrow conception of LID is being promoted by NRDC. They want it onsite. They say, "Hey, if you keep it all onsite, there's no pollution. There's not a single molecule that gets off site."

That has a simplistic appeal to it. It just doesn't hold up to scrutiny. And, by the way, it is inconsistent with EPA's definition of LID. It's inconsistent with the State Water Board's definition of LID.

Those definitions of LID allow filtration. Filtration is understood to be, what we call, biotreatment. The State Board's definition of LID allows for detention. What NRDC is talking about is retain it, retain it, retain it onsite all the time. 100 percent detention.

The State Water Board's word is understood to mean slow it down, treat it perhaps with biological process and actually allow the runoff to continue off of the site.

This is a huge choice here. Let me just try to illustrate it for you. The 85th percentile storm. This is one of the products of the negotiation. We're happy that we agree what the design capture volume should be. It is a big deal.

Under the existing scenario that Mr. Smythe showed to you -- under the existing scenario, an undeveloped piece of land, that entire 85th percentile volume comes off the property. We're not in BMPs. We're just undeveloped land. That entire volume goes off the site.

Think about how dramatic NRDC's proposal is. Under NRDC's proposal, all of that water is going to stay on that property. And then think about our proposal.

Our proposal is much closer, actually, to their proposal than it is to the undeveloped state. In our proposal we say, "Yes, we'll try to keep it onsite." That makes sense. We don't have anything against infiltration BMPs where they make sense. We don't have any objection to harvesting, this new concept of harvesting and reuse, if it makes sense. We don't have any objection to evapotranspiration BMPs, if we can figure out what they mean.

We don't have any objection to those three types of BMPs, which is what they would limit us to. And they would make us do all that on site.

Our proposal is to do that when it is feasible. And then simply to add one more category of BMP. It is simply the biotreatment category of BMP.

A biotreatment category of BMP also requires the entire volume to be treated, but it is the catch and release version of LID. It requires good treatment through natural processes and then a discharge. It allows a discharge to come off the site.

Now, you can understand why that one word in C2, first sentence, is so important to us. Because we're actually relying on one word here, "capture," for our whole conception of LID. It is very scary to a certain extent. It's very tenuous. And I think you can appreciate some of

the angst we're suffering here today. I think you can appreciate why we're asking this Board to make this choice very clear.

This is a policy decision. This isn't technical.

MS. BESWICK: And I think we got that.

MR. SINGARELA: Okay.

MS. BESWICK: I don't mean -- but, I mean, that was what you started with. And we understand it's a policy decision. And, actually, it has been discussed at the Water Quality Coordinating Committee with other regional boards as well. So we get that.

MR. SINGARELA: Thank you.

MS. BESWICK: And I'd kind of like to move it along a little bit. I have an awful lot of speakers. Some that want ten, fifteen minutes.

MR. SINGARELA: I understand. I'll wrap it up.

So make no mistake about it. This narrow conception of LID that NRDC wants you to embrace as a policy for this region is zero runoff. It's zero runoff for new development, all the way up to the 85th percentile storm. Yeah, of course, if you have some Noah's Ark storm, they'll let you have something come off the property. But it is a zero runoff proposal.

So what are you saying? Well, what you would

be saying if you were adopting this permit is all new development can't actually use the public storm drain. You're cut off. You're stranded. You're an island from the public storm drain. Is that what you want to do? Does that make sense as a matter of policy? It doesn't make sense to us.

And contrast it to everybody else that's already using the public storm drain. Where is the existing water quality problem coming from today? From the rest of the basin.

We, the developers, who are using the best BMPs, are penalized and denied access to the public storm drain. That is what you're being asked to embrace.

I say to the agency, it ought to get all your questions answered today. You ought to deliberate on this. This is a huge issue for the future of this region. And we think when you really put it to scrutiny, you'll come to us and let us continue to use natural treatment systems like the IRWD approach. You'll let us use those in addition to the three narrow BMPs and let us use it onsite or offsite.

Thank you very much, Madam Chairman. I appreciate the patience.

MS. BESWICK: Thank you.

MR. PON TELL: Madam Chair?

MS. BESWICK: Yes.

MR. PON TELL: Could I ask a question? Because it is one of my questions, and now it is being introduced. Maybe the staff could just explain something to me.

MS. BESWICK: Sure.

MR. PON TELL: I am curious about the 85th percentile. Is that -- why not 84? Why not 86? Why not 70? And how does it correlate to what the natural flow from the natural property would have been with or without development? I'm curious. What's the logic behind that?

MR. THIBEAULT: The 85th percent --

MR. ADACKAPARA: The 85th percentile was something that was adopted by the Los Angeles Regional Water Quality Control Board, what is called the susump requirements. Those susump requirements were challenged and they stayed -- when the Water Quality Control Board finally upheld what the Los Angeles Regional Water Quality Control Board adopted.

And that approximates to about 95 percent of the storm event. So essentially what we're saying, if you treat the 85th percentile of the storm, you capture about 95 percent of the runoff. It was based on that.

And then that order that the state board adopted was considered as a precedent-setting order. And the chief counsel from the state board issued a memo saying all boards needed to adopt this.

So the 85th percentile comes from that.

MR. THIBEAULT: And, further, Mike, what I was going to say is the 85th percentile capture or treatment is already part of the WQMB for Orange County. It is something already being implemented under the existing program. So it is not a change in direction.

MR. PON TELL: So just as -- not as water hydrologist, explain to me the logic behind capturing and depending on the definition to the extent possible, retained onsite more water than would have normally been retained onsite. If the site was undeveloped, and assume 80 percent of the water was running off the site, as opposed to 85 percent of it being captured now, what's the rationale?

MR. ADACKAPARA: Under natural conditions, most of the water will be evapotranspired or percolated into the ground.

MR. PON TELL: Define "most."

You said most of the water will be -- because depending on soil conditions --

MR. ADACKAPARA: I don't remember the exact numbers. But it is pretty close to 90 percent of the water that falls on the soil. That's for undeveloped land. There's no structures on the land. There will be trees and bushes and other vegetation to take care of the water that falls on the

land. So most of the water will be percolated.

And the numbers -- if I'm not mistaken, it is pretty close to 90 percent of the water that falls on the ground.

MR. PON TELL: So the 85 percent would correlate to what would be naturally retained without any development?

MR. ADACKAPARA: That's right.

MR. PON TELL: That's the intent?

MR. ADACKAPARA: That's the intent.

MR. AMERI: Let me just explain something here.

The 85 percentile is not 85 percent of a pre-construction. It is 85th percentile of the average rain fall during the year which essentially comes out 95 percent of any kind of storm event that happens in Orange County.

In other words, the new development will not be able to drain any water to the storm drain system 95 percent of the time during the year.

MR. PON TELL: Is that correct or --

MR. ADACKAPARA: That's reasonably accurate, yeah.

MR. FRESCHI: That sounds very narrow to me. I agree with the gentleman. That's a narrow imposition on the building and the development -- building or development of the property.

MS. BESWICK: If we could. I'd like to finish hearing the speakers, and then let's talk about that. I

think we need to do that.

Mark Grey, followed by Eric Strecker.

MR. GREY: Chair Beswick, members of the Board, staff.

Mark Grey, representing the Construction Industry Coalition on Water Quality.

I'm going to -- Paul covered a number of the areas today. I'll endeavor to be as brief and snappy and entertaining as I can.

MS. BESWICK: You're off to a good start.

MR. GREY: Thank you.

First off, so you know who I'm representing. I'm the technical director for the Construction Industry Coalition on Water Quality. And I represent the management and the labor, the women and men who build most of the projects that we are providing conditions for in these permits in Southern California. And I represent the Associated General Contractors of California, the Building Industry Association of Southern California, the Engineering Contractors Association, and the Southern California Contractors Association.

Again, it is a coalition of management and labor, women and men who build the infrastructure and housing needs throughout Southern California.

MS. BESWICK: Can I add, then, is Paul in your

employ on this subject?

MR. GREY: Paul works with us, and also Eric, after me, works with us.

MS. BESWICK: Well, try and only cover things not already covered.

MR. GREY: Exactly. I've got a presentation.

There were some changes today. I'm going to cut to the chase on a couple topics that Paul -- I don't think he covered in detail.

First off, what I want to cover today -- next slide, please. I wanted to make remarks on the progress we made in the stakeholder group that was an excellent process. We did have a divide in that process. Paul talked about that divide.

Universal retention of the 85th percentile storm, which, for the audience and everyone else, that equates to three-quarters of an inch to, maybe, in the foothill areas up to an inch and a half of rain fall. Something we can all relate to.

We're talking about handling, in low impact development BMPs, three-quarters of an inch to an inch and a half, depending on your location. We reached this divide in the stakeholder group.

I'm going to present a couple slides on low impact development definition from US CPA and the

State Water Resources Control Board. Very important definitions that we're asking staff to help us clarify and make sure that's what you mean in the permit. That's my clarification point.

Next slide, please.

We have a great history of progress. Great history of collaboration, supporting stormwater management sound solutions in Orange County. We really -- I want to point out we support this master planning concept into the permit. Very important. Can guide us in infiltration, where infiltration suitability. Can guide us where harvesting and reuse makes sense. Relative to what agencies like Orange County Water District is doing. Where it is appropriate. Where is it is not. We are very supportive of master planning in this permit.

Next slide, please.

The divide -- Paul mentioned the divide. We don't believe that universal retention makes sense for low impact development. Filtration of water through engineering BMPs is an essential tool in using LID principles. This is widely recognized and is recognized in national programs.

And now if I could just jump to what would be slide five. Go back, please.

The US EPA LID definition, this appears in the green infrastructure glossary. We've provided the cite to

Gary, Mr. Thibeault and Mike Adackapara, part of the staff has the citation.

LID, a comprehensive stormwater management insight design technique. Within the LID framework, the goal of any construction project is to design a hydrologically functional site that mimics predevelopment conditions. This is achieved by using design techniques that infiltrate, filter, evaporate, restore, and runoff close to the source. I added the emphasis on hydrologically functional and filter. "Filter" is an important word. "Filter" means biofiltration. It means biotreatment. It means treat and release. That's what we're asking for in this permit. That the conception of LID includes not only infiltration, harvest and use, evapotranspiration, but biofiltration as well. Very important and critical.

Next slide, please.

State Board definition. This is our State Water Resources Control board. The goal of LID is to mimic the site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and retain runoff close to the source of rain fall.

I think you get our point. "Filter" is a very important word here.

I would like to jump to slide 7 and 8, please.

There's been quite a bit of talk, and what I'm

going to skip over that I'll provide in our comments. There's quite a bit of talk about national programs. How much water they handle, what LID BMPs are allowed in these national programs.

We've examined them very closely and provide on the record, really, what are in these national programs and what they require. I just offer that to staff and to the board members for your use.

Next slide, please.

Next slide after that.

Before I go here. I ask you for just a few clarifications. Number one, we are seeking clarification that the LID performance standard permit and anticipate the use of all LID BMPs, including LID treatment BMPs that release water.

I think I made that point over and over. I want to re-emphasize. That's very important to us. We hope you please confirm that the definition of low impact development BMPs that's used in this permit is constant with the EPA definition. We would appropriate that clarification. And I've got other comments on the slide that can you see.

Next slide.

Number two in section C2, this word "capture." That's very ambiguous and vague. We prefer it be

biotreatment. It could also be biofiltration or filtration. We feel strongly that the word "capture" provides a tremendous amount of ambiguity.

And I'm trying to be brief, Chair Beswick.

Number three, the last clarification that we seek. We request that the word "strategy" in section 12C3, which is obviously after two, replaced with the word "preference."

And there, somewhat, we think that this would support staff's intent, and we've talked to Staff in length and stakeholder groups and subgroups that we talked about LID BMP sizing about prioritizing various LID measures. And we think this change would support Staff's intent of prioritizing but not mandating the mimicking of predevelopment hydrology. This then would be a directional statement and not a mandate.

I conclude today in my remarks -- last slide, please. We support LID at the Construction Coalition on Water Quality. We support the full conception of it. Not allowing it to be zero discharge. That doesn't make sense. It doesn't mimic predevelopment hydrology. It doesn't necessarily match the water balance.

We feel there's a strong technical and legal foundation for that, allowing some runoff from the property.

And finally, as I pointed out, I asked you to

seek clarification on some points. Especially, the LID definition provided by US EPA and a couple word changes, that you can see from the deliberations today, that C -- 2 some of the language, especially the word "capture" caused confusion. We think by adding the word "biotreatment" or "filtration," that that would clear up that ambiguity.

Thank you very much. Welcome any comment or questions.

MS. BESWICK: Anyone have questions?

MR. AMERI: That's at least very important to me. Mike, could you provide us with an actual written definition of LID by EPA and by the State so we can actually -- not that we don't trust you.

MR. GREY: Thank you.

MR. ADACKAPARA: There are actually a lot of definitions for LID. Some of the definitions do include filter as an option. Some definitions do not include filter as an option. I don't know if there's one legally defensible definition.

There are so many definitions. Even if we look at EPA site. The EPA itself has several definitions for LID.

The State Board has come out with some definitions. Most of those definitions do include filter.

MR. AMERI: You're handing me to the website.

John, do you know if these definitions are the correct language?

Is John still here?

MR. KEMMERER: Yeah. I have provided -- Mary Lynn just said -- I want to make sure, in our submissions to the Board, we provided all the links of the sources. I would agree with Mike, most of the definitions include the word "filter."

MR. AMERI: I didn't know the word "filter" was included in the definition of EPA and State language for LID. I really didn't know that.

MR. FRESCHI: Is a copy of your presentation available to us? I don't have it here.

MR. KEMMERER: Yes, sir. No, I have not.

MS. BESWICK: No hard copy. I don't think we have a hard copy of your slide.

Mr. Kemmerer: I'll get one made.

MS. BESWICK: Thank you.

MR. FRESCHI: Just the definition page. That's all I'd like to see.

MR. KEMMERER: We have provided it in some attachments and letters to the Board.

MR. AMERI: On that big --

MR. KEMMERER: I'll be happy to find it and pull it out for you, Chair Beswick. May I?

MS. BESWICK: Okay. While he's doing a search, we'll have Eric come up and address us. After Eric, we'll have Greg Woodside.

MR. STRECKER: Madam Chair and the Board, I'm pleased to be here today. It has been very intellectually stimulating to be involved in the consensus building process up to this point. But I'm going to be the technical nerd here and get into the engineering side of things. I'll try to be as fun as an engineer can be.

If I can go to the next slide.

Just a brief introduction on myself. I've been a registered civil engineer in the State of California since 1987. I've got almost 25 years experience helping folks think about both the applied research side of urban stormwater as well as actually getting things into the ground. I was a member of the Blue Ribbon Panel to the State Board on whether numerical effluent limits are feasible in the stormwater permits. And I've managed a number of other projects. And I won't go through the rest of those.

Next slide.

I think we need to step back and see what makes stormwater BMP effective or not. It's really a function of a number of parameters.

First one, what does the runoff look like? How

does it arrive? How do storms arrive? Do they come together? Are they spread out? Those kinds of thing.

Next thing you need to think about, what kind of volume am I going to have to store that water, either temporarily -- I guess it's all temporary -- until I can infiltrate it, evapotranspire it, harvest and reuse, or draw it down. So -- and I just alluded to the next part, how we look at BMP function. It is not about the size of the facility. It is about how fast I can recover the storage, so I'm ready for the next event.

If the tank is full or the bioretention system is full, the next event comes and I'm bypassing. And I don't get the treatment or capture onsite or whatever the goal is.

And finally, what's important is the treatment processes included. What are the physical, biological, and chemical treatment processes that I include in the system to get after the pollutants and parameters of concern. And that, to me, is an issue even with infiltrate. I want to make sure before I infiltrate I'm doing the right processes along with if I discharge from the site.

Next slide.

So let's talk about weather patterns -- it's actually applicable to the West Coast. The West Coast, if the high pressure ridge is up, we're not getting a lot of rain. We might get a freak thunderstorm once in a while. The high

pressure ridge is down, we get a series of storms coming through, pretty much, back to back. That's very different than other parts of the country. Say, if you go to the East Coast where the storm patterns are much more regular throughout the course of the year.

In addition, much of our runoff falls in January and February. And next highest portion is in December and March, so those are really when the rainfall comes.

So the results of that is when we look at harvest and using for irrigation onsite, it is very different. We are getting all the water at the same time. It's very hard to use that in a way for irrigation. And then evaporation opportunities are limited. We're getting rainfall at the same time we want to be evaporating.

Next slide.

One of the things I haven't heard in a lot of this debate is thinking about what is really the natural water balance. One of the things I'll fault LID with today, they haven't thought about ground water. Everybody's focused on mimicking hydrology. And hydrology, to me, as a practicing engineer, does not include just surface runoff. It also includes what infiltrates and impacts ground water.

So in Southern California -- and I can -- the citations are in some of the submittals I have given to

you -- roughly on the order of 80 to 95 percent of precipitation on undeveloped lands is evapotranspirated. And then somewhere between 2 to 10 percent is either runoff on an average annual basis or deeper infiltration.

You know, and when we put in impervious areas, we reduce the area we can use for evapotranspiration. And if we have a goal as a society in having dense developments that, again, limits the ET areas that are available. And we can help mitigate that by putting in things like green roofs and porous pavements.

But, you know, I look at how applicable those are in all conditions and whether they're going to work everywhere.

Next slide.

So let's talk about infiltration. The first question, can you do it? And much of the soils in Orange County have very limitability to quickly infiltrate. I don't know how many of you have dug a hole in the ground to plant a tree. And you put water in it and see how long it sits there.

I would also argue that soil amendments -- you can put soil amendments in the hole, all you're doing is reducing the storage of the hole. The water's still going to sit there for a long time. You really have to think about what are the underlying soils. You're not going to

fix the problem by just amending the soils on the site. You might increase the storage, but, ultimately, it will not fix the problem of getting the water in the ground.

So when that storage that's provided in infiltration is full, bypass occurs.

Next slide.

The next question you have to ask. Should or how much should I infiltrate?

So I think about things like where I have natural plumes like selenium out in Peter's Canyon Wash area. There's manmade plumes. We have areas upgrading of dry streams, if I shove a bunch of more water in the ground over natural conditions I might convert to a willow Arundo thicket. And I'd like to say, Mr. Toad isn't happy in that circumstance.

That was a joke. Sorry.

If I don't match ET rates, then I'm going to have infiltration -- if I use infiltration to match runoff, I'm going to have increased infiltration over natural conditions. Is that a good thing? I would say, if I was in an aquifer that's being managed, great.

You know, Central Valley, California, where they're pumping the heck out of that thing, I'd be infiltrating in a safe manner as much as I could. But in watersheds where that's not the case, I would be thinking

about that.

Next slide.

The next question is, if I'm going to do it, I need to do it carefully. I need to do it in areas above the water supply aquifer or unnaturally low for some circumstance, but up to a certain point to get back to where it should be, and it must be done in a way to protect the water supply. We need to work with water agencies and say, "Let's do this in a way you can live with." So bottom line, infiltration should be carefully thought through on a watershed-by-watershed basis.

Next slide.

Let's talk about evapotranspiration. After development, there's going to be less area of evapotranspiration available. So even with vegetative roofs and especially in high density projects. It's not appropriate to compare monthly precip to monthly ET rates when one's looking for using ET as a way to get rid of stormwater. Again, the storms arrive back to back. And storage within the soils are not going to recover enough when the next storm arrives.

On the next slide, this is the -- the magenta color is the average monthly precip in Irvine. And the green color is the average monthly evapotranspiration. And a point has been made in some of the submittals that when

you look at December/January, they're roughly equivalent, "Why can't we do it?"

The next slide shows weekly values. And here the blue, again, is rainfall on any given week, or average for a week and the evapotranspiration levels. So you start to get an understanding that I'm getting a lot of water when my evaporation rates are low.

The next slide.

Here's a natural site, you know, predevelopment. I have the whole site to use as my ET. I like to call it the sponge. You know, after I develop and put in bioretention areas, shown in blue -- let's say, in this example, even if I put green roofs on all the houses, that's not the same level of sponge pre and post. And so we have the difference between ET levels and precip as it comes, and then compounded with the fact we don't have as much area to use for evapotranspiration.

So the next slide.

We also have an issue from a vertical standpoint. Again, I've got the system spread out. I can amend soils in the bioretention area. I can amend soils out in the rest of the site as well to try to act as more of a sponge. And I should do those kinds of things. But I'm only going to have that certain area of a small bioretention area, in this particular case, to do my, you know, storage

of the runoff from the site and get it into the ground.

So next slide.

What are the general water balance implications? I'm not the top chart -- this will be different for every site. On the top chart, in semiarid climate, I'm showing a 70 percent ET. I mentioned earlier it can be much higher than that.

Let's say, you know, on site it is 10 percent surface discharge and 20 percent percolation. If I put in LID to match pre and post runoff, I might have 70 percent percolation. In the water supply reservoir, great. In somewhere where that's not appropriate, that's a potential habitat change issue or other issue, ground water table, elevation levels, and the rest of it.

So my point in all of this is we really need to think carefully, you know, where it is smart to infiltrate and how much ET can I really get on a site.

Next slide.

So let's talk about capture and reuse.

One of the projects I had the pleasure to work on with the Irvine Company is the Pelican Hills Resort. And that was a unique condition. We actually have cisterns -- you're seeing a picture of a 650,000-gallon cistern that was put in. We drained a Crystal Cove in this project. A highly sensitive project.

The Irvine Company asked me to come up with a way to have no increase of runoff. And they wanted to increase infiltration. I say, "What do I have left to play with?"

What I had was the evapotranspiration sponge. And looking at irrigation on just the site, I couldn't get there. Fortunately, I was next door to a 36-hole golf course; I could get there with the greens because they do water those relatively soon.

So the key for capture and reuse is having a use for the water in the first place. Can I use it for irrigation or toilet flushing or some other process water?

The second one is being able to use it. There's lots of code issues that we haven't talked about today.

And the third one is being able to get rid of the water fast enough. And if I can't get that tank drained within a 2- to 3- to 4-day period, the next storm will come along and start bypassing the system. So it will not be as effective.

Next slide.

So this is a slide, actually, where I did a double damp size tank. And this is a series of storms. I picked an example from 1962.

So you can see in February of '62, there were

quite a number of storms that came back to back. What it is showing, there's, you know, bypass events going on every event during that sequence there and then releasing runoff. And this was a tank designed for 1.6 inches of capture from the site. Not the damp size.

So next slide.

And what happens when I look at pollutant loadings? Now, I'm back to a damp size tank. But I provided you guys an example of a hundred acre residential development where I use a cistern for capture, and used for both irrigation and toilet flushing. I've probably over assumed irrigation because I used the simplifier approach to that, and it's probably less available than I came up with.

And toilet flushing I also used some numbers that when people -- for those of you who can't go to the men's restroom, there's no flush urinals in there. If I was going to make this work, I'd want high flush urinals in the winter and no flush in the summer, I guess.

So the bottom line is when I looked at over average annual pollutant loading basis on the capture and reuse, assuming I didn't treat the bypass, I would only capture -- remove 55 percent of the load of TSS, that's total subpoenaed solids. Or with bioretention with under drains I would remove about 63 percent.

I would say, in this case, I would argue that

the bioretention with under drains was a better solution.

Next slide.

And then if we look at the average concentrations coming out of the systems. With the cistern bypass, again, provided you don't require an extra treatment beyond the cistern size, then we're releasing at the inflow concentration. So we've had no treatment for that bypass.

So the other point I'd make is the bioretention with the under drains is resulting in a lower concentration on an average annual basis as well.

So the point here, again, we got to drain the tank fast enough, similar to the drain range for ET and infiltration systems.

And we're talking about the 85th percentile storm earlier. And that, actually, in studies around the country has shown to treat about 80 percent of the runoff. And that was assuming about a 36-hour drawdown time. And that's how that number was first developed. It was a study by Better Bonus at Urban Drainage in Denver. And along with Larry Rozner (phonetic) who's now at Colorado State.

Again, as a key element, it is not just the size of what you require, but also the drawdown rate was included in that.

We have irrigation, you know, use is limited

with these systems, seasonal issues. You know, there's a big push to do zero scaping. So drought tolerant plants. I have some suggestions, "Why don't you overwater for a long time?" I'm thinking, what's a plant pallet that likes to be dry and then also be flooded for a long time. There's issues there.

Competition for reclaimed water. You know, if we require folks to do this for toilet flushing. About the same time that IRWD has the worst time to get rid of reclaimed water is the same time we would be trying to use it for irrigation. And all of a sudden, we have a conflict between those two things.

One of the things I have looked at -- I have come up with a new name for a ratio. I'm calling it TUTIA. And I do think if you do have enough toilet flushing -- toilet users to impervious areas, you can actually show -- it can work.

I did this in a building in downtown Los Angeles. And we were going to combine it with the Gray Water System. And I could show it could work cost wise, got to a reasonable standpoint. Unfortunately, I ran into the City of Los Angeles building code folks; it was "over my dead body" in terms of that -- being able to do that.

I think there's some points where some of these

systems start to become more viable when you have enough processed water use.

Finally, this next slide -- just so you guys are aware of some of the infrastructure you would need. You've got to think about the conveyance and pretreatment to get the runoff into some sort of a storage tank. There's treatment issues. If you're going to use it for irrigation, particularly, in a pressurized system, you're going to have backflow valves, UV treatment, and the rest of it, pumping and piping and all those kinds of infrastructure issues.

And, again, I think in certain applications it makes sense. And other ones we might ask the question.

So next slide.

That just gives you a summary of some of the codes that we're going to have to think about. So in summary on harvest and use, I think, we need to be -- carefully consider where it makes sense or not.

Next slide.

You have seen this definition, so I'm not going to go into that, the first one.

The second one, I think, is important, though. There was a National Research Council report put out. It was called Urban Stormwater Management in the United States. In that report they retitled LID -- they use their own term, Aquatic Resource Conservation Design.

Next slide.

In that document, they're quote, "ACRD offers an array of techniques to reduce the quantity through infiltration and evapotranspiration and improve the quality of any remaining runoff. These practices included" -- and I'll point you to things like swails and filter strips and other things that are not retained on site type BMPs.

On the next slide they actually recognize that in some situations the practices may not be feasible. And then they recommend using the best combination of some of the more traditional controls.

Next slide.

The last thing I'll end with before I summarize, is I do think we need to take a watershed approach to this. Every watershed has unique soils, contamination issues, ground water quality, land uses, ground water elevations, receiving water sensitivities, and the rest.

And I get concerned when we have a one size fits all solution that starts limiting what I think might be the best solution. I think we need to work through the watershed approaches that address all of the elements I have up there.

So in summary -- next slide.

We need to think about the precipitation

patterns and how they effect the performance of these systems. Infiltration is not broadly feasible, effective, and/or desirable in all cases. Harvest and use and runoff due to runoff patterns and ET potential has limited application. We should try to do as much as we can. And I've tried to do it on my projects, but it is limited. And then LID and the permit should include all of the elements of LID, including source control -- we haven't talked a lot about that today -- retention, detention, and filtration.

I thank you very much for your time.

MS. BESWICK: That was great, actually.

Thanks for being as brisk as you could be with that. There was a lot of the information.

I'm asking Gery, -- I think it would be important to have you comment on this issue we've heard thoroughly discussed now about asking that people retain only onsite.

MR. THIBEAULT: I would like to point out, first of all -- Eric, I hope you were listening. Eric gave, you know, an awfully good proposal for his company to do the feasibility studies that Orange County needs. And I want to make it clear that what was just described here is what we've asked for in the permit. Someone to do the evaluation, to look at the feasibility.

If you're getting the impression that we're

requiring everything be retained onsite, then someone is giving you the wrong impression.

What we're requiring is the county to do what Eric just described. Go through the feasibility and, you know, I know we'll say it 50 more times, but we want to make sure that where infiltration or capture or whatever the other options are, are not feasible, no one is suggesting that they be required.

And if you are made to feel like that's what the permit requires, I suggest we need to look at it again. It says, if not feasible, don't do it.

And so this type of evaluation -- and Eric's done a lot of these things. I mean, he's had a lot of experience. This is exactly the kind of feasibility study we are looking for from the permittees.

MS. BESWICK: And earlier when Mark was talking, he talked about technically-based feasibility criteria. Is that what we're looking for as a result of the feasibility study?

MR. THIBEAULT: Uh-huh.

MS. BESWICK: I guess it was important to make sure we all understood there's not one method being purposed here. It is just awfully focused on one thing. I want to make sure we're not losing sight of the broader picture.

Greg Woodside, followed by Garry Brown.

MR. WOODSIDE: Good day.

Greg Woodside. I'm here for the Orange County Water District. I'm the planning and watershed management director.

Just a couple points. We're concerned -- we've commented and we've talked with your staff. We're concerned that if infiltration systems are not operated correctly, they're not maintained correctly, there could be impacts on ground water quality.

There have been studies in other areas in LA County about infiltration systems like these. And there are no adverse impacts to ground water quality found if they're maintained and operated correctly. That's what the studies showed.

We don't have that kind of data in Orange County. We appreciate the fact that the permit now has a pilot ground water monitoring program. We think that's important. We appreciate that inclusion.

We certainly feel that infiltration is not feasible in all locations. That's been discussed already.

But there are conditions, such as shallow ground water, where infiltration might not work.

We do --

MS. BESWICK: Say that again.

MR. WOODSIDE: There are conditions where

infiltration just may not work because of shallow ground water.

We do encourage infiltration to the extent practical at a regional level. We feel if it's at a regional level, or a subregional level, you know, more of a clustered implementation, it will be easier to monitor if there's any potential impact. We think that's something beneficial.

We have one technical point. It was mentioned earlier, the separation. There's the separation distance between the bottom of the infiltration system and the seasonal high ground. We have a little diagram here that shows what we're talking about.

So simplified graphic here. We have the ground surface. We have what is call beta zone or dry well type infiltration. That's symbolized by the well. And it's above the saturation zone, it's above the seasonal height ground water level, in the what we call beta zone, or unsaturated zone.

And the current draft has a five-foot separation between the bottom of the infiltration system and the high ground water elevation.

The previous draft was ten feet. And we would request that they go back to the ten feet.

MS. BESWICK: By the way, we have a monitor down

here. We're able to see what you're showing us.

MR. WOODSIDE: The question marks were there because there's a degree of uncertainty about what the elevation is for the seasonal high ground water table.

The Water District, ourselves, we have a lot of data. The data is deeper. We don't have a lot of data to say where the seasonal high ground water table is in some locations. Now, in some locations it is pretty well defined. But there's other locations where the seasonal high ground water table is not well defined. There's uncertainty about what depth it is.

We would strongly request we go back to ten feet, so that there can be a margin of safety there.

The data that's out there shows, if these systems are built in the unsaturated zone, they will work. We need to make sure that they're in the unsaturated zone, above the water table.

So we feel if we go back to the ten-foot separation distance, we'll account for some of the uncertainty in where that seasonal high water table is. And it would be more protected.

That's our one request.

MS. BESWICK: Can somebody talk about why we went from 10 to 5.

MR. THIBEAULT: I'll take that, Mark.

With respect to the five feet. Technically, five feet should be perfectly adequate for soil treatment and of percolated runoff. And that's been shown, you know, in a number of studies in the past.

So I think we misunderstood what Greg was getting at earlier in the process when he asked us to go -- to go back to ten feet. And that was the fact that just the data that are available for the high ground water levels in most areas are just not very good. And so the extra five feet was to provide a margin of safety when the data aren't good for seasonal high ground water levels.

And this is one of those issues that Tim Moore talked you to about at the last board meeting. Where it is a policy decision -- it is a risk decision between 5 and 10 feet. This is not a technical decision.

And the ten feet does provide for more water quality protection. Five feet, if you have good data, provides good water quality protection with respect to percolated runoff. So it is a data issue. It is not a technical treatment issue.

MS. BESWICK: The question is, do we have good data?

MR. THIBEAULT: No.

MS. BESWICK: Thank you.

Garry, followed by Bart Lounsbury.

MR. BROWN: Actually, Madam Chair, we have a

presentation. And Dave Beckman is going to go first.

MS. BESWICK: Great.

MR. BECKMAN: Good morning. Good afternoon, Madam Chair and members of the Board.

During the first hour of my presentation, I'm going to have --

MS. BESWICK: During the first hour of your presentation we're going to have lunch.

MR. BECKMAN: We'll try to move it along.

I'm a senior --

MS. BESWICK: David, one minute.

Do you need a break?

I'm sorry to do that to you. The court reporter has been -- we won't go anywhere.

Do you mind if we give her a couple of minutes?

MR. AMERI: Can we combine her break with our break?

MS. BESWICK: No, we can't.

MR. AMERI: Okay.

MS. BESWICK: Were you thinking of a lunch break?

MR. AMERI: Yeah.

MS. BESWICK: We don't have lunch yet.

(Pause in the proceedings)

MS. BESWICK: David, thank you for your patience.

MR. BECKMAN: Thank you, again. I hope that doesn't count against our hour.

MS. BESWICK: No. Yeah, it is counted against your hour. You have 15 minutes.

MR. BECKMAN: I had no idea what the folks this morning were going to say.

Madam Chair, members of the Board, David Beckman with NRDC. I codirect the National Water Program at the NRDC. And we're pleased to be here today.

Bart Lounsbury, who works at NRDC, and Garry Brown, we're all doing this joint presentation for you so you get the NGO perspective in one bite-sized capsule.

Bart is going to walk you through some context. I really feel after this morning you need that context. Because if you just walked in here today, or dropped in from some other planet, you would think LID was exotic. That it was somehow being redefined in some narrow fashion. That it was onerous. It might have all sorts of negative impacts on the community.

I heard everything except more high school absenteeism or teen pregnancy, when Eric Strecker told you all the variables.

MS. BESWICK: The hearing's not over.

MR. BECKMAN: Right, there may be more problems.

And you wouldn't know at all what is going on in the United States and the rest of the world of LID. It is not difficult. It is well-proven. And, most important

for your regulatory responsibility, it is the only thing on the table today that gives this permit any chance of being successful. Gives it any chance of being lawful when adopted. And gives the permittees any chance of actually meeting water quality standards, as another part of the permit requires them to do.

In our perspective, in listening to the discussion this morning, that LID is a gift horse that these permittees are looking in the mouth. This is the solution. And more and more people, including the building industry, nationally -- and I think in California, to some extent too -- are recognizing this is something they should embrace. Not throw so many hurdles in front of.

And so the discussion on feasibility and infeasibility, all of the issues, are important. But the permit, as the executive officer indicated, said if it is infeasible, you don't have to do it. And NRDC says, if it's infeasible, you don't have to do it.

Now, where we differ is what is feasible and what's not. And as to that, you should look at the record. You have extensive amount of information -- we're going to summarize it for you today -- that talks about feasibility of LID. And it particularly talks about feasibility on retaining water onsite whenever practicable. Not every drop. That was, I think, either a misstatement or just in

the flow of an extemporaneous set of comments that was a suggestion we're requiring -- we want you to require every drop of water be retained on site. That's not true. We don't.

But we do want that maximized. And why do we want it maximized? Because it's a superior way to address the water quality problem in Orange County. That has, unfortunately, a huge number of impaired water bodies. Not withstanding your best efforts of those of the permittees.

This community has not been successful yet in addressing water quality problems. That directs you, or should direct you in terms of policy. And I assure you, it changes the legal framework. It changes the context of what a permit should look like.

So what we're here to say today is you should set a standard that does requires the maximum extent practicable. And then you should allow appropriate exception whenever it is not possible to accomplish that.

You should not set a minimum standard that might be the lowest common denominator that works everywhere because that's not consistent with good policy, and there will not be a successful approach in terms of the water quality.

I'm going to back-end some of the comments that Bart will make to try and give you the context why it is so

important.

So with that kind of, hopefully, a refraining to focus on MEP, to focus on your obligation to meet water quality standards, to recognize we do have to do things differently. Bart will come up and give you some of that context around the country. We'll show you an EPA definition of LID exactly like ours. And I will describe what we'd like to see done with the program.

Thank you.

MR. LOUNSBURY: Good morning, Madam Chair, members of the Board.

I'm Bart Lounsbury from the Natural Resources Defense Council, as David mentioned.

David hinted at this, but the reason we're so focused on LID today, and probably why a lot of the commenters here today are so focused on LID, is that the conversion of impervious surfaces and natural areas to impervious surfaces through development is the leading cause of water quality impairment in Orange County and, indeed, around the country in general.

And LID has been proven through many studies to be a superior technique for treating stormwater. The Ocean Protection Council of California, just last year, came out with a very strongly worded resolution, that I believe we sent to you in our packet, showing that LID is a practicable

and superior approach. And encouraging regional boards and various other entities to adopt LID as their approach to stormwater management.

US EPA has said the same thing. You heard that today from Mr. Kemmerer.

How do these practices function? Well, apparently there are many definitions out there. This is one from EPA which actually says that it is retention. It is infiltration, evapotranspiration, and reuse of stormwater.

Those are three different techniques. Mr. Strecker touched on this. They're all viable here in different scenarios. And where infeasible, we believe there are alternatives that can be taken. And that this permit does, to some extent, accommodate, but needs to accommodate better.

The State Water Resources Control Board has noted the extreme importance for having performance requirements for LID implementation.

So in this case what we've been arguing about, I think, a lot today is exactly that paragraph -- those couple paragraphs in the permit, where the performance requirement is established. That's why it is important.

US EPA also placed, as you heard from Mr. Kemmerer, very high degree of emphasis on assuring that

there are clear, measurable, and enforceable provisions for the implementation of LID. And where it is infeasible to implement LID onsite, there should be appropriate offsite mitigation options to achieve equivalent results.

Now, EPA also stated, that where onsite management is not feasible, conventional means should not be counted toward this type of numerical performance standard that should be established by the permit. And that's very important.

The types of techniques that we've been talking about fall into various categories. Maybe people who argue about what is LID and what is not. We agree some are much more effective than others. And those are ones we should privilege in this permit. And that's what we're trying to do through our comments on this permit today.

EPA, in fact, has also noted that in this region, typically, permits rely on deferring the creation of standards to plans that are drafted by the permittees and later submitted for approval by the EO or potentially not even for approved at all, necessarily. And those tend to rely on qualitative provisions rather than specific measurable criteria.

Which is particularly problematic because the permits themselves should have established those specific measurable criteria. Which would then defer plans that

don't even have the criteria in them. We want to make sure that this permit itself has the necessary criteria at the outset.

This has been so problematic, in fact, in the San Francisco Bay Region context, that EPA has threatened to consider objection to that permit. This is a letter -- from a letter they wrote to the San Francisco Regional Board this month.

So this is an extremely important issue for all of us. And EPA, appropriately, today is placing a very high degree of emphasis on ensuring that these kinds of standards are in the permit.

Why are we focused on LID? Because it is so vastly superior to conventional BMPs. We had Dr. Richard Horner, who is the preeminent expert on stormwater in this country. In fact, he was on the National Academy of Sciences Panel mentioned by Mr. Strecker.

We had him do a study for us in various areas around California, San Diego, Ventura County, the San Francisco Bay area, analyzing the feasibility of LID limitations and the benefits that would accrue from that implementation.

These are the results for Ventura County. They're very similar for San Francisco Bay, as well as

San Diego. And can you see here that LID BMPs are achieving significantly higher rates of pollution reduction, as compared to even the best performing BMPs.

He also -- Dr. Horner also studied specific case sites here -- this is a restaurant I think he did -- and how much runoff reduction would occur through the implementation of these BMPs in a feasible manner.

And you can see here that there would be approximately a 7 percent runoff loss on an undeveloped site. Which correlates with what Mr. Adackapara was saying. Then with no stormwater mitigation, 49 percent lost. Even with the best performing conventional BMPs, it's 26 percent loss. But under the designed storm conditions, with LID properly implemented, there would be no runoff loss on the site. This has vast benefits.

Also at another case study site, a large single-family home subdivision. In addition to removing pollution, obviously, from the system, it also saves water that results in cost saving for developers, for homeowners, and also reduction of even green house gas emission because of the extreme energy intensity of our water supplies here in Southern California.

I don't think there's any surprise everybody supports LID, including the National Association of Home Builders. No one here today said that LID is not a great

technique for managing stormwater.

So around the country new standards are being adopted. There's an emerging trend toward the types of retention standards that we think this permit needs to incorporate.

Anacostia in Washington DC, an urban area, has adopted this standard, which is to retain the first one inch of rainfall onsite. That's retention.

As someone mentioned earlier, the design storm, the 85th percentile storm in Orange County results in about .75 inches of stormwater in most locations. This is actually a more stringent standard.

And then wherever that's infeasible to meet, there should be offsight mitigation options. And they have multiplier ratios for those, in Anacostia.

The situation is very similar in the West Virginia draft phase 2 permit. Retain the first one inch onsite. If you can't do that, use offsite mitigation or in lieu payment at a 1.5 multiplier for the unretained portion.

That's something we think is very feasible, here. And we hope that that's what you'll ultimately do with this permit.

Philadelphia has the same standard. Retain and infiltrate the first one inch. They actually only allow

infiltration of the first one inch. We are supporting a standard that allows for infiltration of evapotranspiration and harvest and reuse.

We have various techniques to accommodate a wide range of sites. And even when that's infeasible there's always the option for offsite mitigation.

I think David will speak specifically to the concerns of this permit and the language it includes now.

MR. BECKMAN: Thank you, Bart.

Hopefully, that gives you some sense -- and what I want to emphasize, what is before you, even with the EPA changes, is less than what West Virginia -- a phase two, not even a phase one permit is considering -- less than highly urbanized area in Washington DC.

And you've had a chance to review the letter we sent. We have six or eight different standards that demonstrate to you that what you're asked to approve today, with the EPA changes, is significantly less stringent than many other places around country.

You wouldn't get that sense, I don't think, from this morning's presentation. But I think it's critical for your deliberation. Will Orange County adopt something less stringent than a phase two community in West Virginia? That's the question.

Now, we have a lot of concerns with the permit.

Even with the EPA changes, that we appreciate and we think strengthen the permit. You should understand that this is not the NRDC permit as Mr. Singarela suggested or an NRDC provision.

We have suggested something more stringent. We have concerns about the design storm. And more specifically, what happens if you can't retain the 85th percentile storm that you've selected onsite.

As Bart indicated, we think you should follow what every new communities that are considering what these requirements are doing. Which is very similar to a wetland situation, where you mitigate offsite.

Why do you do that? Because we are after a watershed level of performance. We don't want the exception for infeasibility to mean that folks don't do as much as they reasonably can, when you can go, maybe, on an adjacent parcel and accomplish what you couldn't accomplish given the circumstances of your development.

Why is that important? It's important because we won't maintain the water quality goals if we are constantly lowering the requirements based on a series of factors.

So we want that clear performance standard. I think the EPA suggestion goes a long way towards that goal. And just so you can see the difference between something

that's clear and something that's not.

This is West Virginia. And it is very clear. "You must implement and enforce site design standards and manage to keep the first one inch of rainfall from a 24-hour storm proceeded by 48 hours of no measured precipitation. Runoff volume can be achieved" -- and they give you the various ways to do it.

And then they clarify it. "The first one inch must be 100 percent managed with no discharge to service waters." Your permit is not that clear. And it should be.

That's the kind of language that results in good performance because that's the kind of language that we can all understand.

So that's one area of concern.

The EPA suggestion linking a lack of ability to comply with the standard onsite to these alternative programs is helpful. But those programs aren't developed.

One concern we have with this permit and, frankly, others is that the permits don't make the regional board make the decisions that the regional board should be making. You are the only folks in the room that are allowed to issue a permit. With all due respect to the executive officer, he is not.

By having the executive officer basically judge all the feasibility issues, all the alternatives, you're

basically giving up your responsibility, in my view, to decide decisions and be the deciders, so to speak.

Why is that a problem? For lots of legal reasons. But from a practical respect, how is the public supposed to engage in that process? How do you know if Mr. Thibeault makes the right decision, or doesn't make the right decision?

That is a significant issue. There's a lot of case law on it now that makes it clear the executive officer can't be in the position alone of judging the adequacy of provisions like this. Because they're, effectively, the management of the permit.

We want to see the programs spelled out in a public way. And you should make the decision on that. Not anybody else.

And I've basically covered this bullet as well.

Now, one of the things I'm going to try to do before turning it over to Garry is just to connect the dots.

Bart indicated why LID is so important. Why that retention standard is so critical. But there's a context even beyond LID that, I think, is important for the Board to consider in making its decision. And that's there are other issues in this watershed. There's the need to comply with TMDLs, for example.

How will you comply with the TMDLs if you don't

significantly reduce the amount of the pollution? If you don't require permittees and those they regulate to select the best BMPs, the likelihood of meeting the TMDL requirements is very low. And that creates other legal problems.

By selecting strong management provisions, you actually can assist the permittees in doing what we want them to do. Which is to improve water quality. All of the feasibility concerns that have been raised, as I said, can be dealt with with proper provisions. But they shouldn't ignore the vast amount of science and technical information out there that shows these provisions and ones much more stringent are feasible. That's the information before you.

That's why I would ask Mr. Kemmerer to respond. That the issue about the language in the first provision is not just about a delay. It's about the presumption that we need to prove in Orange County something that's -- prove the feasibility of LID in Orange County, but it's been proven to be feasible everywhere else. That this is some new thing. It is not.

In fact, it's being done here by builders in Orange County before the permit is being considered by you.

There's another issue. There's a new case that you probably haven't dealt with before because of -- the permit wasn't reissued in 2007. And that's the

Friends of Pinto Creek v. US EPA.

Long story short. In impaired watersheds like we have, unfortunately, in Orange County, there's a significant restriction on new development and new sources of pollution when there are no TMDLs in place. And there are restrictions when there are TMDLs.

Practically speaking, what's the best way to make sure the permit complies with these kinds of requirements? It is to require the techniques that maximally reduce water pollution. And that is retention of water in new development as opposed to its discharge.

Another problem we've highlighted, the permit doesn't comply with the basic requirement in the statute itself to effectively prohibit non-stormwater discharges.

And very briefly I'll touch on the issue here, or one example of the issue. And that is that you allow runoff during the dry season from lawns and irrigation. Irrigation water which studies demonstrate are highly polluted.

And that's inconsistent with what the act requires. And it's sort of ironic that your peer regional board that covers Southern Orange County, the San Diego Board, has just come out with its draft permit that has stacks of information about how highly polluted those discharges are.

And those are discharges that your permit allows with conditions that are, in our view, not acceptable. Those non-stormwater discharges need to be prohibited. The law requires them to be prohibited. And from a policy perspective, we're not going go get to the end result if we continue to ignore these pieces of the puzzle.

The final thing I would say is that we could understand, perhaps, a difference of opinion if there had been a compressive examination of the likely pollution reduction of this permit. In other words, if you tell us, "We're not going to do exactly what you want with LID, but we're going to retrofit. We're gonna do a bunch of other things. We are going to show you that we have a reasonable belief, based on science, that we'll be successful. We'll meet those water quality standards." That would be one thing.

And perhaps you as a board might think, "Why don't we be more flexible with development, if we know we're going do get there anyway. We're gonna meet our budget. We might spend a little more on a nicer dinner. But we're going to meet the budget, so we'll do it."

That's not in front of you. You can look anywhere you want, in the reams of information you've been given and in any comment by any party, and nowhere will you find an estimate of the effectiveness of this permit. And

that should trouble you from a policy perspective.

Because I would submit, not withstanding your best intention, you don't know what you're doing. How can you? How can you make a determination when you don't know what the effectiveness of the permit's likely to be?

The federal regulations require an estimate of what the purposed program will do in terms of pollution reduction. And we would submit that that's been too long ignored. Not just in this region, but in many other regions and, in deed, in many other places in the country.

And we would certainly submit to you that absent that kind of information, it's incumbent on you when you have information about superior approaches that are practicable with the National Association of Home Builders and NRDC, like, those should be in the permit.

So what that means is, we would like for you to implement the red line -- which we have copies of if you want, they were submitted with our last set of comments -- that shows you what we think should be done with the LID section. Certainly, at minimum, EPA's changes, the small ones -- the two small ones that they've made, should be part of your decision and should not be changed or watered down with the kind of suggestions that you've heard.

And we think, at the end of the day, you will have a permit you feel good about which is practicable and

much more likely to do the job as necessary than one you saw this morning or the one, with all due respect to my friends in the room, that some others would like you to adopt.

With that, I really appreciate the work. I'd also like to thank Mike. We're involved in this kind of process everywhere. I've been in the process and sometimes they start and three years later they're not over.

And while we certainly have some respectful disagreements on substance, we think you've done a terrific job in moving it along. Very professional. Very businesslike. I think it makes it a lot easier for everybody when you can actually get, hopefully, to a result as opposed to this constant process.

And you should be very appreciative of your staff. I think everyone in the room is.

Thank you very much.

Garry, you are going to close.

MR. BROWN: Hello. My name is Garry Brown, Orange County Coast Keeper.

First thing I want to do is kind of echo what David just said about the staff. Our organization for the last decade has worked closely with the Regional Board Staff and built a relationship with them. And it's a relationship we appreciate.

And when this came up, which every five years it does, we basically -- in Orange County, a group of us had been talking about this for some time. And in December we came, a small group of us, and asked if we could stop the comment period date of the end of December to, basically, take some time out and maybe change the paradigm.

We've had a long success of working with various developers in Orange County. I think at all times we have been somewhat reasonable. And we have a reputation for that. So we have, often, discussions on how we can make this better.

And in December, what I felt, personally, was that, you know, we can go through the process again and try to clamp it down some more. And we can probably -- we can guarantee it will be more expensive for developers, more expensive for the city. But can we guarantee the water quality is going to be better on the direction we're going? And the answer is no. I couldn't stand up and say the water quality will be better.

So, you know, to me, we need to change the paradigm. How the past permits have gone. And that's what this attempt has been -- to do. And that's why it hasn't got any discussion today.

But the section yesterday that was mailed and is on your errata sheet on the master watershed plans. And

I think that alleviates a lot of the discussion you have heard this morning and objection.

We look at -- how can we change the paradigm of the permit to, you know, make somewhat reasonable, but yet accomplish a higher standard of water quality. And our thought was let's develop a strong permit. Let's take susump, and let's have the 85th percentile. And let's retain that water. And I'm not going go repeat what you have heard a dozen times today. We have to have a strong permit.

And then the second -- like the second leg of a three-legged stool. Let's develop watershed master plans. And in the next two years -- and virtually everything Mr. Strecker said in all of the different nuances of Orange County. That if you're in Serrano Creek, we know there's erosion problems. If you're in San Diego Creek, we know where the plumes are. We know other issues. We know TMDLs. The whole point in the watershed master plans is to encapsulate everything that was basically discussed earlier as infeasibility or feasibility.

And so what we would like is to proceed with that, have a strong, almost default permit, have, basically, these watershed master plans so nobody can say one rule fits all. Because it will be one rule based on the circumstance and science of that particular watershed. That's the

direction we want to go.

The third leg of the stool, we want to go online hydromodification modeling with something like UCI. And have online historic rainfall data. The geologic data.

The ultimate would be if engineers, when they were designing a project, they go online and pull out all of the historic data, all of the rainfall data, and they would know how to size. And then when their plans go to plan check in the city, the plan checker would go on the same website and validate the information.

What we're looking at is a longer, wider vision than this permit. This permit is the first leg in, certainly, the watershed master plan.

Where it mandates is the second leg. And down the road, we want to develop the third leg. We think that, one, bottom line, we'll have a much more effective permit. We will have, actually, done significant in drastically improving water quality standards for Orange County.

You know, one of the concerns about using the word "infiltration" -- over the years we, as I said, we work with various developers. You have got very responsible developers. We started a relationship with Irvine Company, as you know, in an era of -- through litigation. And that turned into a partnership for developing water quality.

And we have touted their work at the

Newport Coast on water quality as being the best in the nation. My point is, if Irvine Company -- and what they have already proven they're efforts in water quality. Then you know, we won't have a problem. But not everyone's Irvine Company.

You now, MEP, for example. Our frustration with MEP is to the responsible developer, you know, that's fine. To the guy that's on a shoe string and trying to cut every corner he can, MEP translates into let's do the least for the cheapest.

My problem with this is that you add filtration, that's the way out. That's where the responsible developers and redevelopers will do what they need to do and do it right. The ones who are trying to skate by and do the least, you know, they're going to look at that and say, "Okay. We'll dig a ditch and throw some plant seeds in it." And that's a vegetative swell, and the runoff will come off. That's the way out. That's our concern.

We need to have a strong permit to begin with. And so we certainly would appreciate your deliberations in giving us that.

Thank you very much.

MS. BESWICK: Thank you.

MR. PON TELL: Madam Chair?

MS. BESWICK: Yes. Questions?

MR. PON TELL: Just two follow-up questions. On the one slide you showed -- I think it was Paul that showed the natural runoff being 7 percent, and LID runoff being zero percent. Is that desirable or is the goal 7 percent?

MR. LOUNSBURY: That's under the design storm condition.

So the goal there is not necessarily a hydromodification goal, which is more about matching peak flows and durations and what not, which is also in the permit. The goal with the LID provision should be mostly water quality.

So in that case, by reducing runoff to zero, you can be sure under the design storm condition, there's no pollution going to receiving water. That's not zero percent runoff overall because we're talking about a design storm scenario. Which, as people have noted, is not necessarily -- or does not take into account all the rainfall in the year. It is less than 95 percent of the rainfall that is captured.

MR. PON TELL: Can you say that again?

MR. LOUNSBURY: Sure. I think that -- and we've submitted many studies, so we can look through the records and find this exactly.

Not all of the rainfall in any given year is

captured within the 85th percentile design storm scenario. There will be runoff. Period, if you're just capturing the 85th percentile storm and retaining it onsite.

So that 7 percent discharge under natural conditions and zero percent discharge under the LID provision doesn't mean that every single site in Orange County will never discharge stormwater during the entire year.

Does that clarify?

MR. BECKMAN: That's perfect. I just wanted to add, one thing you have to keep in mind is, what is on a natural site and what is on a developed site.

The reason it is so important to limit water pollution or the flow of pollution is because once you've developed, it's no longer natural. There are pesticides and herbicides and potentially bacteria and other metals and all the other things you know from your work are in the water in Orange County.

The ability to limit the amount of pollution by limiting runoff is critical to the ultimate environmental goal. As Bart said, that's not -- because it is a design storm, it is not all water. You'll still get runoff from the site.

Most of the standards for hydromodification that US EPA adopted -- even the ones that are in the federal

energy bill that relate to federal sites, one of the newest -- they assume that if you retain, roughly, an inch of rainfall, that's a down payment on the hydromodification requirements.

In other words, in order to make that hydromodification graph look like it should, you have to do some runoff. That's generally the way the system, or the standards work. So what we're asking for here is something far less than what other communities are doing.

I think that's the point that's really, really important.

MR. PON TELL: Just a follow-up question. I guess what I'm confused by, you're comparing an arid community with non-arid community. So capturing an inch of water in a non-arid environment is a fraction of the total. Where capturing an inch of water in an arid environment is 100 percent of the total.

So I'm just kind of trying to grasp the net effect of making those kinds of comparison and adopting a policy then. If in any of those communities, you know, that one inch was 20 percent of the rainfall that was being captured, and then we were then to apply a 20 percent factor on the capture, it seems to me that might be an equally relevant way to evaluate.

MR. BECKMAN: I think there are a couple responses.

That's a good question. The way you can normalize the situation is through the design storm. And those communities, notwithstanding whatever -- maybe they have 30 inches of rain -- I think your point, right -- and maybe we have 10 inches here. So how do you deal with the question?

You deal with it, in part, with the design storm. The requirement in West Virginia, hypothetically, isn't to capture all of the rain they have during a certain month. It is an inch of rain. The standard here is less than that. In any case, it normalizes for the fact that there are different amounts of rainfall in different places.

It is, actually, more difficult to accomplish the standard in an area with more rain. Because as Mr. Strecker indicated, if you have a lot of rain, it can be, you know, the ability of soil to evaporate, the ability of systems to capture rain after repeated storms is more challenging than if you have only a few rain storms every year.

The other thing I would say, just to complete the answer, is we asked Dr. Horner to look at the questions of these standards that we're holding out to you as an example. And asked the question, is the evaporation rate in those places comparable to Southern California? Because that would be an important thing to consider.

If, for example, you couldn't evaporate water, or you couldn't somehow store it, then maybe the standards are not apples to apples. I think is part of what you're asking.

That's in our submittal most recently to you. We looked at all of the standards that we have put forward in our comments. And the conclusion, as you can see, is that Southern California is either on average the same as the other communities, or in some cases, is in a lot better situation to deal with the standards that we're advocating. Because of the fact that we get a lot of sun during -- between storms in Southern California.

We try to look at those apples to apples questions. And we are suggesting to you that this is an apple to apples situation. And, if anything, that supports a stronger standard than you're looking at today.

MR. PON TELL: I have two quick questions for staff.

One issue was raised about the non-stormwater discharges, to what extent I think it was implied that our requirement did not meet the standard that's required.

MR. ADACKAPARA: Our requirements actually are specified in section three of the -- roman numeral section three, that's page 32, and it actually prohibits non-stormwater discharges. And it is consistent with the federal regulations and the Clean Water Act.

MR. PON TELL: My second question.

There was a question about the, quote, unquote, "Ability to state with some level of certainty with regard to the overall effectiveness of the permit towards achieving the water quality standards."

MR. ADACKAPARA: Actually, in the report of waste discharge, that was submitted by the County. They have provided an effective analysis.

And in addition to that, Geosyntec, provided by somebody, of all the effectiveness analysis that has been included in the report of waste discharge. And also in other reports that the County has provided.

We did not provide a copy of the Geosyntec summary to you because it came in yesterday night. But they did provide that analysis.

MR. PON TELL: And based on that analysis --

MR. ADACKAPARA: Based on that analysis, the program seems to be effective. But some of the programs could not be -- they could not reach a conclusion about some of the programs that are being implemented. So they are proposing additional programs, additional best management practices.

And we are requiring in the permit additional controls so that the program becomes more effective.

MR. PON TELL: Thank you.

MS. BESWICK: Is that it, Steve?

What we're going to do now -- we have had food delivered to the conference room in the back. We're going to have a closed session while we have some nourishment as well. The closed session will be on the item on personnel.

So we'll be on a break until 1:30.

(Lunch recess)

MS. BESWICK: Back in session.

What we're going to do -- we have several more folks who would like to offer input. But I think at this point we're going to become a little more constant with our three-minute rule. Yes, Gery said I'm going to get a little heavy-handed.

I think the Board members are going to throw me off the floor.

And then -- I know there are a couple of people that wanted to add another comment. I'm going to give you a minute or two to do it. I'm going to force the three-minute rule now.

So let's see, is Mary Lynn Coffee in the room?

There she is. Followed by -- is Matt Yeager still here? I don't see him. I'll put his card underneath. And Jim Fitzpatrick.

Go ahead, Mary.

MS. COFFEE: Thank you.

Good afternoon.

I represent the city of Irvine and its division of the Great Park Corporation. And I understand the City of Orange also concurs with these comments.

I would like to encourage the Board, as heard before, to clarify this provision C2 of Section 12 because the clarification is really very critical for this permit.

We appreciate Mr. Thibeault's clarification that feasibility criteria will be developed to determine when it is feasible to retain runoff onsite versus when that needs to be done somewhere else. It is still important to revise this section or clarify it so biotreatment BMPs are available for use in meeting the standards of Section C.

You know, the EPA's language here clarifies that this section, C2, tells you when you have complied with the LID requirements of this permit, and when have you to go to Section E and look for additional mitigation under water quality mitigation credits or other kinds of fee programs to comply.

And the clarification that we're requesting would make it clear that biotreatment BMPs are available for use in complying with the standard. And that you don't have to go to section 12E to use those types of BMPs. And they are, in fact, available without a waiver and the offsite mitigation credit programs that are anticipated by Section E.

So we encourage you to go ahead with that clarification of the term "capture" to incorporate biotreatment.

And we'd also like to point out that that clarification is consistent with the generally accepted scientific and technical definition of LID. We're not asking for an exotic definition of LID.

An exotic definition might be one that excluded biotreatment of BMPs. But rather a clarification that the types of LID BMPs that are typically thought of to be LID technologies that are available. And I would note, in addition to the definitions we gave you, all of the guidance for LID BMP implementation that we looked at as part of the stakeholder process, including guidance developed by NRDC for recommendations on how to implement LID BMPs do provide recommendations for implementation of biotreatment BMPs. I don't think it is a radical departure to allow those types of BMPs to be used.

And the last point I'd like to make, clarifying that biotreatment is a tool available to meet the standard is also, I think, very important when we're thinking about how protective is the stormwater standard that you're creating -- stormwater control standard you're creating with this section, C2.

You've heard from Dr. Strecker that requiring

retention of that full water quality volume, the runoff from that 85th percentile storm event, which is roughly equivalent -- I think someone, Mr. Ameri, said that it's roughly equivalent to 95 percent of rainfall. Or I think we also saw in the stakeholder process roughly equivalent to somewhere around the first .9 inch of rain.

The required retention of that amount may not -- may be, actually, less protective of the water quality than allowing some of that to be treated via biotreatment. Because in this region, a semi-arid region, where we get back-to-back storm patterns, you may end up with discharge of untreated water much more frequently. And he also noted that it is critical to allow biotreatment because anything else would result in a change in the natural water balance when you take into account ground water and evapotranspiration.

With that clarification, we support this permit. It is a tough permit. It has 25 to 30 new requirements, programs, et cetera. But that water quality is critical in Orange County. We support the permit with that clarification.

Also, I want to indicate that we highly support the master plan process that was set forth in the errata sheet today. And look forward to participating in that along with Coast Keeper and the other permittees.

Thank you.

MS. BESWICK: Thank you.

For those of you who just walked into the room. Since we have reconvened, I'm enforcing the three-minute rule. And I'd really appreciate it if we would bring up new points at this point rather than reviewing things discussed in detail over the last few minutes.

Gene Estrada. Is Larry McKenney still here?

Larry, you will follow, then.

MR. ESTRADA: Good morning, Madam Chair, board members.

I will keep my comments brief.

I thought we were going to go ahead and fairly adopt the permit today. But one of the comments I did want to make was that on the errata sheet -- those were the changes for the implementation of an approval of water quality management plans.

In the errata sheet we seem to have made a change that, to me, is fairly significant and would affect some of the projects. And that is the implementation as to when we actually are required to implement LID.

It seems that there's no provision right now to allow projects that have been approved through the cities either through the planning process or discretionary permits. There was language there previously. And that

language has been deleted now.

I'm concerned about what we would do for projects that are already in place and have been approved by the City, but don't have approved water quality management plans.

For instance, they have approved parcel or tentative maps. And to go back and have to go back and now have to redo the plans for implementation of low impact or hydromodifications is going to be very difficult to do. And something we shouldn't have to do.

MS. BESWICK: Good point. Thank you.

Larry, followed by -- did Matt come back in? I didn't see him.

MR. MC KENNEY: Good afternoon.

I'm Larry McKenney. I work for RBF Consultanting. I was asked by Lennar to participate in the stakeholder group meetings with regard to this permit. And Lennar, of course, is doing the Heritage Field's Great Park Neighborhood's Development at the Old El Toro site. So it is a large development in this permit area.

I think the first thing I would say is that Lennar probably sees a lot of things in this permit that gives them a lot of concern and pause. There are a lot of things in this permit they don't like, even though they want to do the right thing.

However, we believed in the stakeholder group that we were reaching consensus on a lot of issues and reaching a mutually acceptable conclusion. And so we're really not happy with some of the proposed changes to the permit language today. And we hope that the permit does go through and get adopted.

MS. BESWICK: You're talking about today's language changes?

MR. MC KENNEY: And some things suggested in speaker comments today to go even beyond that.

MS. BESWICK: But none of that is on the table at the moment.

MR. MC KENNEY: I did mention two things. Not new things, but I wanted to add a twist.

MS. BESWICK: You're not playing along.

MR. MC KENNEY: One is just with regard to the inclusion of biofiltration as a part of, sort of the first tier of --

MS. BESWICK: We got that. We've got that. Next.

MR. MC KENNEY: I want to suggest, in lieu of Garry Brown's concern, that that be viewed as an out for developers. Certainly, there's no problem with subjecting that to design standards or something so that it's clear what that is. The County can develop that as part of its implementation plan.

And then the last thing I want to mention, there are provisions that are in the permit that Paul Singarela referred to as the off-ramps -- that are in Section 7 now -- that allow for the implementation of these same kinds of LID approaches on a regional scale if it's not appropriate or feasible to do them at a site scale.

And I think there's concern now, with some changes in the language that occurred, we may have lost the ability to go to that alternative without going through EO waiver process. I just wanted to note, I think that that's a very valuable and important part of the permit.

It actually was Richard Horner's suggestion to include that kind of an approach in the permit. And we develop it and implemented it as part of the stakeholder group. And I'm not sure what the effect of the language is now.

I wanted some clarification that we still can use that kind of larger regional approach once we've done what we can do onsite without going through a waiver process.

MS. BESWICK: Did you see something in the errata or -- that would indicate to you that the change --

MR. MC KENNEY: I'm just trying to understand the paragraph 2 that's up here as it's rewritten now. I just want to make sure -- I may be completely wrong. I just

want to make sure we don't have to do everything on site and then go to a waiver.

MS. BESWICK: Remember, this is not adopted. This still has to be discussed. I don't see where that would really change the EO's authority in this.

Good point.

MR. MC KENNEY: Something for you to consider in your discussions. I'd like to be able to preserve the Section 7 regional alternatives, once we've done what we can do onsite.

Thank you very much.

MS. BESWICK: Thank you.

Is Jim Fitzpatrick here? And Irwin Haydock?

MR. FITZPATRICK: Thank you.

My name in Jim Fitzpatrick.

Hello, again. Happy Earth Day.

I wanted to introduce a new concept called Low Impact Car Wash Standards.

First of all, thank you to the permit writers. I appreciate the dialing up to this state. I did pass out some information. Mike, has the Board received that?

MR. ADACKAPARA: Yeah.

MS. BESWICK: Yeah, we did get it.

MR. FITZPATRICK: Great.

There's an opportunity here to prevent

pollution and contaminants from the mobile car washing and detailing. And it's very simple. Require these businesses to operate to the same standards as a commercial car wash. Because that's what they are.

I operated in the City of Santa Ana. And I went through a rigorous one-year process. I had to demonstrate how I was going to be handling the waste water.

Pronto Wash is the planet leader in hand car wash and detailing. What makes us unique is we get a car clean with one pint of water and don't create any runoff.

Yet, when I say I'm mobile in the same city, unless I'm a massage parlor or something like that, with, often, $25 I can receive a permit to operate within the city. And I don't have to go through the same process.

Although, in this permit I do see there's a pilot program. I don't see any standards that materially change the BMPs from what exist right now. And right now -- let's take the two worst case scenarios: Cleaning rims and cleaning engines.

If you go up to any detailer and say, "I'm going to sell my car." As sure as the sun will rise tomorrow, you'll get up-sold to an engine detail, where they spray caustic degreasers -- spray all that to the ground, put a dressing on. Well, all that contaminate and pollution is now sitting on the ground.

The way the current permit reads -- the interpretation by the County of Orange, who is the permittee that directs the co-permittees to the cities. They look at that that says, if that water does not enter the public right of way, no harm, no foul.

And so as proof that runoff from car washes do create issues, the International Car Wash Association has published the Car Wash Runoff and Effluence Study in Puget Sound that offers the facts and data it does kill fish.

So what I would recommend, then, is looking at cities outside of Orange County. I'm so disappointed that I operate primarily here in Orange County and I don't have the engagement of the cities and the counties here.

If you look at the City of Calabasas -- a very small city that's going through the same financial distress that all these other cities are. They do have a process where you do have to come to City Hall. And it is a zero discharge standard. And that's what I'm advocating, is the standard be to a zero discharge. Not, if the water doesn't leave the property, no harm, no foul.

When you look at this, I believe it is reasonable. Because not only is Calabasas, but the City of Oxnard. And the State Water Board is getting much more active on this topic than I'm seeing here in

Orange County -- both North and South Orange County.

Also, the City of Vista, we went through -- they invited us in to test their standard and their process. But they also have a zero discharge. Then you look at the People's Republic of Santa Monica or Pasadena, and they've taken extraordinary measures on this subject. And I'm not seeing that here from the County of Orange.

So it's reasonable in a small city like Calabasas to have between eight and ten people from the industry who have been able to satisfy these standards of zero discharge. It is achievable.

And what I ask the Board to do is be a little more prescriptive to staff because there's nothing in this permit right now, other than to go through the pilot program, as to what you're intentions are for creating pollution through this industry.

So that would be my request, that the Board give direction to Staff to set the standard as a commercial car wash in a zero discharge environment.

Thank you for your time.

MS. BESWICK: Great. Thank you.

Is Irwin here?

MR. HAYDOCK: Yes, ma'am.

Thank you very much.

My name is Irwin Haydock. I'm a resident of

Fountain Valley. And I came here today to speak about item 10, which was on the consent council. So it got passed before I had a chance to speak about it.

I had been sitting here listening all morning to the wonderful conversations. And it reminds me of my successful career of 25 years with the LA County Sanitation Districts and Orange County Sanitation Districts, avoiding the rules and requirements for the 301H Program. And negotiating successfully until I left both agencies when they then had to go to full secondary treatment.

As I aged, I found that wasn't a bad thing to do. In fact, the Orange County Sanitation District, which's well on its way to secondary treatment, is now passing it's clean water over to the Orange County Water District, and we are reclaiming 70 million gallons a day of fresh water. That seems to fit with my background which is a PhD in ecology.

And I'm concerned about, now, in my role as a retired person, I'm an advisor to the Newport Bay Naturalist and Friends, and we're trying to develop the watershed management program. And I would second what Garry said about watershed management.

And the state seems to have that as a mantra now where we would use collaborative, adaptive management with eco-system based principles to develop full scale plans

for each watershed that makes sense; that are systematic, that are sustainable, and are the right thing to do.

I have to cut to the chase because you've limited me to three minutes.

And my point is we now have Marine Life Protection Act process going on on the coastal zone. We have ASBSs that you regulate, which they complain about, well, you can't have discharges in them and so on. And we have watersheds that have TMDLs.

What I want is a system that allows us to go from the pines to the palms, to do all the right things. And I think the way to do that -- I read last night in Isaac Newton -- James Glick wrote a biography about him. And he says this, "The Aristotelian cannon enshrines systemization and rigor, categories and rules. It formed an edifice of reason, knowledge about knowledge, supplemented by ancient poets and medieval evil divines. It was a complete education which scarcely changed from generation to generation.

Newton began by reading closely, but not finishing, the Organon and the Nicobanion ethics," in parentheses, "for the things we have to learn before we can do them, we learn by doing them."

And I really liked what the beginning speaker said today from Lake Forest. I don't like it all, but I

think I want you to move ahead with it. And we'll fix it as we go along. Remember, in making the policies, you revisit them over and over and over again.

Thank you very much.

MS. BESWICK: Thank you very much.

And did Matt Yeager come back? There he is. You came too far not to be able to speak.

MR. YEAGER: Thank you, Madam Chair and members of the Board for opportunity to address you today.

I'm here on behalf of the San Bernardino County Stormwater Program. And there are 16 cities in the valley in the Santa Ana watershed and county and the flood control district of the permittees.

Similar to what Jason Uhley told you, this isn't our permit. We understand that. We have been watching this permit along with the South Orange County permit and Ventura permit and Bay area permit that's going on up there because it will impact what happens to our permit. And for this reason I believe it is the next one in the queue for MS4 permits.

And, you know, we appreciate all the staff time, discussion that's taken place. A lot of -- we've learned a lot in this process. And we'll be in a better position to do our permit than Orange County was to start with.

What I ask is that we be afforded the same opportunity to start from our ROWD, that was submitted back in '06, to -- we spent a year developing our ROWD with input from members, from staff members. And we would like to not discard that effort. We'd like to be able to use that still and proceed from that as a starting point. Rather than taking a look at all the Orange County language and using that as our framework and a template. Which is what our permittees, the city managers, city engineers are a little afraid of. We're going to be given that language and have to live with it. Because it will now become MEP for us.

That's all I really wanted to say. Hopefully you can afford a little staff time for us, too.

MS. BESWICK: Thank you, Matt.

Our track record is pretty good. I think you can trust us on this.

I'm out of cards. I know at least one person wanted to recomment. And I said I would give him a minute to -- yes.

Oh, Mark hasn't had a chance to speak yet.

I'm sorry. I'm confusing you. If you don't mind waiting.

MR. RECUPERO: Madam Chair, members of the Board.

Mike Recupero. I apologize for our clumsy

dance. This is a regulated community that looks at words and meaning really careful. We have spent the last six months hashing out this permit down to the word. So when we showed up this morning and the word changes, it made us uncomfortable, the fact we didn't understand what it means. Made us essentially go to pieces.

So with that in mind, if the Board is going to consider this language, I just ask for maybe a clarification of a few things. The first of which is whether or not this language changes the feasibility analysis. The sentence is stricken up there. If that's true, or if this is going to be our permit language, what does that mean? And I think that's important for the regulated community to know.

Number two, what is the threshold of the showing of feasibility? And who is the trier of fact on that? If the City of Anaheim wants to put in a parking lot or redo -- redevelop a portion of a library, are we actually doing a feasibility analysis that shows that infiltration cannot be done? And once that's done, are we going to a waiver hearing at the Board? And is every public works project doing that? Is every homeowner doing that when they're required to do a WQMB? Is every commercial facility or an Applebee's expected to go to a waiver hearing?

I don't know what the answer is, but I know it's a large concern because simply for the volume of the

project that gets done.

The third point is if, indeed, "capture" is going to be defined to include bioinfiltration, or biotreatment, biofiltration, as we said time and time again, I think there's a greater level of comfort on the regulated community side.

And lastly, we support the Orange County Water District separation distance of ten feet between the bottom of the infiltration device and the water table.

Thank you for your time.

MS. BESWICK: Thank you. Good points. And you were very succinct. Thank you.

UNIDENTIFIED: Chair Beswick, members of the Board, one minute. And I promise Paul will be entertaining.

MR. SINGARELA: Paul Singarela for Pickwick.

As you go into these deliberations, the issue from our perspective on LID is biotreatment. Is biotreatment going to be part of the compliance, part of the standard, part of what you define as MEP? Or is biotreatment something we have to earn only by showing technical feasibility and getting some waiver?

We don't want to go over in waiver land or getting a variance. Biotreatment needs to be part of baseline compliance. I ask you to deliberate on that, and hopefully resolve that issue today.

Thank you.

MS. BESWICK: That was good. Very quick. I think that's -- unless I'm -- one minute.

MR. BOON: Richard Boon, County of Orange.

I need to have the last word.

At 9:00 o'clock this morning, the County of Orange, all of the permittee cities, I think were enthusiastic and supported adoption. And that included the errata sheet and all the additional provisions in the errata sheet, including, I think, what must be a rarity for a regulated entity, asking for something that was previously optional be made mandatory, the watershed action planning process.

With regard to the language that you have before you, I think we would be prepared -- and I think we could very quickly offer you some alternative language on the revision to C1. Perhaps that establishes a point in time, 18 months or 24 months, after this process of trying to come up with a revised model WQMB such that the program would preassume that all projects are feasible, unless we've come up with some criteria for determining there are cases of infeasibility.

With regard to C2, when Haydock quoted Newton, I would refer to the comic strip in Fraz in the LA Times.

MS. BESWICK: Ten seconds.

MR. BOON: Ten seconds.

There are simple answers to complex problems that are generally wrong. Mike, I think, put together a permit that is a swiss watch in its sophistication and interconnectedness. And we would ask the revision to C2 be struck.

MS. BESWICK: Thank you.

Okay. I think we're at the point where we can, at least, stop, if not close, the public hearing. And I'm going to turn to the Board members. But as I do that, I'm going to play on what Richard just said. And that is he tells us that people came here today, and we heard all day long, people came here enthused about this permit, ready to support it. It was like -- I like the swiss watch analogy. Way to go, Mike -- and then we ran up against something new to everyone in room. Not just to you, but to us.

And so something that we might consider -- I'm not suggesting -- just as we begin our debate, what we might consider is -- let's look at the good parts of this. See if we can come to terms on the pieces that everyone's in accordance with. But, perhaps, an option could be to leave the public hearing open on just the two items in question until our next meeting, which would be about 30 days, I think. May 22nd, close. Perhaps giving time for people to submit comments.

And we could keep the public hearing open just to those two points for our meeting in May. And if there were still issues about it, we could address them then. That's one suggestion as we begin discussion.

MR. RUH: Madam Chair, I think that's an excellent suggestion. We had concurrence on so much of this already. We could move forward on that and do what any prudent -- even a business would do -- the areas we have some question, let's revisit it. Keep it open. I think that's a very fair way to do this.

MR. AMERI: Ditto. I agree. I think we should limit the next hearing to specific items which essentially 90 percent, I think, is going to be items 12C1 and C2.

But I have a couple other points I'd like for consideration before now and next month.

One of them is Item E1 which essentially gives the EO too much power. If the feasibility -- if one of the LID procedures is not feasible, at the discretion of the EO to make the decision whether another alternative is feasible or not. And if the applicant doesn't agree with them, guess where the decision goes to? State. It never comes to us. And I totally disagree with that.

We are the body that makes the decision. We are the one that approved the permit. We are giving our EO the authority to make that decision. And if the applicant

disagrees with his decision, we should be the body that -- to consider that Applicant's, you know, appeal. Which is in agreement with what David Beckman said, basically, a hundred percent.

I do believe that we really need to have a very clear, concise definition of what LID really is. None of us really knows what it really includes. Is it the three items of infiltration, evapotranspiration, and unused harvesting? Does it also include a fourth element which is filtration and treatment and release?

And I see this thing from one of the speakers that very clearly indicates that the US EPA and the states criterias (sic) mention filters as one of the four elements of LID. Then what I hear are arguments that that's not true. EPA has other definitions.

I'm not comfortable with what it is. The staff needs to really convince me either that 100 percent filter is the fourth element in LID, or convince me that it is not. Or come and tell me it is in their research 75 percent of the time it is in there, 25 percent isn't. I need to be very, very, very clear whether there has been practice or not.

Third is something that Steve mentioned, the 85th percentile event. He brought up a real good point. What is the 85th percentile? In Seattle it is probably

5, 10 percent of the rain events that happen over the year. Where is it in Orange County? 80 percent of the time? 90 percent of the time? Some said 95 percent of the time. In other words, we build storm drains in development. We spend all of that money. 95 percent of the time it is dry when it rains. 5 percent of the time, when you have a little bit of rain over one and a half inch or whatever, goes into your storm drain. Why do you build storm drains then? Let's eliminate building storm drains in new development and say onsite retention. Period. These are issues I have.

I agreed with you that 90 percent of the discussion should be concentrated on items 12C1 and C2. But I would like to be clear on these other items before I'm ready to express an opinion.

MS. BESWICK: Richard?

MR. FRESCHI: I concur with your point. And I also agree with Fred, that's delineated in footnote number 55.

I think, not withstanding the fact if it is turned down by this Board it goes to the state, I would rather have it -- if it is turned down by our EO, it comes to our board, and we make the decision. Because if that's the case, and it is turned down by the EO, then the company or the organization has to spend a whole lot of time and lot of effort and lot of money going up and arguing it in

Sacramento. And I ask us to consider that provision.

That's it.

MS. BESWICK: Steve, anything you want to add?

MR. PON TELL: Sure.

MS. BESWICK: Any reactions to --

MR. PON TELL: Well, first of all, let me confirm -- so Gery is in section E1. Is that the case, if there's an EO decision that it would be appealed directly to the State?

MR. THIBEAULT: Yes.

MR. PON TELL: So we can modify that to say that if someone would appeal the EO decision, it can be appealed to our Board?

MR. THIBEAULT: Yeah. And you can also modify it to bring the whole decision back to the Board.

MR. AMERI: We don't want that.

MR. THIBEAULT: And I would recommend that you do that instead of having the EO review it.

MR. PON TELL: I think we should at least, maybe, use the standard by which we review septic tank appeals. So at least have Staff have that level of review, to the extent it is necessary to have a board have a step in that process.

I found a lot of the conversation very interesting. I'm sitting here, Madam Chair, do we really need to keep the public hearing open on these, essentially, two items? Maybe for form, it may not be a bad idea,

because there were suggestions of additional alternative language that might be injected into it.

I do also agree this is actually -- having the opportunity to review it -- I viewed it as a very well crafted and balanced approach to what can be incredibly complicated issues. Congratulations to the process and the working group that invested the time in this.

Just some conceptual thoughts and especially, maybe with regard to San Bernardino and Riverside, some things to think about. I think the 12-month process for, you know, developing some more specific plans with low impact development is helpful to everybody.

There's a concern in the back of my mind about jumping on to a solution du jour that says, today -- and I don't know if I captured it exactly right -- the concept of capturing and mitigating runoff on a lot-by-lot basis being the best solution that may or may not be the case. I think there can be arguments for logical, neighborhood, local, community based, regional, subregional solutions for different types of activity. And to the extent possible, I think that the planning process in -- as it articulates in this permit -- should allow that level of flexibility and creativity in thought with regard to what may happen in any particular incident and what may be the best solution.

I am always curious when standards are set with

regards to modifications of parcels up to 5,000 square feet or 10,000 square feet or 100,000 square feet, because my question always is, why not 98? Why not 105? Where is the rational and logical way of thinking about it?

As LID moves forward, I think good planning is going to require an increasing amount of thinking about the system solutions, about how development occurs not just on lot-by-lot or project-by-project bases, but within the context of the community.

The other question that always comes to mind is -- in using Orange County specifically as an example -- what percentage of activity are we actually talking about since a significant percentage of Orange County is already built out?

So to the extent -- I think I heard someone say, the only way we are going to solve the water quality challenges is through low impact development. Well, you're talking about one, two, three percent of the entire county, then, is going to save the entire future.

So I think there is a disproportionate weight given to some solutions when it may be that a subregional or neighborhood or community solution can actually capture and deal with the currently built environment, which is the primary generator of runoff and all of the various pollutants we're concerned about. As opposed to the small

fraction of new development that's going to be occurring in Orange County over the next decade or two, over the next year or five.

I seriously doubt that there will be a lot of new development anywhere for quite a while. I hesitate to put our entire future, essentially, on the bubble of LID. I hope there would be some other solutions articulated in the permit that would be able to achieve our goals.

With regard to some specific recommendations, I see no reason not to include the term "biofilter" with regard to the catch-and-release -- whatever the right characterization would be. I assume staff could come up with the appropriate term.

I would also see that, you know, the ten-foot standard with regard to the separation -- and I do appreciate the ground water purveyors having an interest. And it would seem to me they would have a significant input into assessing what they believe would be a safety factor with regard to water quality.

I also don't necessarily see anything wrong with changing in C Number 3, essentially, the sentence that talks about the design -- instead of "The design strategy shall be to maintain or replicate," "the design preference shall be to maintain or replicate."

And so, once again, all going back to the

intent of, we want to do the best job possible. We want to use the best science possible. We want to devote our recourses to the best, most cost effective solutions that then perpetuate, essentially, clean water.

And my final comment would be, I would hope -- it is kind of interesting, reading through the cost benefit analysis on the permit -- which, I believe, was about a page and a half -- with a primary emphasis on looking at the ocean water, the beaches, the use of the beaches, et cetera, as a primary benefit and tying that to tourism and tying that to tourism dollars. It would be my strong suggestion if we can, in any way, beef up cost benefit analysis -- if we're going to be putting more energy towards smaller and smaller solutions down to a lot-based solution, per se, then we may need to add additional elements in order to actually have a cost benefit analysis of the permit that's being proposed.

With that, Madam Chairman, I would be prepared to vote today. I'd be prepared to vote in a month. It is to your pleasure.

MS. BESWICK: I want to give Bill a chance to comment.

MR. AMERI: Excuse me. I have one more comment.

MS. BESWICK: Could Bill comment before? And then I said Gery had a comment. I will give everybody a shot. And

I might comment.

MR. RUH: Other than the two items we have presented before us, which seem to be the point of contention, I believe we've gone through in good faith, everybody with the stakeholder process.

I believe the stakeholder process was designed to reach a consensus as best we could with everyone at the table in agreement. Not everyone is going to get every single item they want. But we come together in reason.

I see no problem going forward with it. Other than these two items, keeping them for the next meeting, to move forward with it just as it has been presented. Because that's what the stakeholders agreed to.

And to put other things in and change it, means we have to go back to another -- open the whole thing up. We've had agreement on consensus. The stakeholders worked this out. Other than these two items before us, which we can continue and let the stakeholders work with that, I think we need to go forward in good faith with what they've already worked on.

Thank you.

MS. BESWICK: I asked Gery -- I'm sorry. Did you want --

MS. MC CHESNEY: I had a few comments to make on the process.

MS. BESWICK: Great. Thank you. Please.

MS. MC CHESNEY: Now?

MS. BESWICK: You want to do it?

MS. MC CHESNEY: Sure.

One thing is that because it is an MPDS permit, it is required that there be response to all comments. I want to check with Staff if any comments today are new comments that weren't responded to in the record. And to -- if you postpone -- if you continue the hearing, then they can be responded in writing and provided later. If you don't continue the hearing, then we need to make sure they're responded to today.

The other thing is on the issue -- if you want to continue the hearing, I would suggest that if you want to have a future opportunity to consider the two items, continue the hearing and not vote today.

The reason is you're going to have two dates by which if anyone wants to file a petition to the state board, there will be two dates to do that and create a cumbersome process. But what you could do is say that you closed the public hearing now. You're providing an opportunity only to submit additional written comments on those items. And set a date certain by which that happens. So you're not, at the last minute, getting the comments, and then it's only on that.

So when you come back, again, you can allow additional public comment if needed on those items, but not review the whole hearing. And then you can vote on that.

MS. BESWICK: Thank you. Those are important.

Mr. Ameri.

MR. AMERI: These are just comments we may not want to include to be discussed later on and with just those two items next hearing, I have no problem with that. Besides what I already said. There are three other technical issues.

I don't see the logic behind changing the 5 percent EIA from a metric that we had to a volume capture metric based on the design volume. I am a little bit of a technical guy, but it is above my head.

MS. BESWICK: I asked Gery to address some of the things.

MR. AMERI: Number two, I don't see any problem with really keeping the ten-foot for the water table instead of the five.

And since it hasn't been brought up, I'm assuming all the stakeholders are in agreement, and the county, especially, is in agreement on the timeline. Because we have a lot of timelines here -- with 18 months within this. I hope this is all agreeable to everybody. And if it is all agreeable to -- that item should not be

included in the next, you know, focused hearing.

But I just wanted to make sure the time tables are acceptable. I didn't hear anything objectionable to that. So I think that, kind of, concludes my comments.

MS. BESWICK: Okay. I thought I asked Gery to address some of these things. Just a little bit of clarity. And then I'll keep the remarks to the end.

Gery?

MR. THIBEAULT: Yes. Thank you, Madam Chair. There are a few things. And I guess I can go backwards from Fritz to Steve.

The ten percent separation, Staff agrees with that. I recommend that be changed from five-foot to 10-foot separation.

The logic of changing from the 5 percent EIA to the 85th percentile is something that was worked out with all the stakeholders. This isn't something -- this is not prescriptive. It is an agreement that was worked out during all the stakeholder meetings that we had. I can go into it again --

MR. AMERI: No. If it is agreed to, I don't care.

MR. THIBEAULT: One of the things that Mr. PonTell mentioned was about the design changing in C3, the fifth line, where we talked about a design strategy. And Steve was looking for preference.

It is more than a preference; it is a goal. It is something that's being sought after. And so it is -- I was hoping he would use a higher level of strength word than "preference" because it is something we would really like to see implemented. And so if "strategy" is not good, perhaps "goal" would be another option.

MR. PON TELL: Yeah, I would agree with "goal."

MR. THIBEAULT: Great.

With the lot-by-lot evaluation, we're not sure where this comes from. There's nothing in the permit that requires anything lot-by-lot. If somebody has an approach that is at regional or in -- neighborhood oriented or whatever, and doesn't violate the prohibition on discharging pollutants to waters in the US. Which is always, like, the number one factor that prohibits long-range regional treatment from being implemented. Then there's nothing that says that kind of approach couldn't work.

You could capture and percolate everything. That's sort of what, like, the Inland Empire Utility Agency and some of the others are doing with large scale stormwater capture programs that they're implementing. I don't think there's anything in this permit that would ever prohibit anyone from looking at a larger scale perspective.

MR. PON TELL: I was quoting, I believe, the gentleman from Orange County who talked about potential concern about

the disaggregation of runoff mitigation to lot-by-lot treatment. I think he said something like that.

My read of the permit is it allows for a neighborhood, subregional, whatever the case may be, solution. And if I was a local jurisdiction attempting to cause a certain amount of development, or economic development to occur, I would probably want to develop a multi-entity resolution that can help to create walkable water ways and path ways and whatever else the case may be and accomplish the mitigation.

MR. THIBEAULT: That's something that Staff tried to include in the flexibility in the permit.

With respect to biotreatment. Staff doesn't have any objection to including that, these words into the two places. Page 55, number 7: If site conditions do not permit infiltration, harvesting and reuse. And then we would add biotreatment, comma.

And then in C2, on the screen. The third line after evapotranspire, comma, biotreat, comma, or capture. There's no reason why that couldn't be included.

With respect to having the process come back to the Board on appeal as opposed to just to the EO and then to the State Board. You can do it any way you'd like with respect to that.

And, typically, when there would be a

disagreement, it would be at a technical level. It would be, you know, engineering versus policy kinds of argument. And we can certainly bring those back to the Board. And then the next appeal would be to the State Board. And then -- what we're trying to do is make the process be a little easier to be approved.

But there's no reason it can't come back to the Board. It is going to take a little longer. If you intended 18 months for this to be done, that may be not enough, if it is going to need Board approval. We may have to give a little longer. Maybe --

MR. AMERI: My reason for that was that, really, we want to have a test of the implementation of this permit through our staff. We want to hear if there are -- I mean, yeah, we are not all technical and all that. But we have had a lot of technical presentations here that we made decision on, as far as ACLs and stuff like that what you show very technical, complicated stuff. I'm not afraid of hearing someone come in and presenting a design issue and for us to hear and make policy decision.

MR. ADACKAPARA: I think the intent was, actually, you know, if they were a noncontroversial issue, it doesn't have to come back to the Board. That was the main intent.

But if there are controversial issues that come up during the public notification process -- if you

look at footnote 55 on page 53, it actually provides two options. Either the EO can approve it or the regional board can approve it.

MR. AMERI: No. I think it has to be specific. If there is no agreement between the Applicant and the EO on the feasibility of doing something beyond the LID, it should be appealed to the Board. Period. Like we do with ACLs; right?

MR. THIBEAULT: And then with respect to the threshold question that was raised earlier. Our response to that would be, the threshold should be identified as part of the feasibility study. The threshold should be proposed as part of the feasibility study. And then that proposal, the way it's looking now, would come back to the Board. And you would identify whether the proposed threshold feasibility is adequate. So good luck with that, by the way.

Madam Chair, if you do leave the public hearing open for C1 and C2, it should be left open for all of C -- if we have changes we need to do a consistency review of the permit.

MS. BESWICK: Make sure it all --

MR. THIBEAULT: We might need to make changes, just for continuity.

MR. RUH: Would May 22nd be enough?

MS. BESWICK: Yes, it will.

MR. RUH: Maybe I'll take a stab at a motion.

MS. BESWICK: Can I have comment?

MR. RUH: Sorry.

MS. BESWICK: The reason I want to comment -- I want to start by saying, I'm always amazed and proud and always enjoy touting our region when we go to other meetings. Our stakeholders are an amazing group. They are so willing to give tremendous amount time. And have such a sincere approach to the process. And I think that also speaks highly of our staff. Because it means they believe they'll be treated ethically and fairly by the staff as well.

I guess my comments are going to come from the standpoint, I respect the process around here. And I also -- some of my fellow board members heard me say, I'm loathe to rewrite things at the Board table because -- especially here, when I think I heard there were eight stakeholder meetings. I'm not sure I'm really willing to second guess the people that participated in at least eight meetings on a word.

But that's not to say I would not be willing to be persuaded. If you want to have biofiltering, I'm good with that. If you want to go to goal rather -- but it is just it is not my nature to do that. I agree with the going from 5-foot to the 10-foot.

But the fact is that personally I'm not

enthused about doing other than keeping open the dialing about the items under C. I actually think, Fred, you can end up costing an applicant more time and money if they come here for an appeal and then go to the State Board for appeal. They can actually end up spending even longer.

MR. AMERI: We got to keep the option open.

MS. BESWICK: I'll go either way on it. I think you need to think about who the ultimate authority is. If we deny, they can end up --

MR. AMERI: I don't want that issue of E1 being overlooked. Either it's got to be --

MS. BESWICK: I'm perfectly fine -- my inclination on that one, I don't have a problem with EO making the decision. But I think the appeal could come to us. I'm not objecting to that. I'm suggesting if the appeal comes to us, it could also have a second step. That's all. And so when talking about saving people time and money, that's something to consider.

But for me, I would just as soon keep this open. Whatever you want to do on a motion as far as the appeal of the EO piece is fine. I really, personally, have a pretty high regard for the work that has been done by the stakeholder group, and I thank them for their time and conscience effort. And Mike as well. Very good job. This is tough stuff.

Now, go right ahead. Have a motion, Mr. Ruh.

MR. RUH: My motion is to keep the two items open and to vote on the rest.

MR. PON TELL: I think Counsel advised not doing that.

MS. BESWICK: Not keeping it open?

MS. MC CHESNEY: To not vote today on the permit, but to allow additional comment.

MS. BESWICK: He's just making a motion to keep the public hearing open?

MR. PON TELL: He's making a motion to vote on the rest.

MS. BESWICK: Excuse me.

MR. RUH: No. Keep it open so that we can talk about these two items.

MS. BESWICK: Well, could I make a suggestion? I think that -- let's go back to what Frances suggested.

MS. MC CHESNEY: You don't need a motion at this point. You can, by consensus, continue the public hearing to May 22nd, leaving -- and provide an opportunity to comment on, specifically, section 12C. And then deliberate next time.

MS. BESWICK: I think Bill's probably trying to get some vehicle for us to get to consensus on what we were going to leave the public hearing open on.

It doesn't have to be a motion. Perhaps it can just be a consensus of the group that we'll leave the hearing open on the subject of item C, in its entirety.

MR. AMERI: I want to let you know that May 22nd, since you need at least five votes, I'm not going to be in town.

MS. BESWICK: Do we have five people for May 22nd?

MR. RUH: I'm here.

MS. BESWICK: I promise we won't go to the next day. Are you two here? Then we've got it, then. We've got it.

So, I guess, that's the question. So that -- for the purposes of the people who are in the room that want to submit comments, there are two things.

One, we need a deadline by which we get the comments.

MR. THIBEAULT: We have four weeks until the Board meets. Perhaps we can have comments by two weeks, and cut it off at that time.

MS. BESWICK: Cut it off by May 8th. So comments by the 8th.

And then -- but I think what we need to get consensus on here is -- item C, we all agree to.

MR. PON TELL: Correct.

MS. BESWICK: Do we want to -- it seems to me the other pieces we might not need public comment on, but we as

the Board might want to still address. Such as the appeal process and the individual changes, the biofilter piece, the goal piece.

MS. MC CHESNEY: I want to comment. Just by leaving, continuing the hearing and leaving it open for further comments on specific issues does not prevent you from having minor changes to the permit, the word changes that could be developed over the next two weeks, also.

And your deliberation, next time, you know, in May that you may want to change something else, you can still do that.

MS. BESWICK: I think we're trying to limit the public comment.

MS. MC CHESNEY: Right. You can say now that the public comment is only on item C. That's it. Those two items and anything relevant to those two items. That's fine.

MS. BESWICK: All of item C. There might be a need to do some alignment of impacts of changes to C.

Is that agreeable then? Steve?

MR. PON TELL: Yes.

So then, Madam Chairman, I don't know if it's an expression of the intent of the Board on just a couple of the other items. But going from 5 feet 10 feet. Maybe if that language can be incorporated in the modified -- I do think maybe some language, to give us something to look at,

in the less than half a percent chance the EO's decision were, in deed, to be appealed, but then there would be -- we would be a step in that appeal process.

I do think that the word "strategy" may not be the best word. If there's not -- not to wordsmith too much. It is my nature. And then maybe to figure out how to incorporate the biotreatment.

I don't know if it's the will of the Board to agree to, in principle, with those changes, they can be incorporated.

MS. BESWICK: You're okay with those pieces? Yes. That's understood, then, as part of the process.

MR. AMERI: That's it, yeah.

MS. MC CHESNEY: I did want to say something on the delegation to the executive officer on those issues about the reviewing the criteria that -- Section E. That you could -- one option is that the executive officer could get the application for approval and determine that this is not one that the executive officer wants to approve but rather bump it to the Board.

MS. BESWICK: That's the opposite of how we're trying to do things, Frances.

MS. MC CHESNEY: Instead of putting in that it must go to the Board on these certain circumstances -- which might be hard to define. You can leave it up to the EO to

choose to say, "This one is appropriate" -- and that's what happened in the Los Angeles -- what's referred to as the SUSUMP order. The executive officer did approve the SUSUMPs, then it went to the regional board who then approved what the executive officer did, maybe added some more.

You could leave it open that just the EO will then bump it to the Board instead of making the decision.

MR. PON TELL: I think staff --

MS. BESWICK: I like that, too.

MR. AMERI: Pretty much what we do with ACL, isn't it?

MS. BESWICK: No, I don't think that's what we do with ACLs.

You know what. Let's let them bring something back to us. With ACLs, they are always on our agenda. And sometimes they are not. They always start on our agenda. That's where they originate. Right? Right.

MR. PON TELL: I apologize --

MS. BESWICK: Thank you, Steve.

MR. AMERI: There are some results we don't hear.

MS. BESWICK: No, they're always on our agenda. Unless they're resolved before the agenda gets published. I see what you're saying, Fred.

MR. THIBEAULT: They still come to you for approval.

MS. BESWICK: Okay. I think we have consensus. I hope everyone is in accordance and understands. We will have this on our agenda on the 22nd. Comments by the 8th. And we'll take final action, theoretically, at that time, unless something complicated comes up.

All right. Then I'm going to move on to the next item, which is Item Number 13. Public Hearing on the Clean Water Act Section 305(b) Integrated Report/Clean Water Act Section 303(d) List of Impaired Waterbodies.

Pavlova has probably waited for us all this time.

All right. Good afternoon.

MS. PAVLOVA: Good afternoon, Madam Chair, members of the Board.

I'm here once again to talk to you about the 2008 integrated report for our region. As you might recall I first presented this topic to you at the January 23rd board meeting. And at that meeting I presented a brief background on the regulations governing the integrated report and showed you the preliminary results of the data assessment that we had done. We were at the time also looking for public comments.

And it -- also at that meeting you heard some of the comments from the public and staff went away with the task to work with the public, hold public workshops, and to

obtain and respond to public comments.

It has been about three months now since the last board meeting. And I'm here to say we've come a long way since then. We held two public workshops. We met individually with stakeholders. And we have shared our data, heard their concerns and recommendations. And, consequently, we have revised the integrated report where appropriate. And, of course, we considered in making those revisions the state listing policy. We believe that we have a better product now. And before you today there's an agenda package that includes the staff report that summarizes my talk, and among other things, resolution for your consideration.

First of all, I'm going to show you the steps that board staff took to arrive at the current report and hopefully answer any questions you have.

I will begin with giving you a brief regulatory background and also explain what an integrated report is and summarize the new integrating report and share with you the most recent comments we have received from the public. And these are comments that would be received after April 10th, which is when the agenda was sent out. I will also explain to you the next step we could take and give you board staff's recommendations.

To begin with, section 305B of the

Clean Water Act requires the states to prepare and submit every two years to the US EPA every quarter, assisting the state water quality. EPA, in turn, reviews and approves the report which is used in the preparing the state of the waters report to congress.

Section 303D of the Clean Water Act requires the states to develop and submit to EPA for approval a list of waterbodies that are not meeting water quality standards and are not expected to do so even with technology-based controls.

I would like to point out that a water quality standard is defined as the beneficial use, the water objectives necessary to protect that use and the anti degradation policy.

Now, with that in mind, the integrated report combines the Clean Water Act Section 305B report and the Section 303D list of impaired waters. Further, it also places the waterbodies assessed into one of five categories.

Category 1 are those waterbodies that meet all water quality standards and no use is threatened.

Category 2 are the waterbodies that are meeting some water quality standards while insufficient data and information to determine if other water quality standards are met.

Category 3 are the waterbodies for insufficient

data and information is available to determine any water quality standards being obtained.

Category 4 is where one of more water quality standards are impaired or threatened, but the TMDL is not necessary if any of the following is true. The TMDL is already approved or established by EPA. Implementation of other pollution control requirements is expected to obtain water quality standards. Or the waterbody impairment is not caused by a pollutant.

Category 5, which I think is the biggest point of interest, are those waterbodies that are impaired. They are not obtaining water quality standards and a TMDL, or total maximum daily load, is not needed.

Let me point out that TMDL is a calculation of the maximum amount of pollutants that a waterbody can receive and still safely meet water quality standards. It is calculated by including a load allocation from point sources and load allocations from non-point sources and a margin of safety.

In California, it is each regional board's responsibility to prepare an integrative report. And the State Board is closely overseeing this process. They will review each integrated report for their approval and ultimately compile each of these into one state-integrated report.

In preparing the preliminary integrated report as well as the final draft before you today, Staff reviewed the data from approximately 60 waterbodies in accordance with the listing policy. And, also, staff consulted with stakeholders, regional and state board staff, and presented the preliminary report to you at the January board meeting.

As I said earlier in this talk, soon after the January board meeting, staff held public workshops and met with individual stakeholders. Comments from this public outreach included letters of support for the work staff had done. And others mainly dealt with suggestions on how to assess the data. A copy of the comments received is included in Attachment 7 of your agenda package.

A table outlining each comment with the corresponding staff's response is in Attachment 6.

Consequently, the integrated report was revised where appropriate and, of course, a table outlining these revisions is in Attachment 4.

Here is a list of the entities who provided comments. We are -- like you mentioned earlier, we are very fortunate in the region to have the stakeholders' interest in this process because it allows us to prepare a better product. As I mentioned before, the integrated report integrates the 305B water quality assessment and the 303D list of impaired waterbodies and places each waterbody

assessed into one of five categories.

Beginning with Category 5, here is a summary of the proposed integrative report: We're proposing to add to the 303D list Bolsa Chica Channel for ammonia; Oregon Creek downstream of Irvine Boulevard for ammonia; East Garden Grove Wintersburg Channel for ammonia; Newport Sleuth for enterococcus; Peter's Canyon Channel for pH; Serrano Creek for pH; Chino Creek for PH; Chino Creek Reach One B for chemical oxygen demand; Chino Creek Reach Two for pH.

And at this point I'd like to make a correction on this slide and also on your agenda package. We are going to be proposing to remove City Creek from the current 303D list or Category 5. Primarily, that was an oversight on our part. The data doesn't reflect that there is impairment there for mercury or cardamon.

Cucamonga Creek Reach One for pH, copper, and zinc; Cucamonga Creek Reach Two for PH; Lake Elsinore for sediment toxicity; Rathbone Creek for cardamon and copper; San Antonio Creek for pH; Santa Ana River Reach Three for copper during the wet season; and Temescal Creek Reach One for pH.

Let me also point out that the TMDLs for these developments such these TMDLs are expected to be no later than 2021.

Just like we can add waterbodies to the 303D list, we can remove them from the list. For our region, assessment of the data has suggested that we take these waterbodies from the list: And that's Big Bear Lake for sediment, siltation, and metals; Grout Creek for copper; Knickerbocker Creek for metals; San Diego Creek for metals.

Moving along to Category 4. That includes waterbodies that are impaired, but no TMDL is required because an approved TMDL is in place. This category includes Newport Bay for bacterial indicators.

Category 3 includes waterbodies with insufficient quantity or quality of data to determine if any standards is being attained. These are Chino Creek Reach One for pesticides; San Haibane Creek for pH, chloride, total dissolved solids, sodium, sulfates, and total nitrogen.

Moving along to Category 2 which are the waterbodies meeting some standards, but we don't have enough information to determine if there are other standards met.

As you can see, this list pretty much includes beaches. Bonita Creek, San Mateo Creek, and Mill Creek in the Prado areas.

The water bodies meeting all water quality standards -- I wish we could tell you we have a long list, but at this point the data we assessed did not show -- did

not reveal any waterbodies in this category. None of the 60 waterbodies assessed fell in this category. And that may be because monitoring has focused mainly on problem areas and a lot of the data is focused on those areas. So it is not really that there aren't any.

Like I said before, we have received comments after April 10th, 2009, when we had sent out the agenda. So these comments that were received are here on these two slides for you to look at.

The main focus of these comments are from Orange County Public Works. They would like us to make sure that the ammonia listing for Bolsa Chica Channel and East Garden Grove Wintersburg Channel be limited to the title prism.

At this point regional board staff does not agree with that comment. Primarily because the samples that were collected in these channels were in the fresh water part of these channels, and we don't believe that the exceedences (sic) are caused by the title influence.

The other comment that we received was from Riverside County Flood Control District. They submitted a map that depicted the areas where there were fires. And they would like us to consider this map in the effects of the fires in assessing the Lake Elsinore sediment toxicity data.

The map was a very nice, well put-together map. It was very informative, but it did not indicate that there would have been an influence on the sampling that took place in 2003. As a result, it would not have influenced the data assessment for that period.

We also received a fairly lengthy letter from the Santa Ana River Association where they summarized their comments. These comments are fairly -- are, basically, not new. These are comments that, basically, were discussed with us during stakeholder meetings and individual meetings and via e-mails and phone calls. And as a result of these comments, we have revised our integrated report. So I, basically, summarized the comment on this slide.

As you can see, we have come a long way since the January 23rd board meeting. And there are yet a few more steps to go. Once this integrated report is approved by the regional board, it will be transmitted to the State Board with all the associated information.

The State Board will in turn review and approve the integrated reports from each regional board and will transmit all these as a single integrated report to US EPA for their approval.

Let me also add that we're not too far away from the next integrated report cycle. This next cycle begins at the end of this year, beginning of 2010 or end of

2009.

I also would like to bring up that we have an errata sheet included in your package. This recently added errata sheet amends the resolution. It gives the executive officer the authority to make non-substantial changes to the water quality assessment data base prior to transmitting it to the State Board. And we would also like to add to this errata sheet the deletion of City Creek listing for cardamon and mercury.

With that, I would like to conclude with Staff's recommendation to the Board to adopt Resolution Number R8-2009-0032, approving the 2008 integrated report, including the 303D list of impaired waters as presented and amended by the errata sheet.

That concludes my presentation.

MS. BESWICK: Thank you.

Any questions?

MR. AMERI: A lot of work since the last time we heard you.

MS. BESWICK: Thank you.

I have a few people who would like to comment.

I'm going to start with Tim Moore. He promised he isn't going to use as much time as he put on his card.

I know. Why should you be exempt?

MR. MOORE: It is proform to thank staff. And I am,

but that simply does not do it justice. It just doesn't. I would have bet a lot of money it could not be done what I saw Pavlova do for the last four weeks.

She took a year's worth of work, took our criticisms and suggestions, and redid the analyses for 60 locations and all that data and all the perimeters. Not once, but twice. And I don't know any engineering person that could have done that in the time that was allotted, and do it as well as she did.

It is so far and above the call of duty, I just can't simply say it is nice to work with your staff. This was a miracle. So kudos for Pavlova for pulling it off. And as a result I can stand here and say I think we have no serious objections to what's going forward to the State Board.

I'd like to, then, condense my comments to the two issues where we need some clarification.

I'd like to point to the NRDC's presentation this morning that pointed out the Pinto Creek decision. Which basically says that if you list a waterbody on the 303D list and have not developed TMDL for it, then there are pretty severe restrictions on what you can issue permits for with respect to new discharge.

And so there's always a big question what constitutes a new discharge. Is every new development a new

discharge? Is Riverside's treatment plant plans to expand their facility a new discharge or is that an expansion of existing discharge? You can get into really tight knots on this stuff.

And what you don't want to do is look at the list and say, "Well, you don't have do the TMDLs until 2021." The reality is, while that's true, between now and then, until the TMDLs are developed, you may have some serious restrictions on what permits you can issue. You want to be very thoughtful about that.

The other thing I wanted to do -- this came out of this morning's presentation -- is refer to these Watershed Action Plans. Because, once again, the new language of the new permit says if you have a stream or waterbody listed as impaired, but for which, yet, there is no TMDLs developed, then there is an expectation that the stakeholders will provide you a watershed action plan as to how they intend to monitor this. And what they intend to do about it until such time as a TMDL is developed.

What I want to do on the last two issues, the two proposed listings, is talking about that. I want to talk about what we intend to do over the next two years. Make sure that's acceptable to you and your staff, in a general sort of way. In which case, if it is, then we can accept the listing and don't have to go fuss with the

State Board or any of that. Because we think we can resolve the issues in short order.

The two we have concerns about are the Reach Three copper listing and the Lake Elsinore sediment toxicity listing.

In the case of Reach Three, we think what is going on here is we have a whole lot of data that is copper measured in the total recoverable form. And all that work we went to 16 years ago to develop a translator between total and dissolved was intentionally done very conservatively. And, frankly, the translator does a great job of figuring out what is going on during base flow conditions. But doesn't do a fantastic job during storm flow conditions, which are as you saw the wet weather conditions where we have the exceedences (sic).

We believe if we spend the next year or two gathering some more data, we can develop a wet weather translator that is appropriate for stormwater. So we don't have to rely on what we did 16 years ago. And once we do that, if things fall into place -- as EPA says we should expect them to, based on their generic formulas -- this listing will go away.

And so I want to suggest that that's what we intend to spend the next two years doing, looking at water effects ratios, looking at stormwater TD ratios, and perhaps

collecting some actual dissolved data instead of total recoverable data, and revisit this in two years.

Why am I bringing this up now? Because there's a difference of delisting and coming back -- and there's one set of mathematical probability criteria for doing that -- and another that says, two years from now, "You know, that listing we did two years ago probably wasn't correct. We didn't have all the data we need. And if we'd had this, we would have made a different decision."

I want to make sure that latter option is open. Because it's substantially easier and less costly to just fill in the blanks that are missing and go back and reevaluate all the data than it is to come up with whole new data showing that there is, now, no impairment and all the old data stays as it is with its voids.

So it is just an approach, I think, makes perfect sense. If I leave a placeholder here, since some people may not be here, I can refer to this and say, "Yeah, that seems reasonable." In the meantime, you list it and we'll work it out two years from now.

MR. AMERI: But when you list it, isn't it a big process later on if you found out in a year --

MR. MOORE: It can be. But it doesn't have to be.

Okay. There are two ways to delist. One of them is a really big, ugly, nasty, statistical thing that

requires an immense amount of data. And the other is to say, "You know, we had a little more data that helps us evaluate the old data we used the first time."

In this case what we need is how much of the copper in the middle Santa Ana River that we measured as total recoverable is actually in the more toxic, the toxic dissolved form. We can kind of guess at that now. But we don't have to.

If we get a good translator, we can go back to the old data, refigure things and just say, "We were overly conservative. We made conservative assumptions because we had no better data. Now that we have onsite specific data, we don't have to make that assumption. And our previous assumption was in error." That's just easier to do. Requires less data and less money, mostly.

All right. Lake Elsinore. There's no question whether it is failing the sediment toxicity test. So we're not here to dispute whether we see this phenomenon occurring.

What we have concern about is what is already written in the Staff's report, which is we don't know what is causing it. It might be being caused by some of the nutrient problems that have already been identified for Lake Elsinore, and for which we already have a TMDL. It might be being caused by the fact that all the data that was

collected for this study was collected in 2003 when the lake was very low. A lot of the water had evaporated which concentrated the residual salts.

And we know at high salinity levels this particular test level doesn't fair very well. So it may be a combination of those things. The hydrogen sulfide coming off the bottom from the organic material decaying from the nutrients. Might be some ammonia issues. Might be salinity. Might be all those things.

The key thing is this. If it is salinity, there's not much we can do about that. If it is nutrient related, we are already doing a lot about that.

The next natural step after this listing is to figure out what the specific cause is. I can tell you that having done that many, many times across the country, that's a 100 to $200,000 next step. It is very expensive for sediment toxicity. Very complicated.

What I would suggest is this. We spend a fortune on putting aerators into Lake Elsinore and adding supplemental reclaimed water flows to get the elevations up. And we genuinely believe these things, as I told you last December, that these things are going to make a big difference.

So our thinking is, we structure a reassessment process to look at whether or not those things solved the

problem. If it's ammonia or hydrogen sulfide related, it ought to have. And that we reassess in a wet year when the salinity's a non-issue. That will very quickly tell us that it either is or is not these other alternative explanations.

If it is not ammonia or hydrogen sulfide or salinity, then it's something more serious like perhaps a pesticide. In which case we're off to the races doing the TIE work, the toxicity identification work.

And we think that, you know, we wait for a wet year -- three, four, five years -- reassess, and if it is not what we think, then we -- if we think -- if the TMDL's going to solve it; it is going to solve it. If it's not, we do the TIE. And that still leaves us four to five years before the TMDL itself is due. But to do a TMDL, you have to know what is causing the problem.

What I'm suggesting is an approach that simplifies figuring out what is causing the problem. So we don't have to spend so much money in a rough year. Gets us to the exact same place on the exact same schedule.

That's the watershed action plan we would likely be proposing to you. If that feels right to you, then the listing itself doesn't give us great pains, and we'll go prepare -- what we do the next year and the year after. And what we do if it is this. And what we do if it is that. And it'll show the decision tree all the way to

the TMDL in 2021, if still necessary.

I want to make sure that that proactive approach is okay. And what we don't have to do is, especially with copper -- we don't really believe we have an impairment, but in Lake Elsinore we probably really do. But a question of what it is matters a lot as to what we can do about it.

So that's it in a nut shell.

MS. BESWICK: That was good Tim.

MR. MOOR: Okay. That's what we're suggesting. Doesn't change the recommendation -- but if I can get some clarification on that -- it changes the likelihood we ever need to go to Sacramento and argue this in front of the State Board.

MS. BESWICK: Any input for Tim?

What would you like someone up here saying?

Joanne, you would like to respond.

MS. SCHNEIDER: I was going to comment. I obviously don't want to step on the toes of my stormwater colleagues. I would suggest that what Tim proposed is exactly what should happen.

MS. BESWICK: That's a pretty strong endorsement, isn't it. I wouldn't say another word, if it were me.

Does that help?

MR. MOORE: It helps a lot. We want to make sure

we're doing the right thing. We don't want to get stuck in an unintended consequences, oops.

MS. BESWICK: All right. Great. Thank you. Enjoy your weekend in Southern California.

John Kemmerer. Thanks for waiting all this time.

MR. KEMMERER: Hi. Good afternoon, Madam Chair, members of the Board. So thanks for the opportunity -- my testimony on this is actually -- my understanding is that the staff is proposing the list be adopted and passed on to the State Board. And we don't at all object to that. We think the staff has done a great job in putting this together.

I want to let you know we do have a disagreement with conclusions on two of the waters that are being considered here. Those are, Temescal Creek Reach 6 and San Diego Reach 1 and 2. So in those cases there's a clear analysis given here. And it discusses that there's some elevated levels of bacteria.

Staff is making the recommendation that because of some standards that are going to be revised in the future, they're not going to be listed at this time. We think there's some legal vulnerabilities with that argument. And as was described, the process here is you guys adopt it. It goes to the State Board. It comes to us. And we approve

it. And we can add waters to it.

So we'll be taking a close look at these couple waters, and it is possible that we'll be adding them to the list based on our reviews.

MS. SCHNEIDER: I appreciate that. And we also have to note, the State Board staff also has an opportunity to make recommendations different from those we provided to you.

And what Mr. Kemmerer refers to specifically are some e coli measurements, as I recall, for Temescal and San Diego Creek. At the present time, of course, our bacterial quality objectives are not based on e coli. They are based on fico coliform. However, EPA does have national criteria based on e coli.

But the concern that Staff has in applying the e coli data is basically that the data is very limited. And we're talking about an analysis of samples collected once a month, perhaps twice a month, to a value assigned to a single sample maximum value as opposed to the more traditionally employed geo mean, which gives you a heightened level of confidence with respect to actual public health risk.

And EPA's guidance has, in fact, explicitly acknowledged that the single sample maximum values should be used, are intended for use for posting purposes, for notification purposes, and as triggers for additional

monitoring. Now, I will acknowledge that EPA does not limit the application for single sample maximum values for just those purposes. But acknowledges the states have at their discretion to use them for other water quality standard program uses.

In this case, Mr. Kemmerer is suggesting that we use them for impairment assessment purposes. We just -- given the high level of variability of single sample maximum values, we simply don't think they should be used for impairment purposes. This is a theme, actually, repeated in the California Ocean Plan with explicit language therein.

And I think the other concern is that in the specific application of the single sample maximum values, I think the EPA and, perhaps, the State Board staff are purposing to evaluate the data using a single sample maximum value that is calculated based on a couple of assumptions.

One being that we're talking about designated beach areas, which, in this case, we're not. Neither Temescal Creek nor San Diego Creek Reach One or Two, I think, in most people's judgment be designated beach areas.

And furthermore, the equation that is used to calculate the single sample maximum values has a variable that reflects the variation in data. And we know that there's a lot of variability for these particular waters.

That if we were to employ the greater variability in -- the equation would, in fact, result in a much higher single sample maximum value.

The single sample maximum values are to be used, and EPA is very explicit on this, really as statistical constructs to tell you whether or not you are actually meeting your geo mean, which is typically the way the objectives are expressed.

And you want a greater level of confidence and more stringent number for a single sample maximum where you want greater confidence that your geo mean is being met. That's where you have a very stringent single sample maximum value that applies to a designated beach area. Where as if you have an area that's very infrequently used, you can allow for higher single sample maximum because you're not so concerned about making sure your geo mean is met.

In our best professional judgment, to employ the single sample maximum data in this case simply does not make sense. We completely acknowledge we've got some high numbers there. That we need to follow up on. And what we proposed do is collect additional data and ask ourselves based on the additional data do we have a bacterial quality problem that warrants listing?

And as Pavlova has indicated, we're going to be in that process in the pretty near future. We will

respectfully disagree on that score.

MR. KEMMERER: I appreciate the explanation. The write-up I have is from, I believe it's from the proposal. It doesn't base the conclusion on the single sample maximum. It is the fact that there's this new process for new criteria.

MS. SCHNEIDER: We've supplemented that response substantially.

MR. KEMMERER: I'll take the response back.

MS. BESWICK: That was well put. Thank you.

Garry Brown and then Amanda Carr will follow.

MR. BROWN: Garry Brown, Orange County Coast Keeper.

First, we would like to thank Pavlova for all the work she has done, and the great work she's done on developing this report. And we are in total support of her work, and what she has done.

A lot of the data -- some of the data we submitted on these and -- of particular concern is -- to us is to make sure that the recommendation for the ammonia listing on Bolsa Chica Channel and the East Garden Grove Channel, we support that.

We don't see the prism as an issue because the samples weren't taken in a prism, they were taken further up.

We hope that you approve the list, the report.

Thank you.

MS. BESWICK: Thank you.

Amanda followed by Matt Yeager.

MS. CARR: Madam Chair, members of the Board, thank you for the opportunity. I'm the Chief of Water Quality Planning for County of Orange. So I sat through all the permit discussion as well. That was very important because my group does the TMDL. We're all interrelated.

Just wanted to offer a, sort of a clarification to our comment on the East Garden Grove Wintersburg and Bolsa Chica Channel limiting the listing. That was mainly based on a beneficial use issue that those channels are not listed in the basin plan, but the sections of channels that are listed in the basin plan are the titally (sic) influenced area.

We asked -- to be consistent with the basin plan and the designated uses for those areas -- that we limit the listing to the area that's listed within the basin plan. We realized that the samples were taken further up stream. But those areas do not have beneficial uses assigned to them and are not included in the basin plan. That's our viewpoint.

And then I also wanted to just quickly reiterate what Tim was saying in the beginning of the process. You know, working with Pavlova on this 303D listing process has been very, very clear, very helpful.

She has always been willing -- in fact, she came out to our offices, e-mailed me all her spread sheets, and we went through issues and discussed things very clearly. I thought it was a very clear and open process.

And, you know, a great regulatory process to work through. And I can only hope that our Region 9 folks, who we also work with, will be as cooperative in the listing process.

MS. BESWICK: Now, don't go telling Region 9 that you really like the way it was done in Region 8. They hear enough of that.

MS. CARR: Thank you for the time.

MS. BESWICK: Thank you very much for sitting through all of that.

Matt and then Jason and --

MR. YEAGER: Good morning, again, Madam Chair, members of the Board.

I got a call -- I remember getting a call -- or I came back to my office a few weeks ago and there was a message saying, "You better call Pavlova. She called and wants to talk to you." I thought -- not sure what to do.

Following that, I found that Pavlova was really great to work with, very collegial. We went through the data, again, echoing what Tim said.

Mike, I have a question. At this point if I

was to have a question with one of the remaining listings that I think might be incorrect, hypothetically, how would I -- what is the process -- I don't want to go any further than necessary if, in fact, there's something missing.

MS. SCHNEIDER: Well, I'll give it a try. You can correct me. I think that if you have additional, relevant information, then by all means share it with us. And if we're persuaded that it has merit, we can forward it to the State Board as well for their consideration. Of course, they have to go through a similar process.

MR. YEAGER: Can I do that Monday or whenever possible.

Again, thank you very much. Very collegial and worthwhile. Great work. Thank you very much.

MS. BESWICK: Thank you.

Jason?

MR. UHLEY: Jason Uhley, Riverside County Flood Control on behalf of Riverside County MS4 program.

I'd like to concur with Joanne's comments on Temescal. They were very eloquent.

We just also wanted to gush about Hope and Pavlova's work. I think that they really went above and beyond this. The additional stakeholder process was really helpful. And we believe it's really important because the 303D list is having an additional regulatory meeting for us.

And it's really important that we get the list right because it has -- it costs the city money if we get it wrong.

I hope that this level of effort will be continued forward.

Thank you, again, for that.

MS. BESWICK: Thank you for your comments.

Hope, would you like --

MS. SMYTHE: I need to make one quick response to Ms. Carr's comment about the title prisms and the beneficial uses in the basin plan.

For those two channels, they are not in the Basin Plan and do not have assigned beneficial uses. But the ammonia criteria that we looked at is related to the fishable goal of the Clean Water Act. And it's completely appropriate for us to apply the aquatic life beneficial use to those channels, even if they are not in the Basin Plan.

MS. SCHNEIDER: Those uses are presumed.

MS. SMYTHE: Exactly.

MS. BESWICK: Thank you.

That's the extent of the comment cards that I have.

Do we have any questions by the Board or staff?

If not, are you ready to take action on the list?

MR. RUH: I'll make a motion for the item as

presented.

MS. BESWICK: With the deletion of City Creek?

MR. RUH: Correct.

MR. AMERI: Second.

MS. BESWICK: Any discussion?

All in favor, please say aye.

BOARD MEMBERS: Aye.

MS. BESWICK: Any opposed?

I believe that's our agenda for today. So we'll reconvene on the 22nd. We'll all be there.

(Board meeting adjourned at 3:11 p.m.)