TRANSCRIPT OF PROCEEDINGS

DEPARTMENT OF WATER AND RESOURCES

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE

MARCH 27, 2008

INLAND EMPIRE UTILITIES AGENCY

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CHINO, CALIFORNIA

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LICENSE NUMBER 13283

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I N D E X

CHINO, CALIFORNIA, THURSDAY, MARCH 27, 2008

9:07 a.m.

HEARING OFFICER HUFF: Good morning. I'd like to convene the public hearing. Good morning.

Okay. My name is Gwen Huff and I'm with the Department of Water Resources, and I am the public hearing officer today. I know that you're here for the Model Water Efficient Landscape Ordinance.

A couple of matters of housekeeping. We will take a lunch break today from 12:00 to 1:00. We will conclude at 5:00. We will take a short break at 10:30 and a short break at 2:30. If there are pauses in the speakers, meaning we've covered everyone, we will just recess until any speakers show up, but we plan to be here until 5:00 today, with the exception of having lunch. And the restrooms are down the hall to your right. Okay.

The public hearing body consists of the public hearing officer, myself, department representatives Kent Frame and staff counsel Nancy Finch. The public hearing is recorded by a professional shorthand stenographer and we may make audio recordings in this public hearing.

The public hearings are being conducted according to the Administrative Procedures Act that are a requirement the standards state agencies must follow. We convene here

today, March 27th at 9:11 a.m., to receive public comments on a proposed rule-making action by the Department of Water Resources. Today's public hearing will conclude at 5:00 p.m.

The department has proposed changes to the California Code of Regulation Title 23, Division 2, Chapter 2.7, commencing with Section 490. We will refer to this regulation as the Model Ordinance.

The attendance sheet is for everyone, speakers and nonspeakers. The attendance sheet will be added to our mailing list to notify all parties of additional rule-making actions. Please be sure to sign the attendance sheet.

Also at the sign-in sheet we have our exhibits for the public hearing. Exhibit A is a Notice of Proposed Rule-making. Exhibit B is the text of the Model Ordinance. Exhibit C is Initial Statement of Reasons for the Ordinance. And Exhibit D are written comments received to-date. It's all been duly noticed more than 45 days prior to today.

Background. The input to updating the Model Ordinance so far; AB 325, the original Model Ordinance from 1990, the landscape task force recommendations from AB 2717, the required elements of AB 1881, existing landscape ordinances from throughout the state, as well as outside

the state. We've taken some information from them and compiled them into this ordinance. We have 13 stakeholder meetings and extensive literature review.

The rule-making process on the top left, the legislature authorizes the department, and then it goes to the state agency. And you can see we've done the Notice of Proposed Rule-Making Initial Statement of Reasons Text of Regulations, and you probably received those in the mail.

And we are here at the public hearing process. And this is a 45-day process, it will end at 5:00 p.m. today. If we make major changes, we will have to do Notice to Public of the new changes, have another 45-day comment period. If the changes are less than major, it's a 15-day public process. And these can repeat until the changes are down to minor changes, and then we begin the acceptance process by going to the Office of Administrative Law.

The purpose of today's public hearing is for the department to receive public input on proposed regulations. This is a quasi-legislative public hearing. As part of the department's rule-making function delegated to it by the California legislature per AB 1881, Chapter 559, Statute of 2006. The department's notice was published in the California regulatory notice register 2008, number 6-Z on February 8th, 2008, more than 45 days ago.

Under the Office of Administrative Laws Administrative

Procedure Act, this is the time and place set for the presentation of statements, arguments and contentions, oral and written, for or against proposed changes to the water ordinance.

Public comment period closes today at 5:00 p.m., and a transcript of the public hearing and related exhibits will be part of the department's rule-making record. And you should have received a pink handout on the rule-making process.

Again, how the revisions go, if there are major changes, we notify the public of the changes, the new document, the new 45-day comment period; if they're less than major, they are called substantial, then, again, the public is noticed and we have a 15-day comment period.

This may repeat until they become non-substantial changes, then we submit to the Office of Administrative Law. And then before the ordinance is adopted, there is one final public notification. Again, if you're not on the mailing list, you would not receive these public notices and we use the sign-in list from today to add to our mailing list.

We encourage the submittal of written comments. You can leave them with the woman, Judy Colvin, at the sign-in desk. Oral testimony will be in the order of speakers listed on the attendance sheet. The Department will accept public comment only and will not respond to any comments

and testimony during this public hearing.
Speakers will please approach this microphone and state their name and affiliation, if any. If possible, speakers will please provide the page of the section numbers of the regulation to which their comments refer.
Oral testimony should be addressed to the public hearing body, should be relevant to the proposed regulation, should be professional, should not be of a personal nature. The public hearing officer will be imposing a time limit of five minutes per speaker, and now we'll begin the oral testimony portion. Wait until I can seat myself, I'll call the first speaker.
If you would like to speak -- if you think that your comments are longer than five minutes and you wind up being cut off at five minutes, you'll have an opportunity to come back and speak again. Just go back to the sign-in table and we'll sign you back up for the next available speaker spot, provided that time permits.
Elizabeth Hurst is our first speaker.
MS. ELIZABETH HURST: Good morning. My name is Elizabeth Hurst. And I'm here on behalf of the Inland Empire Utilities agency and as a member of the Inland Empire Landscape ordinance. Brief background, the alliance is a voluntary collaborative working group of stakeholders within the Chino basin.

And it includes the cities of Chino, Chino Hills, Upland, Ontario, Montclair, Rancho Cucamonga, Fontana; Monte Vista Water District, Cucamonga Valley Water District, San Antonio Water Company, Fontana Water Company, Chino Basin Water Conservation District and Chino Basin Watermaster.

The alliance has been meeting over a year to develop an understanding and support for water conservation through the stipulated policies in our region, but these views that I'm going to express represent Inland Empire Utility's point of view about that.

First of all, I would like to commend you all for the hard work that you've put into creating this draft. We support the scope and vision in the direction that your model ordinance is going, but we do have some concerns.

First, we would like clarification on the criteria for our regional local ordinance to be at least as effective as the state model ordinance. We would also like clear justification for reducing the evapotranspiration adjustment factor from 0.8 to 0.7.

We would also like to ask that exemption for botanical gardens, as well as cemeteries and historic sights be included, since they have their own unique way of managing their collection, which are an essential part of our natural history.

2,500 minimum square feet requirement for landscape would overwhelm the local agencies. And we would like to recommend 5,000 square feet and to phase in the smaller lot sizes. The local agencies are also not necessarily the water suppliers, and as such, sharing water data may not be possible. Also, the water suppliers have active education and conservation programs.

And we're worried that these efforts might be duplicated the way that the Model Ordinance currently states it and we would prefer that they corroborate, rather than duplicate effort. Likewise with the stormwater runoff requirements in the ordinance, those are already mandated and we would ask that they be integrated, not duplicated.

Water audit requirements should only be performed if the property exceeds the maximum allowable water allowance or by the stormwater provision. And we would ask that you simplify the landscape documentation packet.

We believe that to address these, there will need to be another full review period. And I'd like to thank you for your consideration of our comments.

MS. NANCY FINCH: I have a question. You mentioned that sharing water data was probably not possible, and I don't know if you can answer this or someone else can.

Could you be more specific why?

I've seen comments about privacy issues and we're

interested in knowing what the issues of the law which prohibits you from doing that is and that could be very much helpful if you have that answer, or someone else can.

HEARING OFFICER HUFF: Would someone else like to speak on that?

UNIDENTIFIED SPEAKER: I'm a landscape contractor in the southern California area and getting the water records of the property that I maintain -- I'm primarily commercial, homeowner's associations and so on, gets very tricky and sticky, because when you're asking a complex to reveal what their water usage is -- and they get very, very particular about invasion of privacy.

MS. NANCY FINCH: Okay. Thank you.

HEARING OFFICER HUFF: There's a couple of hands.

MS. NANCY FINCH: Do you want to incorporate it into your -- Okay. I'm sorry.

UNIDENTIFIED SPEAKER: As a water agency, we have issues providing customer data to non-customers. We have to have a customer authorization in order to provide their specific account data information and water use records to anyone other than the customer.

MS. NANCY FINCH: Thank you. I think that answers the question.

HEARING OFFICER HUFF: Next speaker is Joel Addink.

MR. JOEL ADDINK: Hello, my name is Joel Addink. I'm

with A-G Sod Farms and Aqua Conserve. We're a turf grower, but that also brought about an interest in water conservation. So we have Aqua Conserve, which is an ET controller company.

We feel like the Model Ordinance is going in the right direction in the area of ET controllers and in the area of tiered water structures based on studies done by the Valley of the Moon, Denver, Sonoma and Santa Barbara, ET or weather based controllers save twenty percent of outdoor water.

A survey done with homeowners shows that most homeowners change their controllers two to four times a year, so you have the (indicating) -- a little top hat look in ET controllers, cut the corners off and match the curve better, so that's where most of the water savings come from, particularly in the fall.

We do feel like the ordinance is headed the wrong direction in the area of the 70 percent rate. AB 2717 Task Force requested a three-year study of new and established landscapes designed to meet a variety of ET adjustment factors and a mix of plant factors, and other data as available.

Although funding for the study was an issue, industry sources were never approached for contributions and the study was not done. Instead, a survey of existing

information was done. And in the January 25th, 2008, white paper, there were two water agency ordinances cited; that would be San Diego County, using 70 percent ET, and Cochela Valley Water District using 50 percent ET.

These are two of the driest areas in the state and are not representative of California's diverse climates. Curiously left out was Irvine Ranch Water District, widely cited as an effective ordinance, based on a hundred percent ET. We also feel like the 80 percent goal has not been -- the previous AB 3205, we haven't seen what savings can be accomplished with an 80 percent rate.

Another failing of the new ordinance is that it states there is no or little economic impact on the state. This is untrue, since there's a loss of jobs for workers in the green industry, landscape maintenance, and also, as evidenced by the presence of many today, water districts, and the cost to enforce. So there will be an economic impact.

Those who live in California communities understand that green areas increase their property values. And it has been shown that most -- survey shows that most people prefer a landscape area with predominantly green and some turf area. This provides a safe place to play with their children, energy savings, air quality benefits similar to trees, reduces stormwater runoff and helps

control erosion.

I think the goal of the bill was to achieve a balance and the communities of California deserve that balance, and we don't feel like the 70 percent achieves that balance. So thank you.

HEARING OFFICER HUFF: Thank you.

The next speaker is Glen Schimdt.

MR. GLEN SCHMIDT: Thank you. I'm Glen Schimdt. I'm representing the American Society of Landscape Architects, San Diego chapter. I appreciate having this opportunity. Representatives from our organization have contributed and are endorsing more detailed letters and comments you will be receiving from the Conservation Action Committee in San Diego, as well as comments from the California Counsel of American Society of Landscape Architects, CCASLA.

Over the last year-and-a-half, volunteers from our organization have spent hundreds of hours facilitating and participating in nearly weekly meetings with a variety of organizations in San Diego in an effort to get a head start in creating a regional model landscape ordinance for our region.

And we're hoping -- and those -- and the comments that you received from the Conservation Action Committee, CCASLA and ours, are accumulation of those efforts. A few important highlights of our written comment, first, much of

the ordinance is constructive and appropriate, we appreciate the effort, and we agree with the water conservation goals.

However, we strongly feel that many aspects of the ordinance is overly prescriptive and complicated. We counted approximately 16 plans, forms and certifications that were required for a submittal. In order to be successful, it needs to be simplified. Actually, San Diego believes the water budget approach as part of the ordinance is the most appropriate approach for providing flexibility for landscape design.

There have been adequate research to document the water consumptive characteristics of turf grasses, but very little research to document the tree, shrubs and ground covers and how much water they utilize. Even though this is true, actually, San Diego believes that 0.7 ETAF is appropriate in order to set a high standard for conservation in the state.

So our hope is the ordinance will provide incentives for public and private funding for more research to provide the tools necessary to assure the appropriate design of our landscapes to meet this aggressive water conservation goal.

Our endorsement of the 0.7 ETAF, however, is contingent on the fair and reasonable definition of

landscape area. Currently, the proposed definition is too narrow, will act as a disincentive for water conservation, resulting in a number of inequities.

We believe that the definition of landscape area should include pervious areas, such as dry stream beds, non-irrigated succulent plants and native landscapes, as well as decks and other decorative features. Two projects with equal unpaved area should be allowed the same water budget. Please allow the talented designers in our state the flexibility to comply in many unique and interesting ways.

And lastly, we have concerns regarding the definition of recreation area. This definition reads, in part, where turf provides a playing surface or serves other high-use recreation purposes.

As noted in Section 490, passive recreation areas are of equal importance to -- as active recreation areas. Our parks are the highest and best public use of our water resources and, therefore, should be highly valued. The definition of recreation area must be expanded to include passive recreation areas, as well as active.

And lastly, just a comment on the earlier discussion, in San Diego County. The San Diego County Water Authority has something like 27 different water agencies. Those water purveyors, many times, are separate

from the municipalities and the cities.

Those cities don't talk to them, sometimes they don't even get along with them. So asking -- and they have no jurisdictional authority over them, so the document reaches between those two entities in a way that's very difficult.

We think that you should address the compliance with code compliance and -- enforcement with code compliance, and then work on separate legislation that deals with the water purveyors. Thank you very much.

HEARING OFFICER HUFF: Thank you. Just a reminder that public -- all public comments, written or oral, are due in by 5:00 p.m. today. By 5:00 p.m.

MR. GLEN SCHMIDT: You'll receive them via e-mail, then.

HEARING OFFICER HUFF: Next speaker is Barbara Alvarez.

MS. BARBARA ALVAREZ: Good morning, everyone. My name is Barbara Alvarez, I'm an owner of a landscape maintenance company out of San Dimas, Alvarez Landscape and Maintenance. I am also part of that -- part of the California Landscape Contractor's Association. I was the 2005 state president.

I also participated on the AB 2717, spent a year of going up and back to northern and southern California, because I believe this is an important issue. I want to be

able to maintain my projects in the best and most water-efficient way.

And I believe that a majority of the report is good and applicable. I have some problems with the money that it will take to certify these projects. I would rather that money that it takes to certify these projects go into upgrading the actual irrigation system.

Where you talked about plots of land that are 2,500 square feet, you are not talking about properties that are going to be maintained by a licensed landscape contractor, who will, more than likely, understand what irrigation conservation is, you will be dealing with homeowners that probably will not take the time to understand what is needed to be put in the irrigation systems to accomplish your ultimate goal, which is water conservation.

We have -- on a property of 2,500 square feet, you will have basically, quote, unquote, you will have what they call the mow and go gardener, who is not going to have sufficient knowledge on how to apply this, so perhaps we should increase that 2,500 square feet to a more palatable 10,000 or 20,000 square feet lots.

The ET controllers, I truly believe in and can work, but along with that, you have to make sure that your irrigation that's existing in there, is operating to its

full efficiency and -- otherwise, ET will not provide the savings that you require.

So rather than the money going into, again, that certification, have it go into the upgrade in the landscape in your -- not only in plant material, but also in your irrigation system. And I believe most water is lost nowadays in the old landscapes.

And once you suggest to a homeowner that -- for them to upgrade, and they realize the system and the process you have to go through, and the money it's going to take, it might dissuade them from improving their land, saying forget it, because that money that it's going to take to certify, it could have gone into upgrading their irrigation system. Thank you.

HEARING OFFICER HUFF: Thank you.

The next speaker is Dan Noble.

MR. DAN NOBLE: Hello, my name is Dan Noble. I'm the executive director of the Association of Compost Producers. We are an organization of public organic-generating agencies, as well as public and private compost producers and marketers.

For an example of such a member is Inland Empire Utility Agency, who also co-invests in a -- probably the largest indoor composting facility in the world, but certainly the West Coast, over here in Rancho Cucamonga,

which is under a 9,000 square foot enclosed building producing co-compost in conjunction with LA County sanitation districts.

But we have private composters. For example; Kellogg Garden Products, Synagrow, Engel and Gray, Agreserves, throughout California.

We're pleased to submit our comments today on the proposed regulations. A basic -- a tenet of our association, includes promoting and delivering the use of compost solutions for multi-media management, providing actual net environmental benefits to air, water and soil of California.

We're organized around this. The fact that the use of compost is, in fact, a beneficial -- has beneficial impact in perpetuity on the three aspects of our environment; soil, air and water, and create actual integrated solutions to all of the environmental media. And because landscapes generate a lot of the green material that is feed stock for compost, we provide a valuable service to the landscape industry.

I may be, probably, the only person on comment today or even yesterday, who is actually speaking on behalf of the soil environment. Which in the ordinance, you know, a lot of attention is paid to the plant, to the cultivators, as well as, certainly, to the water and the

evapotranspiration rates.

However, I want to point out that the ET doesn't even include the soil characteristics, as far as how the ET really works, so there's holes in our knowledge about soil. Healthy plants, as well as water efficiency, relies on healthy soil as a foundation for growing healthy, water efficient, high-performance landscapes, whether they're native or moving all the way to tropical. For example, you know, the tropical gardens over at Disneyland.

Organic matter in the soil is even ignored by many soil experts, because they tend to look at just the inorganic parts of the soil as either clay or sand, and so forth, but the organic matter in the soil provides four important benefits. One is soil silt, which provides oxygen to the roots to grow healthy plants.

The other is the water infiltration, which is very important to water efficient landscapes so that the water doesn't run off the soil into the street, especially for clay compacted soils. The other is water retention for sandy soils, where water runs through and doesn't stay in the root zone, so you have to keep adding more and more water, even though it's being flushed through the soil.

And probably most importantly, and often most ignored, is that organic matter is one of the only things that provide macronutrients to the soil organisms to create

healthy soil. So for all of those reasons, ACP supports the need to update the ordinance, particularly the soil management plan, and we're very gratified to see that in there, and we would certainly not want to see it eliminated.

In Section 492.7, we believe that the soil management plan is an effective tool to begin having landscape designers, as well as maintenance folks, to pay attention to the soil environment, along with the plants and water environment. And it is our belief that the State of California can substantially impact water use by preventing -- by implementing these recommendations.

We have some minor changes to update the definitions. For example, organic phrase, organic matter and compost and mulch are all used in the ordinance, but they're not included in the definition, neither is healthy soil included in the definition. Don't take it for granted that everybody in this room understands what healthy soil is or what organic matter is or what compost is.

HEARING OFFICER HUFF: Five minutes.

MR. DAN NOBLE: Are we done? Gee, I didn't realize I used up -- that much time had passed. Also, after the ordinance, we would like to participate in the educational efforts and our association stands ready to do that.

Thank you very much.

HEARING OFFICER HUFF: Thank you.

Next speaker is Patrick Larkin.

MR. PATRICK LARKIN: Good morning. My name is Patrick Larkin. I'm executive director of Rancho Santana Botanic Garden located in Claremont, California, the largest botanic garden in California, dedicated solely to California's native flora.

For more than 80 years, we've been increasing the general public and scientific knowledge with regards to the understanding and preservation of California's native flora and we're very happy that the rest of the state is finally catching up to speed with regard to the usefulness of these plants and how they can be effectively used in a landscape, not only for beautiful purposes, but also for water conversation purposes.

On the one hand, we greatly applaud the concept and work that has been done to the Model Ordinance so far. The garden is a member of the American Public Gardens Association, a professional association representing botanic gardens throughout the state and, actually, throughout the world.

We're also an accredited museum by the American Association of Museums. Our plant collections, are collections just as Arrowheads or Van Gogh's, and so there is a -- certain codified rules with regard to how we care

for those collections, how we maintain those collections, how we conserve those collections, and how we interpret those collections.

I have several comments that I wanted to bring up with regard to the Model Ordinance. One is that we are a little bit concerned that municipalities will not be able to effectively enforce the mandates that are in the ordinance and that are being provided by the ordinance, in that it will, yet again, become an unfunded mandate that just increases the cynicism of the general population with regard to some of these things.

Requiring landscape architects to do much of the work -- not any of the landscape architects in here, certainly, but as a profession, have not always made the best choices and to solely pick out that particular group as the best group to actually implement some of these landscapes, I would beg to differ with.

Oftentimes, the work, particularly for homeowners, is better done by landscape designers, horticulturists, or even in some cases, ecologists. And so, if there was some way of actually expanding the parity as is done in other parts of the ordinance to include those particular professional groups as well, that would be much appreciated.

There does not seem to be any recognition in the

ordinance for the establishment period of a water efficient landscape. Water use may actually increase during the first one to three years when you are installing a native landscape, and so the amount of water that is actually needed would go up.

Whereas over the longevity of it, after that third year, you could actually see the water almost actually being completely turned off. So there needs to be recognition particularly during that first part and to establish a healthy garden environment, that water rates may need to -- may need to increase.

The ordinance seems to be based on the notion that ET rates are stable and uniform, or that these numbers can be applied to a wide variety of landscapes. This is not entirely true. Nearly all the CIMIS numbers are based on turf, not on gardens or landscapes, which are much more complex systems.

This is a very difficult situation that many people are trying to address right now, but the research is not there to actually -- to back up the fact that the ET rates are actually consistent for landscapes or gardens.

In Section 490.1, you mention replacing -- or it is mentioned that replacing ecosystems lost to development. I believe that a better phrase instead of replacing, would actually be restoring those landscapes.

Replacement implies that you can put just about anything else in its place, whereas I think a better goal would actually be to restore those ecosystems to their -- as much as possible, to their previous state.

On page 4 of Section 490.3.2, since much of California riparian vegetation has been destroyed and restoration projects are very common and, in fact, desirable, enforcement of the ordinance could jeopardize these water-requiring landscapes if this actually goes through. And so, there should be some recognition for these particular ecosystems which does actually require water and may indeed need additional irrigation for it to remain healthy.

In Section 492.7, nearly all soil nutrition reports are done with crops or turf as the baseline, with the assumption that an amendment will be needed. What a more sustainable concept would be, would be to say that in the soil report that this is the group of plants that could actually survive here without soil amendment, so if you can just make that note.

On page 18, 492.1.8, there is mention of the Sunset Western Garden Book Climate Zone. It should be noted that as with all climate zones, as local climate change is happening, that these zones are going to be changing, and that phenomenon is very well documented at

this point.

Finally, as I mentioned earlier, I would ask that there be an exemption for botanic gardens. Botanic gardens and arboreta are actually holding quite a number of rare, threatened and endangered species, and enforcement of these codes could actually put those valuable resources at risk.

And also, this is -- enforcement of the code could actually stipulate care and maintenance that is counter to best management practices within botanic gardens and arboreta flora collections. Specifically, I would make mention, as an example, the mulching requirement of two inches for all landscape areas.

For wildflower areas, mulching is actually something that is detrimental to the wildflower display, and so requiring a mulch would actually harm this potentially water conserving landscape area, as well as some of our cacti collections and things like that. It could be harmful to those particular plant groups.

Thank you very much for your time.

HEARING OFFICER HUFF: Thank you very much.

Next is Pam Pavela.

MS. PAM PAVELA: Good morning. I'm Pam Pavela from Western Municipal Water District. Sorry. I just hit a button.

HEARING OFFICER HUFF: Go back. Yeah. Thank you.

MS. PAM PAVELA: All right. Western Municipal Water District's main concern, as well as the concern of other commenting agencies, is the burden of additional time and resources that will be required to implement this ordinance as it's written.

Of particular concern is the water audit portion of this ordinance, which are Sections 492.14 and 493.1. We agree that water use should be tracked over time to ensure ongoing compliance with water budgets, but realistically, however, there are little to no resources available to provide the extensive tracking required by the Model Ordinance as currently written, especially for existing landscape.

Western would like to see an exemption to the water audit portion of the ordinance if a landscape for which the ordinance applies is subject to individual allocated water budgeted tiered rates provided by its water purveyor.

As the Association of Irrigation Consultants pointed out in their comments to this ordinance, the only realistic way to ensure saving water and landscape over time is to track the water use against the maximum allowed water use calculations, commonly refereed to as MAWA, and assess penalties for exceeding the MAWA.

This will require landscape area data for each

customer, which is a very costly endeavor. But if water budgeted tiered rates are in place, this tracking is automatically occurring at regular intervals as part of the billing system.

The Model Ordinance, as currently written, mandates an evapotranspiration adjustment factor of 0.7 or 70 percent of referencing evapotranspiration. Irvine Ranch Water District, which has had successful water budgeted tier rate structure in place since 1991, has been able to surpass the mandate by maintaining an average customer water use of 0.6, for 60 percent of the ET adjustment rate, without an ordinance requiring their customers to maintain this low rate.

Therefore, having the exemption for allocated tiered rates or water budgeted tiered rates, will encourage their use and potentially simplify methods of conservation. And as the previous speaker, Mr. Alvarez, noted, it's going to be very difficult to get the smaller homeowner types to calculate their ET adjustment factor or calculate what their landscape's going to be utilizing and so forth, and so many other issues.

If there's this water budgeted tier rate in place, it pretty much automatically takes care of a lot of the issues without a lot of pain.

Thank you very much.

HEARING OFFICER HUFF: Next speaker is Gerry Foote of CBWCD.

MR. GERRY FOOTE: We've submitted our comments in written form.

Thank you.

HEARING OFFICER HUFF: Okay. Good.

Bob Wade.

MR. BOB WADE: Good morning. My name is Bob Wade, I'm a landscape contractor in Orange County. I'm also on the state board of California Landscape Contractor's Association and I'm vice-chairman of the Irrigation Association of Government Affairs Committee. My responsibility is turf and landscape. I was also on AB 2717 work group three, which is plant material and soil.

So we've been watching this from the very start. The various green industry associations have submitted their recommendations for modifications to 1881 and I think they've done a very good job.

One thing that I would like to talk about, is the document is very heavy on design and paperwork submissions, and it makes scant referral to the management of the water once all this stuff is in the ground. I think that's where our true water savings are. As a landscape contractor, I rarely admit that my group is not doing a good job at this.

I think education and unfamiliarity with a new

technology is part of it, economics is a major part of it. The CLCA and IA have both developed water management certifications in direct response to AB 2717. We saw the need as that was going through and CLCA started that procedure before 2717 was done. The IA has a similar program.

The end result for this is to get people more educated, get them so they're reporting their water use, keeping track of it on a monthly basis, and this should be more heavily noticed in this document. There should be requirements on the larger projects that certify or some other proof of competence be required on the job and the person who's got their hand on the controllers are -- they have the knowledge to do it correctly.

The other part of economics, there is a couple of things there. Most owners are reluctant to do the actual investment they need to do to save water, so the landscape contractor -- excuse me, is stuck in a position of trying to make things work. Irvine Ranch Water District has done a very good job of developing a water budget, telling the owner this is your water budget, you should be able to make this work.

The water budget, I feel, is a very generous one. There should be no problem in meeting it, but if you don't meet it, you will get penalized economically. This brings

the problem right back to the owner, who can then talk to his landscape contractor, say we need to fix this. There's the economic incentive to make all of this work.

We don't see too much of that in the ordinance. We see lots of design specifications, and again, paperwork, but I feel that the best way to save the water the state of California is to get to the guy whose got his finger on the dial.

Thank you.

HEARING OFFICER HUFF: Thank you.

Rita Kurth,

MS. RITA KURTH: Good morning. My name is Rita Kurth, I'm Water Resource Administrator for the Cucamonga Valley Water District. Cucamonga Valley Water District is fully cognizant of water situations in the state of California and western United States, and supports all water conservation efforts.

However, there is no clear distinction in the landscape ordinance for cities that do not have water departments. Cities would have to approve the landscape design from a planning standpoint, and water purveyors would then be required to perform complicated irrigation audits. Excuse me.

This ordinance applies to new construction for public agency projects and private development projects

with a landscape area greater than 2,500 square feet that require a permit, land check or design review. This submittal would go through the cities of Rancho Cucamonga, Ontario, Upland and Fontana, the Cucamonga Valley service area.

This ordinance requires annual survey in comparison of customer's landscape water use to local reference evapotranspiration rate for landscaped area greater than 2,500 square feet. Cucamonga Valley would then be responsible for identifying properties where the ET rate is exceeded by 80 percent per year. The district would then have to conduct an irrigation audit of 20 percent of those customers identified.

Creating this database would be extremely time-consuming for district staff. District staff time would not be a recoverable cost. Cucamonga Valley would have to contract -- excuse me -- for the services of a certified landscape irrigation auditor at a cost that is unknown at this time.

This person may also have to be trained as certified irrigation specialist to understand how the system was designed for each property. Paying for the audit would become the responsibility of the property owner to be assessed by its local agency.

Since Proposition 218, assessing fees to property

owners has become more difficult and cumbersome for public agencies. This ordinance states that the local agency shall obtain permission from the property owner, or his or her designee, to access the property for the purpose of conducting a landscape irrigation audit.

What is the agency to do if the property owner does not grant permission? No enforcement provisions, there will be -- penalties may be assessed and the ordinance calls for termination of water service as a final penalty.

This is not always possible because of fire protection. DWR has not proven that this new approach will conserve any more water than is already being conserved through education programs and local rebate programs.

Thank you very much.

MR. STEVEN BROWN: Excuse me, Madam Chair. You missed No. 8.

HEARING OFFICER HUFF: I have that as Gerry Foote.

MR. STEVEN BROWN: No, Steve Brown should be No. 8.

HEARING OFFICER HUFF: Okay.

MR. STEVEN BROWN: It's okay.

HEARING OFFICER HUFF: Yeah, let me just find -- little pieces of paper. What was the name again?

MR. STEVEN BROWN: Steven Brown.

HEARING OFFICER HUFF: Okay, I'll just write that in

here.

MR. STEVEN BROWN: Okay. Thank you.

Thank you, members of the board. My name is Steve Brown. I'm testifying for the City of Temecula today. And we have -- I'm just going to get to the high points, because a lot of this has been already touched on by previous speakers.

With regard to Section 490.3, the -- we're looking for some type of exemption from the 70 percent ETO rate. The City of Temecula built this beautiful sports park and put in artificial turf. Unfortunately, we didn't realize that with our hot Inland Empire weather, it is intolerable during the summer.

We will have to go to natural turf eventually, because this artificial turf is just too darn hot to play on during the summertime of the year. So we would need some type of -- maybe an Inland Empire or an inland area exemption based upon high summer temperatures for public parks.

With regard to Section 49 -- excuse me, 492.14 and 493.1, the hundred percent mandatory audit. This is an unfunded mandate of extraordinary proportions for jurisdiction and I don't see how we or other jurisdictions can endure this.

There are also other problems. Access to private

property. I've managed the Code Enforcement Division for our city for several years and it is a real difficult time or deal to get into somebody's backyard to do an audit. We have to get a warrant and I can't imagine getting a warrant to do an audit on some of this property.

Also, obtaining water use information from the Rancho California water districts might be problematic for us because of privacy issues. And also, what are the remedies for failures for the audit? Do we cite them, do we give them civil penalty, or do we take them to court? We need to know what the remedies are.

Also, just one procedural item. When you have another comment period, could you please have your public hearings and give us a few days to wrap up our comments before they're due, because comments were due today and based upon all the testimony that I'm hearing today, we might want to modify our letter. It's impossible now, but that's just a housekeeping idea.

Thank you very much, appreciate it.

HEARING OFFICER HUFF: Thank you.

We're going to take an early break at 10:00 a.m. so that we can bring some chairs in, because we have a lot of people who need chairs. So let's take a ten minute break, we'll return at 10:10.

(A recess was taken from 9:57 a.m. to 10:10 a.m.)

MR. ANDY BOWDEN: Thank you very much. My name is Andy Bowden and I am the 2008 president of the southern California chapter of the American Society of Landscape Architects.

And on behalf of the society, we'd like to thank you very much for this opportunity to speak and we'd also like to applaud the efforts of the California Department of Water Resources and their efforts to try and control wasteful water practices within the state of California.

We feel that the water efficient landscape ordinance has many good points and offers some very good solutions to the overall concern of water use in the landscape.

However, while this ordinance has some very worthwhile and noble intentions, there are a number of items within the document that we, as one of the major stakeholders and designers of the landscapes within California, do not agree with, as we feel they will not benefit the people of California, nor will they meet the stated goal of saving one of our most precious resources, which is water.

For your consideration, we offer the following comments on items that we feel should be changed, modified or deleted from the final version of this ordinance. Our first issue: It is our understanding that this ordinance

does not appear to apply to local water purveyors, and as such, they are not required to comply with its provisions.

While it would appear that the intent is that the cities, counties and other government agencies work together to use water efficiently, the fact is that these privacy issues, they are not permitted to share information with the water purveyors, and the water purveyors, in turn, are not permitted to share information with the government agencies. The end result will be a lot of unnecessary red tape, additional bureaucracy and added delays to the construction process.

Our recommendation would be to require that water purveyors track water use utilizing a maximum water allowance and assess penalties for exceeding this allowance, similar to what is currently being done in the Irvine Ranch Water District. They assess penalties for water use over and above the maximum water allowance and this has had a positive effect in actual and real water savings.

Issue number two: The ordinance requires the design professional to design to an overall water budget of seven-tenths of ETAF and for that professional to certify compliance. Currently, there has been adequate research to document water consumption characteristics of conventional turf grasses, but unfortunately, there has been very little

research to document the water consumption characteristics of trees and shrubs that are utilized in our landscapes, other than for the turf grasses themselves.

The reality is that the water consumption characteristics of trees and shrubs is based on the locus (phonetic) document, which is only exodus and has no real supporting scientific research.

Our recommendation for this would be that each -- or I guess this is really more of an observation -- each region within our state has need of a different plant palate, and as such, it becomes almost impossible, given the ordinance, to totally comply with the provision as it relates to the 0.7 ETAF.

Our recommendation would be to initiate a study to evaluate the water consumption characteristics for the many trees and shrubs commonly used in the landscapes within California and require that trees and shrubs used in the landscapes meet a certain low water consumption rate that could be backed up with appropriate scientific research.

Issue number three: The ordinance states that the initial cost to developers designing and selling water efficient landscapes would be the same. It also goes on to state that there will be no cost impact on local agencies or school districts, because they can levy service charges to pay for the costs associated with adopting the Model

Ordinance.

It is our professional opinion that if this ordinance is enacted as currently proposed, there will be a considerable increase in the amount of work that will be needed in order -- to be done in order to comply with all the provisions of this document.

This will include an increase in the amount of fees paid to landscape architects and irrigation consultants, new fees to be paid to the hundreds, if not thousands, of water auditors that will now be needed to certify each and every landscape project across the state that exceeds 2,500 square feet in size

And there will need to be an increase in the amount of personnel that each government agency will need in order to review all of these new documents that are now being required be submitted.

We can't really offer a recommendation for this particular issue, as we cannot see how this ordinance will not have a financial effect on the people of California. They will have to bear the financial burden of increased fees, as eventually these will be passed on down the line to the end user, which in most cases will be the property owner.

Issue number four: The ordinance allows certain tasks to be accomplished by professionals that are not in

compliance with state law. Licensed architects, under 5615 of the Business and Professions Code, may prepare construction documents and specifications, as well as responsible construction observation. This pertains to construction elements planting, irrigation and grading.

Under the Landscape Architects Practice Act, Article 3, Section 5641, identifies exemptions and exceptions. Within this section, it clarifies the responsibilities and capabilities of property owners, nursery owners, architects, professional engineers, land surveyors, landscape contractors, golf course architects and irrigation consultants.

The Model Ordinance should be revised to reflect the responsibilities of these professionals. For example, the Model Ordinance allows landscape contractors to submit the signed and certified completion. However, under state law, they are only allowed to complete the signed services if they are also performing or directly supervising the installation. This should be clarified.

It is our opinion that a certified water auditor may not have the necessary skill, knowledge or experience that would enable them to accurately judge whether or not an irrigation system was efficient in its design or installation.

It is our understanding that in order to obtain a

certification to be a water auditor, all that is needed is to complete a two-day seminar and then complete an exam. A landscape architect goes to school for four years, where they take intensive design and construction classes.

After graduation, they must then work for two years in an internship position under a licensed landscape architect before being eligible to qualify for the landscape architects registration exam, which is referred to as the LARE.

This is a national exam which must be completed successfully over a course of multiple days prior to obtaining a license to practice landscape architecture in California. The minimum amount of time investment from start to finish is approximately seven years. We are concerned how an individual who only takes a seminar for two days can be considered equal in their abilities to determine the effectiveness of an irrigation system.

Thank you very much for your time.

HEARING OFFICER HUFF: Thank you.

MS. NANCY FINCH: I have a question for you, it's regarding -- backing up to, I think, one of your first points, the privacy issue. I want to make sure I understand what you're referring to.

The issue that keeps coming up, is that the counties and cities cannot share water use information of

individuals with the water purveyors due to privacy --

MR. ANDY BOWDEN: That seems to be our understanding. That there seems to be this problem between sharing of information unless you've been given permission by the actual -- I guess the person who has the water bill themselves.

MS. NANCY FINCH: And the information that we want you to share is water use, the individual water use, is that --

MR. ANDY BOWDEN: Well, it sounds --

MS. NANCY FINCH: And if there's someone else, I don't want to put you on the spot.

MR. ANDY BOWDEN: Thank you. I do appreciate it.

MS. NANCY FINCH: So if you want to defer to someone else, that's fine. I think there's --

MS. NANCY PALMER: I'm next.

MS. NANCY FINCH: Okay. You can answer that question for me.

MS. FIONA SANCHEZ: Also on that question, it's sort of the other way around from the way you stated it. As the water purveyor, we cannot necessarily share the information because of privacy issues with the cities and counties, because we have a customer account. And as I explained earlier, without that customer authorization, we cannot provide specific information related to that customer; name, address, and then tie in with their water information

without their expressed permission, so that's the issue.

MR. KENT FRAME: Fiona, if I could just nail this down a little bit further. Is it the water use data specifically that involves the privacy issue or is it the person's name, account number and the private information such as that?

MS. FIONA SANCHEZ: Well, Irvine Ranch Water District, which is the district I'm with, we will not -- we can provide the water use data and -- for example, to somebody as a global term. So I could tell you here is all the water use data, but I could not link it back to a specific customer or address for privacy use purposes because the specific usage information in that customer name and address is where the privacy issue comes into play for us.

MR. KENT FRAME: And is this something that the water agency has established or is this a water code?

MS. FIONA SANCHEZ: This is something -- at least at Irvine Ranch Water District, it's something on advice on legal counsel, because it's customer information and it's private information, we don't share it without a customer's permission.

MR. KENT FRAME: Okay. Thank you.

HEARING OFFICER HUFF: Speaker No. 12, Nancy Palmer.

MS. NANCY PALMER: Thank you. I'm Nancy Palmer, I'm with the City of Laguna Niguel. I'm the senior landscape

architect for the City. I also manage their urban runoff control program, and I run their recycling program.

Cities have land use decision-making and permitting powers, so it's reasonable that the cities should be the lead agency for implementing water conservation controls for a new and substantially rehabilitated landscape project that requires permits.

It's not reasonable to assume that cities have the capacity to oversee water consumption over time on existing developments, because many city governments do not operate and have no direct control over the water supply infrastructure and we do not, as has been said, have any right to water consumption data for individual sites.

Water purveyors and retail water purveyors have this control and the data access. They also have the ability to raise or tier water rates to meet any new expenses that come up and also to encourage conservation.

In the recycling world, we call this extended producer responsibility. The entity that sells the product has responsibility to make sure the product is properly used and not wasted, or improperly disposed of.

Therefore, the retail water purveyors should be the responsible lead agency for tracking and enforcing water consumption against water budgets for existing developments, instead of prescribing elaborate forms and

procedures that aren't reported. This ordinance should set simpler design guidelines, performance goals or water budgets, as was said, so that --

And it also should require that city and retail water purveyors should be required to coordinate together to determine the most effective procedures and methods to achieve water conservation's goal to both new and existing development.

I also think you've met with an opportunity here to coordinate the draft Model Ordinance provision with the municipal MPDS permits that are issued and also issued to wastewater and wastewater agencies. These are issues by the regional water quality control board, who are strongly encouraging low impact design strategies to reduce urban runoff and water pollution, right in line with what you need to be aware of.

Some of the Model Ordinance provisions as are currently written are likely to work at cross-purposes to low impact design strategies. For example, the exclusion of non-irrigated (inaudible) areas from the landscape area water budget calculation may tend to encourage a higher percentage of heart failure. That is counterproductive for urban storm runoff control.

Also, the urban runoff best management practices of manually irrigated landscaping and green roofs do not

appear to even be accountable in your water budget.

You should be aware that the MPD S permits in Southern California typically require that priority projects meeting certain land use and size thresholds, and that threshold is typically 5,000 square feet, are already subject to post construction water quality management plans and are inventoried and inspected regularly for best management practice maintenance.

The Model Ordinance should coordinate with those kinds of thresholds and specific activity that are required already. You should take advantage of the fact that the MPD S has enforcement provisions. Under MPD S, most cities have the citation authority to give penalties for people who are wasting water into gutters.

It also requires reporting by cities to the regional water board and that is a mechanism to make sure that cities and water agencies follow through on their program commitments. Water agencies may not be able to provide individual water data. They can, however, provide statistics on water use and water savings, and that could be part of reporting already required.

I think these are major issues. I do want to request that the public comment period on the draft ordinance should not be final and closed at this time and that instead the comments received today should be

considered in developing a refined draft, and then the draft Model Ordinance should be reissued for an additional public comment period.

Thank you.

HEARING OFFICER HUFF: Thank you.

Jan Harris, speaker 13.

MR. TOM PENNING: It's Tom Penning. It's hard to read. Sorry.

I'm Tom Penning with the (inaudible) Company. We're a manufacturer of soil moisture-based irrigation control equipment. I just have two comments I'd like to make. One in Section 491, under definitions, number 10, where it defines smart controllers.

Our concern is the use of the word controller. It refers to a single piece of hardware, when, in fact, oftentimes multiple components are put together to make a control system, such as a moisture sensor and evapotranspiration device coupled with a time-based controller to make it more efficient.

And we ask that the definition be clarified to encompass assemblage of components like that and we've submitted some wording for consideration.

Also, in 492.9, number 1(a)(2) -- excuse me, 1(a)(5), a number of sensors are mentioned in there and the terminology is used that they would be required where

deemed applicable for local climatic conditions. We would ask that that be clarified to determine either who or how appropriate would be defined, so it's not as vague. And we submitted some suggested wording to be considered.

Thank you.

HEARING OFFICER HUFF: Thank you.

Speaker No. 14, Mike Baron.

MR. MIKE BARON: Hi. I work for Toro Irrigation, and I'm also the chair of the Resource Management Committee for the California Landscape Contractor's Association, and three-time president of our local LA, San Pedro Valley CLCA chapter.

Now, the goal of the ordinance, I think we've all agreed, is a good one. There is limited resource of water in California and we've had to do a better job of using it efficiently. But I'm struck by the diversity within this group, which represents the green industry. There's been a lot of good ideas proposed.

And even though we attempted to generate an ordinance that would capture best practices and design and installation, we see that there are a lot of issues that have been brought up. And I'm concerned that by focussing on the best practices and quotifying those, that we're really going to limit the creativity and innovation within the industry to try to solve this water issue that we have

in California.

It's as if back in the '70s, the Federal government would have said here is a code, here is a way that you should build cars, and the goal is to increase average fuel efficiency from, you know, 12 miles a gallon to 30 miles a gallon.

Well, I think that if we take the information we've learned from Irvine Ranch Water District with water budgeting and with tiered rate structures, that we can set the goal of how much water should be used in a fair, and I think appropriate, method and leave the industry to be able to help California solve its water irrigation issues.

Key thing is that you can't manage what you don't measure. And the water budget approach, which has been talked about here, I think does that very thing. CLCA recognizes that, as Bob Wade mentioned earlier, by developing the water manager certification program. Which, in fact, takes a property, establishes the amount of water that should be used on that property that is efficient, and then says give us that water meter reading on a consistent monthly basis so that we can report back in graphic form how much you're using relative to what you should be using.

That kind of approach, I think, and then penalizing for over-usage, will achieve the effect or the result that we're looking for, without, again, trying to be

so detailed and tell the professionals this is what you can do and what you can't do.

So thank you very much.

HEARING OFFICER HUFF: Speaker 15, Brad Buller.

MR. BRAD BULLER: Thank you. I am a consultant to the Inland Empire Utility -- or the Inland Empire Landscape Alliance, and that is a corroboration of seven cities, six water agencies, private practicing stakeholders in this whole industry of landscaping irrigation, as well as what we call our friends, and that is other agencies outside our immediate region.

We have been meeting now for a year-and-a-half trying to understand AB 1881, getting to know each other and how we are going to deal with it as a region. You've heard from some of our stakeholders already today and you have received some testimony, both in writing already previous to today. We're here as an alliance.

We tried to get our comments collectively together to present one presentation to you today, but the 45-day period was not sufficient enough for us to do that. And as you can tell, the issues are quite broad and because we brought so many stakeholders together and so many different comments, we are probably today just asking you, the state, to accept our individual testimonies.

But we are -- at the same time, have set up April

2nd, for those that are in the audience that would like to join us, we will be having a debriefing of what we hear today, and what it is that we are wanting to do and willing to do as we move forward. We are all in agreement. We understand the crisis that we are in, with water and water issues in southern California and in our region.

And today, what I would like to do is just go over a few things. The alliance is committed to continuing our effort, because we believe doing it together in an open forum will generate the best results. And on behalf of the alliance, we thank you for this opportunity to respond to the Model Ordinance.

The alliance took seriously the intentions of AB 1881 and formed a voluntary collaborative, and it is our goal to achieve improved water efficiency in all landscapes in our region. We believe in moving forward with creative and coordinated approaches to effective landscape and irrigation practices.

We will do everything within our power to provide support consistent and new legislative requirements in our communities and agencies, and innovative land management practices for all involved.

We accept the individual -- please accept the individual comments of our stakeholders today and accept our commitment as an alliance, collectively, to continue

our course of action to develop coordinated approaches to effective landscape and irrigation practices.

Our stakeholders have each addressed concerns that the ordinance as drafted, may contradict and duplicate local restrictions and regulations, and may not be feasible for local jurisdictions to adopt and implement as currently drafted.

As you move forward, State of California, please consider; one, the need to clarify who would make the local ordinance at least as effective, what is the criteria that we would use or the state would use. Local agencies are not necessarily water suppliers, as such. Issues related to sharing water data may arise, as seems to be one of the topics.

Many water suppliers are already actively providing education on landscape water conservation to consumers. We're looking for a collaborative effort, not a duplication of effort in that matter. How the ordinance will affect botanical gardens, which have a unique role in preserving the natural environment, there should be exemptions to such things as our gardens in our area, cemeteries and other historic sites.

The applicability of the proposed Model Ordinance to include all new, rehabilitated and existing landscapes within the minimum of 2,500 square feet of landscape area,

will be costly and overwhelming for local agencies to comply with. We strongly recommend that minimum lot size be increased. We would like to work with our alliance members to address the alternatives to this minimum lot size.

A phased approach to compliance should also be considered in addressing rehabilitated and existing landscapes. The maintenance and auditing requirements of the ordinance as drafted, will place an additional and significant burden on our stakeholders.

Question: Will the existing proposed state projects be equally subject to the provisions of this new law? Provisions of the ordinance should compliment, not duplicate, existing stormwater runoff regulations currently mandated with ordinances in place within our local agencies.

These current requirements already have been shown to be effective ways of reducing landscape water use, providing a clear justification for the proposal to reduce the evapotranspiration adjustment factor from 0.8 to 0.7, we simply ask that there be a more scientific reason or educated reason as why that would be the best practice.

Last, simply, the landscape document package, as proposed, the materials would require prohibitive amounts of time for the local agencies to review the package. In

addition, they are overly complicated for single family homeowners to submit without technical assistance.

Again, I thank you for the opportunity to comment on the draft ordinance. We believe that the current draft model ordinance needs work before it can be proposed for adoption. We strongly recommend that the Department of Water Resources modify the draft ordinance, recirculate it for the 45-day review period for additional review and comments.

Thank you very much for your time and enjoy your day.

HEARING OFFICER HUFF: Speaker 16, Don Clark, I believe, Rain Bird.

MR. DON CLARK: Good morning. I'm here representing Rain Bird, as well as myself, personally. At the end, I'm going to close -- take my Rain Bird hat off and speak from a personal standpoint.

Since the beginning of Rain Bird's history 75 years ago, we've been committed to the intelligent use of water. Our orifice are based on the ingenuity of the citrus farmer who developed a way more efficient way to irrigate his crops. That commitment has been maintained throughout our history and continues to be maintained. It is a driving force in our mission of strategies today.

Rain Bird does applaud the work and leadership

that's been done in an effort to maximize the efficiency of landscape irrigation water use and applauds the efforts associated with the development of this water efficient Model Ordinance.

We fully support the Irrigation Association's recommendations. You should have received a document from them on the 20th of March. It's pretty extensive and Rain Bird does fully support every one of their recommends.

To go back in history a little bit, in the early 1990s, I believe that AB 325 was established. It was to develop an efficient model landscape ordinance, if my recollection is correct. In this model ordinance, a water factor of 0.8 was established and was required.

And it's Rain Bird's belief that over the years, this really has been in force and there really isn't scientific evidence to support moving it to 0.7. There is some documentation that's cited throughout the draft ordinance that, frankly, is inaccurate and is not scientifically based.

And I think that there needs to be further research and funding to support the research to develop a correct water adjustment factor. This is also a recommendation of the Irrigation Association. Rain Bird was then and will be supportive of all of the reasonable actions to improve the efficient use of landscape water

use. In fact, we believe it's essential to the future success of our industry and the economy of California.

We want regulation that's effective, trackable and enforceable. We do not believe the change to the 0.7 water factor is appropriate for this Model Ordinance at this time and may result in little or no enforcement, in the case with the current Model Ordinance. That result would be detrimental to the goal of improving what we're out here to improve, and that's the landscape water use.

I'm going to take off my Rain Bird hat and put on my personal hat. I was a part of the AB 2717 landscape -- the irrigation work group, work group number two, and invested a lot of time, we had a lot of discussion about the 0.8, moving it to 0.7, and a lot of debate, frankly.

And the recommendation at the end was not to move it to 0.7. I don't know how that ever got into this ordinance, but that's what's happened. And having worked for a -- in the irrigation industry for a number of years, the thought that over the last 15 years since AB 325 was established, that there's been incremental improvements to efficiency in sprinklers is absolutely correct.

But the 0.8 baseline that was established was never scientifically proven so we're taking an artificial baseline and we're essentially saying we're going to use that and because of the improvements, we can move it to

0.7.

Also, from a personal nature, I feel that this ordinance is highly prescriptive and that if we went to -- this is a common theme -- we went to the, you know, tiered water rate structure that -- and let the free enterprise system take over, that it would basically solve itself. People would not be willing to invest in water unless they felt it was important enough.

So thank you for your time and let's make good comments.

HEARING OFFICER HUFF: Thank you.

No. 17, Kristy Lovelady.

MS. KRISTY LOVELADY: Good morning. I'm Kristy Lovelady with Riverside County's planning department. I'm the administrative manager of the landscape program and also the manager of the Riverside County Task Force.

I'm here today to do two things. First of all, advise you of what Riverside County has been doing the last two years and also make comment in such a way that affects -- the model water ordinance affects Riverside County's practices.

Riverside County appreciates the objectives of the state's model ordinance and all the work that's gone into it so far. About two years ago, Riverside County embarked with a water task force made up of various stakeholders on

drafting their own water efficient landscaping ordinance, which went into effect in January of 2007.

It applies to commercial, industrial, multi-family homes, single-family tract home development and a variety of others. The baseline factor is 0.8. It incorporates elements such as smart controllers, rain-sensing devices and incorporates the use of recycled water, and it requires the use of -- the landscape plans follow the Riverside County guide to California friendly landscaping, and I'll provide you with a copy of our ordinance and also the guide at end of my comment.

That particular guide does a variety of other things, including requires a water budget, it requires that landscaping plans be broken out into hydro zones, it requires limitations on turf and inspections, which include a water audit. We don't try to overburden the land use development process unduly with additional documentation requirements that exceed what the objective is.

The county is working with the water task force to include -- encourage other jurisdictions to adopt water efficient landscape ordinances similar to the county's, and several have. And we also are looking at the state's water efficient landscape ordinance and see how it varies from our existing ordinance.

Now, as far as our comments go, we have several.

With respect to the applicability Section 430.3, we're concerned about the 2,500 square foot standard that is set. It will affect, pretty much, many of our development projects.

Also, often local water agencies will review and approve -- local agencies will review and approve developer installed front yard, typical landscaping for multiple single-family tract homes under one permit. While the individual landscaped front yards would not meet the 2,500 square foot standard, in the aggregate, the subject permit might exceed the state standard.

It is unclear as to how the state standard would apply in such circumstances. The county recommends that the state standard apply to individual laws, rather than the aggregate landscape area under one permit. Section 490.3 indicates that the irrigation audit proponent of the draft ordinance would apply to existing landscaping.

No database exists within the county that tracks existing landscaping. To develop such a database for a county that is approximately 7,310 square miles in size, we present a significant unfunded cost. We urge the state to look for other ways of achieving this objective.

As many have mentioned before, there is some ambiguity regarding the definition of local agency in Section 491.34. The local agency, as defined, is a local

land use authority that is responsible for permit approval, plan check and design review for a project. However, in various sections of the draft state ordinance, it implies that the local agency has water use authority.

Since not all local agencies have this authority, the County of Riverside recommends that the state review this ambiguity, consult with the agencies who do not have water service capabilities, and revise this definition to more accurately define the role of local agency versus water purveyor.

The landscape documentation and water efficient landscape worksheet components are onerous and extensive, and may be counterproductive to the overall goal. We also suggest that county -- that the State work with a subcommittee of local agencies to streamline these requirements so that they are more relevant to the land use development process and don't counteract the objectives that you're trying to achieve.

The ongoing landscape irrigation audit component of Section 493.1, Subsection 3 and 4, this appears to be a complex, unfunded mandate that would be costly to local jurisdictions and property owners. It is unclear what is intended to be accomplished for the data collected.

Many local agencies lack the resources to implement such ongoing audits, and to compile and analyze

the resulting data. We question if this objective may be better handled by the appropriate water purveyor who has the ability to more directly deal with the end user on an ongoing basis. Water purveyors may also have better access to the statistical information required.

And lastly, the public education component. Through the conditions of approval for projects, the county can, and often does, require that certain water efficient landscaping materials be provided to homeowners and property maintenance firms. However, we deal largely with the developers and builders in the project entitlement process, rather than the end user.

Since the target audience appears to be the end user, the local agency requirements in Section 492.18(a) may be better served by local water purveyors or collaborative partnerships between local agencies and the water purveyors, such as we have in Riverside County with many of our agricultures. They deal with the end user through meters and water bills.

Today, many of our local water purveyors in Riverside County have exemplary public outreach material web sites and public gardens that address water efficient landscaping. The County would like to be added to any mailing list, as you indicated we will be, previous to disseminating responses to comments and our future

revisions to the state's model water ordinance. Thank you.

HEARING OFFICER HUFF: The next speaker is Jennifer Nakamura, No. 18.

MS. JENNIFER NAKAMURA: Good morning. My name is Jennifer Nakamura, I'm with the City of Rancho Cucamonga and we are a member of the Inland Empire Landscape Alliance. On behalf the City of Rancho Cucamonga, we applaud the efforts of the California Department of Water Resources and their effort to develop a plan to reduce landscape water consumption.

There is no doubt that water is a scarce resource in California and without careful management now, we are in serious risk of jeopardizing the overall economic, environmental and social health of the state.

City staff has reviewed the proposed revisions to the model efficient landscape ordinance and feels much as other groups have already expressed today; the ordinance, as proposed, is extraordinarily specific and cumbersome to be implemented with -- excuse me -- any level of success.

We ask that all comments presented today be taken into consideration and that revisions are made that can be supported by all affected agencies. Thank you.

HEARING OFFICER HUFF: Thank you.

Speaker 19, Joseph Berg.

MR. JOSEPH BERG: Thank you. Joseph Berg, Municipal

Water District of Orange County. We're a wholesaler to 29 retail water agencies throughout Orange County, and work very closely with both the water purveyors and the cities to develop and implement water conservation programs, landscape water conservation being one of the toughest nuts we have to crack.

And as a result, are only more recently beginning to make inroads into quantifiable and reliable water savings in the landscape. Historically, our focus has been more on the indoor side of things, because landscaping has been so difficult to address and achieve the reliable and quantifiable savings.

I do think that the Model Ordinance is necessary and that it will go a long way to help save water in the landscape, and that the city permitting process is an appropriate avenue to begin addressing it. But I also think that there's a role for the water agencies to play, especially because they have the consumption data.

We've talked -- or heard a lot today about the privacy issues with the water use data. Many agencies in Orange County will not release that data unless they have a signed release from the property owner. And this happens when we attempt to do water savings analysis for conservation programs and we need to know that consumption data right down to the individual account.

And right now, I'm grappling with an agency who won't release that information to me, so I'm not able to do the statistical evaluation in their area. The only way they'll provide it is if they roll up an entire street's worth of meter readings into one number and give that number to me, and that just won't work.

So my recommendation on overcoming that challenge, is that in the documentation package that's submitted to the city, there be a release contained as a component of that documentation package, signed by the property owner, that will allow the release of that information from the water agency to the city.

The -- I will be submitting written comments, but I did want to touch on a few of the areas. We also heard from landscape contractors today that they feel they have a vital role in saving water in the landscape. And the California Landscape Contractor's Association has developed a certification program by themselves, or as an industry themselves, and feel strongly that it's helping the industry to advance. So if there is some way to incorporate that into the Model Ordinance, I would also recommend that.

Something that was unclear to me in the irrigation design component, was the development of the MAWA. What I would like to see is that there are clear guidelines that

require a water meter have a MAWA and have a dedicated irrigation controller, too; so you have a one-to-one-to-one relationship between the meter, the MAWA and the controller.

As a water agency implementing landscape conservation programs, it's difficult for us when we go to a site and there's a mixture of meters and clocks, so that just helps us have a clearer image of what's going on at the site. I also encourage the department to work with the state board and regional boards to link up the various regulations that are common between MPD S permits and the Model Ordinance.

I think that in lieu of requiring audits every five years, if an agency has either a MAWA reporting-type component to their water bill, whether it's tied to a rate structure or not, should be something that's viewed as more effective than an audit every five years.

That's -- every time they get a water bill, they can look at what their water use was and what their water use should have been, and it essentially becomes an audit every time they get a water bill, so for the most part, that's 12 times a year with monthly water billing.

I think that the definition of registered historical sites should also include locally designated historic sites. The 2,500 square foot threshold to submit

the documentation package, that's a pretty burdensome thing to put on a homeowner, especially even someone whose a do-it-yourselfer.

It would likely move a lot of those people into a situation where they would have to pay more than a thousand dollars to have a documentation package produced, so we would support that that square footage threshold be increased, the floor at 5,000, but possibly even 10,00 or more square feet.

With regards to the definition of smart timers, the Irrigation Association and a large group of stakeholders, both water purveyors and irrigation equipment manufacturers, have worked together to develop the SWAT testing protocol. That protocol is in place, it actually is the basis for the approved product list within my smart timer rebate program.

Also what's happening right now, is the EPA is developing a water sense program, where they will have lists of EPA approved products. That is already noticed on the EPA web site as something that's going to build off the IA-SWAT testing protocol.

In the SWAT protocol, there's weather-based timers, there's protocols being developed for soil moisture-based approaches. And I believe eventually they'll also be looking at central control systems.

So that's something that if we were able to reference in the Model Ordinance. Those protocols, then, as those protocols change and improve over time, the Model Ordinance would not have to change over time, just reference that industry standard.

HEARING OFFICER HUFF: It's been five minutes, if you could conclude.

MR. JOSEPH BERG: Wrap it up. I also believe that the common interest association guidelines, as it states now, it says they can't prohibit use of (inaudible) in planting. I would also encourage that we include synthetic turf in that application should the homeowner want to include that at their site. And with that, I'll stop my comments.

HEARING OFFICER HUFF: And please do submit the written comments and then we'll have them on record if they're not oral. And also a reminder, if you want to stay until the end of our speaker list, you can get back on to the tail end.

Speaker No. 20 is Phil Regli.

MR. PHIL REGLI: I, too, will join Joe afterwards, if I have more than five minutes of comments. My name's Phil Regli. I am the president of HydroEarth. We are one of those ET controller manufacturers. I was the former water conservation manager of the City of Scottsdale, Las Vegas Valley Water District and the Irvine Ranch Water District.

And in my tenure, we invented what you call building water restructures and I sat on the national AWW committee on water restructures and conservation, with the development of alternative rate structures and designs, which have been referred to many times by people at this meeting.

What I propose here under 492.3, waivers and variances, deals with the compliance of the certificates of completion. And the purpose for that is, if somebody does implement a water budget-type rate structure, they probably would supercede all the stuff that is being presented. No arguments with them. But being a rate structure person that I've done for five years, not every entity can develop or implement such rates.

However, there's certain functionalities the cities can do. And what I would propose is in this discussion in that there's four sets of validation, and if the city does a validation that water use or a water budget is created, if it's designed in the irrigation system, that they validate that the design's distribution uniformity meets that standard of the state and if they could validate that the design was implemented into the landscape.

The only one that they cannot validate is that once the keys are turned on, the water use budget is really handed over to the water entity. But if they can do that,

that the ordinance should State and be verified or changed in such a way that if they can create their own validation process, that this should all be waived, the rest of -- the ordinance would have been met. And my recommendation is to allow that validation process being the waiver.

On another footnote, under 492.9, on irrigation design plans, there is a -- an idea here presented on point number ten, "Slopes greater than 4:1 shall be irrigated with drip irrigation or other low volume irrigation technology."

That is really a gradual slope and I would prefer that that would be changed for two points; number one, irrigation technology devices can do extremely good cycling and soak methodologies for a long slope so there would not be a runoff and those efficiencies can be handled.

But number two, is on a research study we're doing on emergency drought and peaking, to fight fires where I live in Lake Forest and other communities. Drip is not a good idea. And so you might have other applications in delivery for fire code development, so you would need those kind of variances built in.

Under -- and I, too, can carry on a couple of other points, but one of the issues on irrigation efficiency, we can develop methodologies that you can reach a 70 percent distribution uniformity.

We performed, actually, in Inland Empire, 120 irrigation audits and found the ranges of the distribution uniformity using a GPS irrigation audit, to range from .22, roughly .76. You can validate that this can be done. And part of the validation process is can it be duplicated. The traditional audit methodology is only good for one point in time.

If you create a system design, an audit, like basically you're creating a system design with a GPS, you can validate and can be retractable, and that can be monitored. But the issue that we're bringing up is the recommendation of all manufacturers of rotors and spray do not necessarily release their distribution curves. Without knowing the distribution curves, you cannot validate if their system is designed correctly.

So part of the recommendation is someone's going to submit their irrigation design, and to validate it in the process, you would have to have the attached distribution curves of the products being used, or otherwise you can't validate.

So one of the recommendations in the changes of the ordinance is you have to submit your distribution curves of whatever product line you're using. And that would help the designers validate that what they're putting in, a 70 percent distribution uniformity can be achieved.

And yes, it can be achieved, they can be systematically tested when it's implemented .

Thank you.

HEARING OFFICER HUFF: Thank you.

Speaker No. 21, Geza Kiss.

MR. GEZA KISS: My name is Geza Kiss, I'm a water management consultant. I'd just like to follow up on that -- on the comments of the previous speaker, with regards to GPS/GIS technology.

Back in the old days when Bob Plow (phonetic) was around, his favorite saying was that there's no control I could ever save a drop of water. And some of the comments that the gentleman from the contractor's association emphasize on that.

This GPS technology actually closes the gap between the designer, the installation and the operation. Meaning, the currently existing gap, there's no hand-off. That's what we were talking about back in the late '70s, early '80s.

This technology actually slides into a smart controller database. Not all, but there are controllers that can actually accept digital data, and takes the design itself as the basis of operation.

And it also eliminates audits, because as long as you have a known distribution pattern, meaning an X, Y, Z

coordinate for each head, then you don't have to -- as long as you keep those positions, you can create a web site where you can see on a database you can download to ET, the green parts are under water budget, the red parts are over, and you can react on a daily basis instead of a -- instead of a monthly basis.

Knowing that efficiency at the time of design is an absolutely critical element, because they're installing nightmares on the databases, nobody knows what's going on. I plan check for various agencies and there's something that looks pretty normal and graphically pleasing. When you actually test it, it's 49 percent.

So we do designs right on a daily basis over 70, 75, so it can be achieved. But it takes a different type of design approach. Now, the additional benefits of this approach is that it's applicable to existing systems, as well. You GPS the points of the locations of the irrigation heads and then you design it.

And versus the regular water audit, which is basically samples of one or two locations, that a GPS/GIS methodology actually covers the entire field and it pinpoints a specific location. If we audit the system, and audit with conventional methodology, somebody reads a number that says your system is 49 percent.

Now, nobody can do anything with that number,

because there is no way to start. And this methodology also introduces a higher level of discipline. Meaning, it's not -- it's a precise head, it's a precise nozzle, not a (inaudible) reason of a pick up-type of approach, but it's precise. It allows us to control, really, the volume.

And half of the control takes place at the design stage, planning a design. Maybe do a master plan for a community. You know exactly what you use at a glance, so there is methodology out there which actually can control precisely, as long the databases of the controllers can accept it.

HEARING OFFICER HUFF: It's been five minutes, if you could --

MR. GEZA KISS: I'm sorry?

HEARING OFFICER HUFF: It's been five minutes, if you could conclude.

MR. GEZA KISS: That's pretty much it. I just wanted to emphasize the importance of knowing the efficiency at the time of design. Once we solve that problem, the GPS methodology eliminates these two big gaps between the design and installation, and the installation and operation.

HEARING OFFICER HUFF: Thank you.

MR. GEZA KISS: Thank you.

HEARING OFFICER HUFF: Speaker No. 22, David Taylor.

MR. DAVID TAYLOR: Greetings and thank you.

My name is David Alan Taylor, Jr., I'm president of the American Society of Landscape Architects, California council, or CCSLA. Our body is comprised of all four regional chapters within the state of California and we work with these chapters on state-wide issues in legislation.

While we have submitted specific questions, comments and questions -- sorry. Well, submitted specific questions, comments and suggestions in writing. I thank you for this opportunity to speak briefly, as many of our comments are some of those already expressed.

The CCSLA strongly endorses conservation in the landscape and supports the overall goal of the Model Ordinance AB 2717 and AB 1881. Our members work at municipalities every day submitting plans and acquiring approval of these elements and the renovation of existing projects.

We are committed to assisting the Department of Water Resources in any way we can and offer the following comments for consideration. First, we find that the Model Ordinance is overly cumbersome and over prescriptive, so much so that it is virtually unenforceable. Simply put, we believe the Model Ordinance can and must be simplified so that it can be implemented successfully.

The Model Ordinance must meet state law in plan preparation and certification and compliance. The ordinance allows certain tasks to be accomplished by professionals that are not in compliance with state law. Licensed landscape architects under Section 5615 in the Business and Professions Code may prepare construction drawings and specifications, as well as responsible construction observation.

This pertains to constructed elements; planting, irrigation and grading. The Landscape Architect's Practice Act, Article 3, Section 3641, identifies exemptions and exceptions. Within the section, it clarifies the responsibilities and capabilities of property owners, nurserymen, architects, professional engineers, land surveyors, landscape contractors, golf course architects and irrigation consultants. Please revise the Model Ordinance to reflect the appropriate responsibilities of these professionals under state law.

And then with regards to the -- there is a proposed rule-making document on page 4 under disclosures regarding proposed action. The document states that there will be no cost on private persons, nor will it directly affect businesses. It states that the initial cost of developers designing and installing water efficient landscapes would be the same.

The Model Ordinance would, in fact, add considerable costs to new landscapes. There are many ways in which this will increase costs. One example is the requirement to use weather-based irrigation controllers, which are more expensive than standard controllers.

Another example is in the make-up of the plant materials on sites. One of the reasons why turf grass is so popular is that it can be hydro seeded or sodded at a lower square foot cost than the same area design with shrubs and ground covers. The ordinance -- where if you see an amount of turf grass -- excuse me, turf grass on site, and therefore increase installation costs.

Another cost issue is a permanent water audit. We estimate each water audit will cost between 500 to a thousand dollars. They are required for occupancy and on a regular basis after installation.

On page 4, under disclosures regarding the proposed action, the document states that there will be no cost impact on local agencies or school districts, raising service charges to pay for the costs associated with adopting Model Ordinance. It states the initial cost to developers designing and selling water efficient landscapes will be the same.

The Model Ordinance will require a huge effort by local agencies to include the review of many more projects

than what they are currently reviewing. This will require them to hire qualified college educated professionals for plan review.

If the service charge for this effort is passed on to the applicants, then the cost to developers will be significantly higher, further making the statement above inappropriate. If the charges cannot by passed on, then there will be a significant cost to the agencies. I'll leave it at that for now, and thank you for your time.

HEARING OFFICER HUFF: Thank you.

I believe Speaker 23 has resigned her spot. We move on to Speaker 24, Fiona Sanchez.

MS. FIONA SANCHEZ: Good morning. I'm Fiona Sanchez with Irvine Ranch Water District and some of the comments I'm going to say have already been stated by others. Thank you.

First of all, I'd like to commend DWR and the staff at DWR for putting together this draft ordinance promoting landscape water efficiency, especially in such a short time frame. I know that has been a challenge.

At Irvine Ranch, one of the key things related to landscape water use efficiency is both the design of the system, and then the ongoing maintenance and accountability. And I think that the Model Ordinance certainly addresses a lot of the design issues.

The ongoing accountability after the fact is less -- there are less provisions. There are the audits. However, not at a point in time and it doesn't really address the issue of the person maintaining the site. One of the things that we have found very effective at Irvine Ranch Water District is the use of water budget based rates.

And when we implemented them, usage within our service area was about 4.98 acre feet per year, it's now averaging about 1.9 acre feet per year. Just as a point of reference, ETO in our service area was about 4 acre feet per acre per year.

We're actually about 60 percent of ETO, although I do want to point out that our water budget is based on a hundred percent of ET. And so, simply by providing a water budget maximum, the MAWA, have been very effective in our service area in reducing and maintaining accountability for efficient water use.

The other points, I would tell you I would recommend that that be considered as an alternative or option within the ordinance. And then, we also would like to, obviously, still see basic design criteria and guidelines, including the use of weather-based irrigation controllers.

And in regard to that and the application of water

budgets, we would like to see the same system expanded and enhanced by DWR to ensure the necessary ET data is available to implement those measures that's cited in Section 492.12. We'd certainly like to see that enhanced, expanded and supported.

Finally, the issue of the amount of landscape has been raised. One suggestion that we would have, is there is already state law requiring the use of dedicated meters for landscape areas greater than 2,500 square feet on commercial property, so I'd suggest that that be used as a threshold for commercial properties, and then recommend as others have suggested, that the threshold for residential properties be set higher, perhaps 5,000 to 10,000 square feet for those lots. And that concludes my comments. Thank you.

HEARING OFFICER HUFF: So that's all the speakers that we have signed up. Is there anyone else remaining in the audience who would like to speak, and if so, here's your opportunity to approach the podium. And there were some people who wanted to have a second round of speaking, this would be an opportunity to approach the podium at this point.

State your name.

MR. PHIL REGLI: Name's Phil Regli, president of HydroEarth. To follow up on Fiona's comments, one thing

that's really important that water agencies can do, is they submit out water budgets, as referred to by Joe, as well, Joe Berg. And the real important point of that signal, is if somebody does provide a signal, the effectiveness is actually quite astonishing.

And so, I recommend the variance of waivers and variance if there's a cooperation partnership between the city and the water entity, sometimes they are one and the same, sometimes they are not, but if they at least put the water budget signals -- that's not a rate structure.

Because when I get into rate structure designs, rate structures are more complex to implement, they require, you know, the California Corporate Commission to approve rates for private entities, which probably will not occur, or the city counsel would have to approve it and this is also very difficult.

But to put out a water budget, it's not difficult and it's very -- it's easier to implement, so I would recommend that if a city did adopt a water budget communication methodology that would meet a -- in the waivers and variances of 492.3, but that wouldn't meet one of the criteria.

And then if a customer, in this discussion, was within the water budget, it would waive the -- basically, the ongoing five-year audit program, because if you're

within your water budget, you're not going to find a lot of problems.

But the problem children will pop up, and those will be required to get audited and those people -- they're going to basically have to pay for the audit, so that's, in essence, a fine for them so there's an incentive for them to be in compliance.

So that's really an important point that we're bringing up here, is how do you get the program after the fact that did it before. Geza Kiss was referring to you catch most of the problem children in design and that's important, you need to catch them in design.

You got to hold them in design, because once it's implemented, it's a pain to take care of, and it also puts them out of compliance. It's hard to maintain that. If you catch it beforehand, and that's really where the city can be -- can have teeth and can implement, as after the fact. If they're not in charge of the water budget, their hands are tied, because they're not in charge of the water rate structure.

Another issue that I brought up on the subject of gold billing, gold billing is a water budget methodology, but that isn't really addressed here in the ordinance, is the idea that hey, look, you just create an allocation. In fact, you get out of the whole step; you just say you got

3,000 square feet, this your water budget, you design according to the water budget.

A city can say here's our water budget, I'm going to allocate. That's called an allocation methodology; so much turf, so much shrub X. We're done here, prove you can do it. What we're recommending in the design, is you can design for a water budget.

They're not used to being told to be designed for a water budget, but that you can design for, which puts it back to the creative process of letting the designers figure out how to fit within a certain program. A city can work with that, but that is taking away a lot of what I call the bureaucrat attitude.

It's like, okay, you set up a program, give me a variance, let the city decide, okay, we'll set in a water budget, then they'll put in their own recommendation of how they could get implemented to meet a water budget standard.

And that's back to allowing them the verification and the validation process, which I think Geza Kiss was referring to, in the fact that they use a GPS methodology to validate and that it's repetitable, you could repeat it, and that's important in this process, where the irrigation designers can design to that standard.

So I guess I could talk for everybody, anyone else want me to? There are other features that I could talk

about, or we all go to lunch.

MR. KENT FRAME: Phil, I do have a question. If I heard you correctly, you used the term "water budget signal," could you explain that, please?

MR. PHIL REGLI: A water budget, when you get into the design, the irrigation design -- okay, what we did on -- I'll speak to the city of Scottsdale, we were the first originators of the idea of, hey, let's put people on a budget, and if you exceeded a certain budget, we'll kick in a penalty.

Part of the penalty was if you head into a drought -- which you guys, by the way, we didn't address here -- but if you go into a drought, how do you get people to bring the water use down? So, for example, the state of California almost went into a drought because of rain, we put a signal, the current signal would be -- right now say the mayor of Los Angeles declared drought, and so you would cut back ten percent.

The water budget turns into a rate structure. And that would be like -- the rate structure at the Irvine Ranch Water District is actually a penalty rate structure that's hammered. People refer to the Irvine Ranch water budget. You got to realize that the Irvine Ranch water budget generates, in the penalty structures, millions of dollars that has to be allocated. Well, there's always

kinds of issues that another entity can't do.

So to say that a public entity has to go through a lot of stuff to be able to do this, because you can create both an excessive amount of revenue, which it's not allowed to have, but you got to balance it out into your budgetary structure. The California Corporate Commission cannot allow a private entity to do that.

There's a lot of balancing to be able to generate, that's why some of that -- structures can't be done, but you can do it with a water budget. Back to the whole concept again; you have a budget, here's what your water budget allocation is. If you exceed the water, a signal goes out. If you continually exceed that signal, you will be audited.

That's what you're asking for. Answer the question? At least the water agency's done its part, they signaled the -- the city or the partnership or the water entity, they signaled their part, then, therefore, they've met the requirements of the goals that are being set up.

MR. KENT FRAME: Thank you.

MR. PHIL REGLI: Do you want me to carry on with other comments, sir?

MR. KENT FRAME: If you have more.

MR. PHIL REGLI: Okay. The other issue of comment is on 492.8 on water features. We discussed this idea of

swimming pools, water entities. We did this in the Las Vegas Valley Water District, there's those big fountains, you know, you've kind of been there, I think, I guess, if you like to gamble.

To some degree, most of those are recycled systems and they're not part of the -- the irrigation designers and the landscape architects have nothing to do with that portion of that application. So to ask them to have to put in water features where they really have no play in that discussion, is really asking to go out and about.

That would have to be handled by the contractor, the general contractor, or the entity itself. So I would ask to have that stricken, not because gee whiz, it's not a good idea to have the city ordinance that deals with recycling water usage on water features. But the landscape and the irrigation designers have nothing to do with them, and therefore, to ask them to be part of that, just creates an extra burden upon them.

However, you could ask an ordinance that, hey, do you have, on your underwater features, recycling, what are you doing to make those efficient? It's a different subject, but it shouldn't be included in the maximum allocation of water, MAWA.

MR. KENT FRAME: I used to work and design water systems all the time.

MR. PHIL REGLI: Oh, you did? Did you do it with a budget, because we don't -- we didn't require that in Las Vegas. Okay. Fine. I strike that, let them go ahead with the program and (inaudible) handled for that so -- but those are really some of the highlights of the comments I needed to make.

HEARING OFFICER HUFF: And you are submitting those in writing, as well?

MR. PHIL REGLI: Yes.

HEARING OFFICER HUFF: Thank you. Perfect. Are there any further comments from anyone present? At this time, we will take a lunch break and we will reconvene at 1:00. So it's 11:25 and we are recessed.

(A recess was taken from 11:25 a.m. to 1:17 p.m.)

HEARING OFFICER HUFF: We are going to resume our public hearing. I don't need the microphone, but it is 1:17 p.m. and we are resuming. And first I'd like to ask anyone, to come to the microphone, who hasn't spoken yet and who has a public comment that they'd like to make.

No one here? Okay.

We will start with speakers who have gone before and have them just come to the microphone.

PHIL REGIL: My limit is 2 minutes?

HEARING OFFICER HUFF: Five.

MR. PHIL REGIL: Five, unless someone else shows up and they kind of hold a card number.

What I'm going to do -- this is a small audience -- is go through with you a GPS irrigation audit program. I'd like to submit that to the state. And do we have powerpoint?

HEARING OFFICER HUFF: Yeah. That's a power point.

MR. PHIL REGIL: Can I put it up on the power point?

HEARING OFFICER HUFF: It's down by your ankles.

MR. PHIL REGIL: Is someone more intelligent than I gonna show me how this little screen pops up here?

HEARING OFFICER HUFF: Do you see the found new hardware on your screen?

MR. PHIL REGIL: I don't see anything.

Okay. This was a tested model that we performed on Inland Empire's agency, here actually we did a 120 irrigation audits. This is called a GPS/GIS Based Irrigation System and the methodology we're gonna go through -- this methodology was developed by Geza Kiss he's an irrigation designer for the last 25 years. Dr. Tim Lindsey (phonetic) is a graduate from Berkley with his PHD in engineering. He did the mathematic designs for formulas here, and Tom Carr (phonetic) was the software engineer.

And the reason I'm here to just -- the reason I'm submitting this information besides having your free time

and everybody sitting here listening, it was the fact that this methodology would be a validation process. So that if the city chose to use this process it would supersede what proposal would be submitted as we're speaking -- as the ordinance is written as of today.

We're just gonna go right through the GIS water management. And what I'm proposing here is that the GIS irrigation water management and they're able to water manage it or control through the planning design and installation. It's a consistent process here and the operation of landscape irrigation system in order to ensure the accurate water consumption.

If you know what the system design is and I think -- in this really pretty picture here is what I call an irrigation system design. What we did is we took the idea that we have an irrigation audit and what's the next evolution step? If you know where everything is at and this is really almost creating an as-built.

The only thing we don't have in the as-built is we GPS to locate every rotor spray head in a particular targeted site. And by doing that we then implement the distribution curves of the product provided to us by the manufacturer. By having that we could then put that into what I call a GreenWorld Software and create what you got in front of you. It's a distribution densogram. The

densogram shows you in the red area where is less water and that tends to be your dry spots. When you put it into a smart controller, you'll hear the comment "dry spots." They over water to get to the dry spot, that's your weakest point in the system.

The dark blue areas tends to be where water -- the heads are close enough to each other they tend to over water. And so people try to under water that if they can. The green is actually where your Targeted range is gonna be.

Currently in the art of irrigation designers, golf course guys can design and they do design to such high levels of efficiency. But we tend not to see that as much played, especially in the research work we did on schools and parks, it's all over the place.

So why would you use this type of methodology? The GIS/GPS data is database driven. It's not just a cat drawn you're driven by the database of the data information. This database of course then gets passed through from design to site specification, verification to the discussion of management. It's a -- connects the field spatial head layout to the controller system.

So technically what I just said is that you could take this information, that beautiful curve, it gets uploaded into a management system, so that would be the

next evolution, which are called the smart controllers. Smart controllers have -- some of the brands have the distribution uniformity figure per valve and that's kind of what this is about.

Did I lose something? You guys can see it. Okay. I guess, I'll look up here. Yeah, we have our own screens.

HEARING OFFICER HUFF: Yeah, we have our own screens.

You may want to think -- it looks like it's rather a long presentation, and we are limited to five minutes. So just want to let you know, it's a couple of minutes left.

MR. PHIL REGIL: Oh, okay.

So we went through this. We go through the new construction steps, the database design and what we do is once you get it into the design --

So if you're limited to five minutes then I could just stop? Or carry on until I finish, I guess.

MR. KENT FRAME: As long as it pertains to the public hearing content or comment on it.

MR. PHIL REGIL: Okay. What we're saying here is that the GIS information is caught in the design and then it passes into what you would call a validation stage. Validation is you go literally GPS to him, so it catches the design and you validate. So once you have that system designed you don't really need to go back and audit. You

already know what the system is already doing. And that's part of the play in this discussion.

So people were asking me a question: So what's the cost? And what we did through the validation process is this cost is no more, no less than a traditional water audit. In the design face the cost is no more, no less than what an irrigation designer charges. As we speak, both of those elements we've done it. Geza Kiss, is an irrigation designer, he actually does this methodology. He can tell you what the cost structures are. But for giving evidence to the board, no this does not incur an increase of the cost to the customer. Either for the design or this discussion, the checking process.

That's just a quick snapshot of what the person does and this is just a complete -- just for you as a review. A GIS site map how the data is collected and put up and presented -- the data points are collected. The issue that you heard discussion on an audit. Audits are using a catch can methodology to figure out the distribution uniformity. There's a lot of evidence in support or disupport of using that methodolgy to figure out the distribution uniformity.

What we have here is you got the distribution uniformity for the entire site down to the square foot. So you really see where your certain problems are.

So one thing that, you know, in this, of course, is our software versus anybody else's is anybody can actually chief guess the site. You don't need that to do that kind of information. What we happen to do that's uniquely different is that you can plug the information, you can change heads, you can change nozzles, you can move heads, that's what you do and irrigation designer can do. In our work -- if we work with the city client -- we would review audits, review the site and send it back to the irrigation designer and say, here is what -- you met your distribution uniform, your requirement, your plan is done or it goes through the software and say your distribution uniform is .5, you need to make some changes and they're used to that.

So they go through that process and they can make the changes or we can actually make some suggestive changes ourselves because we have the software available to us. And that's just an example of a system distribution uniformity of 75.5 percent and we just calibrate that out for the co -- you know, for the city or for the school. It's that information that is uploaded into a -- any of the controllers that we're recommending for improvement or efficiency. So for your goal is 70 percent and in this example we hit 75.5 percent. Just giving you examples that, yes, this can be obtainable.

A person asked about cost. We performed 120 of this in the Inland Empire area. Our traditional three acre cost would be about 2,000 bucks. And our three acre cost is at 1,000. Just to give you an example that, gee, can you do this? Yes, you can do -- the audit cost is less. Mind you we're doing this on rotors and so we convert this stuff here on the revenue expandability. This just happens to be what we're talking -- a little bit here -- the rehab's actual cost. And the reason is my background as a water conservation expert, I was trying to develop -- which is this landscape area, in which you guys are getting involved. There is no standardization and what we're proposing here is we just created a standardization model that -- which I'm submitting to you as were speaking.

But no, there is methodology that can be standard. Yes, there's technology that can be standard, to prove that you can do these things at no extra cost to the -- I'm going to say to the cities or to the school, above and beyond that where you can go ahead and test for these different changes and, mind you, any irrigation designer can make these changes because technically we are using irrigation designing software that can validate this.

So you can change the nozzle head, move the head, redesign and recap a particular site. And the reason why this is important to us, and I'll give you an example of

this. This was performed here in the Inland Empire. This happens to be the city of Ontario. This happens to be Memorial Park. The example you're seeing in front of you was a GPS irrigation audit we performed there. All we did was we took that pretty little finger as in this discussion.

The red area, was using -- is what we found was out there. It was a 45 percent distribution uniformity. By just changing the nozzles, we put it up to 65 percent and somebody's labor to go change it. We could change the exact little nozzles and we could plug and play that into this position. To actually get the -- get it out higher if necessary. And the reason I present this is again to show you that this is something that's cost effective and actually would save the cost benefit to the client in this case, the City of Ontario. It pays for itself automatically. So given the accurate control of water value, the cost reduction, reduction of the inventor, you get a very predictable cost and the optimal water consumption. We generate in each one of these cases an irrigation schedule, historical irrigation schedule, in your presentation you require that and I'm here to support that.

I did the -- when I was irrigation control -- irrigation water conservation manager of Irvine Ranch Water

district, we did the research study on all of these water base controllers and historical weather base controllers will give 98.9 percent for the whole year. That doesn't mean it's not good to have a line because of the ET controller, but the baseline can easily be generated for each one of these sites. And then the line -- it can take over once the client has put it into play. And so the water budget is already then created for you.

So in conclusion, the GIS irrigation system analyses and plan check will be met and exceeds the needs, basically exceeds your standards that you're presenting as we're speaking. And will have a hundred percent turn key program for any water management system. And the reason I present this again to you not only do you have your state standard that you're submitting, I'm already presenting to you a methodology, a new technology that can already meet and exceed your current proposals. And if any city chose to use some new technologies and can validate this methodology that that would be the adoption process, so that city can use that instead of going through the guidelines you're currently proposing they would have to go through.

Do you have any questions? Are you allowed to ask me questions?

MR. KENT FRAME: Yes, we're allowed to, but I don't

think there are any.

HEARING OFFICER HUFF: Thank you.

MR. PHIL REGLI: Okay. And I have some pretty pictures of how it looks, so I can give those to you as an example.

HEARING OFFICER HUFF: If you would give anything written to Judy, she's collecting all the written -- actually, give them to me, I'll take them.

MR. PHIL REGLI: Okay. So I will submit those to you. On other research notes, two things that I thought about over lunch, burritos and that kind of thing.

We did do this research study on emergency peaking and drought and design, and none of this stuff addresses any of those particular issues. Emergencies deals with fire planning or line breaks in pressures. I'm thinking more of the code of fire planning. Peaking deals with the issue of energy, peak management is a similar situation of how you design systems for that. Drought planning is another one, when you design irrigation systems. Are they designing? This whole discussion is with the end use in mind.

How are you planning for a drouth? Because you will go through a drought. How does the system design for it? The irrigation design should be submitted with the concept, yes, we're going to simulate a 10 percent, 15 percent drought. How is the system going to handle that.

And these are kind of issues with a thought process that, again, if the cities chose a validation process that exceeds what is proposed, well, then they can incorporate those ideas.

And the third idea that the cities could incorporate above and beyond what you're doing is -- I call them management maintenance schedules and designs. I'm using ball fields; for example, when we did this audit. What's the problem with this is that the ball fields were not designed for maintenance. So if you have one field A and ball field B, you want to refurbish ball field A, they are on the same irrigation grip. What you wanna do is design a system so that you can maintain ball field A and ball field B separate, so they can rehabitate them or basically you know it's gonna be -- you want to shut it off for 2 or 3 weeks. Redo the turf, because today's overuse on ball fields isn't geered for that.

But again, that would be something that would exceed what you're currently proposing and the city could adopt that as per new constructions that are coming through, which impact against schools and parks -- but I'll submit these drawings. I know all these other people want to come and talk, you know.

HEARING OFFICER HUFF:: Would you like to speak?

MR. GEZA KISS: Just kind of a follow-up. A couple of

thoughts here.

What is the fundamental problem with management? I mean, like they forgot I was here. And we talked about this 25 years ago. What's fundamental is this approached that very clear integrates whether management and it closes the -- as I talked about earlier. It closes the gap for the currently existing problem areas of every base, the most whether between design and the installation and installation and operation. That's why it's so critical to know at the time of design. What is my efficiency? Because once I know it that slides into a controller.

Right now there are two controllers on the market at this time, except that I'm sure that it happen -- I cleaned up with these guys because they listened for one thing. And I don't manufacturer anything myself but at the same time unless you close the gap completely from A through Z the smart controller can take advantage of this process, the design process, only if the spatial distribution is behind and knows. So consequently, once we lock this in with the exception of the other data that a lot of smarter people than I am can predict that, it's pretty much control of variable. So I think some of those complaints in terms of audit, it doesn't require audit because as long as you have the spatial distribution and it stays there for the next five years.

And why would you move ahead if you don't have to, every variable stays the same. Because in case of a new system you design it, you take the X, Y, Z coordinates download it into a GPS machine and within a couple of seven years you can locate every head. Then you duplicate it over a total to duplicate the actual test of distribution. In case of existing, just about the opposite, you located the head first and test it later and then in this case can actually pinpoint the problem areas. That's why this methodology can be used both in plan checking process, as well as evaluation of existing.

And this is a very easy way to fix up existing -- existing systems, which is about -- like as I recall, the number was about 1 through 20 versus new. So a universal tool in that sense and you operate the system from the design. Nobody has to reprogram anything up as long as you download the ET on a daily basis. You can monitor your consumption, you can react instantly. And it doesn't need any -- the contractor is less involved, because it's pretty much automatic. So -- and you can generate preformatted reports, if something breaks or something. That's pretty much standard for most controllers, but it certainly gives you something till the next morning. But to go and just point out the specific location where to fix the system, so this will be my comment.

MR. BOB WADE: I don't want to extend your day any longer --

HEARING OFFICER HUFF: State your name.

MR. BOB WADE: I'm sorry. Bob Wade, Wade Landscape and landscape contractor in Orange County. We do -- about 40 percent of my business is site renovation of irrigation and installation of smart controllers. We are the certified installers for the City of Newport Beach for one manufacturer and another manufacturer in Laguna Niguel and Mission Viejo.

So we do a lot of this. We do a lot of water management also on a monthly contract. Mostly is in Newport Beach, and I'm very interested in this technology, but it is not what I was talking about.

The problems we see don't require computers, they require on-site, physically turning a valve off and looking at it. Distribution uniformity on a site that is installed perfectly if one end is not in alignment, if it's crooked its uniformity is out the window. Computer can't take care of that for you, you need to turn that on. And that's what I earlier mentioned. And CLCA has pretty much accepted people -- the maintenance companies do not turn these valves off and take a look. They don't see the broken heads until somebody notices the dry spots or heads out of alignment or very, very basic even nonchargeable fixes. It

just -- it takes a moment of a worker's time to do it. But nobody is making it worth their while to turn the valves on and do it, and save the water. It's really much more of a fundamental thing than what we're looking at with the computers and the models and all that.

And I think if there is any sort of refinement of 18 and 1 as it is. I'd like to see some more encouragement for just the basic maintenance because I think we're going to save a surprising amount of water if we do that. Thank you.

HEARING OFFICER HUFF: Would anyone else like to speak? We will be available until 5:00. We will just take a break and remain until a speaker arrives.

(Off the record at 1:39 p.m.)

(At 4:50 p.m., the proceedings were concluded.)

STATE OF CALIFORNIA )
) ss.
COUNTY OF LOS ANGELES )

I, ZAIRA JIMENEZ, C.S.R. No. 13283, do hereby certify:

That said transcript of proceedings was taken before me at the time and place therein set forth and was taken down by me in shorthand and thereafter was transcribed into typewriting under my direction and supervision, and I hereby certify the foregoing transcript is a full, true and correct transcript of my shorthand notes so taken.

I further certify that I am neither counsel for nor related to any party to said action, nor in any way interested in the outcome thereof.

IN WITNESS WHEREOF, I have hereunto subscribed my name this Wednesday, 2nd of April, 2008.

ZAIRA JIMENEZ, CSR #13283