

County of Maui Water
Supply

BOARD OF WATER SUPPLY

COUNTY OF MAUI

Regular Meeting

The Maui County Board of Water Supply Regular Meeting was held at David K. Trask, Jr. Office Building, Conference Room 207, Wailuku, Maui, Hawai`i 96793, on Thursday, January 13, 2000, commencing at 9:00 a.m., pursuant to Notice.

Reported by:

Susan Carol Soderberg, CSR 214

APPEARANCES:

Board of Water Supply:

Robert Takitani, Chairman

Elmer Carvalho

Clark Hashimoto

Adolph Helm

Howard Nakamura

Michael Nobriga

Jonathan Starr

Orlando Tagorda

Staff:

David Craddick, Director

George Tengan, Deputy Director

Michael Quinn, Finance

Holly Perdido, Finance

Miles Fujinaka, Engineering

Howard Fukushima, Corp Counsel

Fran Nago, Board Secretary

Also Present:

Linnel Nishioka

Roy Hardy

Allen Mullins

Maris Yapole

Luke Miyasaka

Pat Constantino

Robert Favela

Elaine Waldo

Rand Nooteboom

Nelson Botelho

Bruce Faulkener

Harry Eager

Transcript of Proceedings

Board of Water Supply, Regular Meeting

January 13, 2000, 9 a.m.

CHAIRMAN TAKITANI: Good morning. I would like to call the County of Maui Board of Water Supply regular meeting to order. It is 9:02 a.m., and we are meeting in the HGEA Conference Room, Room 207, David K. Trask, Jr. Office Building. Today is Thursday, January 13, the Year 2000.

We have a very busy agenda, so we would like to move right through it as quickly and as smoothly as we can. We are scheduled to recess and reconvene at 6:00 p.m. tonight at the Pukalani Community Center to discuss the environmental impact statement on East Maui. So we would -- and we have some very meaty items today. So we would like to try to move forward as quickly as we can.

In attendance we have Board members Howard Nakamura, Elmer Carvalho, Adolph Helm, Orlando Tagorda, Clark Hashimoto, Mike Nobriga, Jonathan Starr and myself, Bob Takitani.

We also have Director David Craddick, Corporation Counsel Howard Fukushima, Board Secretary Fran Nago, Fiscal Officer Mike Quinn, Holly Perdido from Fiscal, Miles Fujinaka from Engineering. Susan Soderberg is our recording secretary.

Fran, you want to introduce the public?

MS. NAGO: We have Maris Yapole; we have Luke Miyasaka; Pat Constantino, we have Robert Favela, we have Elaine Waldo in the back. And I am sorry, I didn't get your name.

MR. NOOTEBOOM: Rand Nootboom.

MS. NAGO: Thank you. And we have Nelson Botelho, we have Bruce Faulkener, we have Allen Mullins, Linnel Nishioka and Roy Hardy.

And the gentleman who just came in is --

MR. WAGNER: Nick Wagner.

MS. NAGO: Nick Wagner. Thank you.

CHAIRMAN TAKITANI: I would like to remind the members of the public that this is a Board of Water Supply meeting; it's not a public hearing. I think it has been going around the community that this is a

public hearing here and tonight at the Pukalani Community Center. But it's really a Board of Water Supply regular meeting.

We will go to approval of minutes. We have the regular sessions of November 12, 1999, and December 9, 1999.

MR. NOBRIGA: Move to receive the regular session minutes of November 12 and December 9 of 1999 subject to 30-day review. And if there is no corrections, deletions, these minutes should be filed.

MR. HASHIMOTO: Second.

CHAIRMAN TAKITANI: It's been moved by Mike Nobriga and seconded by Clark Hashimoto that the minutes of November 12 and December 9 be received subject to a 30-day review period, subsequent to which, if there are no corrections, the minutes will be approved.

All those in favor --

MR. NOBRIGA: Sorry. They will be filed.

CHAIRMAN TAKITANI: Excuse me. Filed.

All in those in favor signify by saying "aye."

VOICES: Aye.

CHAIRMAN TAKITANI: Opposed "nay."

(No response.)

CHAIRMAN TAKITANI: The ayes have it. The minutes are approved.

MR. NOBRIGA: No, no. The minutes --

CHAIRMAN TAKITANI: I'm sorry, they are received.

MR. CARVALHO: Received and filed.

CHAIRMAN TAKITANI: Excuse me.

We will now go to testimony from the public.

Is there anybody in the audience who would like to speak on any item that is on the agenda?

Any items that are not on the agenda will not

-- testimony will not be allowed.

MS. NAGO: I have several people who have signed forms to speak.

CHAIRMAN TAKITANI: For items that are on the agenda?

MS. NAGO: There is Maris Yapole, who would like to speak on water fluoridation. Robert Favela would --

MR. FAVELA: Water meters.

MS. NAGO: On water meters.

And then also Elaine Waldo, but she is here in

regards to the request for Ms. Myhre that is on our agenda.

MR. STARR: Mr. Chairman, I have a problem with not allowing free and open public testimony. I really hate to say that people are not allowed to testify if what they want to say doesn't fall under an agenda item. I just feel out of courtesy we should allow people an opportunity to say what they want to say.

Whether we can act or take it under discussion, I think that's a matter for the -- for making sure that things are properly on the agenda. But if people want to come to us with an issue, I, for one, would feel that they should be given an opportunity if they have made their way here.

So I would like to request that if there is someone who has something to say, whether -- I don't want to disqualify them in advance before we have heard what they have to say.

CHAIRMAN TAKITANI: Thank you, Mr. Starr.

Mr. Fukushima, would you like to speak?

MR. FUKUSHIMA: Yes. The statute requires that you allow testimony on all matters which appear on the agenda. However, if the Board wishes, without objection from other Board members, to hear testimony on items not on the agenda, I presume they could, although no action -- or no Board action could be taken on anything that an individual testifies to that is not on the agenda.

MR. CARVALHO: Mr. Chairman.

CHAIRMAN TAKITANI: Mr. Carvalho.

MR. CARVALHO: Point of information.

Did I understand the corp counsel to indicate that the Board could take no action at all?

MR. FUKUSHIMA: On matters that are not on the agenda.

MR. CARVALHO: Not take any action such as filing, deferring or whatever?

MR. FUKUSHIMA: Well, if the Board wishes to take action, I believe the appropriate way to do that is to place it on the next agenda in order to do that.

MR. CARVALHO: Well, that would constitute action by the Board. That is an action taken by this Board to place it for the next meeting.

MR. FUKUSHIMA: Well --

MR. CARVALHO: You know I am right. O.K.?

I have no problem, see. But I want to be doggone sure that we don't just sit here, listen, see what we have heard, and that's it.

No. We can refer it for the next agenda, for

the next meeting or at a subsequent time. And that does constitute action of the Board.

MR. FUKUSHIMA: O.K. I stand corrected.

MR. CARVALHO: Thank you.

CHAIRMAN TAKITANI: Any other discussion?

MR. NOBRIGA: I would like to hear all the testimony since we are a water agency. And as long as testimony relates to water, I don't see how we can cast it aside as irrelevant.

CHAIRMAN TAKITANI: The Chair would agree as long as we don't exceed 3:00 p.m., subsequent to which we need to get ready to go out to Pukalani.

MR. CRADDICK: Bob.

CHAIRMAN TAKITANI: Mr. Craddick.

MR. CRADDICK: Yesterday I think I faxed you a copy of something that was titled "Urgent Bulletin." And I guess it's in everybody's packet. And I suspect a lot of these people are here because of that.

And that urgent bulletin has information in it that is not necessarily true. And I don't know if these people are going to be speaking to that, but -- anyways, if they are, I guess we will have a chance to discuss it later on.

CHAIRMAN TAKITANI: Yes.

Ms. Nago, do you want to go ahead with the list of people that wish to speak?

MS. NAGO: We have the first person who signed up, Ms. Maris Yapole, and she wishes to address the Board regarding water fluoridation.

And if you folks can, when you address the

Board you can sit over here and then we will be sure to pick you up on the record here.

MS. YAPOLE: My name is Maris Yapole. I am a registered dental hygienist. I have been practicing here on Maui for ten years. I have been involved with the Maui Dental Coalition here on Maui for about eight of those years and now with the dental health van that we are trying to get started.

I am also speaking on behalf of the American Dental Hygiene Association and our State of Hawai'i Dental Hygiene Association. And we are definitely in favor of the benefits of water fluoridation.

And I will make it very brief. Fluoride has changed the face of American literally, banished childhood toothaches, agonies for millions, and presented the prospect of an uneventful lifetime of dental history for millions more. Its controlled use has improved the quality of life for all it reaches. And good oral health is primarily a quality-of-life

issue. Water fluoridation is the most cost effective way to bring this benefit to our community.

And that's my statement. And I would be available for any questions. I would be happy to answer them now or at any other time. You have my address. Thank you.

CHAIRMAN TAKITANI: Thank you.

MS. NAGO: We have Mr. Robert Favela, and he is going to address to Board on water meters.

MR. FAVELA: Good morning, everyone.

What I would like to say is that I am trying to get two water meters. And I applied for family subdivision of three half-acre lots back in '96. So far I have gone through the process with the County, played by the rules. I got a folder about this thick of communications between the County and my engineer.

And for about a year and a half now we have been ready for final approval, but because of one reason or another, you know, we had drought, we couldn't cap the pipe, and finally they allowed us to tap the pipe, and now we got the boxes, waiting for the meters. Still no meters, none available.

We get this famous quote, "The Department is deferring action on the subject subdivision based on the shortage of water source capacity that affects Upcountry areas," by the Director of Water Supply, dated March 16, 1993. I guess this goes on, you know, all the letters that go out to people applying for meters.

My thing is this: Why? Can they tell us or do they know when the meters will be available? Right now I have gone through three extensions. And every time I extend the permit to carry it on costs me money. And this is only a small, three-lot subdivision. I have gone through \$15,000 and only on engineering fees and the work that we have done surveying and everything.

Now, how long more? I would like some estimate as to how long it's going to take for me to get those meters. Upcountry people -- and I can go back to 1969 -- the Water Department just about dictated to me where I could build my house so I could get water. This is '69.

This is 30 years later, and I still got problems. Nothing has changed. This -- you know, how many more people like me there must be out there. And like I have said to some of you in this room, you can travel down country, nobody has a problem getting a meter. I go to Kihei, I see all of these developments coming up. Where is that water coming from? From this mountaintop, probably.

The plantation can drain water from Nahiku all the way out here. You tell me the County can't take water all the way out here uphill? It's possible.

What are we, second class citizens Upcountry that we got to live with this year after year after year,

decade after decade? I can't go to the century. I am not that old.

Is it fair? Upcountry people pay taxes just like everybody else. But we are paying taxes on property that we cannot use because of water. And yet there's a lot of people that have been to meetings that testify we don't want no more meters Upcountry; we don't want no more development. In the '60s and '70s there was no subdivisions. All these people that are testifying are living on subdivisions that has been built in the last 30 or 35 years. And we, the people that have been on that land -- my wife's family over a 100 years -- we cannot get water? We never came in and said, "No, we don't want no more people Upcountry" when they were building.

So I would just like to say, you know, people need answers. You cannot just put a blank statement in the paper and -- what? -- it's supposed to go on year after year after year and month after month? Nobody know where we going, what is the timetable. It doesn't

seem that water is a problem; the problem is getting the water. I don't have the millions of dollars needed to drill a well. I get hard time dig a cesspool, much less a well.

That's all I have got to say. Thank you. Any questions?

CHAIRMAN TAKITANI: Thank you, Mr. Favela.

MR. CARVALHO: Mr. Chairman, the Board has before it the matter of the Upcountry water situation. So the testimony received this morning is very relevant and very applicable to the decisions that this Board will be making.

It is my understanding -- and correct me if I am wrong, Mr. Chair -- that discussions are ongoing with a deadline of February 28th to take action on the water supply and the distribution of water from Wailoa Ditch and other environs.

And speaking personally, Mr. Chairman, one way or another, the month of March is going to have the Ides of March and this question is going to be acted on and corrected. And, if I may, Mr. Chairman, I do make a distinction between the power and the authority of the Board, which I believe the Board has -- I make a distinction between that authority and the policy-making decisions of this body and the implementation, which is a function of the Department.

And this implementation process, as I understand it, it has been indicated that this process may be dependant upon the listing of certain priorities and guidelines and all what have you. But I think there is a very distinct -- great distinction between the authority, which is vested in the Board, in making appropriate policy, and the implementation of that policy, which is primarily the administrative matter.

And I would like to see the necessary corrections made and drafted and brought to the Board so that the implementation process can be very clear.

And no Director and no staff member can hide behind a technicality, real or imagined.

CHAIRMAN TAKITANI: Thank you, Mr. Carvalho.

Ms. Nago.

MS. NAGO: We have Elaine Waldo speaking on behalf of Ms. Myhre.

MS. WALDO: Hi. Ms. Myhre lives in Oregon, so she is unable to attend the meeting. And, actually, she has applied for a water meter Upcountry in Olinda. The application was submitted in October, and it's still in limbo. And she basically feels like Mr. Favela, that she needs a response.

And she asked me to bring up three points regarding her situation. And one of that is the question of whether water meters are being given to existing lots Upcountry. I understand that there's a rule that says they are not supposed to be given out

unless the water -- the lot is adjacent to a waterline.

Unfortunately, this isn't necessarily what occurs

Upcountry. You can have lots that are not on adequate waterlines.

But since that rule was passed in '77, it's my

understanding that it actually has not been enforced

and people have been getting water meters with

easements for 22 years, at least. And to me, whether

that's a rule and still policy is something that's

guided decisions for 22 years. And to suddenly just

just say, "No, now we are going to follow the rules"

does not seem fair to people who have had existing lots

and have claimed reliance that they are going to get a

water meter based on a history that has been giving

water meters Upcountry to people needing easements.

If this is something that the Water Department

is now going to start following the rule, then I feel

that the Water Board needs to make a decision that, if

they are not going so continue giving to existing

lots -- and, by the way, this lot has been in existence

since 1915, so it's not a new subdivision -- then, I think they need to do something about these people, either some type of a grandfather clause or something or a date that as of such and such a time, then -- otherwise, the public is relying on the fact that these meters have been given out and now you are just suddenly cutting them off.

Second point she wanted me to bring up -- oh, and by the way, her subdivision, Olinda Homesites, the other four lots in her subdivision on either side of her have been given water meters, all using the same easement from the point of adequacy on Olinda Road. She is the only one that has not had a response.

The other question she brought up was the question that since she has a TMK number and she has been paying taxes, that she assumed that entitled her to public services. And if you are putting in waterlines, they are supposed to be capable of serving the existing lots. Then why are the lines remaining

inadequate?

These lots on her street have been there since 1915. Obviously, everyone knew they were there, and there is an inadequate waterline. So she has no choice to get a water meter at the street.

Then her last point was that she is under contract till the end of February. If this is not resolved, she loses money. And she wanted me to ask if the County was willing to pay for her loss of revenue if this is referred to staff and it's not acted upon or brought up in the agenda in the February meeting.

CHAIRMAN TAKITANI: Thank you.

MS. NAGO: Next we have Christina Hemming, and she wishes to address the Board on fluoridation.

MS. HEMMING: Good morning, everybody.

I have done some research into the aspects of adding fluoride into the drinking water. First of all,

fluoride is a toxic industrial pollutant created by the aluminum industry, the steel industry, the iron industry, copper, lead, zinc, and the fertilizer industry as well as the plastic industry, which my father was a part of. Fluoride is one of the most toxic substances known and is one of the most prevalent substances known.

Since the 1930s, fluoride has been routinely added into the water on the Mainland of the United States. 155,000 tons a year are released into the air, and 500,000 tons a year are released into the oceans and rivers. Fluoride has been proven to cause bone cancer in the state of New Jersey six times higher for men. It can also cause arthritis, central nervous system damage, nausea, decrease in appetite, stomach ulcers, diarrhea, constipation, headache and muscle weakness.

Researchers at Dartmouth in October of 1999 released a study that said fluoride in water magnifies the uptake of lead and other chemicals and other toxins

into the body and the brain.

We have here in Hawai'i -- we have DBCP, TCE, diquat (phonetic) and other approved water treatment systems like Rodeo routinely used in the water systems. We do -- and recently there have been reports in the -- ecologists say that has been no synergistic research studies done on how different chemicals react with each other in the water system and in the body.

I ask the Water Board to propose an amendment saying that no fluoride will be added into the water until a full and complete study is done on how it will affect people and how it will affect (sic) with other chemicals that are already present in the water here.

I also want to ask the Water Board: Who is going to pay for this fluoride? Is it going to be the people such as myself who are paying the Water Board? Or is it going to be the Water Board itself? Or is it going to be the chemical industry giving us the fluoride?

The other major things -- two things I want to also bring up: How are the employees of the Water Department going to be educated and trained to handle the fluoride to put in the water? How is the fluoride going to be adjusted when we have droughts or when we have extra water going into the system? Who is going to pay for this?

And it has been a long, controversial subject.

The other thing is it takes the choice out of people who don't need to have fluoride. I have -- I grew up drinking fluoride, and I have eighteen fillings in my mouth. It did not make my teeth harder. What made my teeth better was not eating sugar.

So it's like it's educating the general public on sugar consumption and eating better food, which is obviously just a basic healthy protocol. But it takes out the freedom of choice for people like me. I don't need it to go into my whole system.

You have children with teeth problems, paint it on their teeth. It's, you know, the most direct way. But it is highly industrialized toxic pollutant. I don't know how it's going to get to Hawai'i. I don't know who is going to handle it. And personally, I do not want it in the drinking water.

And it also does not break down, and it cannot be filtered out of the water. And I got this all off the Internet this morning. So it's -- there's a lot of information out there.

Thank you.

CHAIRMAN TAKITANI: Mr. Starr.

MR. STARR: I share your concerns. In fact, I have long felt that we are fortunate not to have fluoridated water here.

I just would like to request that whatever studies and information you have be -- I request you share them with the Board.

MS. HEMMING: I would be happy to go home --

MR. STARR: Get the Dartmouth study or whatever you --

MS. HEMMING: Right.

MR. STARR: -- can and get it to the Board.

MS. HEMMING: I will be happy to go home,
download it, print up and send it to you all.

I think that you could actually sell Maui to
the tourism industry or to anybody who wants to come
move here. It's like, hey, we have got pure, clean
drinking water. We filter out all of our stuff -- even
though we all know that's not totally true -- and we
don't fluoridate the water.

CHAIRMAN TAKITANI: Thank you.

MR. STARR: I would just like to comment that the Board is not -- has never, as its own policy request, desired to fluoridate the water. There is a possibility that we may be mandated to do so by the state government.

MS. HEMMING: And is there no way that this County can have some autonomy over what Ben Cayetano wants to put out across the state?

MR. STARR: Well, I think that's --

MS. HEMMING: We are just all going to sit back and let Mr. Ben tell us what to do? Is there no way that can create some type of policy that could retain some control over what goes into the water here to strengthen this Board?

Maybe you guys could talk story and figure it out. Thank you very much.

CHAIRMAN TAKITANI: Thank you.

Fran.

MS. NAGO: I don't have anyone else signed up,
unless someone has come in recently that wishes to speak.

CHAIRMAN TAKITANI: Does anyone else wish to
offer testimony?

(No response.)

CHAIRMAN TAKITANI: Seeing no hands, we will
move forward with the agenda.

I would like to move to Roman Numeral V,
presentation by the State Water Commission regarding
the Hawai'i Water Plan.

Ms. Nishioka, would you come up?

MS. NISHIOKA: Thank you, Board, for inviting
me. I guess I will stand over here.

We are going to give a PowerPoint presentation,

so I will be moving on the other side of the table shortly. I just wanted to introduce myself for the people that don't know me.

I am Linnel Nishioka. And since the first of last year, I am the Deputy Director for the Commission on Water Resource Management. It's good to see some of you again, and it's good to meet some of you.

I wanted to just introduce one of my chief staff members, Roy Hardy. He is the head of the Regulatory Branch for our Water Commission. And he is going to talk a little bit about one of the issues we think that you may have to be facing when you do your County Water Use & Development Plan, which has to do with Iao Aquifer. And I know that's a topic that you all have spent some time discussing yourselves.

So I think we will start now. We provided a handout, and I think we gave David like 20 copies. I don't know if there's extra copies. But we provided a handout of both of our basic presentations. And what

it is, basically, is a printout of every slide that we are going to show you today in our PowerPoint presentation. So that I think -- we made that handout available this morning. But it basically is going to have a copy of everything we present so you can have it for your records.

This is what the Commission has been working on, a statewide framework for updating the Hawai'i Water Plan. I am going to change so I can actually talk to you and you don't have to see my back.

And what the Hawai'i Water Plan is basically, is we are going to go over just a short presentation on the background, what it is, relationship of what we call the Integrated Resource Planning to the Hawai'i Water Plan, the Hawai'i Water Plan Framework and then some short summaries and conclusions.

First of all, the basis for the Hawai'i Water Plan is declared in the Water Code, which talks about a

need for a program of comprehensive water resource planning. And what we hope to have the Hawai'i Water Plan do -- we will provide for the reasonable beneficial use of water, proper conservation, water development, preserving water for public purposes, insuring adequate water supply, incorporating the needs of the Department of Hawaiian Home Lands, and setting water resource policies.

And there's eight components of the Hawai'i Water Plan. The first one is the Water Resource Protection Plan, which is prepared by the Commission; the Water Quality Plan, which is prepared by the Department of Health; the State Water Projects Plan, which is prepared by the Department of Land & Natural Resources.

And the newest component is the Agricultural Water Use & Development Plan, which is a good addition to our Hawai'i Water Plan, which has to be prepared by the Department of Agriculture. And then each of the counties prepare a Water Use & Development Plan. So these are the main components of the plan.

The current status at this point -- the initial Hawai'i Water Plan was adopted in 1990. In 1992 there was an update of the Hawai'i Water Plan, but it basically has been deferred and -- for further refinement. I think at this point we are looking at just having everyone start another update of the plan.

There's been some issues -- this is mostly on O'ahu, but there's been some issues about integrative resource planning and what that is. It's a process that encompasses a variety of planning techniques to help determine the appropriate mix of resources for meeting the needs of the future. It uses a balanced approach to water resource decision-making resulting as a nontraditional response to long-term water issues. And it should be very inclusive of a wide range of traditional and innovative and supply-side and demand-side resources must be considered.

Now, what are the components of an IRP process?

One is defining the planning objectives and evaluation criteria, involving the appropriate constituencies, assessing supply options, conservation options, and formulating resource strategies for a range of future scenarios.

How will the IRP be implemented as part of the Hawai'i Water Plan? What we hope the framework will provide is the establishment of recommended guidelines for updating the plan and all of the plan components, better definition of the roles and responsibilities of the State and County agencies, incorporation of the integrative resource planning techniques and methodologies within the Water Use & Development Plan update process, and the formulation of an integrated and coordinated program for the protection and conservation and management of waters in each of the counties.

We hope to have the integration of water use and water planning efforts as part of an integrated resource plan by Federal, State, County and private entities. The facilitation of permitting and

identification of potential critical resource areas where additional monitoring and data collection should occur, the establishment of an overall schedule for phasing in the implementation of this plan.

We realize, given the requirements of the framework, that we probably will take multiple phases to get the Hawai'i Water Plan completed. And this is how we envision it will work.

It starts with the Commission on Water Resource Management. The Commission is set, I think in this quarter, to adopt the Hawai'i Water Plan framework. Then the Commission will prepare -- the State agencies will basically prepare the State portions of the plan, and the counties will prepare the water Use & Development description, which will be approved by the Commission. And we will take additional public input. The counties will update the Water Use & Development Plan.

Right now I think the major effort is occurring

on O'ahu. We realize that Maui is also doing some partial updates on Lana'i and parts of Maui. But I think O`ahu at this point is doing a comprehensive update of their Water Use & Development Plan.

MR. NOBRIGA: How come you got Lana'i to the right side of O'ahu but not to the left of Maui?

MS. NISHIOKA: That's a good question.

But, yeah, we do hope to have public participation, and we are hoping to get demand-side resource assessments and supply-side assessment and then to forecast the projected water needs into the next 20 years. And that plan will incorporate the Water Resource Plan, the Water Quality Plan, the Agriculture Water Use & Development Plan and the State Water Projects Plan.

We hope to optimize supply and demand resources. And at periodical points of the plan, we hope that you will come back and brief the Commission as to the status of this plan. Then from that we see

the Water Use & Development Plans will be completed, and by statute it requires your Board's approval, the County Council approval and then adoption by the Commission.

So from that we hope to implement many of the measures, like for example the use of reclaimed water which you guys are already doing, but the pilot side -- demand-side management programs, monitoring and evaluation, we will continue to do our work at the Commission. I think Roy is going to talk a little bit about that with Iao on the modeling analysis and data collection.

And this is a closed loop. It goes back to the Commission.

So we are hoping that this will be a continuous process. These are the status -- I am going to go through this kind of quickly -- of the various plans.

Right now we are doing a partial update of the Water Resource Protection Plan. We don't have adequate

funding to do a complete update. But the areas that we are going to look at is basically a review of the adoption of -- review and incorporate our revised sustainable yields and raw-water aquifer designations; evaluation of current surface and groundwater monitoring efforts -- and you will see part of that in the Iao presentation; development and implementation of a comprehensive statewide resource monitoring data collection program, which we would like to sit down and discuss with the County; delineation of surface water hydrologic units, which we have not done yet. There is no designated surface water area in Hawai'i at this time.

Then development of a database for our stream diversions and stream channel alterations; preliminary identification and prioritization of streams for potential designation and protection as Heritage Streams; convening of a stream assessment task force to discuss stream-related issues and assessment methodology criteria; identification of further studies and actions that we need to do to establish permanent stream-flow standards; and also to look at development

of adequate provisions to protect and recognize legally protected water rights.

The Water Quality Plan is currently on hold.

You guys are probably aware that the Department of Health is currently doing its source-water assessment program. And my understanding is they will complete the water-quality program after they complete their source-water assessment program.

On the status of our State Water Projects Plan, basically, the actions that we have taken to date, we have met with the various state agencies, established uniform criteria for how to set forecasts, demand projections and looked at resource development.

We currently have a State Water Projects Plan in a draft form that was submitted. We will be doing an informational briefing probably either February or March, at this point. That State Water Projects Plan also incorporates the water needs of the Department of

Hawaiian Home Lands. So it is inclusive of all the State agencies.

The agricultural Water Use & Development Plan, in 1998 the Legislature mandated the preparation of this plan. Unfortunately, they did not give any money to do the plan. So currently we are working with the Department of Agriculture and with the Legislature, and also we have been working with our Congressional delegation in Washington, particularly Senator Akaka's office, to secure partial or full funding to do this plan.

Now, this is the County Water Use & Development Plan framework provision. This is where we really see the full integration of all of the other components of the plan. What we would like to do is work with the counties to develop a water use development project description for review and approval by the Commission. We hope the project description will identify the scope, planning tasks and activities that will be undertaken to update the plan. We would like to see periodical milestones briefings of the Commission,

which will also serve as additional opportunities for public input and serve as an educational process to the Commission on where the County -- what the County water plan is.

Each plan update should include a process to develop what we call planning objectives, evaluation criteria, but also what we would like to define as the stakeholder process. And each county should develop its own unique set of planning objectives, the framework and setup so it's unique to every county because every county has different needs and different planning objectives.

But we would like to see objectives including water supply reliability, costs and rates, environmental impacts, water quality and water rights be addressed in the plan. As part of the update, we are looking at stakeholder and public involvement, what we can do with our SPI strategy that identifies key stakeholders from whom input should be solicited at critical stages of the plan.

Part of the Integrated Resource Planning process includes a lot of public input. Counties should see that the public and stakeholders are sufficiently informed about the progress of the plan and that they have adequate opportunity to provide input. The plans should also demonstrate their input, which will be incorporated into the development and evaluation of resource strategies.

The plan should develop a range of forecasts for multiple scenarios. That's one of the IRP processes where, instead of demand -- projecting for a single-point demand, you do multiple scenarios for high, medium and low demand and incorporate all of the state water protection -- the State Water Projects Plan, the Agricultural Water Use Plan and the Federal and private-sector water requirements.

We are hoping that the forecast can be based on the yearly increments for the first five years, and thereafter forecasts should be based on five-year

increments to the Year 20/20. Demand forecasts for the first five years should be based on specific projects consistent with State and County land-use plans and designations.

What we are looking for is also part of the integrative resource planning process -- is really the integration at the County level and give each county the ability to set the -- to come forward with a plan that sets forth the allocation of water to the land in that county. To achieve this objective, the water planning efforts should be coordinated at the County level, and municipal planning must be integrated with the Federal, State, and private agricultural water plans.

The statewide framework, I think, as I said a little bit earlier, recognizes the need for appropriate flexibility that may be necessary due to institutional and/or funding constraints, we understand. I have gone and talked with all of the managers, water managers for all of the neighbor islands and on O'ahu. And other than the board on O'ahu, I think all of them have

expressed to me the really tight funding constraints that you are under to prepare for the plan. And the plans -- versatility is necessary to encourage innovation and to accommodate unique and specific concerns that may have be addressed in each Water Use & Development Plan.

This is our phasing and implementation plan.

We are hoping to continue our educational outreach. We are hoping to do -- we hope to adopt a framework this quarter. We are in the process of completing the scopes of work for the Water Resource Protection Plan and also additional work for the State Water Projects Plan. We are hoping the Department of Agriculture will be able to get the necessary funding to complete the agricultural Water Use & Development Plan. We are working with the DOH for them to complete the source Water Assessment Program. And then the City & County of Honolulu are in the process right now of updating their Water Use & Development Plan.

In Phase II we hope to work some of our Water

Resource Protection Plan and come up with project scopes for instream studies, evaluation of aquifers and other water resource management measures pertinent to that plan. We are looking to further work with the Department of Health on the water quality management measures based on the results of their Source Water Assessment Plan and the development of a more comprehensive agricultural Water Use & Development Plan based on our framework elements, continuing to update our State Water Protection Plan and then coming and working with the various counties to work with the project scopes for updating our Water Use & Development Plans, which we do have a consultant on board that can assist you in working on some developing of the scope, if you want; and lastly, in order to secure funding for the above tasks.

In Phase III we hope to update the Water Resource Protection Plan based on the findings of the studies and also our modelings as a result of preparation of an updated Water Quality Plan,

incorporating our State -- our SWAP, and also the water protection measures developed in Phase II; continued updating of agricultural Water Use & Development Plan and our State Water Projects Plan, and working with all of the counties to update their plan with all of the framework elements.

What is this going to cost? We gave this briefing to the legislators, giving about three briefings on this topic, and we have always mentioned the need for funding. We estimate we need \$200,000 for the Department of Health to complete the Water Quality Plan, half a million dollars for us to complete our Water Resource Protection Plan, approximately \$300,000 to prepare the Agricultural Water Use & Development Plan, half a million for each of the counties to update their respective Water Use & Development Plans. And we always request additional positions for our Surface Water Management Program.

In conclusion, what we hope the updated Hawai'i Water Plan will provide is for better decision-making,

consistency between land-use planning and water development, which is a pretty recent concept; state and county recognition of water issues as a constraint or factor in land-use planning, the establishment of a system, procedures that will facilitate future planning and provide for matching coordination between the State and County plans, the development of strategies so we can respond to and provide for contingencies that may arise, increase public awareness of our water resource planning issues and maximize the State and County funds.

In conclusion, the State Water Code will continue to provide the legal and institutional framework within which decisions about future water supply will be made. The plans will assist us greatly, but not supplant the water-use permitting process established by the Code. And lastly, there will be the appropriate funding for us to regularly update the plans. However, we realize that the full implementation of the framework may be phased in over several plan iterations.

So in closing, (unintelligible) for updating the water plan and is intended to provide the needed focus and additional guidance to each agency responsible for updating specific performance of the plan. The framework should be viewed not as a one-time fix but rather as a long-term vision to the preparation of a living document which, over several plan iterations, will develop a true and comprehensive water plan. And that's our goal in the whole update of our Hawai'i Water Plan process.

So now I would like to turn it over to Roy Hardy. He is going to give you a short presentation on Iao Aquifer.

MR. STARR: Can we ask some questions first?

MS. NISHIOKA: Oh, yeah. O.K. I am sorry.

MR. STARR: I have a -- I thank you for the presentation. I have a couple of questions.

One, I noticed that in this presentation there was no mention of the O'ahu county funding. Why was that?

MS. NISHIOKA: O'ahu County is funding their own plan. Their Board of Water Supply has committed over a million dollars to the update of the plan. That is coming from the revenues of the Board of Water Supply.

MR. STARR: O.K.

You had mentioned that there's some discussion with the Department of Agriculture, and I know Senator Akaka is involved. And that's to gain some funding for the plan. Will some of that hopefully be able to be available for the County Water Use & Development Plans?

MS. NISHIOKA: Yeah. We are talking with -- Senator Akaka's legislative staffer came down to Hawai'i. We actually had a meeting with all the water managers and myself on the Big Island and discussed the possibility of getting Federal funds.

And I am meeting with the entire Congressional delegation tomorrow, their staffers, and the Corps. What we are trying to do is go in as a group and talk, also to seek funding, because we all kind of have a lot of common interests in water resource research and water resource planning. So we are going to talk with them tomorrow.

So we are in a constant process of trying to get Federal funding.

MR. STARR: But I -- at the very end there was a little bit of mention about it being a living plan. And is there an attempt for the County Water Use & Development Plans to also be a living plan so that they are continuously updated and continuously valid?

MS. NISHIOKA: Yeah. That kind of -- I mean, that kind of is our hope. In the framework document there would be an update in five years, realizing there there hasn't been an update for ten years now. But I think we are hoping that at the third year people would

initiate the update and then it be completed at the five-year mark.

So it wouldn't be a plan that would just sit on the shelf, but we would really be trying to shoot for something that will be useful.

MR. STARR: O.K.

But there is mention in there about implementing instream flow standards in the Water Resource Protection Plan. And I believe there was also some mention about -- comment about it in the County Water Use & Development Plan. But I am wondering how an agency like this Board, which is basically a utility, can become involved or be mandated to be involved with instream flow standards since, you know, it does not -- it's not directly related to us providing water, but it is a resource protection issue.

MR. CARVALHO: Oh, yes, it is.

MR. STARR: We might be a party to it.

But I am just curious to know what the thinking is, you know, on how we can get --

MS. NISHIOKA: Right. I think you are right in the sense that the Water Commission is the agency that sets the instream flow standards, that that is a process that we have been undergoing. Currently there are no permanent instream flow standards. And one of the efforts that we want to do is start setting it.

As you are aware, the Commission sets all these interim instream flow standards that were basically status-quo standards that have been around for the last eight years. And what we are looking at is we do the -- the Code requires us to do all the scientific studies and stuff before we can set that.

But I think as part of the supply and demand analysis, though, if you do use that water -- and I

don't know if you do use surface water as part of your municipal system. A requirement of that is that we are going to have to be looking at the effects that the use of surface water may have on those streams.

And that is something that we have asked the Department of Agriculture to also look with respect to their agricultural Water Use & Development Plans.

MR. STARR: Are you going to be looking at each stream individually and trying to scientifically determine how much water should be, you know, left as a base flow? I mean, there's a lot of streams that every drop of water is taken out of them all along East Maui right now. And there are people that feel that some amount of water should be left in those streams.

Is that -- are you going to look at it that way? How are you going to look at it?

MS. NISHIOKA: Well, it's a pretty daunting

task. My understanding, there's 350+ perennial streams in Hawai'i -- I mean across the islands. And I think what we are going to try and do is set up prior to looking at the streams that are currently undiverted -- I mean looking at the more pristine streams that have not had a history in the last hundred years of being diverted for agriculture.

And we are going to look at those streams first and then kind work down the -- I mean, eventually the goal of the Commission is to set permanent instream standards. Whether that happens in my lifetime, I am not sure, given the kind of resources we need. But that is one of the mandates.

MR. STARR: I know one of the problems you must be facing in doing this is that there were a very large network of stream monitors, of flow gauges. And I know in East Maui that has gone from 40 gauges down to 2 gauges currently, and that there's a plan this year to removed one of those two.

Is there any prospect of your agency working to make sure that no additional gauges are removed and possibly getting some more gauges put back?

MS. NISHIOKA: Yeah. I think one of the things that we are doing -- and I have met with David and we discussed this with -- I have discussed this with all the other water managers from the different islands -- that we all do some water resource monitoring. We have a sort of one contract with the USGS that currently our share is \$415,000; they do a \$415,000 match. So we have approximately an \$830,000 program.

Most of the other counties, including, I think, you guys, also have contracts with USGS. What we wanted to do is we are currently examining our entire contract to see whether we are going to continue to have the same program that we essentially have had for five years or whether we have greater needs somewhere else. And I think in that review process -- and I would look for some direction from your Board and your Department.

But one of the things we are looking at is are there areas that we should be monitoring that we are not, that are a higher priority, including some more monitoring on surface water areas.

MR. STARR: I know talking to the USGS people, they seem to express privately to me that their greatest priority in monitoring was to replace the gauge that was removed on O'heo Stream that's in the national park, the one they call Seven Sacred Pools in Kipahulu. And that is a stream that is untouched and was always the baseline for all of East Maui. And there are records going back over a hundred years, almost continuous, until just a few years ago when the gauging was removed.

And I know that they say that that was the baseline that all their other gauging was measured by. And I know that there's a great desire to get that one back ASAP to -- so that the baseline is there.

MS. NISHIOKA: Yes.

MR. CARVALHO: Mr. Chairman.

CHAIRMAN TAKITANI: Mr. Carvalho.

MR. CARVALHO: A few questions.

Reference was made to the potential of Federal funding for a number of your activities. Does this not, however, include Federal standards being imposed or mandated automatically? As soon as we utilize Federal funding, you have already accepted the Federal standards?

MS. NISHIOKA: No. This one works a little bit differently.

MR. CARVALHO: How?

MS. NISHIOKA: We are not seeking EPA funding, which would mandate -- I know in the Department of Health, it mandates Federal standards for the drinking

water and that stuff.

The kind of Federal funding that we are looking at is to be included -- Senator Akaka's bill is to be included in the Bureau of Reclamation's thing that you can tap Bureau of Reclamation money and technical support for water projects.

MR. CARVALHO: Is there a specific provision that would exclude the automatic application of Federal standards?

MS. NISHIOKA: When you say Federal standards -- tell you what. Are you talking about water standards?

MR. CARVALHO: Any water.

MR. CRADDICK: Linnel, I think one concern I think is once we have Federal money coming in, you have got to do the EIS to Federal standards.

MR. CARVALHO: It's not only EIS, Mr. Director;

it's the whole gamut. And I have had some experience in other areas dealing with Federal funding. And once you accept Federal funding, you have accepted Federal standards.

Now, this is, my understanding, a generalized methodology of approach. This is used in public housing, it's used in public health, it's used right across the board.

So by the acceptance of Federal monies, do we automatically accept, yeah --

MS. NISHIOKA: Yeah.

MR. CARVALHO: Are we limited to the Federal standards and requirements?

MS. NISHIOKA: Yeah. If you are talking about EIS standards, you --

MR. CARVALHO: Never mind that. I said not

limited to the EIS.

MS. NISHIOKA: Right, but --

MR. CARVALHO: Limited to what the Federal practice is across the Board, not just your department, but the Federal standards implications with respect to across the board in everything that involves a Federal project unless there is a specific exemption for it.

Now, I wouldn't want to see this Board or anybody get involved in any projects that automatically would result in Federal standards and Federal requirements being imposed. And I think this is a great danger, a very great danger.

MS. NISHIOKA: I think for us, if we were to accept Federal money, there would be -- I mean, I understand what you are saying. It would be additional obligations in terms of, first, the EIS process. We would have to be up to the Federal standards for EIS. I am not sure that's really different from the state

standards.

Also, if the program had any requirements, reporting requirements and stuff like that, we have to comply with that.

We are seeking --

MR. CARVALHO: Excuse me, Miss. that is precisely what I am saying.

MS. NISHIOKA: Right. We --

MR. CARVALHO: Conformity with the requirements would automatically be there. And when these automatic requirements are included as a matter of course, we don't know at this stage what those requirement changes may be and what various departments -- in this particular case where the funding may be coming from, what authorities they have to write rules and regs that have the force and effect of law and which would then

automatically be imposed upon the recipient.

MS. NISHIOKA: Right. I understand what you are saying.

And I say that I am in a department that currently is 50-percent Federally funded. And we do have to comply with various -- but I think for our purposes as a Commission, I am not worried about the additional standards that may fall by having to accept Federal funding on some of our programs.

But, you know, it's not a mandatory thing for you to accept funding. I mean, if you want to fund it out of your County revenues -- all I was trying to do was to assist the County if they wanted to go in on a selective effort to our Congressional delegation.

I think if, for an example, the deep monitoring well that was built that has been -- is going to be drilled by USGS at Kualapu'u is all Federally subsidized, my understanding, and there have been contributions by the Department of Hawaiian Home Lands

and, I don't know, maybe in the County also. But those are examples of Federally funded projects that have already come into the county.

MR. CARVALHO: Mr. Chairman, that is precisely what I have been saying.

This Board needs to be aware of what the ramifications might be if and when it accepts, yeah, and participates in any program that involves Federal funding, because it will limit the activities of your Commission or any other body that does this study. It would be limited by whatever the Federal standards and/or requirements would be. And those would not necessarily be compatible with the needs of this community or the State of Hawai'i.

And, Mr. Chairman, if I may say, since I have the chance to, I do not subscribe automatically to the rules and regulations, codes and water -- Water Code enacted on statewide basis which would have application

to the County of Maui is necessarily the correct thing. I think we are already finding that out with respect -- to some degree with respect to the aquifer and the position of the State versus the position of the County as to adequacy and its implications.

And I think history is showing us -- showing this to be correct, that if we aren't careful the State does develop its own standards and does impose those standards and requirements on the County, and I think we need to have the various boards and counties aware of this.

And if this is the desired objective, fine.

But be aware of it, that it isn't such a tremendously -- you know, grant of assistance. There are a lot of strings attached to it which includes a large, very large degree of authority which will eliminate or greatly reduce, yeah, the activities and the efforts of this Board, or any other board, for that matter.

CHAIRMAN TAKITANI: Mr. Nakamura.

MR. NAKAMURA: I would like to ask a couple of perhaps simple questions, because I am a little bit, frankly, befuddled by all of this.

The original legislation was enacted when?

MS. NISHIOKA: You are talking about the Water Code?

MR. NAKAMURA: Right.

MS. NISHIOKA: 1987.

MR. NAKAMURA: And in 1990 the Commission adopted the Hawai'i Water Plan, the initial version of the plan?

MS. NISHIOKA: (Nods head up and down.)

MR. NAKAMURA: Did that plan have all of the components that you have listed with the exception of the agricultural component?

MS. NISHIOKA: Right.

MR. NAKAMURA: So that was considered to be the plan? Or was it an interim plan? Or --

MS. NISHIOKA: It was a plan that I think there was a contemplation by land-use planning that there would be updates to that plan.

MR. NAKAMURA: So you --

MS. NISHIOKA: And we are finding a lot of the projections that were made in 1990, as you probably followed the land-use plans, are really -- they didn't come to pass.

MR. NAKAMURA: So in your eyes, you have a plan, but the plan is not appropriate for implementation at the present time? It needs to be updated?

MS. NISHIOKA: Yeah. It's basically a plan

that looks at what are the water needs for the next 20 years. And the contemplation was that it would be periodically updated, just like the land-use plans are periodically updated.

MR. NAKAMURA: So you are in the process of doing that now?

MS. NISHIOKA: Right.

MR. NAKAMURA: And so when all of these different components, the eight different components, four state and four counties, come together at some point, how are they going to be integrated? And how is the plan then going to be implemented and enforced? I guess I am somewhat following up on Board Member Carvalho's question as to what are the implications in terms of local management of the resource.

MS. NISHIOKA: I think the way that our framework is set up is that we are hoping that the

integration will occur at the time of the County Water Use & Development Plan. And one of the bases for this is that in the past -- and this is what happened with our 1990 plan -- was the Water Use & Development Plans that the counties prepared basically were just for the county developments.

And what we are looking for is a plan that will integrate all of the water needs or the proposed water needs for the counties. And why we wanted it to be done at the county level is addressing the point that I think he has brought up, is that we want to give the counties the greatest ability to basically come up with a plan to meet their water needs versus the State coming in and saying "this is the water needs for your island, and this is how you will implement it."

We are hoping that taking it down to the local level will give the different counties the ability to look at what their plans are and work with the county water boards as to how they will need -- what those water needs are for the island as a whole.

MR. NAKAMURA: But under the process that you are embarking on or that you are in now, you have all of these things going in parallel tracks.

MS. NISHIOKA: Some of it is going in those parallel tracks. I would say that the City & County of Honolulu -- and this was more a response to what happened in Waiahole case with the Water Commission deciding that they wanted to do their update of the plan now. But we are not really -- we are trying to get some of our State components done, completed at this time.

But I am not aware of any of the other -- I know Dave has done some work here on Maui, but I am not sure of any other county that is doing a whole update of the plan, I mean, doing a whole countywide update of the plan.

MR. NAKAMURA: So any State agency that needs to make the decisions on water will be -- is mandated

by statute to follow the provisions of the plan?

MS. NISHIOKA: They are --

MR. NAKAMURA: And the same thing applies at the county level in your planning --

MS. NISHIOKA: No. I think that the plan -- we are really hoping that the plan is just to provide -- I mean, for us, we are looking at the plans to provide some guidance to the Commission's decision making.

One of the areas that we have been talking with City & County of Honolulu is for them to develop a plan for specific areas. And what we would do is look at the possibility of setting aside reservations, what we call reservations of water for their future use. And one of the things that we had asked the City & County of Honolulu to do is to do a plan that looks at the cumulative needs of the country for that particular area, and then we could look at setting aside reservations of water for the municipal department.

CHAIRMAN TAKITANI: Mr. Starr.

MR. STARR: Well, I had attended a presentation on O`ahu which was -- had some additional elements to it. And part of it was a presentation on some of the preliminary data on state water use. And I was shocked by the numbers that I heard. And I just wanted to share them and perhaps maybe Linnel could comment.

But the state use of water on Maui Island was currently pegged at 3 million gallons a day, a little under 3. And they projected over the next 20 years it's going to climb to over 20. And that would mean an increase of 17 million gallons a day for State use and State projects over the next 20 years.

That's an increase of 850,000 gallons per day each year, which is faster than we have been developing water in our entirety on the island for the last ten years or so.

Also, there was an additional 3 million gallons that was projected on Moloka'i for state projects that -- are those --

MS. NISHIOKA: Yeah. I can't tell you right now because I didn't bring those numbers to this meeting.

But, yeah, I remember we did have a presentation on what the future demands were.

MR. STARR: Staggering numbers.

MR. CARVALHO: Mr. Chairman.

CHAIRMAN TAKITANI: Mr. Carvalho.

MR. CARVALHO: Be that as it may, we can stay here and be arguing and discussing the numbers ad infinitum. It means nothing.

What the important thing is, is if push comes to shove and there is a difference of a plan and between the State plan and the local plan, never mind

the numbers, the difference of opinion or what is different between the State plan and the local plan, which plan prevails?

MS. NISHIOKA: Well, we are hoping that the local plan will incorporate --

MR. CARVALHO: By law, which plan prevails?

MS. NISHIOKA: If you are talking about the Water Code having jurisdiction over the County --

MR. CARVALHO: You better believe it.

MS. NISHIOKA: Yeah, it does.

MR. CARVALHO: You better believe it.

MS. NISHIOKA: That's how the statute and the Constitution are set up.

MR. CARVALHO: And this is the basis, the basis of my concerns that are being expressed today, yeah, that we talk of needs and growths and what have you. But the more critical question is jurisdiction and final decision.

And without water, no community can survive, no development plan can be implemented. So by utilization of the Water Code, the State, then, through its control of water, would be in a position to dictate to each jurisdiction what would or could -- not what could happen, but what would happen, because it retains jurisdiction and it retains superiority of its program versus the little -- I mean, I think this is the question.

The numbers can always be adjusted, yeah, developed and what have you. They can always be. But in the final analysis, as I indicated earlier, when push comes to shove, which one prevails? And the point is, I think at the present time the State would prevail. And I think we need to take very good, hard looks at it and discuss these matters with our

legislative bodies.

Now, reference was made to the Constitution, and that's the interpretation. And if one wants to be slightly philosophical, you know, in years gone by philosophers always argued that if an angel was headless and formless and bodiless, how many angels could dance on the head of a pin? That's all immaterial. Jurisdiction.

MS. NISHIOKA: Yeah. And I think -- if I may respond, I think that that's one of the things that we are trying to advocate is the Counties to do a Water Use & Development Plan update so that that will be a way to have a really big input into the process of how decisions are made at the State level concerning the use of water in the various counties.

MR. CARVALHO: Question, ma'am. If I may, Mr. Chairman.

CHAIRMAN TAKITANI: Mr. Carvalho.

MR. CARVALHO: It's not the degree of input.

It's always essential. But after all the input has been received and the plan has been developed, Water Code and what have you, with respect of the State level and that plan or that Water Code is not completely, yeah, to the liking and the programs of the County, which one prevails?

And that's the bottom line. Let's not get away from that bottom line. The bottom line is the State would prevail, regardless of all the heads dancing around that is done in the process. The bottom line is the State. And is that wise?

That's for the Board to decide.

MS. NISHIOKA: That's probably a decision for the Legislature.

MR. CARVALHO: That is important to the Legislature.

CHAIRMAN TAKITANI: Can we continue with the presentation?

MS. NISHIOKA: O.K.

MR. HARDY: Yes. As it warms up, I believe you also have a handout on Iao Aquifer. And this is actually a good segue into it from the Hawai'i water plan, because this is kind of an example of what the Hawai'i Water Plan seeks to manage is the demands from the land-use development side with those of the available water supply based on the hydrology, seeing what is out there in terms of water.

And to bring you up to speed on Iao Aquifer, because I know a few of the Board members are new, is the issue of Iao Aquifer, which has been before the Water Commission and, actually, prior to the Water Commission, the Board of Land and Natural Resources.

And I am not going to get into it, but there is this question, as the Board was saying, about

jurisdiction. And there is the designation whereby the State would come in and designate Iao Aquifer as a water management area.

What does that mean? Basically, that means water use permits would be necessary, another layer of regulation would come into play.

This isn't something that is new, actually.

Back in the '80s, actually '86, the Board of Land and Natural Resources was looking at Iao Aquifer and considering it to be what under the time was being a groundwater control area. Since then, the Water Commission, in 1987, with the Water Code -- the Water Commission also initiated proceedings back in 1990.

And a milestone of this -- I am not going to go into the details of the process because it is complicated, and you could probably have another hour's presentation on that because it is a long, drawn-out process. But six years later, in 1996, the Commission came up with a findings-of-fact report which completed

the analysis of -- under the Water Commission's process, of what is designation and should it be designated, Iao be designated, and on the basis of what facts, what details.

And these are probably three of the main conclusions that came out; there were many others. But specifically, the sustainable yield of the Iao Aquifer groundwater, which is approximately 20 million gallons per day. And, at the time in 1996, the actual pumpage from Iao Aquifer was in excess of that sustainable yield. And further, and probably a more potent point and a reason why there should be a Hawai'i Water Plan, is that the authorized planned uses deemed by land-use decisions on this island down to the zoning level were in exceedence of 20 million gallons a day, I think, somewhere in the neighborhood of 35 million gallons per day.

And, at the time, the only groundwater source for potable water use that could meet these demands was basically the Iao Aquifer. So it's pretty easy to see

that -- you know, what you are up against and the problem that would be coming down the road.

Now, after the findings of fact, the Commission still had not made a decision on designation. And, in fact, in '96 and '97 there were at least five meetings. And many were community Maui Roundtable meetings, culminating in the August 1997 Commission decision to -- what it was was simply to defer designation.

However, if the 12-month moving average coming out of Iao Aquifer exceeds 20 million gallons, the Commission would immediately meet and vote to designate Iao Aquifer as a management area, thereby instituting the application for water use permits.

The reason why this '96 to '97 period took so long is there were a number of, if I may say so -- in essence, the Commission set up many milestones, looked at ways to avoid designation with the County. And, in essence, it came to a head where the Commission felt that they no longer wanted to simply micromanage the situation and simply made a simple target, if you will,

that this 12-month moving average shall not exceed this less than the sustainable yield for the protection of the aquifer, of Iao.

And this here is -- you are all familiar with this, your island. And this is the vision of the -- how the Water Commission looks at the island from the groundwater perspective. There is many of them -- what are deemed surface systems. What the Water Commission, of course, is interested in is this highlighted red area, which is the Iao Aquifer system.

Just one note to make: These boundaries have changed over time from what was going with the Board of Land and Natural Resources in the '80s and up until the Water Commission. The actual boundaries of Iao Aquifer have changed. And that's a source of confusion. But in the Hawai'i Water Plan, anyway, the Water Resources Protection Plan, we define these boundaries. So we are now speaking from a common base or definition.

And, yeah, if you are to look -- if you are to look, of course, with Kahului down here, towards the mountain, of course, this is what you would see. And here is Wailuku, and we are probably in one of these buildings right here as we speak. And this is Iao Valley in the back. And, of course, the source of all of the water, fresh water and potable water, are the clouds.

And just a brief Hydrology 101. Many of you are familiar with it, and some of you may not be so familiar with. Of course, all the fresh water comes from our rainfall, which gets into the ground in the form of what we call recharge. Part of it runs off at the surface, but what gets below the ground and makes its way into our aquifers -- this water is fresh water. It is not as dense as sea water. And that's because sea water is salty.

And because of this, the water floats, fresh water floats on top of the salt water. And the dynamics of the situation is such that as long as recharge is occurring, water will build up. And it has

to go out somewhere. What it does, it eventually discharges into the ocean.

Now, as it does that, you set up an equilibrium, if you will, a sustainable situation where the aquifer will reach a certain dimension, if you will. Now, when man comes along and starts drilling wells, we capture all that water that is flowing into the ocean. And, of course, if you capture it in this fresh-water area, you will be pumping fresh water.

Of course, there is this area which is deemed, what in island situations such as Hawai'i -- what is a transition zone. And this is different from aquifer to aquifer. And in this transition zone, if the wells' intake points, which is usually the bottom of a well, that is penetrating into there, you will start getting water of that quality. And what the Water Commission and the EPA are have specified as guidelines as to the top of this transition zone are -- is the 250 milligrams per liter concentration of salt.

So when you start that, you may start running into some aesthetically -- people can start tasting the water is salty, and there is also health risks, too, with people who have high blood pressure and so forth. The transition zone itself, again, as I said, the top of it is a concentration of 250. And that proceeds on down into the concentrations of pure ocean water, sea water.

This dotted line here is the middle of the transition zone. It's far too salty for anyone to drink or even plants to use. So you can see that there's a zone here that is of critical importance and concern to us all.

Now, this here is a schematic of Iao for the major wells in Iao Aquifer, all the wells and Wailuku Shaft. Those wells which obviously are in the fresh water zone are pumping at levels that are less than 250 milligrams per liter. However, this is what is happening at Iao. You do have instances of globalized what we term upconing, because pumpage is so strong and

small areas of the aquifer get this upcoming of the transition zone. You are pumping water which is above this EPA guidelines of the 250 parts per million.

So, you know, where is this transition zone?

That is something of critical importance to us all.

With time, as you pump, what happens is that on a global scale your interaction zone will begin to move up because you are taking more of the water out. It's not coming out, and the concern is it's coming out of the wells and the cone of water here is getting smaller and the transition zone is moving up, as specified here.

And what happens there, what could happen is that you begin to have these more localized situations where you may go up more from the transition zone in other areas. So some wells are still defined, but other wells are deeper and, hence, beginning to come closer to the beginning of this transition, this upcoming of this water.

Fortunately, in Iao -- and this a minority in the state -- there is a deep monitor well that penetrates the entire profile of fresh water body's transition zone into the salt water. So we can monitor this. We can monitor and measure what is happening down way below this fresh water zone.

This is what we use today. This is the technology today, what we terms as a CTD, conductivity temperature depth probe. And also it does help us to determine and identify the chloride concentrations in the water. Prior to this we would have to go down into that deep well and actually grab individual water samples, you know, and take them back to the lab, analyze them and all that. You know, it would take you at least a week to get a week's worth of work to get one profile. With these things now you can get an entire profile in about an hour.

This is a typical diagram of what comes out when you start lowering the probe into the water, down into the water. This is elevation; this is the

chlorides, if you will, facing to the right. And as you begin at the ground surface and make your way down, and when you get into the water table to the fresh water zone, you are going to eventually hit the top of that transition zone, the 250 per deciliter.

Then, as you further lower it, you can see that the chlorides start increasing dramatically until soon you are at the midpoint, O.K.? And, of course, if you continue to lower it, eventually the salt water will then get a concentration of the ocean.

So this is what we are looking at. This is a one-time shot in terms of time. But what is critical for us to know is how this changes over time. And this is the situation with Iao. Fortunately, Iao we do have a lot of data all the back from the '40s. And this is the entire record compiled from the aquifer system, this gray area here. It's on a month-to-month value.

The sustainable yield, of course, has been

estimated at 20 million gallons per day, so that's your underlining line, if you will. This brown line here is called the 12-month moving average. Basically, it's always taking your particular month and looking back for 12 months and taking the average. That's what your yearly average is. It incorporates the entire seasonal changes over a particular year to give you an average on a yearly basis, which continues to move.

So as you can see, since I guess a low point, the last low point back around 1980, I believe, it has been continuously rising. In fact, as we have seen that sustainable yield, that's around '96 sometime. I was talking to you earlier about the Water Commission and the findings of fact. At that time, water use was above the sustainable yield.

Now, the important thing is this blue line here, which is the mid-point elevation of the transition zone. That's half sea water and half fresh water. And with these measurements over time you can see that this transition zone has been rising.

This is against this chart here. This is elevation on this side. As you are going up, the transition zone is going up. So there was a period of time where it seems as though -- and this was about the time of the findings of fact, as well, or just prior to the findings, where the transition zone started to slow down. And it seemed like it was starting to reach a point of equilibrium. And that was just prior to the end of the findings of fact.

So the thought was, hey, 20 million gallons is probably a good number, close to it. That's what the pumping is, and it seems as though the transition zone is equilibrating. However, pumpage continued to go up and actually exceeded that sustainable 20 million gallons a day, and the transition zone resumed its rise. And to this day it continues to rise, and it's on the order of roughly ten feet per year.

However, as you can see, in recent years

pumpage has dropped. O.K.? And there's several reasons for that. Let's see. Just to bring you up to speed today, the colored counter is this 12-month moving average I mentioned earlier. As of November of '99, it's 18.6. However, the trend is rising.

If I just can go back real quick, I am speaking to this little tail end right here. It's rising again towards the sustainable limit over there. However, there are safety measures. I think part of that is the reasons that you have had that down trend in water use overall since '96.

And, first of all -- and this is through the designation proceedings with the Water Commission -- the overall effort of conservation, the Maui Community Roundtable and the Department of Water Supply has worked and developed a shortage prevention rule. I believe that is Title 16, Chapter 10 -- to keep the pumpage below the 20 through the use of water-use pricing incentives. And also there is this -- at the time there was this issue of the West Mai Mountain

Watershed Partnership, which was an agreement to manage watersheds. And there was about \$40,000 from DOH. I don't know what the status of that particular conservation measure is, though.

And secondly, development of -- and more importantly, the development of the alternative water resources. And, at the time, Iao Stream use was permitted by DOH for quality concerns. And they said basically you can start using the stream water if you treat it, and that relieves the pressure on the Iao Aquifer. And you also brought the North Waihe'e -- the well fields was also put into production. And I understand that's also on the increase as well.

So basically, that's the situation with Iao right now. And I would be happy to answer any questions.

CHAIRMAN TAKITANI: Mr. Starr.

MR. STARR: Yes. First of all, thank you for

the presentation. I have a few questions, though.

First of all, what is -- how do you know what the total pumping in the Iao Aquifer area is?

MR. HARDY: As a requirement under the Water Code, anyone making use of water through a well, pumping water through a well, is required to report on a monthly basis to the Water Commission. And the Water Commission, we do have staff that follows up on this.

And in Iao Aquifer the primary user is the Department of Water Supply. So we get all of the pumpage data. And the last report, of course, was November of this year. We are still waiting for December.

MR. STARR: Yeah. I understand you get the data from the Board of Water Supply. But are there other users who come forward from Iao --

MR. HARDY: There are other users as well, small users as well. And most of them are also

government entities as well. The parks I believe uses pumps from the cap rock material, cap rock water.

And there are a number of other, I believe, private entities that are using, again, cap rock water. But the way we try to identify all these users, we have a process which we have them go through a registration process which occurred back 1987 where all of those people who were using water were required to declare the use. That was to give us a baseline as to who was out there and what their use was.

And once they registered, O.K., now we need to get a cumulative reporting program going on that to get --

MR. STARR: How do you know that there are not other users who are not reporting?

MR. HARDY: That's very possible.

MR. STARR: Is there a list of the users?

MR. HARDY: Yes. I do have a list.

MR. STARR: And what they have been using?

MR. HARDY: Yes.

MR. STARR: Is it possible to get a copy of that?

MR. HARDY: Yes.

MR. STARR: Do you have a list of the -- you know, I notice you encapsulate Iao Aquifer, you know. And that's all you seem to be watching. Do you have a list of all of the pumpages that have been taking place in Kahului and Pa'ia Aquifers?

MR. HARDY: Yes.

MR. STARR: And are you --

MR. HARDY: Much of it is identified, I think,

in the 1991 Water Use & Development Plan that the County made as well.

But there have been changes, obviously, to the plan as new wells come on line and the Water Commission permits these. They are other sources that --

MR. STARR: Well, the wells are permitted. But do you have a list of the pumpages of all of the users of the Kahului and Pa'ia --

MR. HARDY: Yes.

MR. STARR: Do you know how much is being used in the --

MR. HARDY: Oh, no.

MR. STARR: What is the sustainable yield of those two aquifers?

MR. HARDY: For Pa'ia?

MR. STARR: Yeah.

MR. HARDY: Pa'ia is 8 mgd, and -- I am sorry.

The other was Kahului?

MR. STARR: Yes.

MR. HARDY: That's 1 mgd. Now, that is -- O.K.

-- another, I guess, diverse hydrologic -- that 1 mgd is based on the natural hydrologic cycle.

As you know, there's a tremendous amount of water that is imported into that area from surface water from East Maui. That has been put in -- been put into the calculations of the water in that area that could be utilized, but it is not natural.

MR. STARR: Yea, there is some recharge even though it is all irrigated.

MR. HARDY: Yes.

MR. STARR: But I know that 1991 -- do you know what the 1991 Water Plan cited as the draw on it at that time?

MR. HARDY: I am sure it was substantially higher from the irrigation requirements from that aquifer.

MR. STARR: Yeah. At that time I believe it said that there was a pumpage of 177 million gallons a day.

MR. HARDY: Yeah. That's all that irrigation water, I believe.

MR. STARR: How do you know whether there's net loss out of those aquifers since there's, you know, a huge net loss in terms of -- have you done any studies to that effect?

MR. HARDY: No, there haven't been any studies beyond what is in the protection plan that I know of, not on a global scale. However, we are talking -- this

is getting -- I guess this is Hydrology 101 again, too

-- we are talking different geology and different aquifers.

The Kahului Aquifer is really a cap rock

aquifer. So there's no drinkable water, per se, that

is in there based upon the natural hydrology of the

area. But there's probably --

CHAIRMAN TAKITANI: Mr. Hardy, are you going to

be able to be with us for -- how much longer are you

going to be able to be with us?

MS. NISHIOKA: Yeah, we can stay a little bit longer.

CHAIRMAN TAKITANI: We would like to take a

10-minute break. I think we have worn out our court reporter.

We will come back in ten minutes.

(A short recess was taken.)

CHAIRMAN TAKITANI: We would like to reconvene

the Board of Water Supply regular meeting. We will continue with the CWRM presentation.

Are there any more questions? Mr. Starr.

MR. STARR: To continue my question, do you have any pumping data as far as those aquifers, the Kahului and Pa'ia Aquifers, here in the last five years?

MR. HARDY: Whatever has been reported to us, yeah. We do have some. It may not be all of it, though.

MR. STARR: Do you have any ongoing mechanism to try to know what that true pumpage is and also to examine what the real recharge is with the -- now that it's all drip irrigated?

MR. HARDY: O.K. Two answers I guess to that question.

The first part, the water use, we really only have one -- we have one person on the staff right now that collects all the water-use data from every user in

the entire state. And that is collected, filed. And, when can, given priority, we try to catch those who aren't reporting. So otherwise, it's filed.

The second part of your question, like for recharge, we require study. No, there hasn't been anything like that for Kahului.

MR. STARR: I would like to request a copy of what -- the usage data you have. And I will tell you my concern, which is: Looking at your graphs and also the charts that were presented to us by the USGS recently, they show that the pumpage has been in approximately the same range for the last ten or eleven years. It's been in the range of 18 to 20 million gallons a day.

So it's, you know, been up there, one, and a time when it came down a little bit. The pumping is trending up. But it's been around 18, which is, know, 90 or 95 percent of the paper sustainable yield for Iao Aquifer.

And if things were functioning as one would expect, then Iao Aquifer would have reached equilibrium by now. You pointed that out in your charts, that it would have -- your saline transition zone would have flattened out, whatever, and also water levels would have stopped moving. But all of the water levels seem to continue to decrease, and all of the transition zone levels of salinity continue to increase.

Am I correct with that?

MR. HARDY: Yes, but just a clarification.

We really don't know when it's reaching equilibrium other than -- I think in the presentation I was saying there is perhaps an appearance that it was reaching equilibrium at the time. Actually, there are lag times involved. I mean, it's a geologic time scale we are talking about.

MR. STARR: Is it possible that it may never

reach equilibrium at these numbers?

MR. HARDY: Anything is possible. But the best estimates we have to date and with the data that we do have would indicate that, yes, at some point we will reach equilibrium, certainly.

MR. STARR: If you have an -- yeah, I don't see that happening, and I am concerned. I see in your charts that you show the Waiehu wells -- you show an upconing of the 250 milligram --

MR. HARDY: For illustrative purposes.

MR. STARR: -- per liter beginning to touch the level of the wells which we call the Joint Venture wells, which means that, if they go much further, those wells will be beyond the level that you consider suitable for use. Am I correct?

MR. HARDY: Yeah. Again, a clarification that that was for illustrative purposes again.

The point I was trying to make is that you have localized problems like you have been experiencing in the past at Mokuhou with upconing. But there's the second issue with the entire aquifer as a whole shrinking. And if you bring the transition zone up, then other wells might experience this upconing, you know, in a much shorter time period as well. So it's just for illustrative purposes.

MR. CRADDICK: Jonathan, maybe I can just make a clarification of that.

CHAIRMAN TAKITANI: Mr. Craddick.

MR. CRADDICK: I think what Jonathan is getting at is the -- if you look between the coast and the mountain, the Waiehu wells are here and the Waiehu Heights wells are closer to the ocean. And would pumping at the higher elevation wells, increased pumpage up there, accelerate the problem with the well

closer to the coast?

MR. HARDY: Downgrade it.

MR. CRADDICK: Jonathan, is that --

MR. STARR: No, that's not at all my question.

That has nothing to do with my question.

MR. CRADDICK: Oh, O.K.

MR. STARR: What I am looking at is this chart you gave us, which I believe we would agree is what the data is that was presented to us by USGS. And it shows the tip of the 250 milligram level right at the -- right almost tangent to the level of the Joint Venture wells, which to me --

MR. HARDY: Well, no. It's just for illustrative purposes.

MR. STARR: I believe they are getting to that level, though.

CHAIRMAN TAKITANI: Well, I don't believe --

MR. HARDY: Well, they could, yes, because it's a deeper well, as well.

MR. STARR: My concern is this: We have an aquifer that has not been performing very well when you look at transition-zone levels and you look at water levels. And the sustainable yield has, over historical times, been consistently reduced -- it's much higher, and then it was lowered to 35, it was lowered to 25, it was lowered to 20. And frankly, I would not like to see it lowered below 20.

But, you know, if I followed the trends, that seems to be where they might point. And my gut-level feeling is that we are looking at this thing in a microcosm because there is a line, a political line that delineates this area that we are measuring pumpage from. And then right over the line there's an enormous amount of pumpage, maybe up to 200 million gallons per day.

And there was once a lot of recharge there before the plantations switched from trench-type irrigation to drip. And that, I suspect, Iao Aquifer, which is our primary resource, may be suffering due to adjacent -- pumping in the adjacent aquifer which is not being studied and that the citizens of Maui County, our ratepayers, are the ones who will suffer, have suffered in the past and will suffer in the future because our ability to use Iao Aquifer is being severely hampered.

And that's why I would like your comments on it. But I really wish that there was some way to start looking at that, because I think that at some point we are going to have to deal with it. And the sooner we examine this and find out why Iao Aquifer has not reached equilibrium the better.

MR. HARDY: I guess to answer your questions, you are speaking about the Kahului isthmus area, is that --

MR. STARR: Yeah, Kahului/Pa'ia.

MR. HARDY: And maybe to clarify what you are saying here is, with this 177 or so million gallons per day --

MR. STARR: That was this in 1991.

MR. HARDY: Right, 1991.

MR. STARR: And I believe there's no newer figures.

MR. HARDY: There is a tremendous draw from that area. And in essence, to put it in layman's terms, you feel that it's taking water or sucking water from the Iao area; right?

MR. STARR: You got it.

MR. HARDY: Well, part of it is that geologically it's a different type of -- you are in a cap rock area. It's different; it's much tighter. And also you are in an area where the water is saltier

because the area is closer to the ocean. You have to know all the boundaries you are dealing with.

So I guess in short, to answer your question, is to really find out and answer this, lots of pumpage in this area that's next to another area, when you have got different geologic and three-dimensional boundaries going on, the only real way to find out we are going to find out or quantify that effect is if we go in and do not just the hydraulic water balance, which these numbers are based on, but actually like a numerical groundwater model.

MR. STARR: A head-and-shoulders model?

MR. HARDY: Yeah, if you want to call it that.

CHAIRMAN TAKITANI: Mr. Carvalho, you had something?

MR. CARVALHO: Mr. Chair, from previous discussions, we will be here forever.

The problems of the Iao Aquifer, this is what we have said previously or I have said previously, is significant. But we belong to basically one island with lots of resources. We have enough resources here if we give adequate attention to what we should be looking at to meet the needs of the Iao Aquifer and the water supply from East Maui.

Like we said before, as far as I am concerned, it is cast in granite. There will be no movement of water from the East Maui area to this area until the water problem and the water needs Upcountry have been met. It may sound drastic, but it's a very simplistic thing to do. Very simple.

We need to develop this plan and this Board needs to -- Mr. Chairman, I understand you have to set some kind of a timetable. There's been mention earlier with respect to the ending of February. This Board will prepare the necessary steps to incorporate everything. It can be done.

If I may, with all due respect to the gentleman, I am going to be provincial. Maui and the economic viability of this place, this island, is dependent on the proper distribution and utilization of water. That supply appears to be in the East Maui area. It needs to be made available to Upcountry on a guaranteed basis. It needs to be made available for the growth of this community. It needs to be made available through action of this Board in its development of a plan and a program.

If we don't, the parade is going to pass this island by economically as well as socially and otherwise. We are on the brink, I think, of great success. It is there. The work that the gentleman and his people have been doing is very important to us. It's has great merit. That's why we need to resist at times, when necessary, the attempt, real or imagined, on the part of the State or other areas to make a determination of where this County is going to be going.

And I think these things can be done fast, very fast, within the next 60 days at the latest. Enough said.

Last thing, Mr. Chairman, I think the history of Maui County, if I may, sir, has been that it has never had the strength and the viability of a courageous Board of Water Supply as it does now, with young people who have their eyes in the future and on the needs of this community. So I am quite satisfied that we are going to be able to prevail in terms of meeting these various needs.

And while I may have been a vigorous critic of A&B and the other related large landowners, I must also say that I think they have done a good job on this island. But they also need to realize that Maui does have importance to us, and we will be continuing to stress the utilization of water, people, and other assets of the county.

So it's very simple and doable, very doable.

CHAIRMAN TAKITANI: Ms. Yoshioka.

MS. NISHIOKA: I just wanted to point out that one of the reasons that we came to talk about Iao and that, our Commission has asked us for a briefing on Iao Aquifer also, given the level of pumping that has occurred. And this last summer I know that we had -- you people had a drought. But the pumping has been exceeding the 20 mgd although the moving average is not there.

But what I wanted to do is at least come here and show you some of the work that we are doing, because we are going to do a presentation to our Commission the end of January. And we are continuing to look at this situation because the moving average is basically moving up over the last 12 months.

CHAIRMAN TAKITANI: So from what you have seen, have you been satisfied with the actions that the Board has been taking, i.e. the North Waihe'e well, the reutilization of the Iao Stream water, the

reutilization of the Wailuku Shaft?

MS. NISHIOKA: Well, I think Wailuku Shaft is still in the --

CHAIRMAN TAKITANI: Yeah, we have been --

MS. NISHIOKA: Yeah.

CHAIRMAN TAKITANI: -- using it for the last
several months, yeah. And I --

MS. NISHIOKA: I think you are back on line or
something with that.

CHAIRMAN TAKITANI: Yes.

MR. HARDY: There are certain alternatives and
other sources which are increasing your supply outside
of Iao. But --

CHAIRMAN TAKITANI: So there is no movement on

the part of the CWRM to possibly adjust the sustainable yield or anything of that nature?

MR. HARDY: No.

MS. NISHIOKA: No.

MR. HARDY: We are not looking at adjusting the sustainable yield.

MR. STARR: Is it possible for that briefing to be held on Maui since it is a Maui issue and since it is something that perhaps the public of Maui might want to --

MS. NISHIOKA: No, I think that is a really good point. I will check with our Chairman, and I will let David know or let you know.

MR. STARR: Could you please let the Board members know? And also I think that is something that the Mr. Eager might like to know about as well for the Maui News, our press here.

I, for one, would love to request that it be held on Maui if at all possible.

And, you know, the second thing, I do want to correct something, which is that we are not using Iao Stream water. We have not been using it for six months or so, and we do not -- have not so far been able to get an agreement to use it from the property owners. And this is something that's on the agenda, and we are hoping it might move forward.

But just to be honest and clear, this use of Iao Stream, which was one of the items that had been taken before the Commission, we are not using that now. And I, for one, would like to see us being able to use it on a regular basis, because I feel that it's essential to taking some of the load off of Iao.

But right now we don't have it.

CHAIRMAN TAKITANI: Is there any more discussion for the CWRM people?

(No response.)

MR. CRADDICK: I would just like to say one thing here, because -- I don't know if we are on this Item A under Old Business, the Iao/Waikapu Ditch. But it is certainly a good item to be discussing this under and along with the Iao Aquifer.

Next week we have scheduled an aquifer test, and we will basically be shutting down all of the wells in Iao, North Waihe'e, for approximately a 12-hour period, if we can survive that long. We are trying to get a 12-hour period with no pumping at all and see how the aquifer responds to that so that we get some more realistic numbers on what the aquifer is able to handle.

Anyways, it's just to let everybody know what is going on.

MR. STARR: Do you have a date for that?

MR. CRADDICK: I believe it's the 19th that we are looking at.

MR. STARR: Could you let the Board members know and what --

MS. JACKY: It's Tuesday night from 10 p.m. until Wednesday morning at 10 a.m. next week.

MR. STARR: Is that going to have any hydraulic effects on our ratepayers?

MR. CRADDICK: What do you mean, hydraulic effect?

MR. STARR: Is anyone going to run out of water or get low pressures or any other weird -- dirty water or anything like that?

MR. CRADDICK: There would be no reason to get dirty water. Obviously, the pressure is going to be

lower because the reservoirs are going to drop in levels. So systemwide the pressure will drop about 15 pounds.

So there may be some reduced pressure, but we will stop the test when we get to a level where we have only fire flows left in the tank --

MR. STARR: Are we going to inform the public that --

MR. CRADDICK: Yes, of course. We have already put out press releases.

CHAIRMAN TAKITANI: O.K. Let's move on, then, to Old Business.

If you could stay, we would like to discuss the Iao/Waikapu Ditch. And if you would be able to stay during that discussion, we would appreciate it.

MS. NISHIOKA: O.K.

CHAIRMAN TAKITANI: So we will move to Item A,

discussion and possible action regarding the Iao/Waikapu Ditch. Mr. Craddick.

MR. CRADDICK: I did have a meeting with them.

And we had been discussing that for the time that yourself, I believe, and Mr. Carvalho met with them to utilize the water only during periods when it was excess to their needs so that we didn't have to pay that standby fee.

And they had agreed to do that. I told them I wanted to be able to use it approximately 40 percent of the time; they came back with a number that I thought was 10 percent. They have now given data to show that it may be closer to 20 percent.

And I believe right now, today, we could be using this except that it was expressed to them that -- and I think Jonathan said it earlier there, that it's only his opinion that we want to use that 100 percent of the time.

And I think if that is the Board's position, that we want to use that 100 percent of the time, I believe I need to inform them and begin negotiations along that line, because that has not been the discussion that was previous to that meeting. We said we only wanted it during times when it was excess to their needs. And --

MR. CARVALHO: Mr. Chairman.

CHAIRMAN TAKITANI: Mr. Carvalho.

MR. CARVALHO: I would like to recommend that this matter be referred to the Chair for the negotiation in the totality of the water utilization, the things that you are working on right now.

I strongly suggest that.

MR. STARR: At the last meeting it was -- I believe it was the feeling of the Board that a -- one

of the members of the group of landowners come to meet with this Board so that these discussions can be held out in the public light. And I, for one, would like to see that happen. And I do believe that they have been willing to do that.

MR. CARVALHO: My suggestion would not preclude that. This would place responsibility properly so in the hands of the Chair. And I believe that, yeah -- that it will be much more productive to use whatever methodology he wishes, which would include the possibility of an individual at our next Board meeting.

MR. CRADDICK: After the last Board meeting, a letter was sent to them. And they basically said they refused to come to the meeting unless there is some consensus on the Board of what they wanted. Do they want to use it 100 percent of the time? Or do they want to use what can be called excess water during times when there's high flows in streams?

And I think that's a very, very critical policy issue where, you know, quite frankly, if there's not a consensus amongst the Board on that issue, it's quite difficult to discuss it in the --

MR. CARVALHO: Mr. Chairman, I then renew my suggestion that I believe the Chair would be in the best possible position to enter into discussions along with the Director, as far as need be, to effectuate whatever might be necessary for a period of time in the near future.

MR. STARR: Mr. Chairman --

MR. NOBRIGA: I would second that motion, Mr. Chairman.

MR. CARVALHO: I will put it in the form of a motion. I so move.

CHAIRMAN TAKITANI: It's been moved by Mr. Carvalho and seconded by Mr. Nobriga to allow the Chair to continue with this plan that might involve all

the elements we have been discussing by February 28th.

MR. STARR: Discussion.

I don't really like this mechanism of holding these discussions in secret. This is the first that I have heard of it, and --

MR. CARVALHO: Mr. Chairman.

CHAIRMAN TAKITANI: Mr. Carvalho.

MR. CARVALHO: I take issue with that.

No one at any time made reference to any secret meetings or secret negotiations. The motion was to carry out the intent of this Board as expressed earlier, was to leave it in the hands of the Chair and communication with the Director, communications with the affected parties.

There is absolutely nothing secret in that.

There is absolutely no decision that is being made.

And this is based on the Chair, his duly noticed

responsibilities. If a decision had been made,

Mr. Chairman, I think Mr. Starr fully realizes that I

would have been one of the very, very first to oppose

any meetings in private. And I would be the very last

person to make such a proposal.

But this is merely to expedite matters. And,

Mr. Chairman, unless there is any further new

discussions, I would like to see that -- I ask for the question.

MR. STARR: I have new discussion.

CHAIRMAN TAKITANI: Mr. Starr.

MR. STARR: We have been referred to some kind

of plan with a deadline of February 28th. And I am

curious about this because this is not something that

has been before this Board. And I would like an

explanation of it, and --

MR. CARVALHO: Mr. Chairman, I will respond to that at the appropriate time. That is not the matter before this Board.

MR. STARR: Well, we are voting on it.

MR. CARVALHO: No, sir.

MR. CRADDICK: No, no. That's Wailoa Ditch.

MR. CARVALHO: The question before this Board is with respect to this Iao situation; has nothing to do with that February 28th, absolutely nothing to do.

I want the record to be very clear as to what the facts are.

Question.

MR. NORIGA: Question.

CHAIRMAN TAKITANI: Is there any other discussion?

MR. STARR: What is the motion?

CHAIRMAN TAKITANI: The motion is to allow the Chair to proceed with discussions with the involved parties to try to come to some agreement such that we may be able to present it before the Board.

MR. CARVALHO: Mr. Chairman, this does involve the involvement of the Director, as well.

CHAIRMAN TAKITANI: Correct.

MR. STARR: I do have another -- want some clarification.

Is this to be able to use this water all or most of the time? Or is this to be able to use it a very small percentage of the time? And I am asking the question specifically today because this -- a previous Board, people sitting in our position, had basically made a commitment to utilize this water to reduce the draw on Iao. And this commitment was made to the State Water Commission and the public.

MR. CARVALHO: Mr. Chairman, again I would like to request that Mr. Starr stick to what the facts are.

The only matter before this Board is a motion to have the Chair continue to effectuate what this Board had previously decided on and to bring those results back, whatever they may be, to this Board at a subsequent meeting. That's all it does. It does not defeat, it does not change, it does not modify any previous actions.

So it would be very helpful if the gentleman would stick to what the facts are.

CHAIRMAN TAKITANI: It's been moved by Mr. Carvalho and seconded by Mr. Nobriga.

All in those in favor signify by saying "aye."

VOICES: Aye.

CHAIRMAN TAKITANI: Opposed "nay."

MR. STARR: Nay.

CHAIRMAN TAKITANI: Mr. Starr votes nay.

The ayes have it. The Chair will continue with his discussion in this matter.

MR. CARVALHO: Now, Mr. Chairman, if I may on a matter of personal privilege, Mr. Starr made reference to a deadline.

Let the record show very clearly that this was a meeting that was set at which he was supposed to attend. And he was unable to attend. There has been a negotiating committee on the East Maui situation, of which I am an alternate.

It was at that meeting that the gentleman was absent from that a mutual understanding was reached, yeah, and a request was made for the other parties to

come back with a proposal with respect to utilization of additional withdrawals of or the continuation of withdrawals from Wailoa Ditch.

It was at that that meeting that a timetable was set, a deadline was set, which was the 28th. So there's nothing secretive. It was a continuation of a meeting that you should have been at.

MR. STARR: Thank for the clarification.

CHAIRMAN TAKITANI: Any more discussion regarding the Iao/Waikapu Ditch?

(No response.)

CHAIRMAN TAKITANI: Thank you for your attendance.

MS. NISHIOKA: Thank you for inviting us.

CHAIRMAN TAKITANI: Mr. Nobriga.

MR. CRADDICK: Wait, Bob. One other thing.

Well, I don't know. I can leave that to the staff reports.

CHAIRMAN TAKITANI: O.K. We will go back

Director's Reports, Director's Report 00-01, request approval to authorize the Director to enter into an agreement with the Bank of Hawai'i to provide automatic bill payment services.

Mr. Craddick.

MR. CRADDICK: I would like to refer this to Mike since he has been working on that.

MR. QUINN: First I would like to point out to the Board that there is a mistake in this Director's Report. There is a reference to an approximate cost of \$15,000 a year. That should be \$3,000.

Secondly, what we are proposing here is to

offer to our customers a service which actually, in my opinion, is long overdue. And that is a way to have their water bill paid automatically by their respective banks. And we would do this through this automatic bill paying mechanism that the Bank of Hawai'i offers.

Aside from enhancing our customer service, the fact that many of our customers have asked for this service, there's a couple of other things that come into play here. One is this is a cheaper method of operations. It costs us approximately a third less to process these transaction via this type of method as opposed to our current process that we use.

Secondly, we just about eliminate the impact of float because the day the customer's account is debited, our account would be credited.

I strongly think that we should go forward with this if the Board doesn't have any problems with it. And, again, our customers -- many, many of our

customers have asked for this service.

MR. CARVALHO: Mr. Chairman.

CHAIRMAN TAKITANI: Mr. Carvalho.

MR. CARVALHO: I realize there is nothing before the Board, no motion has been made. But I would have a problem.

First of all, it would constitute a debit charge on various accounts. Are these debit charges to be instituted without the permission of the member? If so, would this not be an invasion of privacy?

MR. CRADDICK: No, no. We are --

MR. CARVALHO: Wait, wait. Let me finish.

MR. CRADDICK: But the people have to volunteer for this.

MR. CARVALHO: Wait, wait. This is why I am

asking the question, Mr. Director. If you were to be careful and listen, yeah, you must have the permission. Otherwise, you would probably be in violation of Federal statutes dealing with the rights of privacy.

And the question of initiating debit charges is -- can be fraught with great danger. And it removes, to a substantial degree, if one isn't careful, the individual's control when an error is made by a debiting company. It takes almost a lifetime to correct it.

Now, I have lived through this kind of regularly. And I have seen what happens when arbitrarily, yeah, debits are initiated. And, Mr. Chairman, it brings another element into play. And that deals with accounts that that have no money and a debit charge is initiated. And then it has to be reversed all the way.

So the concept may be extremely good, but it

might be, Mr. Chairman, in better order if we authorized a program on a voluntary basis and on a pilot program kind of thing to work out some of the kinks that may come about and move into it, because I think if we can be -- it is fraught with great danger in the implementation process.

And this idea of a third body initiating debit charges on other people's accounts, I think, with our without permission, I think it is a very dangerous thing.

CHAIRMAN TAKITANI: Mr. Quinn.

MR. QUINN: Well, we would not do this without the customer's authorization. The customer would have to fill out an authorization slip.

And basically what happens is, the way the process works is the customer authorizes us to do this. The customer gives us his banking account number, his service number, and he signs an authorization slip authorizing us to do this.

We then input that information into the billing system. And these types of customers that have given us their authorization, that data gets captured in a separate file. And then when we read the meters and calculate -- the system calculates the bill, it automatically goes to that file and sends out a bill to the customer saying, "This is your bill. Your account will be charged on X date." And they have already given us the approval to do this. And also the bill will say that they have ten days to challenge the bill if, in fact, they do not agree with it.

This is the way it works for the Honolulu Board of Water Supply. This is the way the banks typically set it up. So we do have the customer's approval. And Mr. Carvalho is correct in saying that you do run into some headaches in the instances where there are insufficient funds. Then you get into the charge backs, and there is some extra charges that get involved. And that is a headache.

But we have had just a tremendous demand from a lot of our customers asking for this service. And it's primarily why we want to do it.

CHAIRMAN TAKITANI: So to the other point, it has been already tested by the Honolulu Board of Water Supply? They have already been doing this for what, oh, a number of years?

MR. QUINN: Yes.

CHAIRMAN TAKITANI: Mr. Starr.

MR. STARR: This seems to favor one particular financial institution. And while Bank of Hawai'i is a very good financial institution, I have some concern over whether that puts other financial institutions at a disadvantage. And it's kind of telling our customers that, you know, they should use this particular bank.

Is there a way that other banks can participate

in it or customers who don't bank with that particular institution can --

MR. QUINN: That's not the way it works.

This service is provided to us by Bank of Hawai'i. But, for instance, if you have an account with another bank, they will debit -- arrange to have that account debited. They will do what they call an ACA, automatic clearinghouse transaction.

So they have a network set up where they can debit -- you continue your relationship with your own bank. It's just that this process is funneled through Bank of Hawai'i into our billing system.

So it doesn't require a specific relationship with --

CHAIRMAN TAKITANI: Mr. Nobriga.

MR. NOBRIGA: I really think it would make us more customer friendlier, especially since they are

asking for it. And I would like to move that the Board does authorize the Director to proceed with this project.

MR. CARVALHO: Mr. Chairman, I will second that for the benefit of discussion.

Initially, on a pilot basis, let's do this and report back to us on the progress within a three-month period.

MR. NOBRIGA: I will take that, yeah. No problem.

CHAIRMAN TAKITANI: It's been moved by Mr. Nobriga and seconded by Mr. Carvalho to proceed with Director's Report 00-01, approval to authorize the Director to enter into agreement with the Bank of Hawai'i to provide automatic bill payment services.

MR. NOBRIGA: With a pilot program of --

CHAIRMAN TAKITANI: Yes, with a pilot program of --

MR. CARVALHO: Three months.

MR. NOBRIGA: And a report to be made to the Board.

CHAIRMAN TAKITANI: Mr. Starr, did you have anything?

MR. STARR: No.

CHAIRMAN TAKITANI: Any discussion?

(No response.)

CHAIRMAN TAKITANI: If not, all those in favor
signify by saying "aye."

VOICES: Aye.

CHAIRMAN TAKITANI: Opposed "nay."

(No response.)

CHAIRMAN TAKITANI: The ayes have it.

Director's Report 00-01 is approved.

We will go to Director's Report 00-02, request approval of funding for the replacement/repair of Waihe'e Pump No. 579 located above Waiehu.

Mr. Craddick.

MR. CRADDICK: This particular pump was not scheduled for replacement. But on Sunday -- we don't know what happened, but the shaft unscrewed and it pushed up through the motor. And the motor totally destroyed the discharge head and fell off on the ground. It's a 600 horsepower motor, 4,000 volts. And it's Waihe'e's biggest -- the biggest well in Waihe'e.

And we don't know what has happened below ground. If it was just the pump, it wouldn't cost any more than \$150,000 to pull it out and put a new one in. But we don't know -- well, actually, I think we probably do know. We have picked up on the shaft, and there's a weight of about 400 pounds. And that weight should be around 6,000 pounds. So we know that portions of the pump have broken off below ground. And

the other hundred thousand that is in there is for fishing that out of the ground.

We don't know if it will take that full amount, but we are putting that in there to cover us. But this is somewhat of an emergency project. This particular day I think the Central Maui system went down about four feet in the Central Maui Joint Venture Tank. And we had been working to get Wailuku Shaft back online, and I believe the guys were going to start it up on the 3rd. And they had to start it up Sunday night, on the 2nd.

And when we got that on, we got the system back to normal. I believe Jacky and George were in and got notices out to the major hotels to cut back on irrigation for the night and shopping centers. And we were able to make it through the night and then didn't, you know, have to immediately go in and start replacing and put a general cutback notice out to the community.

But this is an emergency project that we need

to move forward on. And it's coming out of the budget item that was an allocation, a Board allocation for, I believe it was, Y2K contingencies, drought and emergency contingencies that's in the budget. But it is Board allocated. So without Board approval, we couldn't spend it.

MR. STARR: Mr. Chairman.

CHAIRMAN TAKITANI: Mr. Starr.

MR. STARR: How do you remove 6,000 pounds of motor parts from the bottom of a well?

MR. CRADDICK: Whoa, Jonathan. There's 25 tons down there's, and that's just the shaft. They have techniques to do that.

MR. STARR: Is that on a grapple or something?

MR. CRADDICK: Yeah, there's many techniques.

MR. NOBRIGA: One tall guy with strong arms.

(Laughter.)

MR. NOBRIGA: Mr. Chairman, I would like to move that this appropriation for \$250,000 from the Board's Y2K line be appropriated for this project.

MR. CARVALHO: Second.

CHAIRMAN TAKITANI: It's been moved by Mr. Nobriga, seconded by Mr. Carvalho.

MR. STARR: I have one question.

Will there be purchase orders and proper paperwork for all of the work that gets done on this?

MR. CRADDICK: There will be; that's correct, but --

MR. NOBRIGA: (Unintelligible.)

MR. CRADDICK: The actual pump replacement is probably going to be bid out, the fishing portion of it. Once whatever is taken out of the top, we are going to have to see what the problem is down in the hole once the pump comes out.

And that portion there, we may have to -- to tell you the truth, I am not exactly certain how we are going to handle that right now. It would obviously be much better if we did it by the hour. But I will have to work with the procurement people to see exactly how we can do that, because if we just go in and put it out to bid generally, the price probably could exceed even this if they are just bidding it blind, not knowing what is down there.

MR. STARR: My request is just that we be presented with a purchase order after the project is done.

MR. CRADDICK: Oh, yeah.

CHAIRMAN TAKITANI: It's been moved and

seconded that we approve funding for \$250,000 for the replacement/repair of Waihe'e Pump No. 579 from the materials and supplies portion of the operating budget, the Y2K portion.

All in those in favor signify by saying "aye."

VOICES: Aye.

CHAIRMAN TAKITANI: Opposed "nay."

(No response.)

CHAIRMAN TAKITANI: The ayes have it. The funding is approved.

We will then move to Roman Numeral VII, Old Business. We have deferrals from Item B -- Ms. Olmstead has requested a deferral on her item. Item C, Communication 99-22, Ulupalakua Ranch has also requested deferral.

We have Item D, Communication 99-23, request from Ms. Dorothy Uweko'olani for a water meter TMK 2-1-3:18, Kanaio, Maui, Hawai'i.

Do you wish to proceed? If you do, please come forward, Ms. Uweko'olani.

MS. UWEKO'OLANI: Yes. The reason I didn't defer this is because I feel that our request supercedes Ulupalakua Ranch or Olmstead or Stolle.

We have asked for a water meter and were given a water meter by Mr. Kaiama. And I have a letter from him, and I have yet another letter -- and he is sick right now. But we had requested the meter, and the man came with the meter when my husband and I were at the church. My husband was the proctor of the Kanaio/Pi'iloa Hale Church. His brother is the deacon, which is the -- my nephew, his father is the deacon of the church.

And he had our meter that was coming up to where our house is, where my mother -- his mother had her home. And someone had taken the meter. She died in 1966. So we were asking to have that reinstalled. We couldn't find the paperwork to reinstall the meter. So we have had to go through the request of getting a new meter.

And every request that the Board has made of me and my husband, I can show instances where the meter has been given and for the same reason, inadequate -- every reason that had been given me, while we waited, has been given to somebody else and someone else has gotten a meter. We have also given a meter out to someone that is growing strawberries up there since we have requested a meter, and this is on this inadequate system.

I feel that the Board should acknowledge that Mr. Kaiama's granting us of a meter -- and the one that went to the Kanaio Church was not the meter that was intended for us. My husband signed for that meter

because the church had also had their own meter. So we left that meter there, and we were promised the next meter.

And then -- this is only half of the paperwork that I have been through since. We have our home there.

CHAIRMAN TAKITANI: Mr. Craddick.

MR. CRADDICK: You know, I don't have anything to say. If the Board wanted to take this request up again, it's their option.

MR. CARVALHO: Mr. Chairman, does the Chair have any recommendation on these three items?

CHAIRMAN TAKITANI: Well, the Chair's preference would be to have all of the items tackled together so that we can have everyone present and we can have a full discussion of all of the items and have a total resolution of this whole situation and come to an agreement that --

MR. CARVALHO: Therefore, a deferral is in order?

CHAIRMAN TAKITANI: That would be my preference, because it's --

MR. CARVALHO: I don't want to be --

MS. UWEKO'OLANI: I just don't understand why now that it's come up because someone has come in requesting a meter, why that has to involve me still.

CHAIRMAN TAKITANI: Mr. Starr.

MR. STARR: Mr. Chair, I would like to request that at one of the meetings that will be held shortly we take all of these meter items and make that meeting specifically related to meter policy Upcountry and especially in relation to our rule-making and -- because there's a lot of concern in the community, and there should be. We all have wished there was a way to give them, all of these people, the meters that they want. And we are working toward that.

But I think we need to have a discussion about our meter policy, and that should all be done at one specific meeting. And it should be publicized in that regard.

MR. CARVALHO: Mr. Chairman, I move that all three items be deferred and that we resolve this question just about forthwith, in accordance in with other recommendations and other decisions that may have been discussed from time to time. I so move.

MR. STARR: Second.

CHAIRMAN TAKITANI: Moved by Mr. Carvalho, seconded by Mr. Starr that the items concerning Susan Olmstead, Ulupalakua Ranch and Ms. Uweko'olani be deferred until such time as --

MR. CARVALHO: Mr. Chairman, just as a matter of clarification for Ms. Uweko'olani's benefit, this Board, yeah, has been on record as to its authority and its decisions, yeah. It's necessary to work out the

promulgation on a step-by-step requirements, upon which the decisions may have been made.

And be assured that, basically, our sympathies are with you. And I think you know, you should know, I don't take things too lightly. And I don't take things to defer forever and forever. Uh-uh.

But I think this is the best possible approach.

We ask for your indulgence, yeah, for another limited time. Thank you. We would appreciate it very much.

CHAIRMAN TAKITANI: Thank you.

So all those in favor of the deferral of these three items to a time when we can resolve all of them signify by saying "aye."

VOICES: Aye.

CHAIRMAN TAKITANI: Opposed "nay."

(No response.)

CHAIRMAN TAKITANI: The eyes have it. These three items are deferred.

Thank you, Ms. Uweko'olani.

MS. UWEKOOLANI: Thank you.

CHAIRMAN TAKITANI: We will move to Communication 99-27, request from Luke Yasaka on behalf of Holy Rosary Church for a waiver of the subdivision requirements, Pa'ia, Maui, TMK 2-5-005:003 \$ 019.

MR. CARVALHO: Mr. Chairman.

CHAIRMAN TAKITANI: Mr. Carvalho.

MR. CARVALHO: I move that this request for a waiver be granted.

MR. NOBRIGA: Second.

CHAIRMAN TAKITANI: Moved by Mr. Carvalho and

seconded by Mr. Nobriga that the waiver on behalf of Holy Rosary Church, as recommended by staff, also, be granted.

MR. NOBRIGA: Mr. Carvalho, isn't that what was recommended by staff?

MR. CARVALHO: I believe so.

MR. NOBRIGA: O.K. Thank you.

MR. CARVALHO: You are welcome, my friend.

MR. NOBRIGA: As per staff recommendation.

CHAIRMAN TAKITANI: The motion would be that we grant the request for Mr. Yasaka on behalf of Holy Rosary Church, according to staff recommendation.

MR. STARR: Mr. Chair, I would just like to be clear. I understand this is not creating any new buildable structures; it only allows a parking lot,

which is much needed, to be created. Am I correct with that?

MR. CARVALHO: Yes, you are. Welcome back to the

18 church.

CHAIRMAN TAKITANI: All in those in favor of granting the Holy Rosary Church waiver of subdivision requirements signify by saying "aye."

VOICES: Aye.

CHAIRMAN TAKITANI: Opposed "nay."

(No response.)

CHAIRMAN TAKITANI: The ayes have it.

MR. YASAKA: Thank you.

CHAIRMAN TAKITANI: We will move to Item Roman Numeral VIII, Communications, Communication 99-35,

request from Sheila B. Myhre for a water meter, Olinda, Maui, Hawai'i, TMK 2-4-015:025.

Ms. Myhre, through her agent, Ms. Waldo, has submitted her testimony. They have been informed that our normal procedure is to refer these things to staff for staff recommendation. And they were amenable to that, and they will respond whenever a staff recommendation is given.

MR. STARR: Do we need a motion to defer this to staff, refer it to staff?

CHAIRMAN TAKITANI: That would be good.

MR. STARR: I move we refer it to staff.

MR. HASHIMOTO: Second.

CHAIRMAN TAKITANI: Moved by Mr. Starr to refer it to staff, Communication 99-35, and seconded by

Mr. Hashimoto.

All in those in favor signify by saying "aye."

VOICES: Aye.

CHAIRMAN TAKITANI: Opposed "nay."

(No response.)

CHAIRMAN TAKITANI: The ayes have it.

Communication 99-35 is referred to staff.

We will take a lunch break until 12:20.

(A luncheon recess was taken at 11:50 a.m.

and the meeting resumed at 12:30 p.m.)

CHAIRMAN TAKITANI: We will reconvene the Board of Water Supply regular meeting, and we will go to Roman Numeral IX, Other Business. The first item is preliminary report from the Strategic Planning Committee.

Mr. Nakamura, would you like to give us the report?

MR. NAKAMURA: Yes, thank you, Mr. Chairman.

As the agenda reflects, this is a preliminary report or an interim report that the Committee would like to present to the Board. When we started the process, we indicated that we felt strongly that the important thing to do initially was to get maximum input from the staff and from the managers of the Department. And we have endeavored to do that.

And what you see or what will be presented today does reflect significant input from the managers of the Department. And I certainly want to express my appreciation for their participation, which they did very enthusiastically and fully.

There are a couple of things that have been provided to you. They are similar. The presentation

that will be made by Jacky includes a relatively -- an initial attempt to prioritize some of the objectives. But the other material that was provided to you just around lunchtime, which is the double-spaced material with writing on both sides, that represents all of the objectives that were discussed by the Committee.

So as I indicated, they are very similar. The presentation is somewhat of a short list which reflects -- well, maybe I should say a preliminary attempt to establish some priorities on a preliminary basis relative to the objectives. Now, this is, as I said, a very interim presentation; there is a lot of work that needs to be done. Ultimately, a specific action plan will have to be developed with, you know, some very realistic plans for implementation over the next few years.

We also need to incorporate public input into this process. To date we have not had the opportunity to really bring the public into it. And whether we do it through public meetings or whether we do that through perhaps a citizens committee that would go

through the same process to develop a strategic plan and then have the Board try to meld it together to try to come up with an actual strategic plan and the action plan, I think we still need to flesh that out.

But at this point I wanted to present to the Board where we are at this point. And the members of the Committee have spent a lot of time on it, Clark and yourself, Mr. Chairman, and Mr. Miskae was a great help. And, as I say, the staff has really participated very enthusiastically. And we feel good about where we have gone and some of the discussions that we have had to date.

So with that preface, perhaps I can -- unless you have any questions to ask.

CHAIRMAN TAKITANI: Mr. Starr.

MR. STARR: Am I to understand that what is going to be presented here is this censored version,

this shortened version?

MR. NAKAMURA: Well, I wouldn't say it's censored. I think, as you recall, Jonathan, my -- what I asked at the last meeting after we got through this thing of all of the objectives was to circulate it to the staff and ask the staff to identify what they thought were the important objectives.

And that is basically what this presentation incorporates, the results of what the staff identified as the important objectives.

But, you know, as I said earlier, this is a very preliminary document. And, you know, it by no means reflects a recommendation or either the Committee or of anybody else.

MR. STARR: I don't have any problem with, you know, showing what the staff's priority feeling was. But what I do have a very big problem with is this being presented to the Board.

And do I feel it has been censored and that none of the members of the Committee, yourself included, I believe, have seen this. And what it was was a -- there is a list of, you know, all the different objectives for each goal. And staff took, you know, the objectives that had come out of -- and the process was wonderful. It was a great process. But they had removed most of the objectives and left only the ones that they liked or felt were important. And all the rest of them are gone from -- completely gone from this.

And my feeling is that it should be presented with all of the objectives that were there and -- because rather than just leaving out most, you know -- about three-quarters of the objectives. I do feel that this form is -- has been censored. And I would like to see it presented with all of the objectives, even if we -- even if it was some kind of prioritization, that's fine.

But I don't just like the fact that all of these things, many of which are very, very important, have been left out.

CHAIRMAN TAKITANI: Mr. Nobriga.

MR. NOBRIGA: I take quite a bit of offense at Member Starr alluding to a censorship has taken place since it is not the Ad Hoc Committee's place to formulate judgment and policy but the entire Board. And being that we are now at the entire Board level, I am very anxious to see this presentation.

MR. STARR: Well, that's why I would like to get the Board to see the whole presentation, not just --

MR. NOBRIGA: Well, why are you talking about censorship, then? There is no such thing as censorship. It comes to this whole body, which it is today, for the first time.

MR. NAKAMURA: Just an explanation, Mr. Chair.

I think the entire listing of the objectives that were discussed and proposed have been circulated to the Board. I also take, you know -- I would object to the use of the censorship because certainly I don't think there was any intent to censor anything on the part of anyone.

The way the short list, if you will, came up was that I had asked Jacky to circulate the entire listing and ask the staff to identify three objectives from each goal that they thought were the most important and to give me -- to tabulate what the results of those were.

And that is basically what has been done. I don't think anybody sat there and said, O.K., we are going to take this out, take this out, take this out. Jacky just, you know, got the results from this request to identify the three most important objectives. Whichever were mentioned is what is on the list.

Now, again, this is just a preliminary presentation. So, again, I don't there's been any attempt to censor it.

CHAIRMAN TAKITANI: My recollection is that all of us members of the Committee plus the staff was given the opportunity to prioritize.

(Several people speaking at once.)

CHAIRMAN TAKITANI: And every one of us, I think, on the Board or the Ad Hoc Committee was able to turn in that prioritized list. So --

(Several people speaking at once.)

MR. NAKAMURA: And I will also accept full responsibility for the fact that the presentation that is being made today does not include all of the objectives, because that was my fault in not communicating really to Jacky what was, you know,

perhaps the presentation.

MR. STARR: My question is: Are all of the objectives still part of the plan as it stands or --

MR. NAKAMURA: Oh, of course.

CHAIRMAN TAKITANI: Yes, definitely.

MR. STARR: As long as they are, it's still part of it.

MR. NAKAMURA: Definitely.

MR. STARR: See, I understood that these are just some of the items that were --

MR. NAKAMURA: They have not fallen by the wayside.

CHAIRMAN TAKITANI: Yes.

MR. NAKAMURA: And they will probably be expanded.

CHAIRMAN TAKITANI: O.K. Jacky.

MS. CARROLL: I am just going to go over the results of the meetings we have been having for about four months. I think we had our first meeting in September.

What this was was a lot of brainstorming, a lot of talking about ideas, trying to bring these things to realistic things that we can do, ideas and concepts that are not just pie-in-the-sky things but actionable, realistic projects.

The things that we covered in our meetings was the Mission Statement, developing a Vision, values for the Department of Water Supply, goals and objectives. What I have here for the objectives are just the three or four most important for each goal, just to keep this presentation short. The handout that you have that is a faxed copy has all of the objectives. And I urge you to look over this.

The strategic planning is an ongoing process.

So, you know, even though you are being given it now, it will still be useful in future meetings because we are working on this now and in the future. The next steps are going to be the action items and the timeline, bringing these objectives into reality.

O.K. Our Mission Statement is: "To Provide Clean Water Efficiently." And this has been our Mission Statement for some time. And we talked about it, and this we haven't changed because this is -- this does summarize what we do and what we strive to do.

We did come up with a Vision. The County has a Vision, and we just discussed if we wanted to stay -- keep in line with that. This vision is similar, but it focuses more on our own -- what we do. And our Vision is: "To provide for the present and future needs of our customers in a responsive, innovative and cost-effective manner. We want to develop and utilize expertise in managing, protecting and conserving our

community's valuable resources in accordance with the General Plan of the County of Maui."

I noticed this morning in the water resources presentation, they use those same three words, "managing protecting and conserving." That's what we want to do, too.

The values that we have discussed, these are the things that were important to us that we want to incorporate as our own feelings and the way we work: "To work together as a team; to treat our customers and our fellow workers with consideration, understanding and empathy; to seek to enhance the quality of our service to our customers; to earn the trust and respect of the public; to be stewards of our precious water resources in order to ensure future sustainability; to protect agriculture as an essential component of Maui's economy.

Now, I am going to go over the goals. There were a total -- well, there started out more like 15

goals or a lot more than that. But we have narrowed it down to 11 goals. And actually, the first five are in order of what the strategic planning committee had decided as the most important. But the six after that, I don't know the order of those.

But I do want to point out that this first one here, develop adequate water sources, is the most important goal that the Committee had discussed.

That's develop adequate water sources, storage and transmission for both urban and ag users, including mitigation of the Upcountry drought situation.

The second goal that was most important is to systematically replace, upgrade and improve, as needed, the existing infrastructure. And that is our pumps, our distribution and transmission lines, storage tanks and our other facilities.

No. 3, comply with all applicable State and Federal requirements to ensure providing the public

with water having appropriate and acceptable levels of quality.

No. 4, create long-term, innovative and cost-effective financial management programs for the Department. Some people did think that that should be No. 1, because without money we can't do much. But we have it as No. 4.

No. 5, create a satisfying and productive working environment for all employees and Board members, including providing adequate baseyard and office facilities.

The next goals are to provide efficient and responsive service to the public, provide educational programs to the public, facilitate conservation, promote greater awareness and support of our activities and our Department, also to integrate the management of the public and private water systems.

And this is the last page of goals: To update the rules, regulations, policies and procedures of the

Department; participate in the management and protection of all of Maui County's water resources; and also to maintain a living Water Use & Development Plan through the Integrated Resource Planning process which we heard about this morning.

Now, under these goals we have objectives, and this is what the discussion earlier was about. Some of them had more than 20 objectives, as you can see on the faxed copy, and some them had less. What we did was, we decided -- just our own opinions, management and Administration and the Mayor's representative -- which objectives we thought were the most important. And I compiled those points.

What I have here are just the most, the three highest, just to keep this short. For our first goal, to develop adequate water resources, storage and transmission, the first and foremost objective is to develop new water resources, and that includes surface and groundwater; second, to protect the Iao Aquifer;

and third, to add groundwater storage, that's the untreated reservoirs, to the Upper and Lower Kula systems.

Here is an example of source, Hamakuapoko wells. By the way, that is going to be on our Annual Report cover.

Second goal --

MR. NOBRIGA: I would recommend you stay away from that on your Annual Report Cover.

MS. CARROLL: O.K.

Our second goal is to replace our infrastructure. First objective under this goal is to replace inadequate and deteriorating distribution systems; second, to establish a rational system, prioritized system replacement and improvement; and the last drew a tie, replace storage tanks and provide adequate staff facilities and funding.

Here is another example of our infrastructure replacement, the Waiohuli Tank in Upcountry. This was back in July when they were still constructing it. As you know, it's now in service.

Goal No. 3, to comply with all the State and Federal water-quality requirements. First objective is to establish a system to monitor and understand existing and proposed rules and regulations; implement new technologies where applicable and appropriate; and to provide training and support for ongoing operator certification process. The operator certification process is a requirement; our operators need to be certified by February 2001. Classes do start next month.

No. 4, long-term, innovative, cost-effective financial management programs for the Department. First and foremost, establish a method for funding replacement, that funding to equal depreciation; and second, and somewhat controversial is to incorporate the cost-of-service concept in the setting of rates;

third, identify potential new sources of revenue, including appropriate surcharges; to educate the public and our elected officials regarding our financial needs and our funding philosophies.

And fifth, create a satisfying and productive working environment for staff and Board members, and that includes providing adequate baseyard and office facilities. Notice I have there in bold, "location." We need to find a new location for the baseyard and for the office and also to maintain our facilities and equipment; second, to create programs and recognize and reward successes and superior performance; also to promote a spirit of unity and teamwork; and to obtain greater involvement and control in personnel matters.

Here are some of our staff hard at work.

The next goal is to provide efficient and responsive service to the public. Create a system which empowers staff to take ownership of and resolve problems; establish a system of logging, monitoring and

following up on inquiries, complaints and trouble calls; and to create a culture of service to the public.

Another goal is to provide educational programs to the public, facilitate conservation and to also get the idea of the awareness out of what we do. First objective under that goal is to advise the public as to our future plans and what those plans, impacts and rationale are; to make appropriate use of the media and other resources; create opportunities to interact with the public on a regular basis; and to publicize our accomplishments.

Here is an example of one thing that we did.

This was at Ka'ahumanu Shopping Center showing our leak detection equipment and having our water quality taste test, which Iao Valley water did win.

Next goal is to integrate the management of public and private water systems. That involves taking a proactive approach in acquiring water rights and

systems which may no longer be needed by the major agricultural users; the next objective was to provide interconnection for use in the event of emergencies; and to obtain usage information for all of Maui County.

Also, we would like to update our rules, regulations, policies and procedures of our Department. That involves prioritizing rules that require review and possible modification; pursue autonomy in the adoption of rules, especially those that don't involve our water rates; and to provide the public with clear guidelines on implementation and enforcement of these rules.

Next goal is to participate in the management and protection of all of Maui County's water resources. The first objective under that is to establish watershed and wellhead protection programs and funding sources; establish a water reuse and brackish water strategy -- I know there was some discussion of using treated sewer water, and we will go more into that later; promote dialog between public and private users; and to also determine what our sustainability goals are.

This is an example of one of our water resources on the Lahaina side. This is surface water.

Last, to maintain a living Water Use & Development Plan through the Integrated Resource Planning process, which you saw this morning. The objectives, we want to solicit the participation and cooperation of other agencies; expedite the process of establishing an acceptable plan; and to educate the public on the process and to also solicit their input.

So those are the things that the Strategic Planning Committee has discussed so far. And as I said, this is an ongoing project. And I am sure there will be changes, and we will be bringing those changes to the rest of the Board as they materialize. The next things we need to do are action plans and strategies, also determining our priorities and establishing also a mechanism to implement this, with update and follow-up. And we also plan to include the public in this process.

O.K. That's the presentation. We can answer any questions if you have any. Are there any questions about this?

I would request that you take this home and study it, because it's a lot to read. O.K.? The faxed copy is our first thing, and then you can see where we kind of narrowed it down a little bit. But you do have to look through both. And with your comments and feed back, you can either call Howard or me, I guess.

CHAIRMAN TAKITANI: Mr. Nobriga.

MR. NOBRIGA: I am very impressed. And I would like to compliment and commend Howard Nakamura and the ad hoc committee, Jacky Carroll for an exceptional presentation.

I would like make a motion that we accept this preliminary report, the faxed copy.

MR. CARVALHO: Mr. Chairman, I second the motion, with the complete understanding that we accept it and it is preliminary.

MR. NOBRIGA: Yes.

CHAIRMAN TAKITANI: Very good.

MR. STARR: Mr. Chair.

CHAIRMAN TAKITANI: Mr. Starr.

MR. STARR: I would just like to comment that I am really proud to have been a part of this. The people, especially all the different members of the staff, really gave from their hearts and really took it home with them and thought and worked hard on it. Howard has put in many, many hours. And I really feel we have something very good in process. And I, for one, am very proud to be serving on this. And thanks to Mr. Nakamura for all he has done and is doing.

CHAIRMAN TAKITANI: It's been moved by

Mr. Nobriga and seconded by Mr. Carvalho that the Board accept the preliminary report.

All in those in favor signify by saying "aye."

VOICES: Aye.

CHAIRMAN TAKITANI: Opposed "nay."

(No response.)

CHAIRMAN TAKITANI: The ayes have it.

MR. NOBRIGA: Mr. Chairman, I would like to suggest that we make sure we circulate this to the Mayor and the chairman of the Water Committee of the County Council.

MR. CARVALHO: And that we have restored mutual admiration society of all of the members.

MR. NOBRIGA: A two-stroker or something.

CHAIRMAN TAKITANI: Thank you.

Yes, thank you, Mr. Nakamura.

MR. NAKAMURA: Thank you and the Committee.

And again, I remind you that the Committee is not through yet. There are other things we need to do, including soliciting some public input.

CHAIRMAN TAKITANI: So what kind of timeline do you foresee, Mr. Nakamura?

MR. NAKAMURA: I think the Committee will have to get together in the near future and establish how we -- where we go from here regarding soliciting public input and how we go about refining where we are.

CHAIRMAN TAKITANI: Thank you.

We will move on to Item B, Other Business, discussion and possible action regarding the water system development fee proposal from Allen M. Mullins, CPA. Mr. Mullins.

MR. CRADDICK: Come on up, Allen.

Allen is with -- he runs his own CPA firm, and he was previously with Peat Marwick when the first Water Use & Development Fee proposal was made up. And I believe the person that works with him was also Barry Shaw -- was also with Peat Marwick back then. And so we had some continuity with the original plan since that is the way the Board wanted to proceed.

But on this particular presentation here, what I am hoping to get out of this is the policy issues, not so much the schedule itself, but the policy issues that are in here. And I don't expect that, you know -- even if the Board does agree to a schedule sometime in the near future, there are changes that we have to make to the water system development fee itself.

And I would hope that we would bring those up in the Rules Committee to get those going along with this if we go to public hearing at sometime in the near future. So, Allen.

MS. CARROLL: I am going to start with just an introduction to the Water System Development Fee. And I am going to show you what we presented to the County Council -- Dave, was that the Water Committee?

MR. CRADDICK: It was May -- it was May last year or -- no. Yeah, last year.

MS. CARROLL: And also we had a presentation to the Mayor. And like I said, it's just the basics.

And the Water System Development Fee, that's the rate structure for system development. It's for new or additional water sources. The water bills that we get in the mail and we pay every two months, that

goes for the Department's operations and system maintenance and replacement. The water bills that we pay every two months, that does not pay for expansion. That's what this Water System Development Fee is for.

You know, to be honest with you, I never heard of this until I got a job here. That's because, when I bought a house, I bought a house that was already built in Waiolani. It was built by C. Brewer. And when I got that house, all I had to do was go to the Water Department and give them my name there.

But when C. Brewer built that house six or seven years ago, they had to pay the Water System Development Fee because there was no water system out there. O.K.?

Now, if I had just bought a house in Kahului or if you were buying a house -- excuse me. If you were building a house that had no water system, you would have to pay this fee. If you are buying an existing house, you wouldn't have to pay that fee.

Now, when C. Brewer built that subdivision, it wouldn't have been fair to charge for the cost of building that water system out there to, say, people who had been living in Kahului for 30 years. It wouldn't have been fair for my parents in Kahului to have to pay for the water fees out in Waikapu.

And that is why there is this separate fee that is different from the water rates. And now I pay the regular water bills, and that goes for the necessary replacement and maintenance. And it's just like -- I mean, it's like being on the system just like everybody else because that fee has been paid for.

This system was implemented in around -- throughout Maui County in 1993. And it is actually based on figures from 1991, though. Since 1993 when we got that fee, we have been bringing in about \$1.4 million. I think in 1998 it was about, if I am not mistaken, \$7 million. But Holly might be able to

tell you the exact figures per year. But the average is about \$1.4 million.

However, we need about \$4 million to do the expansion projects that we need to do. And very, very simply, without going into too much detail -- Allen will do that -- the fees are to be determined by looking at the replacement costs of source, transmission and storage and dividing them by the equivalent units of meters according to their size. This determines the average net equity investment and is proportional to the size of the meter.

Now, this does not include distribution lines or debt that is financed through rates. Examples of areas that would have been funded -- that would be funded by the Water System Development Fee would be the Waiehu well sites that we are working on with Hawaiian Home Lands -- that's the Waiehu Kou subdivision; North Waihe'e/Kanoa Wells development; the Keanae exploratory well; the West Kuiaha Tank in Upcountry.

A project that was completed using these funds is the Makawao Avenue 12-inch waterline.

Now, like I said, this fee was implemented in 1993 but is based on numbers from 1991. In 1991 our assets were \$113 million; in 1999 our assets are over \$202.5 million. As you can see, there's been quite a bit of growth in our assets. Our assets are made up of property, plant and equipment. And these figures go into the calculations.

So you can see that the numbers that we have now -- the \$3,350 for the 5/8-inch water meter -- is not adequate because it's based on 1991 figures. That is why we have to revise it. As I said, this is over a 100-percent increase in our assets.

Now, if we had an increase in our customers that was in proportion to the increase in assets, we might be able to make it. But you can see our number of water meters, our services, has only gone up by

about 5,000. That's about a 17-percent increase. We have a 17-percent increase in services to cover more than a 100-percent increase in assets. The bottom line is there has not been enough new customers to generate the revenue needed to fund the projects that we do.

Some of the questions that Allen is going to be covering and that I will be covering also is, first of all, who pays for growth? Growth is paid for by new customers' contributions, and that's equal to the average equity that existing customers have invested in the system. This is kind of a policy of growth pays for growth.

What does the fee pay for? Like I said, it pays for expansion of source, transmission and water storage facilities. O.K.? So only new or additional customers pay for the cost of bringing them into the system.

Where do the fees go? They go all over Maui County; and that includes Moloka'i.

When are they paid? This is a bit of a difficult issue because sometimes when the developers are going through the permit process, they want guarantees from us on when and what we will do.

However, a lot of times at that stage they are just looking at undeveloped plots of land in remote areas, and it's hard to know what we are up against. And at that point we can't always determine what we will have to do and how long it will take. Currently, our guarantees are good for two years.

And last, should the interest earned remain with that fund? So the fees we collect are not always used right away. And so this becomes a question of matching, O.K., that interest earned with the funds or does it go into some pot somewhere else? That is something that we need to address.

Here is another example: The Ha'iku well was used with Water System Development Fee funds. And

another one -- this is the Lower Kula booster pump and tank. This picture was taken about three weeks ago; it's almost done. We are doing the leak testing now.

This is just a comparison of the Water System Development Fee current fees and proposed fees. You can see that it goes up quite a bit for the larger meters. But for a 5/8-inch meter, it will only go up to about \$5,450.

This is a comparison of the water system development fees of the four counties, Kaua'i, Hawai'i, Maui and O'ahu. This here is just for a standard house with 30 fixture units, which is considered standard. We are proposing \$5,450. Kaua'i is quite low at \$2,600. Hawai'i, Big Island, their fee is also under review so this number that I have for them will probably change. And you can see we are under Honolulu's fee.

For a larger, 1-inch meter for a commercial user with 40 fixture units, you can see how high the

other counties have their rates. For Honolulu, \$28,000; Kaua'i is \$38,000; ours is relatively cheap, only \$14,000. The Big Island, as I said, they are under review so that \$9,000 figure will probably change.

Now, Allen is going to go into the more detailed parts of this fee. And you will take it from there.

MR. MULLINS: Excuse me. I am having some technology problems with the equipment I brought with me.

I wanted to go over a little bit on the calculation of the fee. And I also would encourage you to interrupt me at any time or ask any questions. I want to cover the material that you want to cover.

I was asked to use the system buy-in method.

And some of the philosophical methods of the system buy-in method are that new customers share equally in the costs of the system. In other words, a new

customer pays for the cost of that unit of system facilities that they are using at the time when they connect.

The fee is based on a historical cost adjusted to present value. And we will get into some of the details on how that is used. And the basic part of the buy-in is you are buying into the system as an equal customer, equal partners with the existing customers. So that's some of the background of why one would choose this approach.

I just wanted to highlight -- and in your packet that I understand was faxed to you, there are the detailed numbers. And we are prepared to go through those today, too.

But as an overview, basically we look at the system equity starting with the system assets. That includes the plant that is in-service and also the construction work in progress. Also, we look at the restricted cash that is identified in your financial

statements that are restricted for capital projects. In other words, that is money that is reserved for projects that are soon to be constructed.

We adjust or take out for accumulated depreciation. And we did use the information out of the 1999 financial statements. Also we take out the existing long-term debt because there is somewhat of an overlap philosophically between the ratepayers paying the debt and that being included in the fee.

And then we allocated the system equity down to source component, a treatment component, transmission and storage. So we tried to segregate those parts of the system equity that related to the specific functions of the water utility. So that created our system equity number.

Then we looked at our units of service. We look at the existing units and as of the end of your operating year, 1999, and also try to look at the

system utilization and -- to try to see how much available units of service you have by each of the functions, by source, and by treatment, transmission, and storage. And the amount of available capacity you have in each of those, each component, is different. So we tried to segregate those to bring equity into the fee.

Down at the bottom it says, "Existing units are then divided by the system utilization to come up with the total capacity." In other words, to try to develop how many units or, in this case, meters, actual meters you could serve based on your current source, your current treatment facilities, your current transmission, your current storage.

Then on the last segment there of that slide here, to develop the fee we basically look at the system equity and divide by this existing units of service to come up with the fee. The fee that our analysis came up with was \$5,450.

And that is per equivalent unit. And, in the

case of the Board of Water Supply, we identified that as a standard unit is the 5/8-by-3/4-inch meter.

Before I go any further, I wonder if there's any questions. We are covering a lot of stuff here so far.

MR. STARR: Did you make any attempt to look at the actual value of the inventory? Or did you simply take the cost and multiply it for a time factor or inflation factor?

MR. MULLINS: We looked again at the audited data out of last year's financial statements as far as the raw data. And then we adjusted it for a present value of those facilities.

MR. STARR: In other words, you didn't really look to see if it was worth \$200 million or less?

MR. MULLINS: No. It's a present value of those historical costs. And again, it gets back to the

philosophy of the buy-in in that that was the cost to create those facilities that you have now. So it did not look at the future as to what it would actually be to build a new facility.

MR. STARR: Yeah, that's what I am saying, because we have dealt -- because we have had to double our equity to increase this system by 28 percent. Does that tell you that the next time we have to add another 28 percent, we are going to have to double again so that really it's going to -- even in reality it's not going to cost us, you know, this much; it will cost us that much?

MR. MULLINS: In my experience, it has always been that the next increment of development has cost more irregardless of what your geographic situation may be or geological situation is, because you are always having to extend a limited resource further, either through -- in the case of water treatment, through additional treatment methodologies that may be several times more expensive than anything we are dealing with

now or different restrictions or different transmission mechanisms.

So as we extend limited natural resources, it's been my experience that the next ones always cost more.

MR. STARR: So this is conservative, these numbers would be conservative in a real world, then?

MR. MULLINS: Yes, sir. In my opinion, as far as methodologies that have been used in the water industry, the buy-in method is a more conservative approach because you are not trying to really recoup money, you are not trying to accumulate money for the next facility. You are just trying to get the new customers to share equally with the existing customers.

So it's a lower number.

MR. STARR: There is another mechanism that is sometimes used?

MR. MULLINS: Yes.

MR. STARR: Am I correct?

MR. MULLINS: Yes, sir.

MR. STARR: Would you guess that it would be more than double if we used that other mechanism? Or could you just kind of guess from your experience where that would be? We are not using that, I understood, but --

MR. MULLINS: Yes, sir. And if it's appropriate, Mr. Chairman and David, I could just go over the incremental method just while we are all here.

MR. MULLINS: Well, can we -- yes, Mr. Carvalho.

MR. CARVALHO: I have a question.

MR. MULLINS: Yes, sir.

MR. CARVALHO: The present value of the -- the value of the facilities is the present value. Is that the depreciated value?

MR. MULLINS: Yes, sir. We are trying to come up with the present value of the depreciated asset, yes, sir.

MR. CARVALHO: So that value is the depreciated value.

In raising that up to 100 -- have you raised that to 100 percent?

MR. MULLINS: We tried to use the depreciated value and then specifically use the Engineering News Record, being an independent source, to come up with the current cost factors to --

MR. CARVALHO: (unintelligible) -- cost factor?

MR. MULLINS: -- get the -- Yes, sir.

MR. CARVALHO: Now, what consideration, if any, have you given to the accumulated depreciated monies that have been accrued over a period of years by -- from which you then developed your current depreciated value?

MR. MULLINS: Basically, the accumulated depreciation has been -- those funds, I guess, specifically you are talking about have been accumulated from the ratepayers. And so that funding basically is coming through the rates. And one of the reasons I factored that out is to try to separate the kind of philosophical conflicts that are sometimes generated between, "If I pay for it in rates, am I also paying for it in this fee?" And we are trying to separate --

MR. CARVALHO: So, to pursue this, so the cost of depreciation was and is being factored into your cost per thousand gallons, right, rate costs?

MR. MULLINS: I believe the -- I am not sure if

the utility, in their user rate charges, is accumulating funds that depreciate or not.

MR. CARVALHO: Well, do you not, in your accounting system or bookkeeping system -- do you not expense your depreciation? Do you not consider that as a cost item in deciding on your rate structure?

MR. CRADDICK: For rates, yes.

MR. CARVALHO: Therefore, it is recovered. That cost of depreciation is factored into your rate structure, so it is being recovered from your rates. O.K.?

Now, when that amount of depreciation has been recovered, what has happened to that recovered money? Has it been set into a separate fund for depreciation accumulation? Or has it entered into the total expenditures of the Department?

You don't have to answer. I think I know the answer already.

MR. CRADDICK: Yeah, I think everybody does know the answer to that one.

MR. CARVALHO: So in effect, in effect, we are charging the ratepayers, yeah, for the value of the system in terms of that amount which is being depreciated. If it's \$2, it's \$2 that goes into the rate structure. And then those \$2 are entered into the picture or the sum total of income. And then that income is utilized for operational costs. And there are a whole variety of reasons.

Is that not correct?

MR. MULLINS: Yes.

MR. CARVALHO: It's spent.

MR. MULLINS: Yes.

MR. CARVALHO: O.K. It is spent and all -- so therefore, the depreciated costs is already being paid for through the rate structure. Follow me?

Then is the setting -- oh, yes, yes, yes. I am right.

And therefore, then, the setting of a meter charge, the increased amount, is for the full replacement cost, not the depreciated cost that's on the books, but which has already been paid for partially. But the full replacement cost, yeah, based on the depreciated amount raised to, yeah, the replacement.

In essence, the consumer, through the rate structure, yeah, is paying part of that cost because the funding of the rate structure is being used not to be put in a separate sinking fund for replacement purposes but is being used, yeah, for general operations.

And I am not saying whether that is good or bad. All I am saying is that that is what takes place. And this is what we need to keep in mind when we look at costs or what have you.

Another question, Mr. Chairman, if I may. It was alluded to earlier about the increase in rates and how the developer pays, yeah, the cost of these improvements. O.K.?

My understanding is that in the past -- and I do not know what the current practice is. But in the past the developer was able to recover part of his expenditures. O.K.? So when we make reference to the developer having provided these, yeah, entire costs or improvements, that's not true and that is not correct because a certain amount of it, yeah, is recoverable. So the net cost -- yes, sir --

MR. CRADDICK: No.

MR. CARVALHO: Yes, sir.

MR. CRADDICK: No. You are talking about distribution lines.

MR. CARVALHO: No, I am not talking distribution lines. I am talking about developments, O.K.?

And even if we were to limit ourselves to distribution lines, they do recover. Yes, they do.

MR. CRADDICK: Yeah, of course, yeah.

MR. CARVALHO: O.K. As part of the total cost of the development. You know that; I know that.

MR. CRADDICK: They do.

MR. CARVALHO: It would be so much easier, Mr. Craddick, as I have said before, if we just level

with each other so we know where we are coming from and we know what we are working with in order for us to be able to make the proper kind of a decision, O.K.?

So when we look at the costs -- and it affects us because of the meter fees, yeah, being asked for increases -- I think this is one factor we need to look at. And assuming -- just making a statement. But assuming -- without agreeing -- but assuming that we proceed with the proposal, would it be possible to spread out a period for payment of meter connections?

And the reason I say that, Mr. Chairman, is that if we are not careful, we are going to almost make it impossible for a guy to develop his lot and to build a home or whatever. \$5,000, close to 6,000 bucks up front. But over a period of time -- we take a lien, we can do a variety of things. We can do a variety of things, anything to make it possible.

Now, if I may, Mr. Chairman, the gentleman alluded to or the young lady alluded to the amount of

income that we have received because of the limitation of the number of meters. O.K.?

This limitation can almost be immediately removed, yeah, by a more realistic policy of granting of meters and making possible, yeah, additional income. And it is a problem, yeah, or a challenge for management of our resources.

Now, I think this is one thing we need to look at as we look at the totality. Perhaps at 500, yeah, can we increase closer to 700, 800 a year if we do a number of things along the line? I think it's possible.

So if we proceed on the concept that income to people or affordability to people has a limitation, therefore our responsibility is to look for ways, yeah, to reduce, if possible, that cost by a review of the goals and objectives, yeah, and the strategic plan that has been presented to us for greater efficiency,

greater means, yeah, of operations and cut costs, because we need to go to the Council, yeah, for approval for a variety of initial funds.

MR. CRADDICK: George, you wanted to make a comment?

MR. TENGAN: Mr. Chairman, I just would like to offer a comment for clarification.

Mr. Carvalho was talking about depreciation in terms of accounting on the accrual basis. When we prepare our budget and when we went for the rate, increase, we did that on a cash basis. We looked at our -- what we need in terms of the total amount of cash. And so depreciation wasn't included in that rate setting process.

MR. CARVALHO: You open the door for another question.

MR. TENGAN: I am sure.

MR. CARVALHO: If in fact you based your rates

on a cash basis and you prepare your annual reports, which are audited, in those audited reports do you have a depreciation charge?

MR. TENGAN: Yeah, that is why I was saying that --

MR. CARVALHO: No, no. In your audited report -- never mind the Council. In the audited report of operations --

MR. TENGAN: That is done on the accrual basis.

MR. CARVALHO: It is not an expense item?

MR. TENGAN: It is, but it --

MR. CARVALHO: All right.

MR. TENGAN: The financial statement that is prepared in the annual report is done on the accrual basis, whereas the rates are set on the cash basis.

MR. CARVALHO: That is correct.

MR. TENGAN: I just wanted to offer that for clarification.

MR. CARVALHO: Mr. Chairman, if I may, if you wish to start into clarifications, let's go at it.

O.K.? Let's go at it, because what you have done, you have combined two systems of bookkeeping, the cash basis for one purpose and the accrual basis for another. And you have used whichever one has suited your convenience for your particular method and your particular requirements at that time.

But getting back to the point, O.K.? If in your summary of expenditures -- and this has a bearing on what we charge for meters and what have you, and we need to get into these things. If in your financial summary of operations, yeah, you use the accrual system which includes depreciation, do you end up with a deficit? Or do you balance off? Or do you end up with

a surplus?

MR. TENGAN: In terms of cash?

MR. CARVALHO: In terms of your prepared budget based on the accrual system, what did it show?

MR. TENGAN: I believe we showed an operating loss. I don't have the financial statements right in front of me.

MR. CARVALHO: O.K. Now, that deficit is on paper, then.

MR. TENGAN: Correct.

MR. CARVALHO: Enough said.

MR. CRADDICK: Bob, one other thing, too.

In the Water System Development Fee rule, Section 16-10, there is a payment plan in there. And

if, you know, that needs to be worked on, we can work on that.

MR. CARVALHO: Yeah. I have no objections.

But I just wanted to clarify a couple of things.

That's all.

Because, Mr. Chairman, when I was chairman of the Finance Committee many years ago, we ran into this problem. And your distinguished father was a member of the House of Representatives Finance Committee. O.K.?

We came across departments where they brought budgets to the legislative body, and they presented the accrual, yeah, system which showed a deficit. But that is only a paper deficit because improvements had been paid for already, and then they are depreciating it, yeah. That had nothing to do with their cash, operating cash situation.

So we required every department then to present a cash budget. And all of a sudden you have moved,

yeah, from a deficit situation requiring tax increases to a surplus situation where you don't need tax increases.

CHAIRMAN TAKITANI: Mr. Starr.

MR. STARR: Well, first of all, I like the idea of bringing a more forward thinking financing package to the table. And I think that will help alleviate some of the pain that a new rate structure will bring.

My concern right now is that if we do feel we need this -- and I, for one, do feel we need some increase in the development fees -- I would like to make sure that we have all the possible ammunition to be able to, first of all, convince ourselves in our own heart that it's justified and then, secondly, to go out and enter the community, convince the public that it's justified, and also to convince the Councilmembers and the Administration that it's justified.

So I want to defer to Mr. Miskae. But before we finish, I would like to continue with where we were before with Mr. Mullins about trying to look at the other second mechanism and see if this is actually a conservative undertaking.

But let me defer to Mr. -- Brian.

CHAIRMAN TAKITANI: Mr. Miskae.

MR. MISKAE: Mr. Chairman, just a couple of questions.

CHAIRMAN TAKITANI: Go ahead.

MR. MISKAE: I think one of the major concerns that is going to be raised is the additional cost to first-time homebuyers, adding more money to it.

But my question, I guess, is one of arithmetic.

How many fixture units can be handled by a 5/8-inch meter?

MR. CRADDICK: 30. Well, maybe 32, but

rounding it off, 30.

MR. MISKAE: Because I am wondering if there might be some way of factoring in fixture units with respect to starter homes so that homes that had substantially less fixture units may be able to take advantage of a lower entry cost to the system so that they would not have the big hit on entry-level homes.

MR. CRADDICK: Quite frankly, that is what Honolulu does. And their fee is approximately \$3,000-some-odd dollars for a minimum 20 fixture units.

And what they have done --

MR. MISKAE: Maybe have a sliding fee, then. For the first 20 it's so much, and then it goes up from there, see what could be recovered from that.

But I am really concerned about the effect that it's going to have first-time home buyers.

MR. CRADDICK: Not wanting to intercede for Ellen there on what they might do, I am not quite sure what they did to get that based on fixture units.

But I suspect that Honolulu knows the number, average number of fixture units per meter size that they have. And I suspect maybe with that --

Ellen, with that IWR main program, can you come up with information like that on the fixture units per meter?

MS. KRAFTSOW: You mean --

MR. CRADDICK: The short story is we don't have that information right now, and --

MR. MISKAE: Mr. Chairman, I don't expect the Director to have that. But I would ask that to be considered in your deliberations.

CHAIRMAN TAKITANI: Very good point.

Anticipating Mr. Starr's comments here, I asked Mr. Mullins yesterday -- in fact, Mr. Quinn and Mr. Mullins -- to try to look at the cost-of-service method to see, at least on a ballpark basis, what kind of rate might be out there if we entertain the cost-of-service.

And I think Mr. Mullins has done some work on that.

MR. MULLINS: If I may, the other method is called incremental cost method. And basically the water industry took it from industries dealing with product costing. So it's the next increment -- you are paying for the next increment of use.

And some of the philosophical things are new customers pay for the cost of future or new facilities. So I get my service today, but I am paying for the next increment that is developed. Another way of saying this is that a new customer pays for the cost of the next unit of service that is going to be developed.

Historically, it comes up with a higher cost than using the buy-in because instead of being -- buying in even with all of the existing customers, I am getting to pay for that newest incremental element.

And with the Chairman's permission, and an ultimate number of caveats and assumptions, I want to go over -- we did this rather quickly -- what we identified, approximately \$110 million worth of improvements. And I am assuming some of those are approved by the Board and some aren't, so that's another assumption.

In the service area, the Board of Water Supply, we identified that much in improvements, I believe over a ten-year period. Is that the period assumption?

MR. CRADDICK: Yes.

MR. MULLINS: And they could be needed if development requests came in. We had assumed, based on

a historical -- using historical meter requests and new meter sets to come up with approximately 500 meters a year for this study that you have before you.

And so we said, O.K. What if it were a thousand meters a year? What if we really had to the credit and the Board was willing to go into debt and get money, however, to actually fulfill this huge capital improvements plan? That would be about an \$11,000 meter fee.

Now, with all those assumptions given in that number, and I know it's going to be on the front page of the paper tomorrow -- but anyway, it's just based on a number of assumptions and is very roughly prepared. But it is just to compare.

And it's not unusual -- what I have found in the other studies that we have done across the country, and it's just logical that it be not necessarily two times, but that it be higher, because instead of

sharing into the grants and the contributions that were contributed in the past, I am paying all this future cost or sharing in this future cost.

So it's just, by kind of a formula and by philosophy, a higher fee or a higher calculated fee.

CHAIRMAN TAKITANI: Mr. Starr.

MR. STARR: Having heard that, I feel a little bit better in that our \$5,450 number is a conservative number and that it's something that would -- is defensible.

And I, for one, would like to find some mechanism for us to proceed with this. I know that it has to go out to public hearing and it will have to go through the Council and the Administration before anything can happen.

But I would like to try to slowly move this thing forward -- not slowly, but as quickly as we can.

CHAIRMAN TAKITANI: Mr. Nakamura.

MR. NAKAMURA: One question.

I notice that the 5/8-inch meter, our cost is equal to or below Honolulu and higher than the other jurisdictions. But for a 1-inch meter, the cost is considerably lower than either O`ahu or Kaua'i.

Is there any particular reason you can identify for that? Is there some conscious decision on the part of the other communities to put a higher premium on larger meters?

MR. CRADDICK: Those are commercial meters, Howard, commercial, hotel, multifamily use.

MR. NAKAMURA: Well, nonresidential.

MR. CRADDICK: Yeah, nonresidential.

MR. NAKAMURA: Regardless, it still is significantly different.

MR. CRADDICK: Yeah.

MR. NAKAMURA: And I was just wondering what the reason for that is.

MR. MULLINS: Part of it is that in our -- we use the same methodology that we had used in 1992, basically, as far as the calculations and how we derived the fee. Our chart that had all the different fees on it, we used the production capacity differences between each.

For example, a 2-inch meter generates about eight times more demand on the system than a 3/4-inch meter. And I am using those figures. But it appears to me that some of the other counties reduced their fee. I mean, it was a policy difference because we started out lower, and then all of a sudden we are up

in the pack or below them.

And so there was some conscious decision made to change the fees. It's also hard to do. And I know how we calculated it before and how we calculated it this time. I am not sure what methodologies they used. I have -- this little stack of paper is just the other counties' methods. And there are a number of differences as you try to apply a meter of a particular size to a particular installation. It varies from the Maui Board of Water Supply schedule. So I think some of this is just policy based.

CHAIRMAN TAKITANI: Mr. Nobriga.

MR. STARR: I appreciate the study and the survey. And I prescribe to the school that numbers is numbers, and you can make numbers look as good or as bad as you want the report to be.

But the one single number that caught my

attention and would compel me to focus on reviewing our charges is the fact that, according to the study, the source that we are currently using as of May, 1999, we are occupying 99 percent of our source right now. It don't give us any room, any room.

MR. STARR: That is a good point. We desperately need additional new source.

I have been thinking for the last few minutes on whether we should subsidize the smaller unit, whether we should do what obviously Kaua'i and some of the other -- what Honolulu is doing, which is basically trying to keep the, you know, the 5/8-inch meter lower and increase the commercial meter sizes.

I can see there's some merit to that, and I can also see there might be some inequities to that. But I would be curious to hear if any other Board members have opinions on that.

MR. CARVALHO: Mr. Chairman, it's all bottom

line. Study it and see the implications. Reference has been made to the need for additional revenue, and that's very applicable to what we need to do.

But I have been here six months now, just about, and every single meeting that I have attended, attention has been focused, yeah, on the necessary areas where we need to do housecleaning in.

Now, how do we go to the general public with respect for any kind of an increase when we haven't cleaned our house? I can be in favor of an increase provided, however, we come, yeah, as a result of housecleaning. And this is not a criticism of anyone but rather an acknowledgement and a recognition of the problems and the challenges that have come before us. And we know that the present method of operation is inadequate to meet the kinds of things that we would like to accomplish in the months and years ahead.

And oftentimes it is the better part of

expediency, Mr. Chairman, to look for a scapegoat. And looking for a scapegoat many times, yeah, is appropriate, provided however we have done other things along the line. One cannot go without the other.

I hope I make myself real clear as to where I am coming from.

CHAIRMAN TAKITANI: Can I ask Mr. Quinn: Is that possibly a reason why Honolulu is so well funded and -- could it be a conscious decision to adjust their development fees towards the commercial areas?

MR. QUINN: I don't -- I can't answer that definitively. But my gut view is that their rates tend to be so far and above any of the others. I am talking about not the water system development fees but their general operating rates for water consumption. They have built up a huge cash reserve.

CHAIRMAN TAKITANI: Are you saying it's both rates and fees together that make that possible?

MR. QUINN: That would be my thoughts on the subject.

MR. CRADDICK: Bob, in Honolulu, for the most part, when a developer comes in, any water they need over 120,000 gallons, that developer must provide it themselves regardless of the cost.

So these fees end up getting applied to the smaller subdivisions just as -- and there's no question there is justification to charge the business higher because, you know, let's say you have got a restaurant with a 1-inch meter and a house with a 1-inch meter. Obviously the restaurant is going to use more water than the house with the 1-inch meter.

And I know the data that we have to show that is -- again, I will go back that IWR main program where we are developing information on specific to meter sizes, meter sizing. And I would have to say we have not developed that kind of information to where I would

feel comfortable recommending it to the Board. It would be -- I am not certain how long it would take. We possibly could do that.

But -- and, quite frankly, when I saw Honolulu, how they did it with fixture units, I was -- I said, hey, you know, why aren't we doing it this way?

The problem is we needed to know that last year in February when the Board implemented this study. And if we are going to differentially treat businesses and the individual single-family home on the development side, then is there a justification to keep that the same on the rate side?

So the whole picture ends up coming under suspicion if you are going to, on the development side, treat it differentially and on the rate side treat them the same.

So, right, it's been -- for better or worse, it's been the policy of this county to treat everybody

the same except ag. And if the Board wants to change that, granted under the Central Maui Rule and the -- well, not the West Maui Rule, but under the Central Maui Rule, all single-family housing was exempt from paying any fees.

The problem is that that's where most of the development is occurring. There are not big hotels or anything like that on the drawing boards. So you can transfer that and say, O.K., to get this 8-inch meter is going to be a million and a half, but if nobody comes in to ask for that meter, you are not going to get the money.

MR. HELM: You know, Bob, just a concern, yeah.

Given the county's unique geographic situation

-- I am the Moloka'i representative. And I have a concern for, you know -- on the part of the people I represent on Moloka'i.

So it seems to me like this fee would be an

embarrassment for me as a Board member if it was proposed to go in front of somebody like the Moloka'i people because, first of all, economically we are not as able as the island of Maui. And second, we don't have any water treatment plants, you know.

So I would like the Department somehow to investigate or look at whether Moloka'i can be developed -- the development fee can be looked at differently. And I don't know whether that's a standard that can be offset. But that would be my concern right now.

MR. STARR: Can I ask a question of Mr. Helm?

CHAIRMAN TAKITANI: Mr. Starr.

MR. STARR: Would he feel better about it if the 5/8-inch water meter, the single-family meter, were kept lower and then the commercial rates were made higher? Would that help?

MR. HELM: I think that that would be more in favor of a majority of people on Moloka'i.

MR. CRADDICK: Along with Moloka'i, keep in mind, Central Maui does not have surface water, so --

CHAIRMAN TAKITANI: Yeah.

MR. QUINN: Bob.

CHAIRMAN TAKITANI: Mr. Quinn.

MR. QUINN: Just for a point of information, I have -- a consultant has contacted me, and they are in the process of doing exactly the same discussions and studies that we are doing on the island of Kaua'i and the Big Island. And they are looking at the entire rate structures, not just the ones for development. So there are several efforts going on.

So we are all in the same boat, I guess. I

don't know if those studies are still going on, though.

CHAIRMAN TAKITANI: Mr. Craddick, can you --

what is the timeline to get this before the Council?

Because we are --

MR. CRADDICK: It would be -- at the time the

Board has a proposal that they could go public with

sharing, it would be, say, a good 45 days -- 30 days'

notice and another, say, couple of weeks for a meeting.

Then once -- and then, assuming the Board passes it at

that point, after that 45 days, it then goes on to the

Mayor for 15 days and on to the Council. And they have

up to 45 days to act on it.

So 60 plus 45, approximately 100 days from the

time the Board says they are ready to move on it. So

100 days is about three and a half months or so. And

you are looking at February, March, April, into May.

CHAIRMAN TAKITANI: What is about the date when

politics starts to --

MR. CRADDICK: Oh, I will leave that up to the group here.

MR. STARR: April Fools Day.

CHAIRMAN TAKITANI: Mr. Nobriga.

MR. NOBRIGA: Until we dispense with Rule 3-1, the appeals rule, the other rules that we supposed to go to public hearing on, I -- I am interested in this -- hearing the rest of Mr. Mullins' presentation. And I would recommend we revisit this topic in maybe March or April.

MR. CARVALHO: I agree.

CHAIRMAN TAKITANI: I think that is a prudent approach. I am just trying to get a realistic -- you know, trying to get it through the Council is going to be difficult very soon here.

MR. CARVALHO: Mr. Chairman, if this proposal

goes to the Council without its ducks in line, what are your percentages or your chances of success?

CHAIRMAN TAKITANI: Yes, sir.

MR. CARVALHO: Zilch.

CHAIRMAN TAKITANI: Mr. Starr.

MR. STARR: I would --

MR. CARVALHO: I think Mr. Nobriga's suggestion has great merit.

MR. STARR: I would be willing to go along with that. However, I do feel we all should be thinking about this and gathering any other ideas and data and perhaps a really, really good presentation can be slowly developed by staff and so that it -- when the time comes it can be -- we can bring it back before us and then tweak it a little bit and go out to public hearing with something that really looks good and is

very well thought out.

MR. NAKAMURA: I think also that, since we are talking about relatively significant increases, obviously when we go to the public or to the Council, they are going to say, O.K., you are going to raise this money. But what are you going to do with it? Where is your plans for spending it?

And we say, you know, we need the money. But -- which we do. But I don't know that that's going to satisfy everyone.

CHAIRMAN TAKITANI: Very good point.

MR. NOBRIGA: Do our housecleaning first, and then go and ask for a -- put on our addition to the house.

CHAIRMAN TAKITANI: Ms. Kraftsow.

MS. KRAFTSOW: I don't know if this is going to

help for this go-around, but as far as the fixture units question goes, I have been curious about that, too, because (unintelligible) units above a certain amount.

And so some years ago I talked to Charlie Jencks about it because their inspectors, when they go out, their inspection fees are partly based on the number of units. And so they take all that data. In fact, at that time it was just like going into storage and never being used again.

And we talked about maybe getting some handheld calculators so that the guys in the field would enter it into those and then download it to us so that we could use it to track for conservation and demand forecasting and stuff. And he was open to discussing it further.

At the time money was so low it never became a priority. But there is that possibility of getting better history and data. If we had it, the model of

the building, we would be able to use. But we don't have it very well.

CHAIRMAN TAKITANI: Mr. Craddick.

MR. CRADDICK: I believe, if we stuck to residential units, we could come up with numbers for fixture units without much problem, average fixture units for like, say, 5/8-, 3/4- and 1-inch, because I don't know as there would be too many houses that are beyond 1-inch meters in size. I don't think there's very many.

So, you know, if the Board saw that -- I mean it's a commendable thing to go that way.

CHAIRMAN TAKITANI: Mr. Mullins.

MR. MULLINS: I just wanted to comment on the fixture units.

David and I had discussed this when I got the comparative data from the other counties. I have some meter data from a couple of meter manufacturers on the smaller meters like the 5/8- and the 3/4-inch meters. And so to come up with a fixture-unit basis on those smaller residential meters, the use is more predictable and there are some industry standards we could use to come up with a fee per fixture units, I would say, on the residential, particularly on the smaller meters.

When you get into the larger meters, the capacity to draw on the system increases so much that the fixture-unit count becomes kind of moot. But it wouldn't be a lot of -- it wouldn't be additional work to create a schedule for fixture units on those smaller residential type cases.

CHAIRMAN TAKITANI: How much more of a presentation do you have, Mr. Mullins?

MR. MULLINS: I can just answer any of your questions. I am prepared to go through each

calculation if you want. I just mainly want to answer your questions.

CHAIRMAN TAKITANI: Why don't we take a break to 2:15, gather up all the questions we have?

(A short recess was taken.)

CHAIRMAN TAKITANI: We will reconvene the Board of Water Supply regular meeting. We will go back to Item B, discussion and possible action regarding the Water System Development Fee proposal.

Any other discussion from the Board?

MR. CRADDICK: I just have a question.

Does the Board think it's too late in the year to proceed with anything?

MR. NOBRIGA: Yes.

MR. CARVALHO: Too late? It won't work together. I agree. Adjourn.

MR. NAKAMURA: Mr. Chairman, maybe we can put this off until perhaps later in the year until such time that we have a clear direction of where we are going and some of the programs that we have been talking about so that we can review how we can relate the fees to our programs.

MR. CARVALHO: Second.

CHAIRMAN TAKITANI: Moved by Mr. Nakamura, seconded by Mr. Carvalho to delay this Water System Development Fee proposal to a later date, at which time some these matters will be clearer.

All in those in favor signify by saying "aye."

VOICES: Aye.

CHAIRMAN TAKITANI: Opposed "nay."

(No response.)

CHAIRMAN TAKITANI: The ayes have it.

the matter will be deferred.

We will now go to Item C, discussion regarding
the audit management letter for Fiscal Year 1999.

MR. NOBRIGA: Move to defer that discussion,
Mr. Chairman.

MR. CARVALHO: Second, to defer.

CHAIRMAN TAKITANI: Mr. Quinn, did you have something?

MR. QUINN: If it's been moved to defer --

CHAIRMAN TAKITANI: Moved and seconded.

MR. QUINN: I am prepared to discuss it if the Board wants to.

CHAIRMAN TAKITANI: If not, any other discussion?

(No response.)

CHAIRMAN TAKITANI: If not, all in those in favor of deferring the audit management letter signify by saying "aye."

VOICES: Aye.

CHAIRMAN TAKITANI: Opposed "nay."

(No response.)

CHAIRMAN TAKITANI: The ayes have it. We will defer the audit management letter.

Discussion and possible action regarding fluoridation --

MR. NOBRIGA: I think Mr. Quinn wanted to say something.

MR. QUINN: I'm sorry.

This might or might not be taken up by the Council prior to our next meeting. I don't know, I haven't seen any versions. But they do schedule -- this is -- they hire the auditor. And so in which case we would have to go before the Council.

MR. CARVALHO: Go ahead.

CHAIRMAN TAKITANI: There wasn't anything significant?

MR. QUINN: No, no. I just wanted to let the Board know.

CHAIRMAN TAKITANI: Discussion and possible action regarding the fluoridation of the water supply.

MR. NOBRIGA: Move to defer action, Mr. Chairman.

CHAIRMAN TAKITANI: It's been moved by

Mr. Nobriga to defer.

MR. NAKAMURA: Second.

CHAIRMAN TAKITANI: Seconded by Mr. Nakamura.

All in those in favor signify by saying "aye."

VOICES: Aye.

CHAIRMAN TAKITANI: Opposed "nay."

(No response.)

CHAIRMAN TAKITANI: The ayes have it. That
matter is deferred.

Item E, discussion and possible action
regarding Complaint for Declaratory Judgment, Civil No.
00-1-0001(1).

MR. FUKUNAGA: I am going to ask for a deferral on this, Mr. Chairman.

Our office was served with a Complaint of Basil Millan, the defendants being Mr. Craddick, in his official as well as his individual capacity; the Department of Water Supply and the Board of Water Supply. This matter has been assigned to a litigator in our office. I will be assisting that litigator.

But we are still reviewing the Complaint and are still formulating our -- how we are going to respond to the Complaint at this time. And I believe at the next meeting I am going to request that the litigator be present to answer any questions that the Board may have and to set out to the Board what our proposed plan of action will be and our response to the Complaint.

CHAIRMAN TAKITANI: Who is the litigator?

MR. FUKUSHIMA: The complainant in this case is Mr. Basil Millan.

CHAIRMAN TAKITANI: The litigator.

MR. FUKUSHIMA: Oh, it's Robert Rivera.

CHAIRMAN TAKITANI: So we will defer this item
until Mr. Fukushima comes back, possibly at the next meeting.

Mr. FUKUSHIMA: Yes. Thank you.

CHAIRMAN TAKITANI: By consensus.

We will go to Item F, update on Water
Department issues discussed at public meetings.

MR. CRADDICK: There's one Council Public Works
& Water Committee meeting again on tax credits for
conservation. And I think basically they deferred on
that, trying to get the fire bureau in there.

And the other item that they took up was the

interpretation of the rule-making authority of the Board. And for members don't know, prior to 1994 when the Board passed a rule, it went to the Mayor. And the Mayor could camp on these things for months at a time and did. And then in '94 the rule was changed to where the Mayor had basically 15 days, could approve it, disapprove it, or do nothing. And in 15 days it went on to the Council.

And the Council could then either agree with the Mayor with a simple majority or overrule the Mayor with a supermajority. And then there is a last sentence that said "or do nothing and the rule is deemed passed."

And in the past I think corp counsel has said that if the Mayor did something, the Council had to do something. And maybe I can leave it up to Howard there what the corp counsel -- the way they draw it now on that last sentence.

MR. FUKUSHIMA: Well, the problem -- this potential problem arose when the Mayor would disapprove a proposed rule. It would then go down to the Council. And, as David said, the Council could, by a supermajority, overrule the Mayor or by simple majority agree with the Mayor.

The problem arose when the Council did nothing.

The rule states that -- excuse me. The Charter provision states that if the Council took no action within the 45 days, then the proposal would be deemed approved. There was some question as to what the proposal meant. After studying and review of that particular issue, it was clear that the legislative intent was that the proposal was the Board's proposal.

So in the event that the Council took no action, the Board's proposal would be deemed approved. There was a previous opinion from our office that said that -- that indicated that that proposal was in essence the Mayor's action. However, we do not believe at this time that that particular provision and the

word "proposal" means the Mayor's action. Otherwise, it would have said "the Mayor's action."

So therefore there are two ways that a proposed rule could be approved: If the Mayor approved it and the Council approved it, or if the Mayor disapproved it and the Council took no action.

That particular matter or that particular issue was made clear to the Committee, the Public Works & Water Committee. And I believe that they have recommended to the full committee that this matter be filed.

MR. CRADDICK: That's right.

MR. CARVALHO: Next.

CHAIRMAN TAKITANI: Is that it?

MR. FUKUSHIMA: That's it.

CHAIRMAN TAKITANI: O.K. Any other discussion?

MR. CARVALHO: Mr. Chairman, I move to adjourn.

CHAIRMAN TAKITANI: No, no. We are going to recess.

MR. CARVALHO: Oh, that's right. Yes, yes. Tonight.

CHAIRMAN TAKITANI: We are going to recess
until 6 o'clock tonight.

MR. CARVALHO: Move to recess.

CHAIRMAN TAKITANI: That's fine.

MR. CARVALHO: And tonight is merely informational.

(The meeting was recessed at 2:34 p.m.)

"By Water All Things Find Life"

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