

# **WATER, INFRASTRUCTURE, AND TRANSPORTATION COMMITTEE**

**Council of the County of Maui**

## **MINUTES**

**January 6, 2020**

**Council Chamber, 8<sup>th</sup> Floor**

**CONVENE:** 1:34 p.m.

**PRESENT:** Councilmember Yuki Lei K. Sugimura, Chair  
Councilmember Alice L. Lee, Vice-Chair (out 2:30 p.m.)  
Councilmember Riki Hokama (out 3:00 p.m.)  
Councilmember Tasha Kama  
Councilmember Kelly Takaya King (in 2:10 p.m., out 3:00 p.m.,  
in 3:27 p.m.)  
Councilmember Michael J. Molina  
Councilmember Tamara Paltin  
Councilmember Shane M. Sinenci

**EXCUSED:** Councilmember Keani N.W. Rawlins-Fernandez

**STAFF:** Chester Carson, Legislative Analyst  
Shelly Espeleta, Legislative Analyst  
Rayna Yap, Committee Secretary

Zhantell Lindo, Council Aide, Molokai Council Office (via  
telephone conference bridge)

Denise Fernandez, Council Aide, Lanai Council Office (via  
telephone conference bridge)

Mavis Oliveira-Medeiros, Council Aide, Hana Council Office (via  
telephone conference bridge)

Don Atay, Executive Assistant for Councilmember Shane M.  
Sinenci

**ADMIN.:** Jeffrey Pearson, Director, Department of Water Supply  
Eva Blumenstein, Planning Program Manager, Department of  
Water Supply  
Jennifer Oana, Deputy Corporation Counsel, Department of the  
Corporation Counsel

**OTHERS:** Jasee Law  
Clare Apana  
Susan Vickery  
Lucienne de Naie  
Kaniloa Kamaunu  
(3) additional attendees

**PRESS:** *Akaku: Maui Community Television, Inc.*

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CHAIR SUGIMURA: . . .*(gavel)*. . . Good afternoon, everyone. Welcome to the Water, Infrastructure, and Transportation Committee. Today is January 6. It is now 1:34 p.m. Welcome, everyone, for our first meeting of this Committee in the new year. My name is Yuki Lei Sugimura. I am the Chair of this Committee. Alice Lee is the Vice-Chair and new Chair. Alice Lee, thank you for being here.

VICE-CHAIR LEE: Hi.

CHAIR SUGIMURA: Riki Hokama from Lanai is here. And we have Shane Sinenci. Mr. Molina from Upcountry. We share the area.

COUNCILMEMBER MOLINA: Aloha, Madam Chair.

CHAIR SUGIMURA: Aloha. Tamara Paltin.

COUNCILMEMBER PALTIN: Aloha `auinala, Chair.

CHAIR SUGIMURA: Aloha. And Tasha Kama.

COUNCILMEMBER KAMA: Hau`oli makahiki hou, Chair.

CHAIR SUGIMURA: Ah, happy new year. So we have, from the Department, Eva Blumenstein, which is the Planning Program Manager from Water. And thank you very much for working on this Water Use and Development Plan, which is on our agenda, as well as your team. It's a huge undertaking. Jeff Pearson, from Water, our Director, welcome. And we have Jennifer Oana from Corp. Counsel. And I suppose that every time we take up Water you'll be my Corp. Counsel person, are you Corp. Counsel all the time?

MS. OANA: For this Committee.

CHAIR SUGIMURA: For this Committee?

MS. OANA: Uh-huh.

CHAIR SUGIMURA: Oh, very good. Thank you. Staff, we have Chester Carson, he's my Legislative Analyst. And also—is it called supervisor?—Shelly Espeleta is in the back there. Rayna Yap is Committee Secretary. And from our District Offices . . . we have not connected with . . . who's not connected?

MR. CARSON: Everyone's there. Lanai is just sketchy and kind of . . .

CHAIR SUGIMURA: Oh, Lanai. We're having trouble with connections, okay. Today we have one item on our agenda, which is WIT-22(1), which is Presentation on the Maui Island

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Water Use and Development Plan from the Department of Water Supply. We have any testimony in the Chamber? We have one testifier. Please identify yourself and come to the podium.

**. . .BEGIN PUBLIC TESTIMONY. . .**

MR. LAW: Hello, everybody out there in TV land. My name is Jasee Law from Kula. It is an honor to testify at the first meeting of the WIT Committee. And Yuki Lei, when is your birthday? Well, if it is in, under the sign of Aquarius then it's appropriate that you would be the Chair of the Committee because Aquarius is the water bearer. So, whenever I say...whenever I think of Aquarius I think of that song the dawning of the Age of Aquarius. Aloha.

CHAIR SUGIMURA: Oh. Thank you, Mr. Law. Testifiers from the District Office, Hana Office, Mavis Medeiros, do you have anyone wishing to testify? Hana?

MS. OLIVEIRA-MEDEIROS: Aloha, Chair, this is Mavis from the Hana District Office. There is nobody here waiting to testify.

CHAIR SUGIMURA: Thank you, happy new year. Molokai Office, Zhantell Lindo, anyone there to testify?

MS. LINDO: Aloha, Chair, this is Zhan at the Molokai District Office and there are no testifiers.

CHAIR SUGIMURA: Thank you. I wonder if we have connection with Lanai. Denise Fernandez?

MS. FERNANDEZ: Good afternoon, Chair, this is Denise Fernandez at the Lanai Office and there are no testifiers.

CHAIR SUGIMURA: Thank you. So, no testifiers from the District Office. Do we have any more testifiers in the Chamber? Yes? Please come forward.

MS. APANA: Hi, good afternoon everyone. I have been trying to understand this Water Use and Development Plan and find it difficult to reconcile the figures that are coming out that I see, and the one that I'm thinking of is the water usage per household. And it is as I thought in Wailuku, Kahului, we don't use as much water because we've been trained not to water our yards and we've got lots of brown yards. In South Maui, they...I often see sprinklers going off during the day, and they have their own, you know, the inline, underground systems of irrigation. So, the estimated use per household as I see it is 433 gallons approximately for Wailuku, Kahului, and 1,233 approximately for someone in South Maui. I don't know why there's such a disparity, but I believe that that should be remedied and something should be done about that if those are the true figures. And as we look at like 3,000 more homes being built in Makena, how many more gallons of water is that? What I find with this Water Use

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and Development Plan to be the weakest point is that there's a whole list of recommendations for saving water, but there's no plan for implementation. And I...this is what I testified to last time and I gave you something from 2008 which was a plan for implementing conservation measures, and it was for specifically South Maui. And I have shared that with some people from South Maui and they are interested in going forward with trying to get some implementation. What happens is, there's a report at the end of the year as dictated by the community plan, and usually it says, well, this didn't get met, or this, you know. There's no fixing what the problem. And I would like to suggest that we have actually committees formed...like I would like to do my district, Wailuku, Kahului. I would like to be part of a committee that would look at how can we implement some of these things. How can we have some goals actually for decreasing water usage for fixing things that, like, leaks that we see on the street. How can we make our communities much more responsible? And then the Water Department can do what they can do, which is to measure how well we're doing. And I would like to suggest that perhaps Council could set up these committees. I would say that I would love to be part of that for Wailuku, even though I'm really busy. I know Aha Moku Water Committee would like to be part of that. And, you know, we have a start there but --

CHAIR SUGIMURA: Thank you.

MS. APANA: --we're willing to take on the responsibility and so are the people I've talked to in South Maui. So, I hope that you will look at that as a possibility because it doesn't seem like the actual action plan is forthcoming. Thank you very much.

CHAIR SUGIMURA: Thank you. Any questions? Ms. Paltin?

MS. APANA: Yes?

COUNCILMEMBER PALTIN: Thank you, Chair. Thank you, Ms. Apana, for being here. I just wanted to clarify. I'm not sure you were referring to another, different plan. What was that other plan that you were...

MS. APANA: Oh, the other plan was actually brought forward in 2008 and it was for water conservation in South Maui. I believe I gave a copy the last time I testified on the Water Use and Development Plan, but I can look it up again and send that to you. I thought it had a very good strategy. At least it had a strategy for how neighborhoods, people, businesses, could implement conservation of water. And I think that South Maui goes unchecked and that is absolutely wrong.

COUNCILMEMBER PALTIN: So, was...is that the one that was proposed by Michelle Anderson? Is that what you're talking about?

MS. APANA: Yes, yes, that's the one I turned in last time, 2008 and it was proposed by Michelle Anderson when she was the Chair of the Water Committee and it was never implemented. And so I think that would be a place that we could actually start, and I

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actually have taken it to people in South Maui to look at if it is feasible for them to do this.

COUNCILMEMBER PALTIN: So, are you kind of talking about integrating that into this plan? Or just however...

MS. APANA: I spoke to Eva about it and she said that she saw the plan and she put the information into this plan, but what's missing is an actual plan. The suggestions, the ideas for decreasing water usage are there, but there is no plan. Whereas in 2008, there was an actual plan for implementation. And so --

CHAIR SUGIMURA: Thank you.

MS. APANA: --that is really what I'm saying.

COUNCILMEMBER PALTIN: Monitoring and enforcement? You mean, like monitoring and enforcement as well? Or...

MS. APANA: Monitoring, enforcement, setting goals, having the communities be part of it, and so...

COUNCILMEMBER PALTIN: Thank you.

CHAIR SUGIMURA: Thank you.

MS. APANA: Thank you.

CHAIR SUGIMURA: Thank you. Mr. Sinenci, you have a question?

COUNCILMEMBER SINENCI: Thank you, Chair. I just had a clarification for Ms. Apana. So, are you saying that some of the average water use per family are, they're high? They're high amounts from the last report, 2008?

MS. APANA: You know what, I don't know what the --

COUNCILMEMBER SINENCI: The current one.

MS. APANA: --difference is between the two. I just know that in Wailuku, we use about 400. And in South Maui, they're allowed to use almost 1,300 and that seems like a huge difference per household. Especially as you're planning for the future.

COUNCILMEMBER SINENCI: Okay. And, because on this one, it's in one of the slides, it said Wailuku: 343 gallons per, I guess, million gallons per day. And Kihei, 732 gallons per day, millions of gallons per day. So...

MS. APANA: And it goes all the way up to 12...I think, 43, something like that.

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COUNCILMEMBER SINENCI: So, your question is about where is the conservation of daily water use in certain areas?

MS. APANA: My question is are those figures correct? And if they're correct, well, we got to do something about that. And, two, can we all get better?

COUNCILMEMBER SINENCI: Okay.

MS. APANA: And that's going to take some work and I think there are people who are willing to put that into form if the Water Department cannot.

COUNCILMEMBER SINENCI: Thank you.

CHAIR SUGIMURA: Thank you.

COUNCILMEMBER SINENCI: Thank you, Chair.

CHAIR SUGIMURA: So, just for clarification, Members, this Friday Council meeting, the items for this Committee, Water, Infrastructure, and Transportation, will be referred. So right now we have no referral until this happens. Today is a 7(B), which is information only. So, this document will come forward. Just so you know. Thank you.

MS. APANA: Thank you. Thank you.

CHAIR SUGIMURA: Thank you.

MS. APANA: I hope you will ask the question.

COUNCILMEMBER KAMA: Question. Chair?

CHAIR SUGIMURA: Next?

UNIDENTIFIED SPEAKER: . . . *(inaudible)* . . .

CHAIR SUGIMURA: Oh, yes? Oh, I'm sorry. Yes, Tasha Kama?

COUNCILMEMBER KAMA: Thank you. So, your question actually was the disparities between the different communities that are using different amounts of water. And so, you're asking whether or not that is correct, the amount of usage of water? And you're also asking why the disparity?

MS. APANA: Yes.

COUNCILMEMBER KAMA: Okay.

MS. APANA: And what can we all do about it?

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COUNCILMEMBER KAMA: Okay.

MS. APANA: Yeah.

COUNCILMEMBER KAMA: Thank you.

MS. APANA: Thank you.

CHAIR SUGIMURA: Thank you. Ms. Lee?

VICE-CHAIR LEE: None for the testifier --

CHAIR SUGIMURA: Okay. Thank you, Ms. Apana.

VICE-CHAIR LEE: --but I just thought --

CHAIR SUGIMURA: Okay.

VICE-CHAIR LEE: --maybe the Director of Water might have some kind of explanation?

CHAIR SUGIMURA: Oh, okay. Maybe we can take it up when we finish the --

VICE-CHAIR LEE: Oh.

CHAIR SUGIMURA: --testifiers, yeah.

VICE-CHAIR LEE: Oh, okay.

CHAIR SUGIMURA: And then we can do that.

VICE-CHAIR LEE: All right.

CHAIR SUGIMURA: Any other questions for this testimony section? Okay, I have one more testifier, Susan...is it Vickery? Oh, we have somebody else besides Jasee Law?

MS. VICKERY: Hi, good afternoon. My name's Susan Vickery from Wailuku. All I have to say about water basically, I don't know what the regional plan is. I haven't read up on this lately. I'm interested to hear the update. But just do the right thing and divert...undivert all the water. I don't care. Everybody will get plenty, it's just under the control of mindless people that need to release the flow all around the island.

CHAIR SUGIMURA: Thank you.

MS. VICKERY: I don't care where it is. Here, regional, long-term, I mean, rural. I'm not sure what the regional plan's all about, but just do the right thing. Thank you and happy new year.

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CHAIR SUGIMURA: Thank you for your support. No other testifiers? Is there a Lucienne de Naie? Lucienne de Naie is the last testifier signed up.

MS. de NAIE: Aloha and happy new year to everybody. My name is Lucienne de Naie. I'm testifying as just an individual who's been tracking the Water Use and Development Plan, oh, I don't know, since 2004. Since whenever this iteration started way back when. And was happy to get the slideshow, I think it's trying to clarify what some of the key issues are. And I did note that one of the key issues was what is going to happen with the Na Wai `Eha decision at the Water Commission. And of course there has been a settlement that two of the main parties, not all the parties, but two of the main parties, Mahi Pono, who are the owners of about 3,700 acres of agricultural land, and Hui o Na Wai `Eha, who are one of the plaintiffs who brought the action to the Water Commission have reached a settlement. And I don't know if you folks have a copy of that or if the Water Department does, but they should because that kind of changes the playing field in terms of water demand for a segment of the Wailuku sector. Not the whole Wailuku sector because part of the Wailuku sector includes Kahului Aquifer and I think a portion of Paia Aquifer too. So, those will be getting water from East Maui, and there's, you know, a different regime there. But certainly I think the figures would need to be amended to reflect that new information. One of the key things is that the parties agreed that waste would be minimized and no more than 5 percent of the amount used would be allowed for waste. Whereas over on the East Maui side, the water usage figures for instance of going to Central Maui account for waste for 22.7 percent. So, this is like a big shift. Also, the amount used per acre is reduced from the 3,400 gallons that's in the Water Use and Development Plan and is used as a basis in our Water Use and Development Plan, the Ag Water Use and Development Plan uses a 3,400 gallon per day per acre, what they call a water duty, how much water you would use for each acre of agriculture. And instead 2,500 gallons per day is what Mahi Pono has pledged to use. So, there's going to be less demand on the stream waters which should be reflected in the overall non-potable water use. And also there's some other agreements that have to do with developments. For instance, in Makena I'm not sure what figures are...oops, am I up at 3 minutes or just 30 seconds left?

CHAIR SUGIMURA: Finish up.

MS. de NAIE: Okay, thank you. Anyway --

CHAIR SUGIMURA: Like a minute left.

MS. de NAIE: Thank you. The Makena development which had, you know, estimated up to 3,000 units up until the recent years now has a settlement with Sierra Club and others that they would build no more than 1,100 units. So, I'm not sure if those figures get publicly factored into the demand side of things, but if not, they should. And with recent meetings with Makena Resort, they said they probably wouldn't even build the whole 1,100 units. Wailea 670, which is 1,150 units has their own private



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water supply which of course should be reflected in the plan, but it's not water that the County needs to provide. It would come from private wells.

CHAIR SUGIMURA: Thank you --

MS. de NAIE: So --

CHAIR SUGIMURA: --can you finish off, please?

MS. de NAIE: --anyway --

CHAIR SUGIMURA: You're done?

MS. de NAIE: --I'm just hoping that these figures get sorted out as we look at the real reality of what the demand is as the plan evolves into its final form.

CHAIR SUGIMURA: Thank you.

MS. de NAIE: Thank you.

CHAIR SUGIMURA: Thank you. Any questions? Ms. Paltin?

COUNCILMEMBER PALTIN: Thank you, Chair, just a question for you and the Members. Given Ms. de Naie's knowledge of the Na Wai `Eha case and Sierra Club cases, will it be possible to designate her as a resource person on those issues?

CHAIR SUGIMURA: When it comes up.

COUNCILMEMBER PALTIN: In the Water Use and Development Plan?

CHAIR SUGIMURA: Yeah, when it comes up we could ask her.

COUNCILMEMBER PALTIN: Okay.

MS. de NAIE: Okay, if I just knew the date I could try to make myself --

CHAIR SUGIMURA: Yeah.

MS. de NAIE: --available. Yeah.

CHAIR SUGIMURA: But thank you.

MS. de NAIE: Sure. Thank you all.

CHAIR SUGIMURA: Thank you. Alright, any other questions? Seeing none, at this time then I'm going to close public testimony. Members...

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MS. YAP: Just one second.

CHAIR SUGIMURA: We have somebody else here to testify? We have one more testifier coming to the podium.

MR. KAMAUNU: Aloha mai kakou. Kainalu Kamaunu, ko'u inoa, mokupuni o Maui. Moku Wailuku, ahupua'a Waihe'e. And so, kala mai, I'm not fully briefed on what the discussion is today but we just met with the Mayor this morning for the aha, yeah, then we were talking about the water. So, my claim has been the same and some of the people on the Council remember. I came here many years ago claiming my rights as kuleana. That stance has never changed. Kuleana of course is if you don't understand for our people, we no own nothing. Neither did the aliis. They were responsible to take care. So, when you hear the words malama aina, yeah, malama aina was the responsibility that the aliis were given. From whatever supreme being whether you want to, you know, whatever supreme being you want to. But they knew that they owed themselves to a greater power and it was their responsibility. So, no more such thing as ownership in Hawaii, but responsibility, kuleana. So, with that being said, they didn't have the power to take care for themselves so the la hui, maka'ainana, come to the lands and they helped them to fulfill that kuleana, to malama aina, and to make sure that the system works properly for everyone. So, that being said, everyone was incorporated for the mere purpose that the people themselves took care of what was theirs from their ahupua'a, 'ilis, and to their mokus. So, when the mahele comes across to share more of that responsibility, they gave and divested the rights to certain parts of the properties that they had in control and they shared that with their people. So, don't mistake mahele of being division of lands, but more sharing the responsibilities and giving those people the responsibilities to now take upon themselves to malama aina. Because for us, aina is a living breathing person. Because in the Kumulipo, Papa/Wakea gives birth to aina, so aina cannot be considered a property while aina considered kupuna. And by right it is our stewardship to malama aina. So, we need to get all these things together on how our people work. With that being said, 1830 or 1839, Bill of Rights for the Kingdom of Hawaii, in the Bill of Rights, it recognized three groups of people: the mo'i, yeah, the aliis, and the maka'ainana. Each represented, each having one-third interest, vested interest in Hawaii. That means on all resources, all lands, we had one-third interest; that has not changed. We were never naturalized to the United States. With that being said, our rights are affirmed and considered to be affirmed. So, when we talk about water, the real issue is who has the interest of water in Hawaii? It's the maka'ainana, kanaka maoli, yeah. It is our birthright and yet we do not...we are never brought into this discussion. We are left out. We have large landowners, developers, we have all people with money interest that come to the table which they call, or which the County calls as stakeholders. But yet, the ones with the vested rights for the concerns of water never be brought to the table. And so, my thing is you want to continue this discussion, then the true people who actually maka'ainana, keiki o ka `aina, yeah, kanaka maoli, we the ones got to come to the table because it's our rights that are being traversed upon. Mahalo.

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CHAIR SUGIMURA: Thank you. Any questions, Members? Seeing none, thank you for being here.

MR. KAMAUNU: You're welcome.

CHAIR SUGIMURA: Any other testifiers in the Chamber? Seeing none, Members, I'm going to close public testimony.

COUNCILMEMBERS: No objections.

**. . .END OF PUBLIC TESTIMONY. . .**

CHAIR SUGIMURA: Thank you. Public testimony is now closed.

**ITEM WIT-22(1): PRESENTATION ON THE MAUI ISLAND WATER USE AND DEVELOPMENT PLAN (DEPARTMENT OF WATER SUPPLY) (RULE 7(B))**

CHAIR SUGIMURA: Thank you everybody for being here. In the...when we had the public testimony, we had some questions that came up. So, at the...let me go through my introduction, Mr. Pearson and Eva, and then if you could answer some of the questions that came up and we'll do it. Just as a summary for where we are, Members, Ms. Lee was the Chair of this Committee and at that time Water and Infrastructure, two presentations were made by the Department, August 19<sup>th</sup> as well as on September the 6<sup>th</sup>, I'm sorry, September the 30<sup>th</sup>, presenting the first two sections of the Water Use and Development Plan. Today we have Wailuku Aquifer sector area, which we're taking up, which is part 3 and it's Section 14 officially in this thick volumes of the Wailuku, on the Maui Island, Wailuku...Water Use and Development Plan. Sorry. So, we're going to be taking up Wailuku, although, some of the questions that...or comments that were made by the testifiers really were on a broader perspective throughout the island. But we are going to narrowly focus on the section presented by the Department. On March 22<sup>nd</sup> when the document was sent to us by Mayor Victorino from the Department of Water Supply, we had the two Committee meetings and then on September 30<sup>th</sup>, wisely we had...or December...we had a resolution that was adopted on September the 6<sup>th</sup> by the Committee to extend the deadline to December 31<sup>st</sup> so that we could finish this Water Use and Development Plan, which the Council approves. So right now, that is our deadline that we're trying to reach towards. And then on December 27<sup>th</sup> by Resolution 19-214, this Committee was established, of which now I'm the Chair and it's a nine-member committee; and I think before it was a seven-member committee. So, today we're going to have a presentation from the Department to take us through this Wailuku Aquifer section area. And before we do that, I wonder if Mr. Pearson would talk about the question that came up regarding the water use, the residential areas that I think Ms. Lee wanted to have you talk about. So, if you could give us some facts and answer the questions.

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MR. PEARSON: So, thank you, Chair Yuki Lei Sugimura and Vice-Chair Alice Lee. Glad to be here. A little bit different flavor for the Committee now, but hopefully we can give you some good information. Eva might be...Eva's going to make the presentation today, Eva Blumenstein, who is the Division Head for our Water Resource and Planning Section. She's been laboring over this, she calls, it's her baby, but she's ready to let it go. But she's been laboring on this for many years and it's a heck of a good document and I've witnessed it also at Water Commission and they're very proud of the efforts that Eva's been doing. And to answer your question now, generally everyone in this room likely knows that a lot of the water use by household is irrigation. And when you're in drier areas such as Kihei, Makena, you're going to have higher use of irrigation as opposed to Wailuku or Hana, the wetter areas. So, that's the simple answer, not the specific gallon per household per day answer, but there's just a higher use of irrigation. Eva can talk about we're looking at conservation measures, we're putting a bill forward that's going to come in front of you for conservation, and better conservation. So, she'll go over a bunch of this today and I think it's...would be probably better if...or if it's okay with the Chair, as we move through the slides if questions can be brought forth as opposed to waiting for the full presentation. But, of course, that's up to you how you want to --

CHAIR SUGIMURA: Okay.

MR. PEARSON: --run the show.

CHAIR SUGIMURA: So, is that what you would prefer?

MR. PEARSON: Yeah.

CHAIR SUGIMURA: Okay.

MR. PEARSON: That would --

CHAIR SUGIMURA: Okay, so...

MR. PEARSON: --I think that would help the Council, the Committee.

CHAIR SUGIMURA: So, I think you answered the question that one of the testifiers had, right? Higher use and it's, just kind of makes sense.

MR. PEARSON: Yeah, and again, I think Eva's going to get into better detail, but that's the simplest way to start the answer is that, you know, irrigation is counted. Usually there's some areas that have dual irrigation where you have non-potable for irrigation. But most areas use the same drinking water for irrigation, which is not always the best way to utilize drinking water.

COUNCILMEMBER KAMA: Yeah.

MR. PEARSON: But, of course, drier areas have higher irrigation.

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CHAIR SUGIMURA: Okay. Thank you. That makes sense. So, just kind of a history background. Lanai Water Use and Development Plan got adopted in 2011, Molokai Water Use and Development Plan will be worked on, updated, following this plan for Maui Island being adopted. So, that's in the works for the future. And on...for Maui Water Use and Development Plan, the original was approved by CWRM in 1990. In August 2012, CWRM accepted a revised project description to comprehensively address all water resources public and private water systems, and public trust purposes, which is for this document that we're looking at today. So, we got a preliminary go ahead I guess to proceed, but CWRM has the ultimate say after the Council approves. And there are a total of six district aquifer sector areas that we'll be reviewing. Today is the first of the six, so I appreciate that, you know, you taking it and simplifying it so all of us could understand. So, with that Eva, you want to take over and do your PowerPoint presentation?

MS. BLUMENSTEIN (*PowerPoint Presentation*): Thank you, Chair and Vice-Chair, for having me here again. Yeah, so this should be my third presentation of the actual draft plan. And just what Chair went over, we did the part one, introduction and technical approach, and the last meeting we did talk about water conservation in some detail, but I will touch on that today again because that's one of those island-wide strategies and recommendations. And today we're doing the first aquifer sector, which is Wailuku, and you can see that the orange highlighted on the map is one of the six aquifer sectors. We do them by aquifer sector because it's required by State Water Code that we do the Water Use and Development Plan by hydrologic units. So, that's not something I just made up. And these are the topics I'm going to address today for the Wailuku Aquifer Sector. Just briefly a reminder what the Water Use and Development Plan is and is not, it's to guide and advise Council and State Water Commission in planning, managing, developing use and allocating the island's water resources. So it's a guide, it's not the law. It should provide the guidance for budget, such as the...not just the Department of Water Supply, but other County agencies capital improvement programs and budgets. It is not the CIP program, but it should be the primary guidance for that. So, this would also guide using public funds for Department of Environmental Management and Public Works, et cetera. And even though I've been sort of in charge of putting together this plan, it is the Island Water Use and Development Plan, it's not the Department's master plan. So, it's not...it may not be the most favorable strategies for the Department of Water Supply because it has to balance all the other water users and water needs. So, I have my other hat on when I present this. For Wailuku Aquifer Sector, some of the key issues or concerns that the public brought up. We had 25 or so public meetings over 2016 and 2017, can be summarized as to have adequate long-term resource supply and meet projected demand while maintaining watershed stream and aquifer sustainability and replenishment. It's kind of like the overall theme. And some of the specific concerns are listed below. Streamflow restoration, cultural use of stream waters, lack of information on aquifers in regions that are not designated by CWRM as groundwater management areas. So, in this case we're only talking about Iao Aquifer being designated as a groundwater management area where CWRM has jurisdiction. But we have a couple of the other aquifer systems too, I'll show you a map pretty soon. There

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are concerns about saltwater intrusion or increasing chlorides in aquifers. Community wanted to make sure that we maximize use of alternative sources of water that's not ground or surface water but recycled water, rain water, grey water, et cetera, and to mitigate water transport out of the region. Because this plans, we sort of initiated or reignited this in 2015, a lot of things happened after 2015 and we still have an ongoing Na Wai `Eha contested case. So, one of the major uncertainties or constraints in proposing strategies for water allocations is we don't have a final decisions from CWRM on how much water needs to remain in the streams, or water use permits that have to be allocated to individual well owners, because this is a designated groundwater management area. You can only get water allocated by water use permits. So, what we are using is the latest available recommendation from the hearing officers, the hearing officer from CWRM that was issued in November 2017. And as CWRM comes up with final decision, we can adapt and adjust. And I should clarify that also strategies will be adjusted if the new data or the new decision affect the strategies. But if it doesn't, then there may not be...

CHAIR SUGIMURA: Could I interrupt a second? So, to answer the question that came up from a testifier and Ms. Paltin then, so we're not going to be talking about the Na Wai `Eha or this decision in this document, right? Because it's not part of this document as approved by CWRM?

MS. BLUMENSTEIN: Well, so we have summarized the latest recommendation by CWRM that was November 2017. That is the basis for the recommended strategies for Wailuku Aquifer Sector. And things have happened after that such as Mahi Pono purchasing land. Although we have data and we've done analysis on the side, that happened after this was provided to the Board of Water Supply and we submitted the draft plan to this body so we cannot really make any changes once we have a published report.

CHAIR SUGIMURA: Okay. Thanks for that.

MS. BLUMENSTEIN: But I want to note that too. So, for Na Wai `Eha and even the mediated settlement that took place just this November, it does change some of the data or the projected demand for Mahi Pono versus what we knew from A&B. It does not really change the strategy because the allocation of surface water for Na Wai `Eha is done by CWRM, and that supersedes any recommendations we would have. So, water use permits, allocations, and instream flow standards are established by CWRM only so that does not change the strategies of this plan.

CHAIR SUGIMURA: Okay. I just wanted that clarification.

COUNCILMEMBER SINENCI: Question.

CHAIR SUGIMURA: Ms. Paltin? Oh, sorry...next, Mr. Sinenci?

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COUNCILMEMBER SINENCI: I just have a quick question. So, Mr. Kamaunu, he mentioned that there were some kuleana rights to water. Is that...I was wondering if that was part of the Na Wai `Eha case as well?

MS. BLUMENSTEIN: Yeah, so the purpose of establishing instream flow standards or how much water needs to remain in the stream is to protect kuleana rights and instream needs, traditional cultural uses --

COUNCILMEMBER SINENCI: Okay.

MS. BLUMENSTEIN: --of stream water. So, that is...I mean, we discuss that in this document and how we see whether it satisfied those needs or not, but the plan cannot supersede CWRM establishing of those IFS or instream flow standards. I mean, that is the mechanism for making sure sufficient water remain in the streams.

COUNCILMEMBER SINENCI: Okay. Thank you.

CHAIR SUGIMURA: Okay.

COUNCILMEMBER SINENCI: Thank you, Chair.

CHAIR SUGIMURA: Thank you. Ms. Paltin?

COUNCILMEMBER PALTIN: Thank you, Chair. I just wanted to clarify one of the statements that you had just made that once you publish this report, it can't be changed. So, basically you're just telling us it and even if the information is outdated, we got to go with it?

MS. BLUMENSTEIN: No, I'm saying at the point where we the Department submitted the draft report to you, that we cannot go back and make some changes on our individual document. Of course, you are free to suggest changes and adjustments or supplements. But I'm saying the Department, once we submit it, by County Code that report to you, we cannot really fiddle around with it.

COUNCILMEMBER PALTIN: So, then if Na Wai Eha and Mahi Pono have an updated settlement agreement, we could then update your report with that information?

MS. BLUMENSTEIN: Yes.

COUNCILMEMBER PALTIN: Oh, okay.

MS. BLUMENSTEIN: And what I wanted to just clarify that I think it makes sense to do that when it...if it impacts the strategy. If it's just...I mean, new data, there's continuously new water use data, new end uses, new reporters, water use reporters because we have a lot of data inconsistencies or missing data. But to the point where it impacts the recommended strategy so we would allocate water to different end use or different amount, then certainly it makes sense to make a . . . *(inaudible)* . . .

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COUNCILMEMBER PALTIN: And then I just have one other question.

CHAIR SUGIMURA: Okay.

COUNCILMEMBER PALTIN: So this morning we had the climate change meeting, Committee meeting. And MEMA, Dr. Joyce was saying how there's, you know, the trend is less rainfall so less groundwater aquifer recharge. And it looks like this data is from like 2014, 2015, 2016, through 2035, but it doesn't look like it's taken into effect, taken into consideration the changing climate and the less water resources in the aquifers and streams that Dr. Joyce was talking about.

MS. BLUMENSTEIN: Chair?

CHAIR SUGIMURA: Yes.

MS. BLUMENSTEIN: So, it's true the planning horizon has to be consistent with the Maui Island Plan, so it's a 20-year planning horizon, that's through 2035. However, the strategies that are proposed do consider climate change. And a lot of the strategies are specifically to diversify from conventional water resources, looking at decreased recharge of groundwater, longer droughts, et cetera. So, even though the data, the water use data and projections go through 2035, recommended strategies we'll consider...it may not be prudent to develop up to sustainable yield in this one aquifer if we project that this is going to be a drier region in the recent, then that would be kind of wasted capital investment.

COUNCILMEMBER PALTIN: So, you're saying like the projections and the water amounts are just there but they're not something to make decisions on because it's within the realm of CWRM?

MS. BLUMENSTEIN: No, I'm coming to this right now actually. So, for example, talking about sustainable yield. We don't know proposed changes to sustainable yield that's established by law, by CWRM, so that's sort of like the legal limit. But under groundwater sort of constraints or conservations is water quality such as chlorides. We see rising chlorides or rising transition zone in an aquifer over time, that's sort of an additional constraint to the sustainable yield of that particular aquifer system. Climate change impact, if we know that recharge is projected to decrease for Wailuku Aquifer Sector under long-term droughts, projected recharge decrease is 29 percent. Even though that's not within this 20-year planning horizon we consider that in proposing strategies. So, not maximizing development of the aquifer, but looking elsewhere to both diversify source development and looking at alternative water resources that's not ground and surface water. So, it's certainly...so climate change impacts are a factor in recommending strategies within the sort of conventionally assessment of available water resources. So, the groundwater, just what I mentioned and also designated management areas. That means water use permits are a limiting factor. So, even if you have the sustainable yield, the water use permits really determine how much water can be withdrawn from that particular aquifer system. So,



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that's Iao Aquifer that's designated as a groundwater management area. For surface water, we know what streamflow is under median conditions, average conditions, under drought conditions, and some constraints will be of course interim instream flow standards that are established by CWRM and also climate change impacts. We don't have streamflow projections for this century, but we know reduced rainfall will likely impact stream flows, we would have more flasher streamflow, longer droughts, meaning conditions that are more low flow conditions. So, that's considered too in proposing strategies that include surface water use. So...

CHAIR SUGIMURA: So, before you go to your next slide --

MS. BLUMENSTEIN: Yeah.

CHAIR SUGIMURA: --sorry, I'd like to welcome Ms. King who, I guess you've been sitting there for about five minutes, so sorry about that.

COUNCILMEMBER KING: That's okay. Yeah, thank you. I just...I had a call with one of our Congressional Delegation offices.

CHAIR SUGIMURA: Welcome. Thank you, please continue.

COUNCILMEMBER PALTIN: One more question.

CHAIR SUGIMURA: Oh.

COUNCILMEMBER PALTIN: Sorry.

CHAIR SUGIMURA: Yes?

COUNCILMEMBER PALTIN: So, does it also take into effect like what we're kind of noticing a little bit on the West Side is like those, I think they call it a rain bombs where like you know within one to two hours you get a lot of rain and it can't be sustained and it just, like, turns into flash floods. Is that also part of the climate change strategy that's taken into effect?

MS. BLUMENSTEIN: Yeah, so what we have from projections on primarily for groundwater recharge and not so much for streamflow is the more frequent storm events that may be more intense than in the past. So, that...so, we don't have numbers exactly what does that mean in decreased runoff and increased turbulence in streams, but we have some ideas of the reduced recharge to groundwater over the end of century, so . . .

COUNCILMEMBER PALTIN: Yeah. I mean, like, 'cause...so the effect on like say an annual count rain gauge, your inches might be similar, but the difference would be like within a 3-hour period you get 12 inches of rain, whereas that 12 inches in previous years might have been spread out over 2 months or 3 months. And so, in calculating that data it has a different type of effect on the aquifer recharge and like that is that taken into account?

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MS. BLUMENSTEIN: Yeah, so, I mean...we are relying on Pacific Region, US Geological Survey who've done these studies looking at climate dynamic statistic climate projections through the end of century, and they really just provide us the projected decrease or increase in rainfall and groundwater recharge. As I said, we don't really have that for surface water for streamflow. So, what you're saying is one of those factors that determines the decrease or increase in recharge. Is that more, you have more turbidity, and more violent rainfall events than...

COUNCILMEMBER PALTIN: Localized?

MS. BLUMENSTEIN: Yes.

COUNCILMEMBER PALTIN: Yeah.

MS. BLUMENSTEIN: So, and we have that information by aquifer system, which is pretty unique. And it has not been done everywhere but they, Pacific Region, USGS actually did that for Maui Island, so we have fairly good information that we certainly take into consideration. Specifically not looking just blindly at what is sustainable yield, but what are those potential constraints over the long-term.

COUNCILMEMBER PALTIN: Thank you.

CHAIR SUGIMURA: Thank you. Ms. Kama?

COUNCILMEMBER KAMA: Thank you. I was just thinking about what Mr. Kamaunu was telling us today and I was just trying to figure out how does the Department weigh the Water Use Plan alongside with Native Hawaiian water rights?

CHAIR SUGIMURA: Ms. Blumenstein or...

COUNCILMEMBER KAMA: Because the plan is water use, right? Not necessarily water rights.

MS. BLUMENSTEIN: So, the Water Use and Development Plan should guide Commission on Water Resource Management in their decisions of reserving water in allocating water for traditional culture purposes. But, again, CWRM has sole jurisdiction in establishing instream flow standards on how much water needs to remain in the stream to protect those rights. So, the Water Use and Development Plan can't really come up with a different strategy, that would be in violation of CWRM's decision or IIFS. So, that's why we're, you know, we're looking at the 2017 hearing officer's recommendation as the guidance and once IFS and surface water use permits and appurtenant rights are finalized and there's an adopted decision, if that changes the strategies of what we see whether there's sufficient water for the different end-uses, then we'll need to adapt and adjust to that decision.

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COUNCILMEMBER KAMA: So, are Native Hawaiian kuleana right users consulted when you folks do your plan?

MS. BLUMENSTEIN: We did quite a bit of outreach and, I mean, I know we, you know, didn't agree with how adequate it was or not but we did meet with all the water representatives of the 14 moku. We tried to reach out a couple of more times to really get some feedback primarily on the Ka Pa`akai Analysis too so that we would have some ideas if there are impacts on traditional and customary uses. So, that's sort of not a finished chapter, I think that's going to be an ongoing process and part, and the idea of that analysis is to have an ongoing consultation as if you propose use of a new water resource, that there is some consultation with the local experts and the moku or the traditional users in that area. So...

COUNCILMEMBER KAMA: I'm bring this is up cause it was troubling me was that Mr. Kamaunu said that they're not at the table. So, apparently everybody else is at the table except those that should be, and I just want to be clear that I want to make sure that the right people are at the right table. They could be at somebody else's table and you all could be at a different table too, but let's make sure we're all at the same table. Thank you.

CHAIR SUGIMURA: Thank you. You know, I think was the second presentation you did it had all the Ka Pa`akai --

COUNCILMEMBER KAMA: Yeah.

CHAIR SUGIMURA: --and the organizations that participated in discussion. So, quite a large outreach.

COUNCILMEMBER KAMA: Yeah.

CHAIR SUGIMURA: Yeah, but I hear you. Okay.

COUNCILMEMBER KAMA: Because Mr. Kamaunu's not going to stop coming.

CHAIR SUGIMURA: Yeah.

COUNCILMEMBER KAMA: He will continue to be here until he dies. So, we got to make sure that at least it's on record, because those issues are not going to go away.

CHAIR SUGIMURA: Yes.

COUNCILMEMBER KAMA: And if we keep pretending like they don't exist or keep glossing over them, we're going to be surprised at the end that we should've taken care of it in the beginning. So, thank you.

CHAIR SUGIMURA: Thank you.

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COUNCILMEMBER KAMA: Thank you, Chair.

CHAIR SUGIMURA: Okay. Continue. Thank you very much, Ms. Kama.

MS. BLUMENSTEIN: Okay, so, I'm not...I wasn't going to really get into detail of each slide. I assume you have read some of this. But basically the resource assessment is assessing what the available conventional and alternative resources are. So, not just groundwater and stream water, but also stormwater, recycled water, maybe ambient rainfall, rainwater catchment can be a viable strategy in some areas. So, for Wailuku Aquifer Sector, there are four aquifer systems, yeah? Kahakuloa in the north to Waikapu in the south. And you have very specific data on the streams, perennial streams, stream flow during various conditions in the plan, which is summarized here. Then we have to look at the current water use under different, the different water end use types, and different water resources. This is the requirement from CWRM, and again our base here is 2014 since we reignited this process in 2015. We did add...it was pretty poor water use reporting that year so we did incorporate some from 2015 and 2016, but this is just a snapshot of what it looked like at that time. So, on the left is reported groundwater pumpage, and you can just see that big green part of the pie chart is for municipal use, so that's drinking water purposes, Department of Water Supply, other private purveyors. And the small orange part of the slice is other irrigation or ag. And the chart, pie chart on the right is surface water diversion, and it's just the opposite. Pretty much all of surface water diverted was for agriculture and irrigation purposes, and a small slice, just about a million gallons a day was for municipal uses. And the tables on the bottom break down the pumpage and diversions by aquifer system and by stream. So, really important for this aquifer sector. It is closely intertwined with the Central Aquifer Sector, so that's Kahului all the way down to Kihei and Makena. That's both because you have water resources that are shared naturally and mechanically between those areas, and most of the water provided through that area is through the Department of Water Supply's Central Maui System, so that spans from Waihee in the north out to Paia, Kuau, and all the way down to Makena. So, most of the water resources as this table shows originates in Wailuku Aquifer Sector, while a lot of that, or at least half of that is used in the Central Aquifer Sector because the infrastructure, the population centers are in the drier coastal regions and that's sort of what we're stuck with. And that distribution of where the infrastructure is, isn't really changed in the Water Use and Development Plan because that is consistent with the population growth and directed growth that was established in the Maui Island Plan. So, the map shows you the blue...it's the distribution...the Water Department's Central Maui System. Then you see the little orange there of available recycled water distribution in Kihei. And you can see the little purple dots, all of those dots are the wells, and all of them are in the Wailuku Aquifer Sector.

CHAIR SUGIMURA: Oh.

COUNCILMEMBER SINENCI: Just had a quick question.

CHAIR SUGIMURA: Question from Mr. Sinenci.

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COUNCILMEMBER SINENCI: Yeah, so the, just for clarification, all of the blue is...begins at the what, Wailuku Aquifer and it stretches all the way out through Central, it looks like almost to Haiku, Paia as well?

MS. BLUMENSTEIN: Yes, that...the blue is the Water Department's distribution system, the Central Maui Distribution System. So, it stretches from Waihee and then northwest out to Paia, Kuau in the east, and then all through Kahului out and down to Wailea, Makena. Well, 95 percent of the water source for the system originates in the Wailuku Aquifer Sector. So, it's really important. I mean, we're talking about mitigating transport and where the water sources originating and this is the current distribution system.

CHAIR SUGIMURA: Ms. Paltin, do you have a question?

COUNCILMEMBER PALTIN: Yeah, thank you, Chair. Just, the ASEA, is that aquifer?

MS. BLUMENSTEIN: Aquifer sector area.

COUNCILMEMBER PALTIN: Oh.

MS. BLUMENSTEIN: Sorry.

COUNCILMEMBER PALTIN: Okay.

MS. BLUMENSTEIN: Yeah, so, aquifer sector, these are the six aquifer sectors. So, Wailuku Aquifer Sector is what we're dealing with now. And Central Aquifer Sector is the brown, which includes Kahului up to Haiku and all the way down to Makena.

CHAIR SUGIMURA: Okay.

COUNCILMEMBER KING: Okay. Can I just . . .

CHAIR SUGIMURA: Oh, Ms. King?

COUNCILMEMBER KING: Thank you. Just a clarification, so that's all one sector, that, well it's...it looks orange on your, or brown --

MS. BLUMENSTEIN: Oh, yeah.

COUNCILMEMBER KING: --on ours it just looks like a continuation of the purple, so maybe the colors didn't come out correctly but, so the sector on the right-hand side, that's all considered one sector? Kihei, Wailuku...

MS. BLUMENSTEIN: Oh, yeah.

COUNCILMEMBER KING: Oh.

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MS. BLUMENSTEIN: Go back to the main.

COUNCILMEMBER KING: Yeah.

MS. BLUMENSTEIN: This is...so, here it shows in orange. So, Wailuku Aquifer Sector hatched yellow --

COUNCILMEMBER KING: Okay.

MS. BLUMENSTEIN: --I guess, not orange.

MR. PEARSON: It's orange on mine.

MS. BLUMENSTEIN: Yeah.

COUNCILMEMBER KING: Okay.

MS. BLUMENSTEIN: I don't know the colors . . .

COUNCILMEMBER KING: Is there some reason you don't separate out like South Maui or Upcountry area?

COUNCILMEMBER KAMA: It's all Central.

MS. BLUMENSTEIN: South Maui Community Plan?

COUNCILMEMBER KING: Well, for the...just its own sector, aquifer sector.

MS. BLUMENSTEIN: Well, so, the aquifer sector for Central Maui, when we and when I get into demand projections and planned growth, we are considering the community plan growth and the needs of South Maui as part, because it's part of the Department's Central Maui system. We can't really separate that out of the Wailuku Aquifer Sector.

COUNCILMEMBER KING: Okay. So, they can't actually make decisions that...I mean, everything affects that whole sector. Is that kind of...

MS. BLUMENSTEIN: I'm sorry, say it again?

COUNCILMEMBER KING: The decisions that are made for the community plan have to fit within whatever's happening in that entire sector?

MS. BLUMENSTEIN: Well, we had to sort of make a puzzle where we look at the demand projections as based on population growth rates, and they vary by community plan. So, for Wailuku and Central, you have multiple community plans that are overlapping one or multiple aquifer sectors. So, we would literally calculate the population growth rates and sort of if we have most of the Kihei, Makena Community Plan serving the

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Central Maui system, then that population growth rate is what we assume the water use will grow for water in that area. So --

COUNCILMEMBER KING: Okay.

MS. BLUMENSTEIN: --for Central Aquifer Sector that's primarily served by Wailuku community, by Wailuku Aquifer Sector, the water use, the growth, the population growth and the water use is primarily determined based on the growth in Kihei and Makena because that's the highest...there's a much higher growth rate than Wailuku Community Plan for example.

COUNCILMEMBER KING: Okay. And do you take into consideration then daily visitor count as far as water use?

MS. BLUMENSTEIN: So, Maui Island Plan looked at both the resident population and the visitor growth and because the resident population growth rate is higher than the visitor growth rate, we used the conservatively the higher of the two. So, it does account...so, it's based on water use today, which includes visitors and residents, but the growth rate is for the resident's growth rate which is higher than the visitor growth rate.

COUNCILMEMBER KING: Okay. But the visitors are included in the . . .

MS. BLUMENSTEIN: Yes.

COUNCILMEMBER KING: Okay.

MS. BLUMENSTEIN: They are represented in that overall water use.

COUNCILMEMBER KING: Okay. Thank you.

CHAIR SUGIMURA: Ms. Kama?

COUNCILMEMBER KAMA: Thank you. So, how do you determine the growth rate on the visitors side? Is that determined by the counts that come in every day or is that determined by the amount of hotel rooms we have, or the amount of rooms coming up? Or how is that determined?

MS. BLUMENSTEIN: So, we just adapt the growth rates that were determined in the Maui Island Plan in the 2014 Socioeconomic Forecast. So, there are different factors that determine growth rate for resident versus visitor. We don't change that or anything. I mean, we need to be consistent with the Maui Island Plan. So, however method was used in the Socioeconomic Forecast, we adapt to that and we use the growth rate for the community plan that is most appropriate for the water system. In this case, it's the Kihei-Makena Community Plan.

COUNCILMEMBER KAMA: Okay. Thank you, Chair.

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CHAIR SUGIMURA: Okay, thank you. Proceed. Oh, one more question.

COUNCILMEMBER SINENCI: Sorry, real quick. So, it looks like there's about 12 DWS wells in the Wailuku Sector that supply . . .

MS. BLUMENSTEIN: It's probably just poorly shown there. No there's more like --

COUNCILMEMBER SINENCI: The purple dots?

MS. BLUMENSTEIN: --16.

COUNCILMEMBER SINENCI: Sixteen wells?

MS. BLUMENSTEIN: Director is counting. Yeah, we don't show them all. So, through...there's approximately 4 in Waihee Aquifer, 10 or 12 in Iao, and Maui Lani, and then there's 3 in Kahului aquifer. So --

COUNCILMEMBER SINENCI: Oh, okay.

MS. BLUMENSTEIN: --almost 20 in it.

COUNCILMEMBER SINENCI: Thank you.

CHAIR SUGIMURA: Mr. Hokama?

COUNCILMEMBER HOKAMA: Chair, thanks. Just a few questions so I can redefine my parameters and make it tighter. So, again, Chair, yeah, we're just on the Wailuku Sector today so I understand. So, in the Wailuku Sector, how many wells need to be developed to hit the demand numbers that we projecting? Or, we don't need to drill more wells, we just need a transmission improvement?

CHAIR SUGIMURA: Department?

MS. BLUMENSTEIN: Yeah, I'm coming to the strategies in a few slides here --

COUNCILMEMBER HOKAMA: Oh, okay.

MS. BLUMENSTEIN: --but, so it's sort of a, it's not a short answer--

COUNCILMEMBER HOKAMA: Am I jumping the gun for you?

MS. BLUMENSTEIN: --because it's not within the aquifer sector. Some of the recommendations are alternative sources and sources outside Wailuku Aquifer Sector.

COUNCILMEMBER HOKAMA: Which means then we may or may not hit those supply numbers then. Yeah, and the reason I'm asking, Chair, yeah, is because for me we've



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talked about it but we still skirt around it. I need to be something more definite on what is going to be our position as we understand our Hawaiian community and what is the appurtenant right. What is it? We talk about it but nobody seems to know what it is. Yeah, we going talk about it because that's important, appurtenant rights. Okay, so, I'm going to push the button. Are we clear on our understanding of what is appurtenant rights for policy people like ourselves as it is with the Department for them to administer and operate as well as our Hawaiian community who gets impacted by access or quantity of water? So, I just need to have an understanding how that's going to fit for us to make the decisions on aquifer sectors.

CHAIR SUGIMURA: Good question. Mister...you look like you have an answer.

MR. PEARSON: Appurtenant rights, I'm not going to try to...there's more than one definition or definition of course, so I'm not going to try to come with the answer for you right now. But that's also as Eva has been deferring a lot of these, this information to the Commission on Water Resource Management, and appurtenant rights, you know, defer...not defer but are related to surface water and streamflow. A lot of her strategies that are going to be coming up, most of it does not look too much at the surface water and the streamflow for potable water, we have some diversions right now, you know, for Iao Treatment Plant. But to work on those definitions and to use and to respect the traditional and customary practices, a lot of that as Eva has said earlier today comes under the purview of the Water Commission. And, of course, the surface water. As far as well goes, wells go, it's correlative rights.

COUNCILMEMBER HOKAMA: And, Director, I...we understand --

MR. PEARSON: Yeah.

COUNCILMEMBER HOKAMA: --the role of the Commission. My thing is, while we're required to send to the Commission a product for them to review and approve, right?

MR. PEARSON: Yes.

COUNCILMEMBER HOKAMA: So, we need to know what is in their mind is appurtenant rights.

MR. PEARSON: Correct.

COUNCILMEMBER HOKAMA: So, for us to give them a good document --

COUNCILMEMBER KAMA: Yes.

COUNCILMEMBER HOKAMA: --that makes sense for our various communities in this County. So, I am just trying to take away the grey as much as possible. Because I think we all would like to come to a sort of general understanding what is this appurtenant right we're going to address and resolve.

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CHAIR SUGIMURA: Mr. Pearson?

MR. PEARSON: Really, to change the subject a little bit, when you're dealing with wells and groundwater, the Commission looks at correlative rights, which is somewhat similar. If I have a well, let's say at 500-foot elevation, and someone drills a well at 800-foot elevation, then you know that generally the groundwater flows from mauka to makai. That person at 800-foot elevation has to respect my rights at 500-foot elevation to use water. So they can use a certain amount, but they can't restrict my rights to use the water also. So, that's correlative rights. But again, you're right and I agree that we have to get better definition --

COUNCILMEMBER KAMA: Yeah.

MR. PEARSON: --to make it clear where we're going with our document.

COUNCILMEMBER KAMA: Yeah.

COUNCILMEMBER HOKAMA: Because I don't think CWRM or the State component has truly defined it either yet for your use either, has it, Director? Have they come up with a version or a draft understanding of what they see as the appurtenant rights?

MR. PEARSON: Oh, 173C Water Rules has some definitions there also.

COUNCILMEMBER HOKAMA: Yeah, Jeff, if you could, yeah--

MR. PEARSON: Oh, excuse me.

COUNCILMEMBER HOKAMA: --if you could restate it for...

MR. PEARSON: Yeah, 174C --

MS. BLUMENSTEIN: C.

MR. PEARSON: --also has some definitions there. I don't have that in front of me though.

COUNCILMEMBER HOKAMA: Okay, that's a State water rule?

MR. PEARSON: That's the Water Code.

COUNCILMEMBER HOKAMA: Oh.

MR. PEARSON: State Water Code.

COUNCILMEMBER HOKAMA: Okay.

CHAIR SUGIMURA: So, can I...oh, go ahead, Jennifer.

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MS. OANA: In addition, if you want to look at the Water Use and Development Plan on Page 8, Eva puts a good appurtenant rights section and it kind of defines what appurtenant rights are. You're right, though, it is kind of unclear. The Courts have not specifically told us what appurtenant rights mean. There's some cases that kind of talked about it but didn't really clearly clarify it for all of us. But in general appurtenant water rights are rights to use of water utilized by parcels of land at the time of their original conversion into fee simple lands, which is when the land allotted by the 1848 Mahele was confirmed to the awardee by the Land Use Commission, or when the Royal Patent was issued. But you are right, there is some things that need to be clarified with regard to the definition of appurtenant rights.

COUNCILMEMBER HOKAMA: And just one --

CHAIR SUGIMURA: Mister...

COUNCILMEMBER HOKAMA: --quick tight follow up, Chair, yeah. Is that something this Committee would try to address through our language or narrative of our development plan? Our use plan?

MS. OANA: With regard to the definition, I think we'll have to wait for the courts to decide on that, or the Legislature.

COUNCILMEMBER HOKAMA: We could be doing an exercise of futility then.

COUNCILMEMBER KAMA: Yeah.

CHAIR SUGIMURA: Yes. Ms. Blumenstein?

MS. BLUMENSTEIN: I just want to add to that, we have...really grateful the CWRM staff have gone through this draft plan with a fine-toothed comb and provided feedback. So, we're at least confident that CWRM staff has given us the feedback there's something we have misinterpreted, they looked at our strategies. So, once it gets to CWRM for final approval, it shouldn't be a complete surprise. We know that their staff has at least reviewed it thoroughly including the definitions that we've provided in Section 1.

COUNCILMEMBER HOKAMA: Okay, thank you.

CHAIR SUGIMURA: So, I guess in other words you're saying that we are being guided correctly and with the information that we have we're fine as far as the appurtenant rights?

MS. BLUMENSTEIN: So far so good anyway.

CHAIR SUGIMURA: Okay.

COUNCILMEMBER SINENCI: Chair?

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CHAIR SUGIMURA: And CWRM has the ultimate say when this document goes before them?

COUNCILMEMBER SINENCI: Chair?

CHAIR SUGIMURA: Good questions, Mr. Hokama. Anybody else? Mr. Sinenci?

COUNCILMEMBER SINENCI: Thank you, Chair. I just wanted to make a real, a fast comment. I did want to appreciate my fellow Members' comments and I think with listening to the testifiers, they just want to be part of this even though we're still at CWRM and the State Legislatures, you know, it's...I think what the testifier is saying, no mo us on here, you know. They should be, and that's what Mr. Hokama is trying, I believe what he's trying to say is well, where is all of this inside this plan? And I get it that we still at CWRM's whim, but I too would support having it part of this so that we're very clear on what are the takes for cultural. So, I appreciate the conversation. Thank you, Chair.

CHAIR SUGIMURA: Very good. Ms. Kama?

COUNCILMEMBER KAMA: Thank you, Mr. Sinenci, for that comment. Because what Mr. Kamaunu said was land and water has no ownership, right, in the Kanaka Maoli society. But then at the time of the Great Mahele, then ownership started to come into play. So what we're dealing with today is not ownership for the Kanaka Maoli, but the shared responsibilities of making sure that we're good stewards of it. And then we have an entity over here that starts to say, yeah, we know you were here first, yeah we know that you all own the land and you all own the water, but you know what, we came after you all and so we going to put some new rules in play. And now we're trying to play with new rules with something that actually literally had no rules. And now that the ones with the no rules are now saying, now you guys put rules on us, we're trying to figure out how do we get our rights back from you all who came here and put rules upon us. So, I think that's a quandary I think we're talking about here in terms of water rights and appurtenant rights too. So, I think that's a deeper dive because as we continue to do this plan, unless we address the real issue of water rights, we're always going to be going around and around and around and we'll never get to the real truth. And that's why I appreciate what was said this morning at the Climate Change [sic] that's about truth. So, thank you very much, Chair. Thank you, Mr. Sinenci.

CHAIR SUGIMURA: Thank you. Good discussion. Any others? Okay, we'll continue.

MS. BLUMENSTEIN: Okay, projected growth and demand. So, to be consistent with the Maui Island Plan, which does establish directed growth areas and population growth rates, we're looking also at those directed growth areas and it gives some indication of what water purveyor, what water resource may be appropriate. The different planned growth mostly included for residential or for housing, so this gives us a partial idea, 9.6 to 11 million gallons a day of water use over the next 20 years, but this does not take into account commercial, industrial, agriculture uses, and the Water Use and

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Development Plan does account for all other water uses too. So, we have different demand projections for ag that we have to consider on top of that, and then we have the population growth rates which is the selected methodology to calculate how much water we're going to need over the next 20 years.

CHAIR SUGIMURA: Ms. Paltin, do you have a question?

COUNCILMEMBER PALTIN: Yeah, thank you, Chair. So, you're not just dividing 9.6 by 7,780 units, you're taking the, like, the 343 for the Wailuku area, times'ing it by 7,786 and then the excess of that, is that up to 9.6 for agriculture? Or how are you coming up with that 9.6 to 11 million gallons a day number?

MS. BLUMENSTEIN: So, this is housing only, so we're using different system standards for South Shore and North Shore, but then a lot of these proposed projects don't have the number of housing units, we have to go by per acre instead. So, sort of like that's why we have that wide range really, there's not sufficient information to give you a specific demand projection because they...the details are just not there. So...

COUNCILMEMBER PALTIN: So, if you go by 7,787 housing units, that's like over 1,200 gallons a day per house when they were saying Wailuku was 343 gallons a day. Or, I mean that's kind of high, isn't it?

MS. BLUMENSTEIN: So, there's 7,787 plus because a lot of these projects are...we know the acreage but not the units. So, that's why I have the plus sign there. We don't have the exact number of units. It'd be safer to just go by the acres right if you want to figure out what the system standard for...to...we tried to be...use the conservative side. So, if the per acre demand is going to be higher than the per unit, then we put that here because it's just a --

COUNCILMEMBER PALTIN: So --

MS. BLUMENSTEIN: --more conservative estimate.

COUNCILMEMBER PALTIN: --what is the number you're using per acre that's needed?

MS. BLUMENSTEIN: So, for single-family is 3,000, for multi-family it's 5,000.

COUNCILMEMBER PALTIN: Three thousand to 5,000 per acre.

MS. BLUMENSTEIN: Right. But then again, I mean, this is just really just to give an indication of projected demand for residential uses only. Does not factor in the other needs. We had to look at commercial, agriculture, irrigation, et cetera. So, I'm not going to go into all the different details of this. We have to break down demand because CWRM wants to see it by resource and by water use type, but the selected demand scenario is that fat orange line called total population growth based, and the mid-growth, because Maui Island Plan also has low-growth scenarios to high-growth scenarios. So, factoring in all those water uses over the 20-year planning horizon

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means that we will need 69.6 million gallons a day by year 2035. This chart, those tables on the right there compares what we have available resources within Wailuku Aquifer Sector. The average yield being about 110 million gallons a day and what we call the drought yield, we looked at low flow, streamflow conditions et cetera, it's about 81 million gallons a day. But that's not a simple answer meaning like oh yeah, we have enough resources to supply that growth because there are all these different factors. We talked about different constraints, why a certain resource may not be appropriate for a certain end use. And this kind of just summarizes that. There's a long chapter about this in the plan. For example, there's a whole aquifer system that was not proposed or supported by the community to be considered to be developed at all, that's the Kahakuloa Aquifer and Stream. So, that's kind of taken out of the equation right away. That's 5 million gallons, you know, of groundwater. Then for surface water, the constraints are the IIFS and not going to get into detail of different categories, but we're pretty much using the recommendation from the hearing officer of what water uses would have sufficient surface water, and some that are just going to have to look for alternative resources to meet their needs. That's the category three new uses. We know that remaining groundwater yields in some of those aquifers that are outside Wailuku but is underlying the Central Maui System, there's a lot of uncertainty, how brackish is that going to be in the future, how much is actually used because the water use reporting is so poor. So, we need better data to know if that's a feasible resource or not. Recycled water can offset some of the non-potable needs that's currently using potable water. There's recycled water both from the Kihei Wastewater Treatment Facility and Kahului. And I am going to talk a little more about conservation, which can certainly offset a lot of the potable source development. Not substitute it but it can delay.

COUNCILMEMBER SINENCI: Question.

CHAIR SUGIMURA: Mr. Sinenci?

COUNCILMEMBER SINENCI: Thank you, Chair. Just had a couple quick questions for Eva. So, for the Waikapu Country Town, is that project covered under this because this is a, looks like a 20-year projection with the...is those numbers part of the 7,000 homes?

CHAIR SUGIMURA: Good question.

MS. BLUMENSTEIN: That was included in that --

COUNCILMEMBER SINENCI: It was included?

MS. BLUMENSTEIN: --9 to 11.

COUNCILMEMBER SINENCI: Okay. And then the other question was I guess for the 8.69 million gallons a day, the sources. You mentioned couple of the sources but does it...do you break it down into what is public and what is private systems? Where those waters will be coming from?

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MS. BLUMENSTEIN: Yeah, so it doesn't matter if it's the...in terms of source development we're looking at whether a private player or the Department of Water Supply will develop it. But it doesn't exclude any other...it includes all the water purveyors, whether privately owned or County owned. Even the individual wells, individual domestic wells or irrigation wells, golf course wells, et cetera, so.

COUNCILMEMBER SINENCI: And then you haven't broken it down to like South Maui and to the different uses or you already did with the houses per day, right? Usage per day for each of the homes in the different districts?

MS. BLUMENSTEIN: Yeah, we have looked at both by water use type, which is the such as single-family, multi-family, commercial, and by areas. That's not something that's required by CWRM but we look at it because it is use...it does inform where would you have the biggest impact conservation, like, outdoor conservation for example where you know if it's a lot of outdoor use, then there's more potential to offset some of that potable water with non-potable water or some aggressive conservation. So, yes, we looked at that too.

CHAIR SUGIMURA: Okay. Oh, Mr. Molina?

COUNCILMEMBER MOLINA: Thank you, Madam Chair. Good afternoon, Ms. Blumenstein. Just for on Page 10 where it says recycled water in Kihei and Kahului can offset potable water source. Just so I get a better understanding of this, is this something when we're talking reclaimed water the...like in some municipalities they're using some of the, you know, the dirty water, make it drinkable again. Is this something is part of our Water Use and Development Plan that the Department is suggesting, as to offset potable water source in lieu of that?

MS. BLUMENSTEIN: Yes.

COUNCILMEMBER MOLINA: Yeah.

MS. BLUMENSTEIN: Yes, so we are. Some of the strategies that I'm getting to are increasing recycled water use. So, even though that's not the Department of Water Supply's strategy, I mean, it's the island's strategy. There is a high desire to maximize alternative resources and recycled water use and invest in that.

COUNCILMEMBER MOLINA: Okay, interesting topic. Thank you.

CHAIR SUGIMURA: Any other questions?

COUNCILMEMBER PALTIN: I just --

CHAIR SUGIMURA: Yes?

COUNCILMEMBER PALTIN: --wanted to clarify when you talk about using recycled water use, are you talking about to drink that or for...

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MS. BLUMENSTEIN: No, for primarily irrigation purposes.

COUNCILMEMBER PALTIN: Oh, okay. Thanks.

CHAIR SUGIMURA: Yeah, sorry, Ms. King?

COUNCILMEMBER KING: So, yeah, I think that I was trying to clarify that same point. So, when you say that the recycled water in Kihei and Kahului can offset potable water sources, so there are potable water sources we're using for ag that we should be replacing with this recycled water? That's the point?

MS. BLUMENSTEIN: Exactly. Yeah.

COUNCILMEMBER KING: Okay.

MS. BLUMENSTEIN: To offset using a potable source --

COUNCILMEMBER KING: Yeah, we're not talking about --

MS. BLUMENSTEIN: --for non-potable purposes.

COUNCILMEMBER KING: --taking the recycled water and making it drinkable, we're just saying we're using drinkable water where we should be using recycled water.

MS. BLUMENSTEIN: Exactly.

COUNCILMEMBER KING: I think that's what the original question was. Thank you.

CHAIR SUGIMURA: Okay. Continue, thank you.

MS. BLUMENSTEIN: Okay. All right, just a snapshot, this is a simplified table...what is this table, 1441 I think? Yeah? No, 1432 in the plan. Just looking at simply, there was a question about specific source development and we're going to look at the individual aquifer systems and streams too. But if you're just looking at groundwater needs--because that's kind of like the cornerstone for potable, to meet potable needs over a 20-year period--we have some of the total demand for potable and municipal domestic uses, that's not irrigation or commercial or industrial, is 34.26 million gallons a day. Some of that can be satisfied with the available conventional resources within Wailuku Aquifer Sector. There's a smaller unmet demand there, 1.84 million gallons a day. But when you figure out how much to develop for source, you have to consider long-term droughts, peak factors, you have to develop contingency, like, backup supply too. So, sort of a brief calculation is that if we have, we need 34 MGD, we add a peaking factor by engineering studies of 20 percent, we're actually going to need about 41 million gallons a day. So, deduct what we have available, we need an additional 8.69 of groundwater source or surface water source in a nutshell. Doesn't



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mean that that is coming out of Wailuku Aquifer Sector, but that's sort of the additional need for a new source over the next 20 years.

CHAIR SUGIMURA: Ms. Paltin?

COUNCILMEMBER PALTIN: Thank you, Chair. You know when we went to one of the Upcountry, I think it was the budget hearing or something and the guy was talking about the Old Maui High well that how it got fouled and now it can't be used anymore. From the aquifer, is it...that's a possibility that some of these aquifers could get fouled by the wells or?

MS. BLUMENSTEIN: Well, Maui High School well was one of those...didn't that have the DBCP and TCP in it?

COUNCILMEMBER PALTIN: No, they cracked the lens, I think.

MR. PEARSON: If you're referring to the, we call them the H'poko Wells that are near Maui High, those well have DBCP, which was a fumigant added for pineapple and sugarcane, or pineapple?

COUNCILMEMBER PALTIN: Oh well, it wasn't the well...

MR. PEARSON: And also TCP, which is another chemical that was used for agriculture. And so, based on an agreement that took place with the chemical providers, we were able to install the --

MS. BLUMENSTEIN: GAC, granulated activated carbon.

MR. PEARSON: --GAC, granulated activated carbon to remove the DBCP, and they in a huge settlement, they provided the money to provide, for us to install these GAC plant...not plant, but another filtration process. Right now the TCP, I think, no, actually nitrates are near higher levels but they're still below the EPA limits. So, we can run those wells and the water quality meets all of the EPA Federal requirements. We don't run them. There's an ordinance that says that we can only run them during droughts and emergency and I think testing. So, we're not running those now. When we had the dry conditions recently we got these things going, we tested them, we pumped them, but we didn't put them into our system. We just made sure that in an emergency we're able to run the wells instead of...they've been sitting for more than five years so we had to make sure that they're viable to run. But, no, those wells are legal, but based on the ordinance, we do not pump those normally.

COUNCILMEMBER PALTIN: So, does this plan have like a wellhead source protection included in it?

MR. PEARSON: Eva's going to love you with that question.

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MS. BLUMENSTEIN: That's my favorite question. The...yeah, the last chapter, 10 through 13 island-wide strategies we addressed at the September meeting included conservation and resource protection strategies that apply to all aquifer sectors, and that includes the well protection as well as well siting, like where you site a new well and how you protect the well once it's already there.

COUNCILMEMBER PALTIN: So, it's not possible to like crack the lens of a well?

MS. BLUMENSTEIN: I'm not sure what you mean.

MR. PEARSON: Well...

CHAIR SUGIMURA: Go ahead.

MR. PEARSON: There's other ways, of course, that the wells can fail. The, I guess the most common one would be if you over pumped. If you, you know, the thickness of the lens, the freshwater lens is so thick and in the old days the Water Commission wasn't as strict as they are now. But right now, if you drill a well into a lens that's there, let's say it's 100 feet thick based on studies, you can only drill that well down 25 percent of the depth, or 25 feet into that lens. Therefore, there's a much better chance that you don't suck...because, you know, freshwater is lighter, sits on top of saltwater, you know that. And so if you have the well too deep or you pump it too much, then there's a chance of upconing, which will draw that saltwater that's underneath up into your drinking water. And then, of course, that can...another, there may be another term for foul, may have, you know, higher chlorides. We have some wells that we're running that have some higher chlorides and we either have to stop pumping them or pump them much less than we did in the past, or sometimes we mix them with another well so the chlorides will come down. But that's not because of mismanagement, but that's just the way the aquifer lens happens to be in that location.

CHAIR SUGIMURA: So, I'm going to take a short break because you still have some more of your presentation --

MS. BLUMENSTEIN: Couple more slides.

CHAIR SUGIMURA: --it's 3 o'clock. I'm going to take a 15-minute break, Members, is that okay? And then we'll come back and continue. So, at this time, I'm going to take a short recess. . . .*(gavel)*. . .

**RECESS: 3:00 p.m.**

**RECONVENE: 3:22 p.m.**

CHAIR SUGIMURA: . . .*(gavel)*. . . Welcome back to the Water, Infrastructure, and Transportation Committee. We're going to reconvene. Thank you, our recess was a little long and I would like to finish this item if I could. So, Water Department, you

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want to take over again, pick up where we left off which is, what is it Page 12? There we are, selective demand and supply strategies.

MS. BLUMENSTEIN: Thank you, Chair. Okay, so this shows you also simplified, there's some more detailed tables in the plan. What the projected 20-year demand is broken down by potable and non-potable, and the supply to meet that demand over a 20-year period. So, just simplified, total potable demands by 2035 is about 34 million gallons a day. And one of the issues that may stand out here now is towards the bottom of that table it says other non-potable water losses, that 2.73 MGD is what the CWRM hearing officer considered necessary water losses from the Wailuku Water Company system in considering off-stream needs. And now when we...we know that there was a mediated settlement in November that reduced that necessary water losses, this number, for example, could be adjusted to probably another...these necessary losses were 7 percent so that should come down a little bit, which means that there is a slightly less non-potable demand, and of that demand which would come out of the streams, more would stay in the stream. And these are broken down by the type of water use categories that we don't make up, these are defined by CWRM. So whether if something is ag or irrigation or domestic or municipal, those water use categories are established by CWRM. On the supply side, the right table, those numbers should match. So, you can see that ground, potable groundwater are broken down by the individual aquifer system: Iao, Waihee, Waikapu, et cetera. And the...on the top there, Iao Aquifer ground management area, GWMA, can see that the number is a whole lot smaller than 2014. You have to add the non-potable demand for Iao Aquifer too, but this is a way of responding to the community's concern about not developing up to sustainable yield, but to diversify supply and tap into other alternative sources and also aquifers that are not as heavily developed as Iao. So, even though we have many years left to use, Iao Aquifer can still provide a strong, like a cornerstone for potable supply. We need to watch chloride levels in the transition zone and be prepared to provide groundwater from elsewhere and not just rely on this kind of working horse that has supplied almost 90 percent of municipal supply. We're looking at some additional water from Waihee Aquifer, not up...this...any additional development from Waihee or Waikapu Aquifer should consider hydrologic studies. We have an ongoing US Geological Survey study that's looking at potential withdrawal scenarios. Like, if you develop x-million gallons a day over here, what happens to the chlorides in adjacent wells and what happen to the transition zones? So, it's not just the cap of sustainable yield, but really how you distribute that pumpage. We including the potable groundwater from the Maui Lani wells because they're already connected to the Central Maui system, but it does not propose adding any additional development from the Kahului Aquifer. Then it breaks down the water use by stream, and this is really just mimicking, again, the CWRM's hearing officer's proposed allocations by individual stream. And then in that findings he also has the different categories that are served by multiple sources because this may not just be in individual streams. So, we have that Na Wai `Eha multiple sources, 26.687, that's also straight just from the hearings officer's recommendation. About 2.2 MGD could be supplied at least from recycled water, that's maximizing primarily South Maui, Kihei recycled water supply, which is projected to increase in production as there is more development and more wastewater and that can be more fully utilized as well.

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About 4.6 MGD is projected to come from water conservation alone. That's reducing water use per capita by 8 percent, that's consistent with the statewide freshwater initiative. Even though it looks like 2014 there's zero, it just means that today's water use just reflects and kind of incorporates the recycling, the water conservation measures that are already in place. So, looking from now on we want to decrease water use per capita by 8 percent. And then although there is sufficient groundwater to last us for another ten years or more from within Wailuku Aquifer Sector, it's not prudent to rely on those aquifers alone given climate change, longer droughts, et cetera. So, that's why the proposed diversified groundwater development from Koolau Aquifer Sector and Haiku Aquifer System is proposed up to 8 million gallons a day by 2035. And that doesn't mean that there needs to be a firm eight MGD developed by a certain year, it's just as we see both demand needs increase, there should at least be a long-term plan to have that diversified supply ready to go. And this is also consistent with one of those island-wide planning objectives that we talked about at the last meeting, develop groundwater within sustainable yield to provide for growth, maintain a buffer to account for potential future drought impact and prospective adjustments in aquifers that lack hydrologic studies. Before you go develop in any aquifer, you need to have data, good data, hydrologic studies. So, that's sort of the first step before you look at developing a new aquifer, you want to have a solid hydrologic study to know are there going to be any impacts on streams, on existing wells and existing users in that aquifer system.

CHAIR SUGIMURA: So, Ms. Blumenstein, so the big change here is the last item under supply, which is potable groundwater import, right? The 8,000 --

MS. BLUMENSTEIN: Eight million.

CHAIR SUGIMURA: --8 million, yeah, million gallons per day. So that's where you...

MS. BLUMENSTEIN: Yeah --

CHAIR SUGIMURA: Are you --

MS. BLUMENSTEIN: --we pretty much...yeah...

CHAIR SUGIMURA: --going to talk about that in the strategies?

MS. BLUMENSTEIN: Yes.

CHAIR SUGIMURA: Okay, thank you. Oh.

COUNCILMEMBER PALTIN: And MDWS, is that Maui Department of Water Supply?

MS. BLUMENSTEIN: Yes.

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COUNCILMEMBER PALTIN: Oh, okay. And when you said before you go developing aquifers you want to make sure there's hydrological studies before you develop new wells, what kind of things are you looking for in those studies?

MS. BLUMENSTEIN: So, you want to...some of the aquifers like Iao have been thoroughly studied. We have both USGS studies. You know what...you're pretty certain of what the recharge is. You have monitoring wells, you know how the transition zone or how the saltwater transition zone has changed over time. So, when you do a study and you create sort of potential scenarios, if you pump a well over here or a well over there, what's going to happen over time with that, the water levels and with the chlorides in the individual wells, but you also want to know is this truly a basal aquifer or do you have a perched aquifer perhaps? And which part is it that's supplying the stream? So, if you're putting a well over here, over there, is it going to impact that stream or the adjacent wells? So, it's multiple things to consider before you...

COUNCILMEMBER PALTIN: And is that for all well developers or only for government well developers?

MS. BLUMENSTEIN: Well, this is sort of a recommendation to this body, I guess, that it's a prudent step before you go ahead and develop in a brand-new aquifer if you considering, you know, not a single domestic well. But if you really don't have good data, then it's a big gamble to just move forward and put in, you know, large production wells.

COUNCILMEMBER PALTIN: But private water source developers, they're not held to any kind of standard like that where they need to have good hydrological studies before developing wells?

MS. BLUMENSTEIN: Well, so, for example, I mean, the Department has funded a lot of these hydrologic studies but we include aquifers such as Waikapu Aquifer where we do not have or plan to develop wells. Those studies and the results of those studies provide guidance that should be considered whoever, whether it's privately owned or publicly owned system. So, it's just good data for, you know, sustainable pumpage over time.

COUNCILMEMBER PALTIN: One last question. And the studies, like say for Waikapu, those wouldn't translate for wells in other areas where the environment, the rainfall and the weather environment are drastically different, it's just area specific like --

MS. BLUMENSTEIN: Area specific.

COUNCILMEMBER PALTIN: --say you wanted to use the Waikapu studies for Launiupoko?

MS. BLUMENSTEIN: No, no, they're considering specific groundwater conditions, the geology, the groundwater flow, existing...yeah, so, it's site specific.

COUNCILMEMBER PALTIN: Okay, thank you.

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CHAIR SUGIMURA: Thank you. Ms. King?

COUNCILMEMBER KING: Thank you, Chair. So, a couple questions. One, the recycled water that you have in here anticipated from South Maui, that increase, is that just if we did nothing to the system right now if we didn't...or is that with anticipated increase in the system? The recycled water system?

MS. BLUMENSTEIN: You think with the Iao Aquifer?

COUNCILMEMBER KING: No, I'm talking about South Maui. Because right now it's kind of limited, it's like this loop. But is this anticipating expanding the piping, you know, the underground pipes and everything to different areas of South Maui or is this just within the system we have right now expanding in the...because there's going to be more people, and so there's going to be more water coming through that part of the system?

MS. BLUMENSTEIN: Yeah, so, resource or water development is really just trying to support and be consistent with the Maui Island Plan and the directed growth. So, that is, you know, whatever is in the Maui Island Plan, those designated growth areas and the growth boundaries, I mean, that's the areas --

COUNCILMEMBER KING: No, but --

MS. BLUMENSTEIN: --that we're...

COUNCILMEMBER KING: --you're...okay, okay. The question is that you've gone from 2014, 1,580,000 gallons per day--is that correct?--to your anticipating 2,280,000 gallons per day in 2035?

MS. BLUMENSTEIN: Oh, 8 percent?

COUNCILMEMBER KING: That's the third line from the bottom before the total. Is that...I'm just trying to get a feeling for if that increase is an anticipated increase with the current system, or are you anticipating more resources being put into expanding that system, the R-1 system in South Maui?

MS. BLUMENSTEIN: So, we assume that the existing remaining 0.7 MGD that's available now will be fully committing by existing development over the next few years. The total 2.2 is anticipating that you have additional wastewater flow as population growth, grows.

COUNCILMEMBER KING: Okay, so then we would put more resources into expanding that?

MS. BLUMENSTEIN: Yes.

COUNCILMEMBER KING: Okay.

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MS. BLUMENSTEIN: So, it would require some funding of expanding the system.

COUNCILMEMBER KING: Okay, okay, that's good because we are putting more money into, you know, R-1 recycling and I think we're doing that...we've done that, we put some pretty big numbers into West Maui as well. But then, the other thing when I look down this list, there's also a new wastewater treatment facility going in at Waikapu with the Waikapu Country Town Estates, and is that significant enough to recognize as additional reuse water? Not just for that development, but if they're able to sequester all the wastewater from Maalaea into that facility, what kind of additional resource is that of more...because I know that's the original intent of it is to get that water onto the ag land, and then replace all the Na Wai `Eha water that they've been using.

MS. BLUMENSTEIN: Yeah, so, that specific project or the recycled water came on a little after the draft, but should all that production really come to fruition, that could offset like you say, a lot of the Na Wai `Eha surface water or potable groundwater to be used for non-potable needs.

COUNCILMEMBER KING: Okay. So, that...

MS. BLUMENSTEIN: So, I mean, that's in general it's just in...it's very consistent with the island-wide strategy to maximize recycled water when it's, when it becomes available through upfront capital improvement. So, not, rather than...not retrofitting something after the fact, but if you know there's something coming online, you want to have that infrastructure in place already.

COUNCILMEMBER KING: Okay.

MS. BLUMENSTEIN: Yeah.

COUNCILMEMBER KING: So, this is just...all this is just what's already in place and then as new systems come in to...

MS. BLUMENSTEIN: Yeah, so this just the Kihei, and we are talking about Kahului Wastewater Treatment Plant.

COUNCILMEMBER KING: Okay, so, you know, I know they did make a commitment for the wastewater treatment facility so I'm...they're pretty far down the road as far as the design and engineering, I think the question is how much of that...how much can we add from the Maalaea Village area into that system to get, you know, to stop using those injection wells that are going into the bay and also to help those folks get onto actual sewage systems so they can get rid of their septic tanks as well.

CHAIR SUGIMURA: Mr. Pearson, did you have any comments?

MR. PEARSON: I just want to...I've said it in the past but I want to keep it out there. If and when Wastewater does continue to spend money on their recycled system and they

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have additional uses, if that recycled water offsets potable water, in other words, it's just like a well. If they can use more recycled water, half-a-million gallons a day more, that frees up half-a-million gallons a day of potable water. So, what I've said out loud before is that Department of Water Supply will monetarily support the DEM Wastewater when they come forth and when it's clear that it's offsetting potable water.

COUNCILMEMBER KING: Okay.

CHAIR SUGIMURA: Very good.

COUNCILMEMBER KING: All right. Thank you. I appreciate that.

CHAIR SUGIMURA: We like to hear that. Continue.

COUNCILMEMBER KING: We like that word monetarily support.

MS. BLUMENSTEIN: Okay, can I move into strategies?

CHAIR SUGIMURA: Yes.

MS. BLUMENSTEIN: All right, so these are table 1441 towards the end of Wailuku chapter. They're divided by categories. So, resource management are some of the first ones here, and I want to remind you that we talked about resource management and conservation and resource protection in the Island Wide Strategies. So, these are just more, some that are specific to this aquifer sector. Yeah. Watershed protection and so we're proposing a strategy, we have an estimated cost if available. Some of these resource management strategies obviously are not going to have a specific cost associated with it. Or, if it's a conventional strategy, such as well development if there were engineering studies or reports available, we'll incorporate that. We proposed the lead agency or the lead agencies and these, many of these are not the Department of Water Supply because this is different purveyors and different strategies that may not even be potable water. So, in this case to ensure that we have watershed protection not just to maintain what we already have but even to augment or, you know, restore some of this watershed restoration where you put in fence to keep ungulates out and removing invasive weeds, you can actually improve recharge and improve the watershed so that you have a sustained resource over the long-term. For Wailuku Aquifer Sector is primarily West Maui, Mauna Kahalawai Watershed Partnership, and Pu'u Kukui, we're looking at the cost of what their average annual cost is, not just what the Department of Water Supply funds, but other Federal, State, private funders, to just ensure that they have a consistent stream of funding because if you have that gap in funding and then you may lose, you know, a decade worth of work. So, that's why that's even though this is done right now, it's in here because it's so fundamental to all the other conventional strategies that we propose. Okay, the second one comes back to some of the lessons learned from Hawaiian history that we discussed earlier in the chapter, how to have a fair or successful management of Na Wai `Eha resources, and a desire by the community to ensure that the watershed and the infrastructure that relies on it are sustainably managed over the long-term. So, the proposed



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strategy was to establish a diverse working group to address alternative structures for future management of the watershed lands and sustained operations of the ditch system. Since then, the...you probably know, the previous Administration proposed purchase of the system, this is sort of just putting together some of the stakeholders at the table. So, lead agency or proposed organizations to be involved in this discussions are the Aha Moku, the Hui O Na Wai `Eha, Office of Hawaiian Affairs, Maui County, and Wailuku Water Company. Department is not at this table because we're really just talking about the watershed management and sustained operations over the long-term. Conventional water source strategies, that is groundwater or surface water development to meet projected demand. I was just mentioning before, the USGS studies, hydrologic studies to make sure that you develop or operate well pumpage throughout aquifers so that it doesn't increase chlorides or raise the transition zone of an aquifer system over long-term. So, because we have those ongoing studies, adapting pumpage of wells within Waikapu Aquifer, which was included in this study when those results are available. So, the final guidance is really not the sustainable yield but what is long-term sustained pumpage based on studies. Next one, explore new well development in the southern portion of Waihee Aquifer. We do not have engineering studies or reports of well development in that portion of the aquifer. It was sort of dismissed at one point because we have some guidance from CWRM of how to limit pumpage from southern versus northern portions of the aquifer. Well development in the northern portion didn't look very promising because of thin freshwater lands, et cetera, but now we have a study and we're waiting those results. If it looks like there could be additional pumpage sustainably done there, then that's an option that should be further explored. At the time of this draft plan, there were the Mendez Wells proposed in the southern portion aquifers, I believe those are no longer on the table, so that's probably something that can be just struck --

CHAIR SUGIMURA: Okay.

MS. BLUMENSTEIN: --from this strategy. Number five, continue exploration of East Maui development in consideration of reliable capacity for plan growth. But that would then be contingent on the hydrologic study to determine any negative impact on existing ground and surface water sources, stream flow, and influence from dykes. So, that's something that pretty thoroughly discussed in the plan what's needed both in terms of the East Maui consent decree so there's a legal issue that will need to be resolved, but the hydrologic study would really inform, you know, whether that's a feasible action or not. There's been at least three rounds of engineering studies and reports done to, so we have fairly good numbers of estimated costs to do that. And lead agencies, those who need to be involved in moving forward is both CWRM, they recognize that there's additional data needed for Haiku aquifers and East Maui in general, USGS, and the Department. Six, reducing non-potable use of Wailuku Aquifer Sector based on high level of water and that is both to diversify the portfolio and moving away from relying only on Iao and the Wailuku Aquifer Sector in general to Haiku or other areas. It's also consistent with not maximizing sort of the most cost-efficient and available resource is always going to be more expensive when you go to a more remote area. You're going to have more transmission, another cost associated with that; but it also would reduce pressure on that one aquifer system long-term. Prioritize available

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recycled water and brackish water for non-potable uses, which is available through Kahului and Kamaole Aquifers. So, agencies that need to be involved in this action includes MDEM, which is Department of Environmental Management, Department of Public...Planning Department, DWS, and CWRM. The seventh strategy is something that kind of came over from the original or the 2009 effort by Haiku Design and Analysis looking at whether these Maui, the Department's Central System and Upcountry Systems should be connected or not. It wasn't a straight recommendation whether to do that or not, but the community now felt that it should be further explored. Some of the constraints is of course, the East Maui stream contested case, there's you cannot, it was not proposed to...the Department didn't propose to use water from East Maui streams for Central Maui, that was not brought up in contested case so that's one constraint. The other is water quality, if you start mixing different sources like surface water and groundwater. So that is an option that's still on the table. It should be further explored before we know whether that's a good strategy to increase reliability. I mean, it's always good if you can have different system back up each other, if that can be safely done, so...but we don't have enough data or information whether that's viable or not. Alternative water source strategies, that's recycled water, stormwater, et cetera. Number eight is expand distribution from the Kahului Wastewater Treatment Facility, and application for planned energy crops. This was after HC&S ceased sugar and they were proposed energy crops in the vicinity of the planned recycled...the expansion of a distribution line from Kahului Wastewater Treatment Facility to Central Maui. It was in Department of Environmental Management's 2018 budget, 6.7 million set aside, so that's something that should be explored again if there are non-potable or non-edible crops such as energy crops, then the type of recycled water R-1 is available now at the Kahului, could be a viable source to replace surface water either from East Maui or from surface water, and there is at least 4 million gallons a day available of R-2 water today. So, lead agencies there would be today instead of HC&S, Mahi Pono, and Department of Environmental Management. And number nine, I think we just talked about that a little. Identify private/public partnerships and funding sources to maximize utilization of recycled water produced at Kihei Wastewater Treatment Facility. So, that just means a closer collaboration between DEM and Water Department. It doesn't have to be water rates funding groundwater development, and sewer rates funding distribution system, there are creative ways to fund that that could be further explored including a State revolving funds. And the last one, ten, is to explore the Waiale Road stormwater drainage that's in, proposed, an opportunity to use stormwater that was assessed by CWRM back in 2012 I think that can still be...it could offset some of the surface water use from Spreckels' Ditch for energy sources or other ag uses in the vicinity on Waiale. It was estimated at the time at \$10 million. The lead agencies to further explore that would be Department of Public Works who's in charge of stormwater management, Department of Ag because it's an agriculture end use, and instead of HC&S it would be Mahi Pono at this point. So, not specific to Wailuku Aquifer Sector, I just want to bring back again and this was some of the questions that came up in testimony. We are going to try to meet 9 million gallons a day island wide by conservation, more aggressive conservation, and it's very relevant for the Central Maui system. The map there is from the chapters, Chapter 12 that we looked at last time. But you can see, those are the actual water use consumption numbers, how they vary from Wailuku,

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Kahului, to Kihei and Makena. And most of that just represents outdoor water use. So, there's plenty room to target outdoor irrigation, and one of the tools that are proposed in Chapter 12 is a water conservation bill or ordinance that we're working on that includes xeriscaping techniques using more climate-appropriate plants and upfront like water sense irrigation equipment. Other measures is require high-efficiency fixtures in new construction. So, this is something that when we're saying, you know, that to decrease water use per capita by 8 percent, it's really doable and we have formulated a conservation plan how to do this over the next 20 years.

CHAIR SUGIMURA: Oh. Ms. Paltin?

COUNCILMEMBER PALTIN: Thank you, Chair. I had a question on strategies. I know that you kind of went over like Wailea, Makena having such a high usage and it was brought to my attention that, you know, those folks down there, there's like about 50 wells that they have that they use for non-potable uses down in Wailea and Makena and like that. And so, if they're using the wells down there for non-potable usage, could one of the strategies be, you know, working with those well developers to use more non-potable sources for landscape irrigation? Because I didn't see it on here.

MS. BLUMENSTEIN: Yeah, this...for other regions it's specific to an aquifer system to increase use of brackish wells because we know there's still available yield. For Kamaole Aquifer which is underlying Wailea, Makena, it's very uncertain how much water is remain because the water use reporting is so poor. So, we really don't know out of that 11 MGD sustainable yield, we don't know how much is already pumped. So, the strategy, it's discussed somewhere here...

COUNCILMEMBER PALTIN: When we talk about we don't know, is it like we the County doesn't know or we the State doesn't know?

MS. BLUMENSTEIN: The State. Yeah, so, even though all private purveyors, small users are required to report monthly, it still does not happen and CWRM has limited staff so that's an ongoing process. It's better, it's much better, but we still don't have a good grasp of how much water is actually extracted out of that particular aquifer system. So, therefore it's not a proposed strategy to increase the use of brackish water because we don't know if that's a good idea until we have better data.

COUNCILMEMBER PALTIN: But they can drill more wells or they cannot drill more wells?

MS. BLUMENSTEIN: There are new wells being drilled in Kamaole Aquifer so it's not a designated groundwater management area or so, we just don't have good end use data to recommend that as a strategy at this point.

COUNCILMEMBER PALTIN: Got it, thanks.

CHAIR SUGIMURA: Thank you.

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MS. BLUMENSTEIN: Okay, just summarize the last chapter for Wailuku Aquifer Sector talks about implementation and funding. Again, the recommendations is not the CIP plan or the budget, I mean, this would really just be projects are formulated over the planning period. So, over 20 years. And they should guide the CIP budget and land use planning as projects come up to this body and others whether one water resource is appropriate for that type of use or not. So, a lot of these implementing actions, I mean, you hear there are we need another engineering study or we need a hydrologic study because that is the next step before you actually develop a source or...so, it's some going to take time. There's some near-term, one to five years, and more long-term timeframes to develop these or implement these actions. Again, emphasize conservation programs can really make an impact but they don't replace these costly investments. We still know there's going to be an almost \$93 million is what the expected cost will be to develop the needed source over the next 20 years, and a lot of that funding can be shared with the State and other County agencies, but the greatest burden is still going to be on DWS to develop groundwater source over the 20 years. In the overall plan, you have a sort of like a follow-up performance measures just to sort of guide to see if those planning objectives that the community established, how do we meet them over time. For example, I mean do we...groundwater sustainable yield levels are maintained over time or do we increase the use of recycled water. This is sort of just a matrix to make sure that we're on the right track over time. Okay, finally, so we're at the Council review and adoption by ordinance step. After that is approval is needed by the State Commission on Water Resource Management. So, I'm planning on continuing on Chapter 15 next meeting if that's --

CHAIR SUGIMURA: Yes.

MS. BLUMENSTEIN: --desirable. So, that is Central Aquifer Sector, but that is with a focus then on the Upcountry Water System.

CHAIR SUGIMURA: Very good. Any questions? Mr. Molina? No? Seeing none...oh. Ms. Paltin? No? No questions?

COUNCILMEMBER PALTIN: I'm good for now, thank you.

CHAIR SUGIMURA: Okay. Ms. King?

COUNCILMEMBER KING: Sure. If you...no, I just wanted to, I mean you had some, looks like you had some corrections as we were going through there so is that...are you planning to update it after today's session?

MS. BLUMENSTEIN: Well, I mean, I can do it if that's the request from...

CHAIR SUGIMURA: I'm sorry, what is your question?

COUNCILMEMBER KING: I was just wondering, because while we were going through it you were going through some things and that's no longer relevant or, you know, this

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situation's changed, so, will you be making changes in the Water Use and Development Plan --

CHAIR SUGIMURA: Oh.

COUNCILMEMBER KING: --based on when you started this draft and then today the changes that happened in our community?

MS. BLUMENSTEIN: If that's what this body requests, I'd be happy to do that. I just didn't want to go in and make any changes without telling you.

COUNCILMEMBER KING: Yeah, no --

MS. BLUMENSTEIN: Yeah.

COUNCILMEMBER KING: --it's just the things that we've talked about that you've mentioned to us.

MS. BLUMENSTEIN: Yeah, I would be happy to do that if that's...of course I can.

CHAIR SUGIMURA: So, you're asking if there's any changes from what was given to us to what you mentioned today?

MS. BLUMENSTEIN: Yeah, so, since March of last year already --

CHAIR SUGIMURA: Yeah.

MS. BLUMENSTEIN: --now it's 2020 --

COUNCILMEMBER KING: Right.

MS. BLUMENSTEIN: --there were a few changes, primarily for...and even just minor things. Even though they don't change the strategies per se or the numbers, if it's...

COUNCILMEMBER KING: No, just hearing you go as you went through this hearing you say a couple times well that one's no longer relevant because we're not doing that anymore, so I'm just wondering --

CHAIR SUGIMURA: So, I think...

COUNCILMEMBER KING: --if you're taking some of those out and, you know, we're not dealing with HC&S anymore we're possibly dealing with Mahi Pono. But that whole project that was listed in here is not necessarily on the books anymore so I'm not sure how real that is. So, I just wondered if you were going to go through and kind of clean up some of the stuff that's not solid right now at this point in time.

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MS. BLUMENSTEIN: Yeah, I think most of them it just replacing the name of HC&S, A&B with Mahi Pono. And the other one, sort of major one, is there were two proposed wells in Waihee that would be like a major commitment that I'm not, that were taken off the table.

COUNCILMEMBER KING: Okay. Well I just, I mean, I was...when I look at that particular example, that HC&S was working on energy crop project, I haven't heard of an energy crop project that Mahi Pono's working on. I mean, I think they've kind of switched over to, you know, potatoes and oranges or whatever it is that they're doing. So, you know, those are the things that seem like they've changed in the last couple of years in our community.

MS. BLUMENSTEIN: Oh.

CHAIR SUGIMURA: Go ahead.

MS. BLUMENSTEIN: Yeah if I may, so for example stormwater use for agriculture purposes, as long as it's like a non-edible crop, because those projects would have to be scoped out and refined, I think they could still stay in there because it still needs Mahi Pono rather than HC&S's collaboration now. But it's still the Department of Ag, Public Works' stormwater-management issue that needs to be further explored.

COUNCILMEMBER KING: Okay. I guess I'm just kind of confused because in some of the areas we're talking about, we're looking at hard projects that are on the ground and when we start talking about things that have been approved like the Waikapu Country Town, those aren't in there because they're not real yet; but yet we're projecting other projects that might happen that aren't real yet either. So, at what point does something become real enough to make it into this plan?

CHAIR SUGIMURA: Department?

MS. BLUMENSTEIN: So, I think the, I mean the broad, the intent is to have a strategy that's broad enough that it's going to be valid over 20 years but that can be scoped out and refined with the lead agencies that are identified. And maybe that strategy will change, you know, and adapt a lot as more as, for example, having the engineering study done, it may show that development of South Waihee Aquifer is not viable because of the cost and other constraints. But this is a resource strategy, we're just saying this needs to be looked at and further scoped out. It doesn't have, you know, a price tag or specific year. That's not the point of the plan because it's not the capital improvement plan. It needs to be further refined, short or long-term.

COUNCILMEMBER KING: Okay, I mean, yeah --

CHAIR SUGIMURA: Yeah.

COUNCILMEMBER KING: --I'm just trying to get some consistency in what, you know, what's in here that's...to me the Waikapu Country Town Estates is pretty far defined

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because it's, that we've approved that whole plan, the developer's working on that, but that's not going on here because it's not real yet. And we don't have a proposal from Mahi Pono to do non-edible crops that I've seen, and yet that's going in here. So, I'm just trying to --

CHAIR SUGIMURA: So, I think --

COUNCILMEMBER KING: --figure out where...

CHAIR SUGIMURA: --before you walked in they sort of explained where we are, how this plan incorporates what you're talking about because I think as we sit here, we know what projects got approved like the Waikapu or Michael Atherton project. But when the Water Use and Development Plan was done, that may have been, you know, talked about or in the works but not where we are today. But correct me if I'm wrong, Ms. Blumenstein, but what I understood you saying that changes would be made if it affects strategies, so if it's going to be affecting some kind of action plans as you saw in the last few slides that the Department presented, then it would impact, you know, the overall numbers that they are projecting to us, but it incorporates, this plan incorporates, you know, HC&S, which we all...which was viable at the time, but now it's Mahi Pono took its place. And as we see them ramping up trying to do their ag, their water use was taken into consideration to put this plan together. So, the names are, you know...

COUNCILMEMBER KING: No, I understand that part.

CHAIR SUGIMURA: Yeah. So, I think that's what...I think they can change the strategies if you think you need to but you've incorporated a lot of the givens that we know today into the water use as it relates to the community in general.

COUNCILMEMBER KING: I'm just trying to ascertain, you know, where the strategies are coming from because I have not seen a strategy for non-edible crops from Mahi Pono. So, to me that project kind of died already. But going forward I'm part of the steering committee for the Maui Food Alliance. And so going forward we're trying to encourage more food production and when we see, you know, kind of strategies that aren't really materialized that we're dealing with things that aren't real. So I'm just trying to ascertain what, when you put these things in here are you planning to promote that as the Water Department, are you trying to help them develop it, or is it just in there because it's left over from something and you don't want to take it out?

MS. BLUMENSTEIN: So, some of...I mean maybe that is something that should be looked at, amended, the specific...because there are no longer energy crops on the table, then the stormwater project may fall aside.

COUNCILMEMBER KING: Yeah, I mean, I don't think it's a bad thing but I think we need to know because you know, there's this big push for food crops on the island too, and for developing our food supply and I think energy crops are needed, I just don't see that as a project that anybody's like getting behind right now.

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CHAIR SUGIMURA: Thank you. Mr. Sinenci?

COUNCILMEMBER SINENCI: Thank you, Chair. I did have a question for Ms. Oana. When looking at some of the projections of the water projections for the future and because it is in our County document, my question earlier was which, how much will be coming from private sources? So, if we're putting this in a County document then, and if we're sharing this with community plans then we're saying that, hey, there's this much yield in these different districts, are we . . . so does that mean that the County would have to come and look for these sources even though the projection includes private sources? Are we, the County, responsible for the whole projection of these numbers?

CHAIR SUGIMURA: Ms. Oana?

MS. OANA: No, and Ms. Blumenstein can correct me if I'm wrong, but no, we're not responsible for all of the projections. This plan incorporates our water use and sources with everyone else's on the island. And so this is just a guide and a plan, so we're not responsible for what they do. But Eva is putting together the entire picture of Maui in this plan. Did I answer that correctly?

COUNCILMEMBER SINENCI: Yes, you did. I was just thinking like if it goes out into our community plans and it says, hey, we've got so much yield in this district then we can plan for this type of development and does it look for, okay, the County has to supply this because it's in our document. That was my concern.

CHAIR SUGIMURA: Good question.

MS. OANA: No, it's not a requirement that the County supply that.

COUNCILMEMBER SINENCI: Thank you for that clarification. Mahalo, Chair.

CHAIR SUGIMURA: Thank you. Any other questions, Members? Seeing none, so I'm going to be...we're going to move on to the next aquifer sector at the next meeting and I might swap meeting dates with Ms. Kama, and I don't know if it's approved yet but I know you had asked. So, if it does get approved we'll send the request to all of you.

COUNCILMEMBER PALTIN: It did get...

CHAIR SUGIMURA: It did? Okay, so the next meeting then is going to be January 22<sup>nd</sup>, and then Ms. Kama's going to take the 27<sup>th</sup>. So, January 22<sup>nd</sup> is my next meeting and then I hope that you can then present the next sector for us so that we can hopefully meet our December 31<sup>st</sup> deadline. We have Budget coming up pretty soon and then once we all know that once Budget happens we'll receive it on March 25<sup>th</sup> from the Mayor and all stops until we can start again in May. So, we'll try to get through as much as possible, and thank you very much for your diligence in getting this together and I look forward to seeing your water conservation bill, you've mentioned you're working



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on that. And I believe that you answered the questions that came up from the testifiers, Na Wai `Eha, that whole situation that happened in the ending of last year, is the situation that's related to this as you explained a concern area, but we haven't yet gotten any word from CWRM, right? So, we don't have anything final, so I hope that explains that question that came up as far as Na Wai `Eha. Because I had that question too, so I asked them before that. And I look forward to all the referrals in this Council's agenda that'll have items for my Committee and we can see how we proceed further, but I think that Claire Apana's question regarding the conservation of water and, you know, using smart meters which I think Ms. Lee put in the last budget or things of that sort will help us in the long run. Ms. Paltin?

COUNCILMEMBER PALTIN: I just had a question. Who's working on the conservation bill? Is it...

CHAIR SUGIMURA: Oh, Water Department is coming up with it.

COUNCILMEMBER PALTIN: Okay.

CHAIR SUGIMURA: They mentioned it today so I look forward to seeing what they have. It's not...haven't seen it yet.

COUNCILMEMBER PALTIN: Oh, okay, thanks.

CHAIR SUGIMURA: Okay, so, Members...yeah. Oh, I'm sorry, I have to...I'm going to defer this item. We're going to continue discussions.

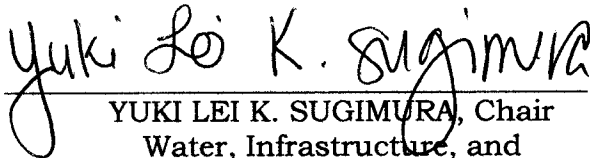
**COUNCILMEMBERS VOICED NO OBJECTIONS.** (Excused: AL, RH, KRF)

**ACTION:            DEFER PENDING FURTHER DISCUSSION.**

CHAIR SUGIMURA: And at this time, the meeting is adjourned at 4:09 p.m. . . .(gavel). . .

**ADJOURN:** 4:09 p.m.

APPROVED:

  
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YUKI LEI K. SUGIMURA, Chair  
Water, Infrastructure, and  
Transportation Committee

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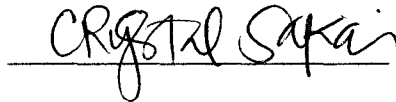
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CERTIFICATE

I, Crystal Sakai, hereby certify that the foregoing represents to the best of my ability, a true and correct transcript of the proceedings. I further certify that I am not in any way concerned with the cause.

DATED the 28<sup>th</sup> day of January, 2020, in Kahului, Hawaii

A handwritten signature in cursive script, reading "Crystal Sakai", is written over a horizontal line.

Crystal Sakai