

WATER RESOURCES COMMITTEE

Council of the County of Maui

MINUTES

Council Chamber

July 17, 2013

CONVENE: 9:07 a.m.

PRESENT: VOTING MEMBERS:

Councilmember Mike White, Vice-Chair
Councilmember Gladys C. Baisa
Councilmember Robert Carroll
Councilmember Stacy Crivello

EXCUSED: Councilmember Michael P. Victorino, Chair
Councilmember Donald G. Couch, Jr.
Councilmember Don S. Guzman

STAFF: Kim Willenbrink, Legislative Analyst
Clarita Balala, Substituting Committee Secretary

Ella Alcon, Council Aide, Molokai Council Office (via telephone conference bridge)

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

Dawn Lono, Council Aide, Hana Council Office (via telephone conference bridge)

ADMIN.: Edward Kushi, Jr., First Deputy Corporation Counsel, Department of the Corporation Counsel

David Taylor, Director, Department of Water Supply

Thomas Ochwat, Civil Engineer, Department of Water Supply

Seated in the gallery:

Jeffrey Pearson, Civil Engineer, Department of Water Supply

OTHERS: Rosemary Robbins
Mercer "Chubby" Vicens
Plus (2) other people

PRESS: *Akaku Maui Community Television, Inc.*
Melissa Tanji, The Maui News

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ITEM NO. 6(1): COMMITTEE'S PRIORITIES AND PROCEDURES; PRESENTATIONS FROM COUNTY ADMINISTRATIVE AGENCIES (DEPARTMENT OF WATER SUPPLY PRESENTATION)

VICE-CHAIR WHITE: ...*(gavel)*... Good morning, this meeting of the Budget [*sic*] Resources Committee will come to order. I am Vice-Chair Mike White filling in for Mr. Victorino who is on Oahu having some tests run, and so all of our prayers and best wishes are with him and hoping for a speedy return that he will be back very soon. This morning, we have a bare quorum, but a strong quorum. And we have Chair of the Council Gladys Baisa.

COUNCILMEMBER BAISA: Good morning, Chair.

VICE-CHAIR WHITE: Good morning, and Vice-Chair Bob Carroll.

COUNCILMEMBER CARROLL: Good morning Vice-Chair.

VICE-CHAIR WHITE: And member Crivello from Molokai.

COUNCILMEMBER CRIVELLO: Good morning.

VICE-CHAIR WHITE: Good morning. This morning we have Mr. Couch excused and Mr. Guzman excused, and as I mentioned, Mr. Victorino. And with us this morning, we have Dave Taylor, Director of the Water Department, and making a presentation later will be Tom Ochwat, the project engineer for the Waikamoi Flume Project; and we also have with us Ed Kushi from the Corp. Counsel; and Legislative Analyst Kim Willenbrink; and Clarita Balala, our Committee Secretary for today. And with that, we'll begin public testimony and we have one person signed up here in the Chambers and so we will call first Rosemary Robbins. And if anyone else wishes to testify this morning, please sign up to do so. And after Ms. Robbins, we will move to our District Offices. Ms. Robbins.

...*BEGIN PUBLIC TESTIMONY*...

MS. ROBBINS: Good morning, everybody.

VICE-CHAIR WHITE: Good morning.

MS. ROBBINS: You and I have been at a lot of meetings lately, and I must say I've learned a lot. I sit quietly up in that corner and listen, and gather, and try and bridge the silos that somebody brought up yesterday, and that's been brought up before certainly. And when the Water Director came in this morning, he and I and one of the staff members were chatting outside for a little bit, and I told him that I would like to be able to pay a compliment for the increased shared concerns expressed among the people on the Committees and on the Council at large, and from the people who are not employed here. I get telephone calls, you run into people at the hardware store, the grocery store, whatever, and they say oh jeez, we didn't know such and such. So they're

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listening to what they're able to see and hear, especially through Akaku and thanks to them. Especially seniors, who are at home, who cannot get out readily to these meetings, but they sit there with a cup of tea, a cup of coffee, and are concerned, and they have history that I'm never going to catch up with that's wonderful, the background that they can apply to it. I'd like to just remind all of us that there has been growth not only at the local level here but at the State level and at the Federal level. We see things like the nature health address institutes who are the committee for growth on the national level. It's prevention, so they're looking ahead, the CDC, looking back at the history, taking a comprehensive look at the currents, and predicting ahead for what could be happening. We were mentioning on water this morning, on the ABC affiliate here, it was talking about Washington, D.C. and environments up and down the East Coast whereby 10:30 this morning they are expecting to have totally dry taps because of the massive evaporation that has been going on for surface level storage and for pipes that are not having water flowing through them, because there isn't a volume of water and there begins to be deterioration at a greater length, to a greater extent in those. So something we might be able to follow through on the media about. The Director said this morning that the application for the Safe Drinking Water Fund, which is Federal money that comes to the State, and then folks in the State government, and non-government entities can apply for those monies. And that that application has been filed and in the conversation we were recognizing that there needs to be not only a timely filed application, but a commitment to it, that's that footnote on the bottom left hand side of that application, and the Director assures me that they will be following through on that. So, I do encourage people to get to the seventh floor of this building, the records are there, if the records exist, and in some cases we know they don't. But we can see what we can do about predicting what would've been dots in the records had they been completed. We know that the EPA is not happy about that state. But to be able to take a look, the staff is wonderful. Give them some clue, and they manage to come up with what it is that you're after. So, it's encouraging to be able to see that, and if not, too indeed, I've never seen Akaku, I don't have that equipment, but apparently people are seeing it and are talking amongst themselves and those are going to be our voters so listen up, you've got good wisdom out there. Thank you.

VICE-CHAIR WHITE: Thank you, Ms. Robbins. Any questions for the testifier? Seeing none, thank you very much.

MS. ROBBINS: You're welcome.

VICE-CHAIR WHITE: And we will go to Hana. Dawn, do you have anyone there to testify?

MS. LONO: The Hana Office has no one waiting to testify, Chair.

VICE-CHAIR WHITE: Thank you, and Denise, anyone on Lanai to testify?

MS. FERNANDEZ: Good morning Chair, no, there is no one waiting to testify on Lanai.

VICE-CHAIR WHITE: Thank you, and Ella, anyone on Molokai?

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MS. ALCON: Good morning Chair, this is Ella Alcon on Molokai and I have no one here waiting to testify.

VICE-CHAIR WHITE: Thank you. Is there anyone else in the Chambers who would like to provide testimony this morning? Seeing none, Members, without objection we will close public testimony.

COUNCIL MEMBERS: No objections.

...END OF PUBLIC TESTIMONY...

VICE-CHAIR WHITE: And this morning we just have one item, WR-6, relating to presentations by the Department, and the Director and Mr. Ochwat have a presentation on the Waikamoi Flume, which should be very interesting. Director, would you like to make any opening remarks?

MR. TAYLOR: Thank you, Mr. Chair. Most of the time in this Committee we get into pretty heavy items of policy and discussion and today will be a nice break from that. What we have for you is simply a presentation of our efforts to date and the status of the Waikamoi Flume Project. There is no Council action to take, it has already been fully funded, at this point it's completely in our hands to just complete the construction. So giving the presentation will be Tom Ochwat, who is our staff engineer who was in charge of the design and is now in charge of the construction. So you can sort of sit back as we give you a virtual tour of the area and what we've been doing, and again, there is no action to take, it's purely for your information of this large project that you've already funded. Thank you.

VICE-CHAIR WHITE: So we will be in recess for three minutes to set up the room for the presentation. And then we'll, if you don't mind, Members, we'll hold questions until after the presentation is done and we'll reset the room again. So, we are in recess for three minutes. . . .(gavel) . . .

RECESS: 9:15 a.m.

RECONVENE: 9:18 a.m.

VICE-CHAIR WHITE: . . .(gavel) . . . Members, the meeting of the Water Resources Committee will come back to order, and we'll proceed with the presentation of the Waikamoi Flume Replacement Project, and we'll turn it over to Mr. Ochwat.

MR. OCHWAT: Good morning, Councilmen, Councilwomen, and Vice-Chair. I've been asked to give a presentation on this Waikamoi Flume Replacement Project and we'll start with the, I titled it Past, Present, Future. . . .(PowerPoint Presentation) . . .

COUNCILMEMBER BAISA: You need to get closer to your mic, sir, please.

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MR. OCHWAT: Hello?

COUNCILMEMBER BAISA: There we go.

MR. OCHWAT: Is that better?

VICE-CHAIR WHITE: Yeah. Why don't you...why don't you pull it out.

MR. OCHWAT: Is that better?

COUNCILMEMBER BAISA: Yes.

MR. OCHWAT: Alright, we'll start off with the presentation here. I'm going to let you...most of the presentation is photographs of the flume. We're going to start off with the location of the flume. It's on East Maui, up in the pristine rainforest. The way to get there, or the way it's located, if you take this access road, it drops down to the end of, or the top of Olinda Road where the gate is up there. Then you've got another four miles of going to the East to get to this. This is where the flume terminates. So you've got an idea of how far and where it is, it's quite a ways to get there. Part of the past use of the flume here was used for domestic water as well as irrigation water. Originally, I guess the flume was built in 1908 and then replaced and upgraded in the '30s, and then we had a major replacement back in 1974-75. Here's one of the landmark signs, you can see it was replaced or worked on back in the '70s. Here's some of the, you could say engineering characteristics of the flume here. It's just a little over a mile long. Elevation up there is 4,300; that's about the cloud level up there so we get quite a bit of rain. And then we've got the three stream crossings. So this is part of the flume that you actually walk on. Well you walk on the flume actually throughout here. We also have a 12-inch waterline that also conveys this raw water. The next slide here shows one of the many Dalton Gulch crossings that we have, and as you can see, we only have railing on one side. It's quite dangerous and risky to cross this flume these days because of the age and that's why we make it closed to the public due to the risk of injury or falling, people falling. We've also worked with EMI. The flume is actually located on EMI property, so it's highly restrictive and access to it is quite limited. Here's some more of the characteristics of the flume that we had to go through with regards to designing and have the engineering portion of it. This is the end of the flume that dumps into our water system. I want to say that the water that we collect within the flume and the adjacent piping all go to the Upper Olinda Water Treatment Plant where it's filtered and treated, and that water treats most of Kula, Upper Kula, Kanaio, in that area, Ulupalakua. So this is the beginning of the flume, or you could say the ending of the flume. And you can see it's in quite disrepair. This is a later shot that this pipe here is actually the bypass that we try to keep the flume flow, the water from the flow from the flume, flowing continuously while we're going to be replacing the existing flume. This is some of the more, you could say mild traverse of the flume at the beginning. You could see it's not too...you could say it's easy access, but when you get off the flume, these areas here are quite boggy, you can get, you can sink up to knee deep in mud. As you see, more gulch crossings. The depth here is about 30 feet, so it gets a little sketchy when you're crossing that flow. We also pick up a lot of what we call lateral water intakes. I believe we have 15 of these

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intakes along the existing flume, again, we're walking on top of this box structure. This here is a lateral flume, and you can see it's also in disrepair. We're going to be repairing portions of that. The following slide, I can show you where it is with regards to the flume portion. Right there's that other lateral flume and then this is our major flume here and again you can see the depth of these gulch crossings. It was quite a feat, I would say having construction of this flume back in the '70s and even back in the '30s. However, this slide I want to point out is, we have a safety cable here that you hang on to because again, the railing is not the best and it's best to hold on to the cable when we cross the flume and again, that's why we make it closed to the public. Just another slide of a gulch crossing. Here's an interesting slide, this is part of the mountain, and this area here slides off or drops off to about another 30 feet so walking this part of the flume, the flume actually pitches away, and you kind of, you want to make sure that you cross this, keep your eye on where you're walking. This is another portion of how the flume is being constructed or was constructed along this mountainside, and right around the corner is where we're going to end at Haipuaena Stream. Here's the stream, right through here, and I want you to take note of this, and note of the, this is an old gauging station, and this is our intake, and this is all part of the flume. These next couple of slides will be very interesting. This is a shot when I was out here back in I think 2009, we had quite a bit of rain as you can tell, you can see there's so much water that gets conveyed in the flume that there's boards that actually release some of the pressure when the water comes out and this was quite interesting. You don't want to be down in here, this will, you'll get washed away. Well that's what happened back in February this year when we had those heavy rains up there and that about 40 feet of our flume got washed away, and we couldn't even find any of the debris, it's probably down in the Pacific now. There's another shot of where, I think that shot was taken from up here, looking back this way. And then we had contracted out to get this, keep our flume...the Haipuaena intake is our major water source for the flume so we had a contractor come in and put in this temporary pipe to feed the flume to continue to keep our water supply. We've contracted with Global Specialty Contractors to do the flume replacement for this project, and you can tell that they've had quite a bit of experience for this with the flume type of work. Again, here's what we're looking at. These next couple of slides will make it much safer for our staff to traverse and to maintain it. It's going to be all aluminum so hopefully the life of the flume will be 50 to 100 years. This here is the prototype section of the flume we had made and asked the contractor to provide that for us. It's all aluminum, top, bolts, everything so we don't get rust. Here's an engineer's rendering of what the flume and the support and the grating and catwalk. Again, we'll be walking on top of the flume and this is what's being constructed now. The next couple photographs or slides will show what the flume will look at, look like. This is part of the flume that is being constructed in the fabricator's warehouse. The contractor went out there and was given the opportunity to construct it in the warehouse and then all these materials are being shipped out here and then be put together out in the field. This slide again shows what the flume looks like. The flume actually just sits on this support system. It's not bolted at all to the support system because aluminum expands and contracts with our temperature changes. There's another shot of what the flume is. Now, the grating will sit on top, and there'll be a railing on top of, along both sides over, through the gulch crossings. Now these are more recent photographs. The flume used to be right here. It's been demoed, about 1,400 feet has been demoed to date. Again, this is the bypass piping that we're going, we to try to continue to keep the flow of water, raw water, while

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they're doing the construction work. Again this is part of the demolition'd [*sic*] portion of the flume. You can see there's a gulch crossing that we'll be replacing, and here's some of the more, you could say, logistics of this project. We gave the notice to proceed to the contractor in December of 2012, and it's got a two-year schedule. We have a cost of 11 million dollars, and I believe that concludes our Waikamoi Flume presentation.

VICE-CHAIR WHITE: Thank you very much, Tom, and the Committee will stand in recess to reset the room and we'll restart in two minutes. . . .(*gavel*). . .

RECESS: 9:32 a.m.

RECONVENE: 9:34 a.m.

VICE-CHAIR WHITE: . . .(*gavel*). . . The meeting of the Water Resources Committee will come back to order, and Members, we will open up for questions after Mr. Taylor is given an opportunity to add a couple of comments to the presentation, and I want to thank you both for bringing that to us today. It's always nice to see what's going on up in the forests, the forest areas where you don't always get to traverse, so it's exciting. Thank you. Mr. Taylor, or Mr. Ochwat?

MR. TAYLOR: Thank you, Mr. Chair. The presentation as you saw focused on the flume project so just a couple words to give you a little broader perspective. As Tom said during the presentation, the water from the flume eventually goes to the Olinda Treatment Plant before it goes to the public. The Olinda Treatment Plant is fed by four reservoirs, the two Kahakapao Reservoirs, which are 50 million gallons each for a total of 100, and the two Waikamoi Reservoirs, which are 15 million gallons each. So there's a total of 130 million gallons of reservoir storage between the flume and the treatment plant. There's also a dam, a concrete dam in the Waikamoi Stream itself. There's a direct fill from the dam into the reservoir system, so the flume is not the only source of water that eventually goes to the reservoirs and the treatment plant. When there is heavy rains, the water behind the dam goes directly to the reservoirs so that is probably the primary way that those reservoirs are filled and then this flume will continue to fill the reservoirs in the days, weeks, after rains when the soil itself is sort of letting the water into the flume more slowly like a sponge. So the combination of the dam, which you didn't see, the reservoirs, and the flume, are the long-term water source for the Olinda Treatment Plant. So I just wanted to clarify where this fits into the overall system.

VICE-CHAIR WHITE: Thank you. Members, questions? Ms. Baisa.

COUNCILMEMBER BAISA: Yes, and thank you very much, Mr. Ochwat, for the presentation. Having had the opportunity to attend the blessing, I'm really grateful because now I have a real picture in my head of what this really looks like and where it is, and it's amazing cause I've lived up there my whole life and never had the opportunity to see it until recently. But thank you for showing us all of this, but a question was asked to me by a person who couldn't be here today

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who is very interested in this Waikamoi Flume. And the question is, how does this affect the Upcountry meter situation? Or does it affect it at all?

MR. TAYLOR: Thank you, Member Baisa. And I'll handle that question. In a previous meeting, I don't remember how long ago it was, maybe nine months ago, we put on a presentation of the Upcountry system and how it worked and what the bottlenecks were and what improvements we could make and how they would work. Because the flume catches water over a long period of time, it helps keep the reservoir system topped off. Having water leaking out of it, which is you could see from the pictures what's happening now, is meaning that the reservoir, especially when it isn't raining, is not as full as it otherwise would be. So the purpose of this project is to make sure that the flume captures more of the water, loses less of the water, and helps to keep the reservoir more full than it otherwise would be. Because, you can see from the technology used in the flume, there is no measuring device at the intake to the flume. We don't know how much water enters the front end, we don't know how much makes it to the reservoir end, so there, we have just no way to estimate how much more water will come when we're not losing any in between. There is just no way to estimate that. It will certainly help, it may help a little, it may help a lot, but it will help overall keep the reservoirs filled, which helps either the Upcountry Meter List or reliability and decreases chance of drought, or a little bit of both as we talked about at the last meeting. But it will get more of the water that we're grabbing at the beginning end of the flume and making sure that that gets to the reservoirs, so numerically how much it will be, there is no way to estimate. But again, you'd looked at the pictures and you can see a lot of water is clearly being lost in that leaky old flume, so it'll definitely help both the situations of avoiding drought and the Meter List by helping to keep the reservoirs more full than they otherwise would be.

COUNCILMEMBER BAISA: Thank you. Mr. Chair, follow-up?

VICE-CHAIR WHITE: Sure, go ahead.

COUNCILMEMBER BAISA: When do we expect to see the completion of this project?

MR. OCHWAT: The schedule on this would be the contract has two years schedule so we're looking at December of 2014 to have that complete, and if all goes well, that's, I would hope that we'd have that complete by then.

COUNCILMEMBER BAISA: Thank you very much. Mr. Chair, that's it for now.

VICE-CHAIR WHITE: Okay. Mr. Carroll, any questions?

COUNCILMEMBER CARROLL: That new one, that steel one that they're making, seems to be, how much bigger is that than the old one, it looks like it's larger.

MR. OCHWAT: The old flume, the outside dimensions of the existing, I should say, the existing redwood flume is 14 by 27 inches. That's the outside dimensions of the existing flume, redwood

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flume. The new flume is 14 inches by 27 inches, we just used the exterior dimensions for the flume for trying to match the same dimensions of the flume that exists now.

COUNCILMEMBER CARROLL: Thank you.

VICE-CHAIR WHITE: Ms. Crivello?

COUNCILMEMBER CRIVELLO: No questions.

VICE-CHAIR WHITE: Okay. What does the, how much of a change is in the interior dimensions? Is there much of a change in the volume that it can...?

MR. OCHWAT: The interior dimensions of approximately three inches in width, if you look at the wood dimensions, the wood, redwood dimensions you know are one-and-a-half inches, if you're using a two-by-four. So, we're picking up about one and a half inches on the width. The height remains the same.

VICE-CHAIR WHITE: So the volume that it can carry is a little bit increased?

MR. OCHWAT: The volume increases but again I want to point out that we're not doing any modifications to any of the intakes to the flume and that's the control for how much water we can convey. So we're just changing the means of conveyance so it doesn't leak as much.

MR. TAYLOR: Yeah, and Mr. Chair if I can follow up. I think most people have heard that there's issues going on with interim in-stream flow standards in the East Maui system. How much water needs to stay in the streams, how much can be taken out? One of our criteria for this project was to not try to increase the size or intake of the flume so that we would be taking more of that water and get ourselves into that issue of changing our permits of our diversions and things like that. So there's a whole State Water Commission regulatory framework that we didn't want to trigger, because it isn't a simple process to go through and it's tied up as I think most of you know with a lot of controversy. So the goal of this project was basically to increase the reliability of our existing system at its existing size and make it work, not to increase its draw and get this project dragged into the controversy of the East Maui stream issues.

VICE-CHAIR WHITE: Thank you. Any further questions or comments? Ms. Baisa?

COUNCILMEMBER BAISA: Just one last one. You know I've noticed that projects we work on them, we plan them, we fund them, and then we get going. Well obviously we're getting going, are we seeing that this, the funding that we have for it will be adequate or do you anticipate that it might be more expensive than we thought or hopefully less expensive?

MR. TAYLOR: I think like with most projects, once we go out to bid, we get a low bid and hopefully that's all of the costs. Realistically, when unforeseen conditions happen we do have contract change orders. The Council also approved what we believed to be enough money to deal with

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those change orders. So at this point we have no reason to believe that we won't have enough money. Hopefully we won't even spend all of the change order money, that's always our hope, but we have no reason to believe at this point that we won't have enough funding to complete the project.

COUNCILMEMBER BAISA: Thank you very much. I think we're all very excited to see the project taking off. We've talked about it for many, many years and I know people have lamented for years about the water that is being lost. So it's nice to see that finally we're on our way. Thank you.

VICE-CHAIR WHITE: Okay, if there are no further questions or comments, I'd like to thank the Department, especially Mr. Ochwat for the presentation this morning, and with that we conclude our agenda for today and we will defer this item without objection.

COUNCILMEMBERS VOICED NO OBJECTIONS. (Excused: DGC, DSG, and MPV)

ACTION: DEFER PENDING FURTHER DISCUSSION.

VICE-CHAIR WHITE: With that, we will adjourn. . . .(gavel). . .

ADJOURN: 9:45 a.m.

APPROVED BY:



Michael P. Victorino, Chair
Water Resources Committee

wr:min:130717

Transcribed by: Marie Tesoro

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CERTIFICATE

I, Marie Tesoro, 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 30th day of July, 2012, in Wailuku, Hawaii



Marie Tesoro