

BOARD OF WATER SUPPLY
County of Maui
Regular Meeting
Thursday, July 26, 2007
9:00 a.m.
Committee Room
Office of Council Services
Kalana O Maui
200 South High Street, Room 707
Wailuku, Hawaii 96793

I. Call to Order

Chair Kenneth Okamura called the July 26, 2007 Board of Water Supply meeting to order at 9:05 a.m.

II. Attendance

Board Members Present:

Also Present:

Chair Kenneth Okamura
Vice Chair Lee Aldridge
Scott Luck
Marion Haller
Carl Holmberg
Michael Howden
Kuilaokalani Lester
Phyllis Robinson

Jeffrey Eng, Director of Water Supply
Eric Yamashige, Deputy Director
Edward Kushi, Jr., Deputy Corporation Counsel
Alva Nakamura
Holly Perdido
Paul Seitz
Jacky Takakura
Gaye Hayashida

Others:

Kim Willenbrink, Legislative Analyst

III. Announcements

A. None.

Chair Okamura announced that Mayor Tavares will be attending this meeting after 9:00 a.m. The plan is to conduct the business according to the agenda until she arrives.

IV. Approval of Minutes

A. June 12, 2007 Meeting

The minutes were approved with the following corrections. The correct date of the heading beginning from page 2 should be June 12, 2007. On page 3, first paragraph, last line, the word “losing” should be replaced with the word “using”.

B. June 21, 2007 Meeting

The minutes were approved as read.

V. Testimony from the Public

The scheduled testifier, Tia Ferguson, will be arriving at 10:00 am. The Chair stated that Ms. Ferguson, an intern at Dowling Co., had asked to present information to the Board on “low volume” toilets.

VI. Appeals

A. None.

VII. Unfinished Business

A. None.

At this time Member Haller stated that the members received a copy of an appeal and she wanted to suggest that the Department’s letter to the appellant should also indicate a time frame to appeal this process. It should be a standard communication that should be added to the Department’s letters.

VII. Communications

A. None.

VIII. Director’s Report

A. None.

At this time the Chair Okamura stated that Vice Chair Aldridge had questions for Director Eng.

The Vice Chair stated that he has questions on the water rates that took effect on July 1st. The press release does not correspond precisely to what the Board had recommended. He asked if what the Board had recommended would eventually be adopted and further stated that there was no single family rate structure set up, specifically the fourth tier.

Director Eng stated that this all occurred during the council's budget hearings. The Department went in proposing the new single family classification and also the fourth tier to promote conservation. But in the course of going through the budget process, where they thought they had support from the council for the conservation rates for single family, things got kind of reversed in mid-stream. The Department was criticized for singling out single families particularly single families in Maui Meadows.

The Director's main concern was to satisfy the revenue needs of the Department, so they gave up on the single family classification. They did get the revenue requirements and they did get increases in the second and third tiers. As a department and in fulfilling their fiduciary needs the Department is in pretty good shape. He hopes in the future to incorporate some kind of conservation measure through the rates and so the Department will make another attempt again.

Vice Chair Aldridge thanked Director Eng for the explanation and stated it would be desirable to receive back information before they see it in a press release.

Director Eng agreed and said that the Department will keep the members apprised as they go into next year's budget and hopes to get their support in the council meetings.

IX. Other Business

A. Honorable Charmaine Tavares, Mayor, County of Maui to discuss the administration's goals for the County's water system and the role of the Board of Water Supply.

Mayor Charmaine Tavares stated that she has been trying to meet at least once with all the boards and commissions. She then thanked the members for their service to the County of Maui.

Mayor Tavares said that the Charter is very general and broad on what the Board of Water Supply's role is. It was made generic in order to be tailored for whatever the need may be at the time, rather than going into specific points. She is very familiar with this legislation since it was she who introduced this to the council. They left it general enough so it would not handcuff the Board's abilities to give input into whatever the issue is at that time.

In the near future the General Plan and the Maui Island Plan will be discussed under the Planning Department. One of the biggest issues in the Maui Island Plan is water. When that plan is in draft form it will be submitted to the Department for comments. She will make sure one is submitted to the Board of Water Supply for their comments. The members' input on this is extremely important because of the impact it will have over the next 10 to 20 years.

The Board's regular business is important to her, to the director and to the County Council because they need to know what the Board is feeling and thinking about. She suggested that any position the board takes on any matter should be put into a resolution and submitted to the County Council or to her because that way they would know that it is coming from the Board. It would be a direct communication between the Board and the County Council. A resolution would summarize the board's discussion and there will be backup documents with it.

She does not mind if the Board has a report, like a minority report, that states what some of the other issues were that came up but is not reflected because the majority of the board felt one way. But it should be mentioned somewhere so they don't have to go through the minutes to see what the objections were, or what things people were uncomfortable with.

Mayor Tavares stated that she is quite pleased with how the Department has been operating and functioning. She believes they are on the right track with the increased emphasis on conservation and it is unfortunate that they couldn't get that portion of the rate to reflect conservation in the residential areas. The Mayor stated that we have a great team in the Water Department and the folks working there are trying their best. She is counting on the Board to support not only the Director and Deputy Director but the entire Department.

Member Howden stated that the way the Dual Line is designed it precludes any extension of users. He further stated that he believes that the Director feels that it is easier to deal with it as it was written rather than for us to intervene and say the design is short-sighted. Any county input is largely by-passed to the detriment of agriculture on Maui.

Mayor Tavares said she is not intimately familiar with the Dual Line because the county has had very little input in the process. But as with any plan, when times change you've got to be able to change what was approved 10 years, 15 years ago. We need to look into it more.

This water line was planned even before she got on the council. Though she has not seen the actual plan and what the purpose was, things have changed a lot and that's why we need to update the community plans every 10 years. She will work with the Director and the Department of Ag and will try to encourage the state to let the county help put this line in.

Vice Chair Aldridge stated that he has a concern regarding an article in the Maui Times that highlighted the number of housing units that are planned or in some stage of development and it was in the tens of thousands. His concern is that the water infrastructure is not keeping up. It is falling further and further behind, ie. the Upcountry water meter list continues to grow longer. It is also exacerbated by the fact that the Department has shortages in both the engineering and planning

sections. He further stated that he hopes there is something they can do to “leap frog” over the shortages.

Mayor Tavares stated that it has always been a challenge regarding personnel shortages. It is not just in the Water Department but rather it is throughout the county organization and also the entire state. They are looking at ways to entice or to make it easier for out-of-state people to apply. For example, the Planning Department can now recruit out-of-state planners, which was not allowed before. They have also expanded the salary. In the past, a person hired by the county had to start at the starting salary no matter what their experience is. Now there is a salary range and depending on their experience and educational background they could earn more than the starting pay.

It is not a matter of fighting with the council to get more positions, the county has those positions funded but they don't have the bodies. We can't do our jobs well because the small staff that is there has taken on the responsibility of a full staff. You can do that for a temporary period but in the long run when you don't see an end in sight then you get resignations. So now what we are seeing is an exodus of county employees because it gets too difficult in their department and because there are other outside jobs available.

The things the board has talked about will be critically addressed in the General Plan and the Maui Island Plan. She knows the list that Vice Chair Aldridge is talking about that had all the housing developments that are being proposed. They should have just titled it “Wish List”.

The Planning Department, in concert with the Water Department, has to look at those plans and give their comments on it. Urban growth boundaries will be established in this round of community plans. They will draw a line around each of those existing areas and/or make a new area to prevent sprawl. We need to look at what this community can support and first we need to look at water. If it cannot be supported with water or the ability to develop and deliver water is too expensive then it shouldn't be developed here but rather be placed somewhere else where it would be more economical.

These are the things that will be discussed and looked at during this Maui Island Plan. This is the most important thing that is coming down here. It only happens once in every ten years so this current board's role in this process is very critical.

Part of our inability to find employees is because we don't have affordable housing. They can't afford to live here. In order to keep our people here we have to have affordable housing projects and we need to be able to deliver water to those projects and it has to be at the top of the list. This is what drove the council to come up with the workforce housing policy bill that passed last year.

The Mayor stated that she is not going to give a list of all the things they think is going to happen but as it comes to reality then those will be released and then you will see units coming up for occupation. That's how that list the Maui Times referred to got created because everybody's dream project got put on it, something like 14,000 units in Maui over the next 3 to 5 years.

We are making some good in-roads with developers and non-profits interested in building affordable housing as well as the workforce housing. And all this is tied into what kind of water can be delivered.

There are plans to provide more storage for Upcountry and looking for water source. She has discussed this with Director Eng and they are formulating a plan that will be presented to the County Council.

Mayor Tavares stated that she did read the Viewpoint article in the newspaper and she is not going to bother to defend her position in the past, but she will go ahead and work forward. An issue such as a centralized water system for the entire island is not something that this administration thinks or feels should be a decision by this administration alone. A decision like that is a huge decision for all the island and all the island should be involved. It should not be a unilateral decision. Whether or not she believes all the systems should be tied in together is not the issue. The issue is the process by which you come to that conclusion. It should not be done on one floor of the county building.

Member Haller asked if there is any plan to pursue this 300 million gallon reservoir for Upcountry?

Mayor Tavares replied that this is what we are talking about and we are kind of getting ready to go the next cycle with the budget. Those reservoirs have been in the plans since before her father was mayor, though only two were built. We have to re-visit that and look at the situation now. It is not a case of we don't have water, it is just that we don't have it at certain times of the year. We have to look at the combination of groundwater and surface water to provide a consistent water supply. We want to have something ready for the next budget cycle which starts now.

Member Haller asked if Mayor Tavares has any thoughts about readdressing the memorandum of agreement and making it a more defined agreement.

The Mayor stated yes, that is one of the things that they have in their "stew pot" to look at. It is not just that agreement but there are a number of agreements they will look at especially the ones that were signed in the later part of last year. They need to confer with the county attorney to see if it can be re-opened and what is the administration's ability to re-negotiate these agreements.

Chair Okamura asked what would be the future possibility that some of the water infrastructure could be funded through the general fund i.e. the real property tax collections?

Mayor Tavares replied that nothing is impossible in that realm but it will take a lot of negotiation or information back and forth with the administration and council. For the administration to propose something like that they would need very good back-up.

One of the ideas floating around because of the General Plan and the urban growth boundaries is to look at the infrastructure and to figure out another way to get the infrastructure up, rather than depending upon the developer to fund it. Because what is happening is that the developer who is ready to go is the one who pays for everything then the next developer doesn't pay anything or very little. So we have a waiting game to see who is going first. We have to get a better system in a more organized and thoughtful way. But if someone wants to build outside the urban growth boundaries then they are on their own.

Mayor Tavares stated that they are open to creative ways in doing things. They have talked to the congressional delegation in helping for certain things like Upcountry infrastructure needs for water storage or wells and help with the Dual Water Line.

The Mayor told the Board that they should feel free to contact her if they have any questions, and she will certainly try to get some answers to them. She then thanked the board members for their work.

The Chair thanked Mayor Tavares for her time in attending this meeting.

V. Testimony from the Public (continued)

Tia Ferguson, an intern at Dowling Company, stated that some of her work involved water and so she thought it would be appropriate to talk to this board. Hand-outs were distributed to the board members.

Ms. Ferguson stated that we all know there is a water shortage and from a developers perspective the available water conservation technology is profound. She looked at every plumbing permit issued in 2006 and calculated what the projected water usage would be for conventional fixtures, low flow fixture and ultra low flow fixture. With ultra low flow fixtures the water savings would have been 20 million gallons per year for 2006. That figure is impressive enough to consider given the current water shortage.

For today she just wants to talk about toilets and urinals because 30% of household water usage goes down the toilet. A definition of a high efficiency toilet is a toilet that uses 20% less than the current standard, which is 1.6 gallons per flush. There

are 3 types of high efficiency toilets. The first is the dual flush that has 2 flush options, one for liquid waste and one for solid waste. The liquid waste option only uses 0.8 gallons per flush. The solid waste option uses 1.6 gallons. Then there is the gravity assist toilet which uses 1.1 gallons and the pressure assist toilet uses 1.28 gallons per flush.

The urinals are similar in that there is the half gallon flush, the pint flush and the waterless. In her research she has found that the waterless urinal has been proven to be more sanitary than a flush type. In the flush process bacteria is stirred up in the bowl whereas in the waterless urinal it just goes down. There is a layer of oil based biodegradable substance that sits above the urine that seals off all of the bacteria and blocks the smell.

Another interesting aspect of the waterless urinal is that because they don't have a flush function that can be tampered with they are not vandalized as easily.

Dowling Co. uses these fixtures in all their developments including commercial, affordable housing and luxury developments. They also have it in their office.

She did not come here with an agenda but she thinks that it is smart to be conservative and to be aware of the other places that have incentive programs. It is worth knowing that California is doing this and soon it may become mainstream.

The Chair thanked Ms. Ferguson and stated that if the Board desires they can follow up on this on some future agenda.

IX. Other Business (continued)

B. Report on the AWWA Annual Conference and Expo (June 24 – 28, 2007) from Members Carl Holmberg and Kuilauokalani Lester.

Member Holmberg gave a summary on the sessions that he and Member Lester attended which included microbial issues, water treatment and distribution options, plumbing codes and conservation efforts.

There was the Kauai Growth Farm project by designer Steve Duransao of Orlando and Hugh Strong from Aqua Engineers of Kauai that he attended. This was a partnership to build a surface water treatment system.

One of the new technologies being brought up is disinfection with UV and ultra-sound which is still a lab project. Basically, they found that a combination of UV and ultra-sound seemed to be extremely effective at damaging the DNA of bacteria. The UV damages the DNA and using ultra-sound prevents the bacteria to repair itself. Further research needs to be done to finding the exact mechanism in ultra-sound that causes this to happen.

There was a session on Maui De-Salting. Brown and Caldwell was asked by someone from the private sector to take a look at a plan for desalinization given that they already realized that sea water desalinization was going to be too expensive to do here. What they were looking at was various plans for brackish desalinization. What they came out with for potential cost is about \$4.10/1000 gallons for brackish water versus \$10.00/1000 gallons for sea water.

After the session Brown and Caldwell said that if the County Council wouldn't use water that was in any way contaminated even though it was later treated then the whole point was moot.

A session on Legionella disease discussed the correct temperature to prevent bacteria build-up in hot water tanks which is the standard of 140 degrees. It was also recommended that a thermo static mixing valve be used to protect people from being scalded.

The director of Redwood City's water system got very serious about doing a program to reduce the water consumption for outdoor watering. What it came down to was a need for a lot of field work to get with the contractors, the homeowners and businesses.

As with Redwood City, the city of Austin, Texas got serious with water conservation. A big part of this was making sure the council and the community groups were all fully exposed to what was going on.

The city of Las Vegas, Clark County, has gotten very serious with the need for water efficiency. Now for major developments they have a Water Smart program where the water district would work with the developer to put together a water plan.

One session that caught his attention was Building Skills for Small Boards. There is an organization called the RCAP that is aimed at small systems with populations under 10K. They offer courses in training and financial management assets, rate setting and setting fees.

The EPA now offers a free program called CUPSS to help small districts organize their efforts. It is still under development and they plan to release it before the next ACE meeting.

C. Discussion on Upcountry Drought Situation and Update on Upcountry Water System.

Director Eng stated that we are still in the drought situation and the overall demand has been well controlled but there is still a long way to go and we might be facing 3 more months of this. The Wailoa ditch has had some decent flows but because of

turbidity the production may be down. Hopefully it will not go to the next level of mandatory conservation.

The Department's biggest concern is for the farmers who will have to meet the 10% mandatory cutback in early August. They have been meeting with the Maui Farm Bureau and if it ever goes to the 25% cutback they may want to meet as a body to see what can be done to protect the farmers. But right now it is pretty stable.

The Kapakalua Well maybe back in operation by next week and Pookela is still available as a back up.

He has just received some data from Maui Electric on this first almost full month of electricity costs. He feared that it would be in the order of \$3.00/1000 gallons to pump. It actually is \$1.32/1000 gallon.

He will try to get something to the State Water Commission's staff member who heads the Hawaii Drought Council for help in applying for some emergency drought funding. But there is no guarantee because there are 17 western states competing for the money.

Vice Chair Aldridge wondered why Pookela well was shut down and hasn't been brought back since.

The Director stated that the Department has been able to focus more on Kamole and its production. He further stated that demand being more under control the Department is able to do that. If demand had gone up to 10 mgd then Pookela would have been turned back on. Because it is a costly well to operate we are going to keep it as it was intended, as a back-up.

Vice Chair Aldridge thanked the Director for sending the members the schematic of the Upcountry system. He asked where is the Waikamoi reservoir on this?

Director Eng stated that is to the left of Kahakapao. From the intakes, the water flows into Waikamoi Reservoir then on to Kahakapao. There are 3 or 4 intakes that serve the Upper Kula system.

Paul Seitz stated that the main one is the Waikamoi stream. Then you got the high flow and the flumes and there are a couple of in-takes on that flume.

Vice Chair Aldridge asked so Pookela well pumps into the Pookela tank?

The Director replied yes it does. It would be to the left of the tank on the schematic.

The Vice Chair asked for a general idea of the approximate elevation of these 3 plants.

Director Eng stated that Kamole is at around 1100 foot elevation, Piiholo is roughly 3000 he believes.

Mr. Seitz stated it is lower than that. Olinda is at 4000, Piiholo is about 2400 to 2500 and Kamole is around 850.

Vice Chair Aldridge asked if there is the ability to back-flow down from the higher elevation?

Director Eng replied if there was a lot of water it could be done.

Member Howden asked how well are those in-takes maintained? Are they checked regularly?

Director Eng replied yes, he believes EMI goes in fairly regularly and clears the in-takes. The flumes need some repair and replacement and the Department is looking into it for this coming CIP.

Vice Chair Aldridge asked what is the source of supply to Piiholo reservoir?

The Director stated that there are 7 in-takes for Piiholo from different streams.

Chair Okamura asked if Resolution 98-18 regarding drought triggers, has been rescinded as mentioned by the previous director? What is the official status?

Edward Kushi stated that he didn't know.

The Chair stated that he was asked by a pre-school operator how they were going to be able to cut-back on the average because their use is only toilets and washing hands.

Director Eng stated that there are a lot of people that have special situations like that. These people can write to him explaining their unique situation. Before the Department takes any enforcement action they will take all this into consideration.

The Chair asked how does the Department come up with the averages used to calculate the cut-back? In his situation the average seemed too low. In the higher elevations there are periods when hardly any water is used and periods when it is dry when more water is needed. So the average is way down compared to someone who farms in Omaopio where it is sort of dry most of the time so their average would be more in line to what they use. He believes that when enforcing the averages you really need to look at the particular situation.

Director Eng stated that he is right, every situation is different and we have discretionary powers to help farmers.

When it comes to regular rate payers he has thought of establishing 400 gallons per day as a trigger. But there are many gentlemen estates where their base is already 2000 gallons per day, and then they get the notice to cut-back 10%. They are still at 1800 gallons per day. What about these regular residential customers at 410 and they get the notice to cut-back? The Department has thought about setting a higher base year round but that's not going to help the conservation efforts. Maybe one way to address this is to set up drought rates rather than having a mandatory volume/quantity cut-back. This is just something to think about and if the board has any thoughts he would appreciate it.

Vice Chair Aldridge stated that ironically whenever you impose a percent cut-back it's the ones who have been conserving already that suffer the most because they cannot squeeze any more to conserve and the ones who over use can cut-back 10% easily. Imposing drought rates works economically because the over users have to pay for the extra water usage.

Member Haller suggested imposing a flat rate. If you go over a certain amount you get billed an additional \$50.00. You have to get severe in your drought rate, ie. \$6.00 a gallon, to make an impact.

Member Howden suggested that HC&S pay more than the 2 to 3/5 of cent per 1000 gallons that they take from the East Maui Watershed. In terms of funding for water storage maybe they need to pay a more reasonable amount.

Member Haller stated that she remembers the drought guidelines are not official because they got rescinded. It makes sense to her to make them official as opposed to using old guidelines.

Director Eng stated that one of the councilmember has a similar proposal to the Water Resource Committee with a new drought ordinance. As to who has authority to declare a drought, that will have to be worked out. As far as the triggers are concerned it may change from time to time.

D. Receipt of Board Member request for agenda items to be placed on future agendas.

The Chair stated that he will take the members suggestions at this time for future agendas but right now the August agenda is pretty full.

1. Discussion on the Piiholo well as suggested by Member Howden.

X. Orientation for New Board Members

A. Presentation on Overview of the Department of Water Supply.

Jacky Takakura gave a power-point presentation on the Overview of the Department of Water Supply. A printed copy is attached to these minutes.

B. Discussion on the Duties and Responsibilities of Board Members.

Edward Kushi submitted 3 hand-outs for the members' "night-time reading" which are basically Sunshine Law related.

The first is dated 1993 (Information Packet for New Board and Commission Members), the next is dated February 23, 2003 (Review of Agendas for Meetings) which is a paper done by Professor Jon Van Dyke, and the last one is dated August 2004 (Open Meetings – a guided to "The Sunshine Law") which is issued by the Office of Information Practices, State of Hawaii. This is the state office that controls, governs and enforces the state's Sunshine Law. This basically covers the duties and responsibilities of board members, state law chapter 92, HRS.

You are all subject to the Sunshine Law. This covers meetings, communications and non-board communications and chance meetings. Any questions you have about meetings and boards and commission you will find in here.

Mr. Kushi reminded the members that they are officers of the county. Anything that applies to employees and officers of the county applies to the board members. He suggested that the members review the section regarding contested case hearings and appeals because they now have the power to hear appeals.

Member Luck stated that basically they cannot communicate by e-mail regarding anything other than that there's meeting on a particular day. Is that correct?

Mr. Kushi replied that has been a touchy subject, it is yes and no. Any two of you may communicate wherever, as long as you don't commit yourselves to voting one way or the other. Serial communications are frowned upon by the OIP but any 2 members can communicate by e-mail or personally as long as you don't commit yourselves to a vote. E-mails for administrative matters are ok, you may do it amongst all of you as long as it pertains to administrative scheduling matters not substantive or decision matters. If a non-board member solicits all the members as a whole Mr. Kushi suggests that they should request the chair bring it up at the next board meeting.

Member Haller asked how can they do site visits? Can we hold a meeting?

Mr. Kushi replied yes but it would be a lengthy agenda and has to be posted. Or it could be done in a series of no more than 2 members at time.

Member Lester asked if there was a way they could do it without discussing board business?

Mr. Kushi stated that the problem is that when there are 5 or more board members you have a quorum then this meeting has to be posted.

Member Holmberg asked how did the council pull off having dinner together and we can't have a similar get together just to view something? Was there a legal follow through? If so, what was consequence?

Member Haller suggested that maybe there would have been consequences only if someone sues or does something about it and nobody did.

The Department staff stated that it would be a public meeting and members of the public are invited and there may be a limit on how many people can be taken at a time to tour the facilities. And the other problem would be the transportation. Will the Department provide transportation for the public? How many buses would be required? So in the past the Department has done it for 2 members at a time because the logistics gets in the way.

XI. Division Reports

The Chair apologized for skipping over this agenda item and asked if anyone had questions.

Member Haller asked why the Hamakuapoko wells are being tested? Is that in case they get used?

Director Eng stated that the Department did want to operate them because they have been idle for many months and you don't want to leave equipment sitting idle. We could use it in a water exchange later on with A&B as the drought gets worse.

XII. Adjournment

The July 26, 2007 Board of Water Supply meeting was adjourned at 12:06 p.m.

Prepared and submitted by:

Gaye Hayashida
Commission Support Clerk

Approved on: _____