

BOARD OF WATER SUPPLY
COUNTY OF MAUI

REGULAR MEETING
MINUTES OF AUGUST 30, 2012

The regular meeting of the Maui County Board of Water Supply was held at the Department of Liquor Control office conference room, 2145 Kaohu Street, Room 108, Wailuku, Maui, on Thursday, August 30, 2012.

CALL TO ORDER

The meeting was called to order by Chair Kevin Boteilho at 9:05 a.m.

ATTENDANCE

Members present: Kevin Boteilho, Chair
Donald Gerbig
Robert Joslin
William Kamai
Cyrus Kodani
James Rust
Michael Suzuki

Excused: John Hoxie, Vice Chair
Patricia Eason

Staff present: Paul Meyer, Deputy Director
James Giroux, Deputy Corporation Counsel
Gaye Hayashida, Commission Support Clerk

Chair Boteilho thanked the members for allowing him to change the meeting to August 30th.

ANNOUNCEMENTS

Because the Department of Liquor Control will no longer loan out its conference room the Board of Water Supply's meetings for October 18th, November 15th and December 20th will be at the Planning Department (conference room). The September meeting date is still pending. The Mayor's office is reserving 3 possible dates for their conference room on the 9th Floor; September 19th, 21st and 25th.

The Board was informed that the appellant Rosa Say will not attend this meeting but will submit her Proposed Findings of Fact, Conclusions of Law, Decision and Order (Proposed Findings) to the Board. The Department's attorney, Thomas Kolbe is available on all 3 dates.

Deputy Corporation Counsel James Giroux was concerned that if the Board has questions on Ms. Say's Proposed Findings she will not be here to answer them. He felt

that it would not be fair to her if she doesn't attend. He explained that it is her right to be present to answer questions.

Staff will contact Ms. Say and explain this to her.

Board agreed to hold the meeting on September 25th at the Mayor's conference room from 9 am to 11 am but staff will ask to change the conference room reservation to 8 am until 1 pm.

(Note: Due to a scheduling conflict with the Mayor's conference room the September meeting will be at the Planning Department's conference room on Monday, September 24, 2012.)

APPROVAL OF MINUTES

Minutes of July 26, 2012

The chair asked for approval of the minutes.

Motion: Member Joslin moved to approve the minutes of July 26, 2012

Second: Member Gerbig

Discussion: None.

Vote: Unanimous. Motion carried. The minutes of July 26, 2012 were approved.

Staff informed the Board that the court reporter will have the transcripts of the July 26, 2012 hearing available on September 4th.

TESTIMONY FROM THE PUBLIC

There being no public testifiers Chair Boteilho closed public testimony.

APPEALS

There were no appeals scheduled for this meeting.

UNFINISHED BUSINESS

None.

OTHER BUSINESS

At this time, Member Gerbig stated that the Board had voted against the proposal to create the Lana'i Water Advisory Committee (LWAC) and he wondered what happened to that.

Member Joslin remembered that a letter was sent to the Council stating the Board's position on this matter.

Member Gerbig said that he would give testimony (to the Council) to back up the letter if it comes up.

Mr. Giroux suggested that the Board vote to amend the agenda to create an investigative committee for the limited purpose to address the issue of the LWAC as it comes up in council. But first the Board needs to amend the agenda. This would be an internal matter as the letter has already been written and they would set the members to this committee and set the parameters of the investigative committee. The committee would then report back to the Board and if there were no questions this matter would be filed away since there would be no further action taken.

Motion: Member Gerbig moved to amend the August 30, 2012 agenda.

Second: Member Joslin

Discussion: None.

Vote: Unanimous. Motion carried. The August 30th agenda is amended.

Motion: Member Gerbig moved to add under Other Business, the Creation of an Investigative Committee to Address the Board Water Supply's letter/position regarding the Lana'i Water Advisory Committee to the Council.

Second: Member Joslin

Discussion: Member Joslin asked if this is an issue over whether to testify in support of the letter because the letter says what the Board has agreed on.

Chair Boteilho stated that if this matter comes up before the Council someone on behalf of the Board can attend the council meeting in support of the letter.

Mr. Giroux explained that the Board needs a policy statement saying that the Board has discussed this and that this is the

position of the Board, even though it is being given at public testimony.

Chair Boteilho explained for the benefit of the new member(s) that during the process of creating the Lana'i Water Use and Development Plan, a Lana'i Water Advisory Committee (LWAC) was formed to primarily focus on this plan. But the members of LWAC wanted this to be a permanent committee and so a request was made to the Council. But the Board, after discussion and a vote, sent a letter to the Council stating that they were against the creation of a permanent LWAC.

Member Gerbig added that there is no law that gives this committee any power.

Member Joslin also stated that there is no statute precedent, and that there already exists state oversight. And that there are other private water systems and we would be interjecting on something that the County is powerless on.

Chair Boteilho, Members Gerbig, Joslin and Kamai volunteered to be part of an investigative committee. The committee members may give testimony before the County Council on the Board's position against the formation of a Lana'i Water Advisory Committee to advise the Lana'i Planning Commission. Staff will notify the committee when this item comes up at a future council meeting.

Director Taylor explained that this matter is being proposed as an advisory committee to the Lana'i Planning Commission. It more than likely will not be discussed at the Water Resources Committee as this water advisory committee is being proposed to be a part of the Lana' Planning Commission.

(Note: no vote taken)

Motion: Member Rust moved to confirm board members Kevin Boteilho, Don Gerbig, Robert Joslin and William Kamai to the investigative committee

Second: Member Kodani

Discussion: None.

Vote: Unanimous. Motion carried. Kevin Boteilho, Don Gerbig, Robert Joslin and William Kamai are now the investigative committee authorized to speak on behalf of the Board of Water

Supply in the matter of the Board's position against the creation of the Lana'i Water Advisory Committee.

Request for information from the Department and further discussion regarding water use by area and/or demographics

Deputy Director Meyer stated that at the last meeting there was discussion regarding the consumption patterns in residential areas. The top 6% of residential customers use about 23% of the residential water. About 1200 residential customers use more than 3 times the average consumption.

Last year the Department went to the Council and got a 4th rate block on the residential rates; \$5.25 per thousand gallons above 35,000 gallons a month to encourage conservation. As a conservation measure this is easy to administer and is done in connection with the (bi) monthly billings. Unfortunately, since this only started July 1st of this year the Department does not have the results yet, but they are hopeful that there will be some conservation because of this 4th tier.

The Deputy Director referred to 3 color-coded maps of residential consumption that were given to the Board. The maps have been made a part of these minutes. The first map shows the daily consumption of individual residential meters including condos. The high users are shown as red dots. The green and yellow dots are lower consumption.

Member Gerbig stated that if this is a comparison of condominium meters to individual residential meters, then it is a not fair comparison.

Member Joslin asked if these are all 5/8ths meters.

Deputy Director Meyer replied yes, these are single family 5/8ths meters, so there may be ohanas on there.

The second color coded map shows the averages by meter single family users and also larger commercial users in red at very high consumption. This map shows gallons per day by tax map key (tmk).

The third color coded map is of Wailuku-Kahului single family 5/8ths meters showing gallons per day averages. The map shows a fairly consistent pattern of consumption; relatively low compared to the Kihei-Wailea area.

They are hopeful that with the new billing system, which has been delayed again by the Honolulu Board of Water Supply to January 24th, they will be able to get more user data from this Window based system.

Member Kamai asked regarding the \$5.25 rate, how much dollar-wise increase does this equate to.

Just for the residential rate block, the Department didn't raise the first 3 tiers much. There was a 4% increase in the standard monthly fee and they added a 4th rate block, over 35,000 gallons for the high users, with the intention to encourage them to use less. This is sort of the state of art across the country.

Member Joslin said that the difference of this state v. other states is that our zoning allows 3 dwellings off a 5/8ths (meter). If you have one house with 3 bedrooms and you're using that much then you've got a problem. But if you have 3 families in 3 houses on one 5/8ths meter that it is already zoned that way then it shouldn't be burdening (to the system).

Deputy Meyer stated that the (current) billing system and the way the meters are set up do not allow them to determine how many people are on the other side of that meter.

Director Taylor added that there is no way they can bill knowing how many people there are, how many have jobs, how many are kids.

Deputy Meyer further stated that if all the structures are permanent, all the bedrooms are permanent, all the wash rooms are permanent, it is very likely you don't have a 5/8ths meter because the fixture count would be way over the limit. You would have to upgrade to a 3/4ths meter or have a couple of meters.

Director Taylor explained that the 1st rate block is below cost, the next rate matches cost and then there's a rate that is a deterrent to use a lot of water. Rather than looking at the worst case scenario, i.e., a big family with one wage earner, and then set a rate they can afford, it is set for the average so enough revenue comes in to run the utility. Then maybe through another program, e.g., another department or a non-profit organization, the council can help people who need help paying utility bills. This is a better way to handle it. You don't want the rates set so low that there is not enough money to operate. The Council has been supportive of this philosophy and so this is the direction they are going which is why they are not looking for these few cases of real hardship and trying to set rates for them.

Member Joslin asked if these new rates are in the projected repair costs and bottleneaking issues.

The Director replied that the numbers they have been using are still in "an envelope enough" that they're not to this level of detail. They don't know how this rate structure will affect people's behavior. It's going to take a few years to tweak the numbers to see the response to behavior. Once they get a better idea of the conservation volume they can then go back and decide on whether to count on that conservation or not. So their projections are all within a ballpark with a pretty significant margin of error that really envelopes this whole range of what conservation they might get. There is just not enough data to fine tune any better than that.

Chair Boteilho asked if this is justification to raise rates in order to provide service in areas that use more water like South Maui.

Director Taylor replied that it does not appear that the Council supports different water rates for different areas. Upcountry is a little more expensive than Central but Molokai and Hana much more expensive. And so if you raise rates in higher costs area then Molokai and Hana which are the 2 areas that are the least able to pay are going to have the highest rates and the Council doesn't want to go there.

The Deputy stated that West Maui's costs are 88% of the average cost, Central is 89%, Upcountry is 116%, Molokai is 205%, and then East Maui and Hana are 400% of the average cost per thousand gallon.

Member Joslin asked if Molokai's numbers include the Molokai Ranch water system that the County inherited.

The Director replied no, the County of Maui never inherited Molokai Ranch system. Even though the Department of Health tried to give that system to the County, the County won in a Department of Health hearing and in court. The County was never forced to take over that system. Molokai Ranch is still running it and it is still under the PUC as a privately owned public utility.

Member Kamai stated, so South Maui is Central Maui, yes?

Director Taylor stated that they consider it part of the Central Maui system because it is all connected and it all comes from the same source waters. So Central and South Maui from a community plan standpoint are both part of the same functional water system.

Member Kamai asked if they could separate the average cost for Wailuku-Kahului v. Kihei.

Director Taylor stated that the 'lao well system serves both and also a lot of the core system is really the same. They share so much of the same infrastructure; whereas the systems that the Deputy previously mentioned are completely independent systems with completely independent customers.

Member Kamai asked about pumping costs past Waikapu.

The Deputy replied that there really isn't much pumping cost in the Kihei to Makena area. There are a couple of booster pumps serving Maui Meadows but most is run off the elevation difference in the "head" from the tanks and wells from Waihe'e to Waikapu.

Referring to the second map, the large red area is Monsanto and they use a lot of R1 water but they also use potable water.

Member Rust stated that the Kihei Sewage Treatment Plant should be putting out more R1 water than Monsanto could handle.

Deputy Meyer replied that there are other users besides Monsanto. The recycled water line goes all the way down into Kihei now but it doesn't reach Wailea.

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

1. Water Use and Development Plan Schedule presentation by the Director.

COMMUNICATIONS

None.

DIRECTOR'S REPORT

The County has been lucky; we've had some regular rain up in the watershed area and the Upcountry water systems are at almost 90% capacity in the raw water reservoirs; though the area from Ulupalakua, Keokea all the way through to Kaupo has been very, very dry.

The Department has given high priority for Upcountry projects such as the Hamakuapoko Wells. They are just about ready to release the environmental assessment (EA) and are hoping it won't be challenged. These 2 wells can produce up to 750,000 gallons per day and will serve as a reliable, ready back up for the Pookela Well. In addition to putting in a new pump, they are also putting in a new storage tank and reconditioning the GAC filters at the wellhead.

They are also proceeding with the reconstruction of the Waikamoi Flume. The EA on this is just about ready to go and they are about ready to go to bid on this as well. This will add to the reliability of the Waikamoi stream flows and Kahakapao reservoirs.

Another is the organic carbon reduction project at Piiholo and Olinda. They have a team from the University of Central Florida doing additional water quality analysis with Austin Tsutsumi as the lead engineer on this. They will devise a pre-treatment system and a post-treatment aeration system to reduce the amount of carbon in the surface water. The net result will be a much cleaner water supply that will be within federal standards. The target is 50% of the federal maximum limits.

The Piiholo pre-treatment bid for GAC filters is just about ready to go. This will allow the Department to go to one method of disinfection for both the Upcountry systems, Upper Kula and Lower Kula. Right now, you cannot mix water disinfected by chlorine with water disinfected by chloramines. That means they cannot pump the water up or down the mountain. This new pre-treatment will allow them to do that in times of drought.

The pre-treatment costs at Piiholo is estimated to be about 2 to 3 million dollars and the aeration part will likely be less than half a million. The amounts for Olinda will be less than that.

The financial audit is proceeding and they don't anticipate any problems. When the Grand Wailea went bankrupt there were almost \$400,000 in receivables. They have been told by hotel management that the bill will be paid.

An analysis of the reliability of the water capacity on a district by district basis is just about completed. This will be compared and contrasted to the variability of demand. For each district they try to come up with fluctuations of supply, fluctuations in demand, and how much capacity do we really have in terms of excess or deficit. They will soon deliver a report to the Mayor by next week of the Upcountry district. Their recommendations will very likely be to allow them to put restrictions in under drought conditions by way of an ordinance.

With Hamakuapoko coming online, the TOC (Total Organic Carbon reduction) project, the flume project under way, and with some changes in operation methods they could start issuing water meters off the Upcountry Meter List pretty quickly, probably before year-end. Maybe at the next meeting the Department may be able to present this to the Board.

Changing the operation parameters for Upcountry is something they are looking at. The Wailoa Ditch goes through the Kamole Treatment Plant. The plant's capacity is 6 mgd when the water level is high and the water is clean. But the ditch goes dry, though not very often. If they change the operation parameters and use the ditch water first and keep the tanks full by pumping up to the Upper Kula and the Lower Kula lines we can preserve the raw water reservoir capacity. They can keep the reservoir levels more full at Waikamoi and Piihola. Though the pumping costs will increase, the reliability of the system and ability to go through drought periods will increase.

The Central District results show that they have some capacity of about 1 mgd and it is on a first come first serve basis for new meters. Lahaina is short but they are waiting for the completion of another well above Mahinahina which will create additional capacity and there may be room for a second well.

Currently, the MCC Chapter 14.06 allows the director to ask for voluntary and mandatory cutbacks in usage during a drought. They are drafting language to present to the County Council to expand on the powers of the director.

One alternative in mandatory cutbacks might be to have a surcharge on the amount of water people use above the amount that they're supposed to cutback to. If you use 100,000 gallons, with a 25% reduction you're supposed to use 75,000 gallons but instead, you use 85,000 gallons, then you might have to pay double the normal rate for that extra 10,000 gallons.

Water companies across the country are using this kind of action right now. But one of the issues is how do you deal with ag water users. It would be very hard to cut back on water for livestock and high-value crops that are not drought resistant. So a different set of rules may have to be used for ag users.

DIVISION REPORT

June and July Division Reports

Member Suzuki asked about Mokuhou 503 Well's replacement pump and the hiring of a third party consultant to conduct an investigation.

Deputy Meyer stated that it is his understanding that the Division Head, Joe Mendonca has taken a pretty tough line because that fairly new pump failed. It looked like there were faulty thrust bearings and the issue is under discussion between the manufacturer and the Department. It was determined that the Department needed an expert to look at it because the pump manufacturer is saying that the failure may have been due to cavitation¹ and it wouldn't be covered by the manufacturer's warranty. But the supplier stepped up and a new pump was installed and it is working.

There has been some discussion about Finance Department taking over some of Fiscal's positions in the Water Department. Though the Department is cooperating and providing information to Finance it is difficult to see how this would lead to greater efficiencies. The Fiscal Division is so integrated; from the preparation of the bills to meter readings to servicing our customers; everything is keyed to water.

Though this was not the agenda, Member Suzuki asked to speak about the August 14th Water Resources Committee (WRC) meeting. Chair Boteilho allowed him to speak on this matter.

He stated that Committee Chair Victorino said that he personally uses the spring loaded hose end sprayer. That's an excellent idea to save water, however on new homes there's a hose connection vacuum breaker that is attached to the hose bib. This requirement was recently added to the plumbing codes. The hose connection vacuum breaker prevents water from siphoning back into the home's water system, preventing contamination.

Deputy Meyer said that the Department requires backflow preventers on the streets just beyond the meters.

Member Suzuki added that the WRC spoke about the EPA standards for the new low flow toilets that use only 1.28 gallons from 1.6 gallons.

Chair Boteilho asked if the backflow preventer is a requirement for ag water users.

¹ **Cavitation** is the formation and then immediate implosion of cavities in a liquid – i.e. small liquid-free zones ("bubbles") – that are the consequence of forces acting upon the liquid. It usually occurs when a liquid is subjected to rapid changes of pressure that cause the formation of cavities where the pressure is relatively low.

Deputy Meyer stated that any time there is a separate system, a non-potable system, there's got to be backflow preventers.

The Chair asked even if the ag users are using potable water?

The Deputy replied yes. The Department reviews the plans that conform to the water system standards and they send an inspector to make sure that the backflow preventers are installed properly.

Member Joslin asked for clarification on what is going on at Council on September 4th.

Staff informed the Board that on September 4th the Water Resource Committee meeting and they are going to be discussing an update on the Water Use and Development Plan (WUDP) schedule.

Deputy Meyer stated that the Commission on Water Resource Management has come up with guidelines for all the water departments in the state so that the WUDP pretty much address the same issues. One of the key issues driving off of the Maui County plan is population and area density. That's the Community Plan which all the utility companies like water, electric, etc., is charged with doing, and how they are going to meet the needs of the community over the next 20 years.

This is more of an island-wide scope of where demand is going to be, how it is going to grow and how the Department can and will try to meet those demands. It will have to go by district but the focus is going to be island-wide.

Member Gerbig asked to have the WUDP Schedule on the next agenda as a presentation by the Director.

He also asked if the County is affected by court action on the 'Iao Stream water redistribution.

The Deputy replied yes. The supreme court decision said that the allocation of instream flow is being sent back to CWRM for re-determination. The court found that CWRM didn't look into some of the things that they should've looked into. There will be a public hearing on October 24th and the users of the stream waters are asked to re-submit their claims or rights to that water.

Member Joslin noted that all the users were listed in the newspaper.

Deputy Meyer added that the County uses that stream water and puts about 1.3 mgd into the 'Iao Treatment Plant. It is a vital source and they would like expand the capacity of that plant to use more water.

ADJOURNMENT

There being no further business the meeting was adjourned at 10:50 a.m.

Prepared by:

Gaye Hayashida
Commission Support Clerk

Approved by:

Paul Meyer
Deputy Director





