

BOARD OF WATER SUPPLY  
County of Maui  
Regular Meeting  
Thursday, August 23, 2007  
9:00 a.m.  
Planning Department Conference Room  
First Floor, Kalana Pakui Building  
250 South High Street  
Wailuku, HI 96793

I. Call to Order

Chair Lee Aldridge called the August 23, 2007 Board of Water Supply meeting to order at 9:06 a.m.

II. Attendance

Board Members:

Staff:

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

Jeffrey Eng, Director of Water Supply  
Eric Yamashige, Deputy Director  
Edward Kushi, Jr., Deputy Corporation Counsel  
Alva Nakamura, Engineering Program Manager  
Holly Perdido, Fiscal Officer  
Gaye Hayashida

Excused:

Others:

Kui Lester

Rena Gansky, USDA NRCS District Conservationist  
Dudley Kubo, USDA NRCS Planning Engineer  
Warren Watanabe, Maui County Farm Bureau president

III. Announcements

Chair Okamura introduced the newest board member, Kelli Myers. Ms. Myers previously completed former member Michael Victorino's unexpired term and now has been reappointed to a five year term.

Also, at this time the Chair thanked the Department for allowing the board members to tour the Upcountry water system.

Member Holmberg stated that it was good to get a better overview of the Upcountry facilities and the chance to talk to the staff was very illuminating.

IV. Approval of Minutes

A. July 26, 2007 Meeting

There being no corrections or additions, the minutes of July 26, 2007 stand approved as read.

V. Testimony from the Public

A. Warren Watanabe, President of the Maui County Farm Bureau

Warren Watanabe stated that he has asked the director for another grace period and was told that Ag users can appeal to the department on a case by case basis.

He stated that it is not just for Ag in general but special consideration should also be given for the livestock industry. A lot of farmers have cut back on their plantings to comply with the 10%. He has been tracking the levels at the reservoirs and though it has gotten better since the previous month, there is still a concern because for Hawaii, the drought has been extended to November where previously it was to October.

The farmers cannot continue to take the mandatory restrictions. The County and the State need to set policies in support of agriculture and must provide all the necessary resources.

When he talks about agriculture he also includes Maui Land & Pine and HC&S. If you drive by the HC&S fields you will see the plants are under stress. They do not have enough water.

Those in the Ag industry believe diversified Ag is not practical in the Central Valley area. And while HC&S is looking at bio-fuel, if we cannot supply the water to grow the crops, where are we?

Members Howden stated that we limit ourselves when we allow water hungry crops for the Maui saddle. There are no windbreaks and often when the fields are harvested not only is the burning detrimental to the public's health but you have tremendous amounts of soil erosion by the constant wind across the saddle, which he considers as poor agriculture practice and indicative of industrial agriculture. He suggests a t looking a diversified Ag by growing tropical hardwoods, and fruits and nut orchards.

He further stated that he finds it difficult to be sympathetic because they have had such a sweetheart deal for over a hundred years in terms of public trust waters. Though they are an important part of the Maui agricultural economy he believes we need to shift our paradigm and look at sustainable agriculture for the Maui saddle. A

mono culture of sugar and pineapple across the Maui saddle is not a sustainable agriculture.

Mr. Kushi asked Mr. Watanabe what agency extended the drought from October to November.

Mr. Watanabe stated that it is put out by NOAA (National Oceanic and Atmospheric Administration). This is just a long range forecast.

B. Summer Erdman of Ulupalakua Ranch.

Sumner Erdman stated that he will limit his testimony to Ulupalakua Ranch. In May they instituted a culling program on the ranch in preparation of the drought restriction. It is not just water but they also run out of feed because they rely on the rainfall. Their goal in May was to cull 400 to 500 cows. They have reduced the herd by 180 to 200 cows in the first phase. Right now there is no market for these cows. Though they are trying to meet the 10% cutback and short of shooting the cows there are not a lot of choices.

He is hoping that the Board or the Department look at how the livestock producers will meet the 10% cutback goal. You cannot ask the cattle to drink 10% less water. As it is now, they are eating dry grass which only makes them increase water consumption not decrease it.

Mr. Erdman asks that the Board and the Department take all this into consideration for all livestock producers.

Member Howden commented that his motion made it clear that agricultural use would be exempted for 60 days. This was not communicated clearly in the Maui News or through the Department's letter to the agricultural users. The Board may want to discuss exempting cattle/livestock operations from any 10% cutback and also make it better known to the users at large that other farmers who are making bona fide efforts can apply for exemptions to the Director.

Member Haller asked Mr. Erdman if there was a way for the ranch to continue to conserve and still receive enough water for your cattle. Could he suggest something where the Board can do this? How do we get all the other farmers to do that?

Member Howden stated that it would take enforcement capabilities that the Department does not have.

Mr. Erdman stated that Ulupalakua Ranch uses around 80,000 to 100,000 gallons per day which is less than 5 gallons an acre. He cannot speak for the farmers but he can say that the dry grass will increase his cattle's water consumption by about 5%. He suggests that they continue to do what they are doing and if they cannot

comply then they can come before the Board and show that they are trying to comply.

As odd as it may seem the Ranch is putting in more water troughs so that the cattle won't destroy pipelines trying to get water. They are combining herds so that they can turn off some systems. Though this will lead to some meters at zero and others jumping way up so the Department has to take this into consideration. The Ranch is trying to reduce its overall water usage anyway they can.

Member Howden asked if the Chair would consider a motion.

Chair Okamura responded by saying that there is an item on the agenda dealing with the implementations of the Drought Guidelines.

Chair Okamura stated that each operation whether it is livestock, vegetables, fruits or flowers have different locations and different needs so we cannot make a blanket statement or try to put the same standards for reduction on everybody. This is what we need to talk about later, trying to understand each particular situation before we make a one size fits all regulation for the farmers and the ranchers.

VI. Appeals

A. None.

VII. Unfinished Business

A. None.

VII. Communications

A. COM 07-16 Chair's letter to Jeremy Jameson denying his request to appeal the director's decision due to the request being received after the time limit of 30 calendar days as set forth by MCC 14.11.010.

B. COM 07-18 Chair's letter to John J. Jacintho denying his request to appeal the director's decision due to the request being received after the time limit of 30 calendar days as set forth by MCC 14.11.010.

Chair Okamura stated that these are two communications or requests for appeals from Jeremy Jameson and John Jacintho that were requested after the deadline. According to the ordinance on appeals a person who is not satisfied with the decision of the department had 30 days to request an appeal. Both Mr. Jameson and Mr. Jacintho did not make their request in time and were sent letters stating that. These were placed on the agenda so the Board could review the situation.

Member Haller stated that she feels the correspondence is fine and asked that the Board be made aware of correspondences like these when people don't meet the 30-day requirement. She asked Mr. Kushi what other appeal board has a 30-day appeal time limit.

Mr. Kushi stated that most of the appeal boards usually have 30 days. He recalls 45 days would be the maximum, but 30 days is not unusual.

Member Holmberg asked Director Eng if the potential appellants are made aware of the 30 days.

Director Eng replied that in a previous meeting a board member wanted to make sure that the Department adds that language to the letters of denial.

Vice Chair Aldridge suggested that not only should the director's letter mention the 30 days but also the ordinance should be attached so that it is clear. If all the other have the same deadline then it is not unreasonable to make a request within the 30 days.

Member Haller noted that it is not 30 days of receipt; it is 30 days from the date of the letter so it doesn't even allow for mail time.

VIII. Director's Report

A. None.

IX. Other Business

A. Discussion and Update on the Petition to Designate Na Wai Eha as a Surface Water Management Area.

B. Discussion and Update on the East Maui Water Licenses Litigation.

Chair Okamura announced that Deputy Corporation Counsel Jane Lovell was not able to attend today's meeting, therefore these 2 agenda items will be deferred to the next possible agenda.

C. Discussion and Update on the Upcountry Maui Watershed Project (Dual Line) by Representative(s) of the NRCS

Chair Okamura introduced Dudley Kubo and Ranae Gansky of the NRCS who will give an update on the Upcountry Maui Watershed Project. Brian Kau of the State Department of Ag declined the Board's invitation.

Dudley Kubo, planning engineer with the Natural Resources Conservation Service (NRCS), explained that they have been engaged in projects to supply agricultural water to Upcountry Maui farmers for the last 20 years or so. He has personally been involved in the planning and implementation process.

The program they have been implementing is the Small Watershed program, Public Law. 83-566, which allows the NRCS as an agency of the US Department of Agriculture to come in and provide technical and financial assistance to communities having water resources problems.

They were asked in 1985 by Elmer Cravalho and the Olinda-Kula Soil and Water Conservation District to come in to provide planning and create a project to provide water to farmers up there because the Upper Kula water system was not providing the quantity the farmers needed especially during drought periods. When they started the project they worked with the farmers, the soil and water conservation district, the Department of Water Supply (DWS) and the State Department of Agriculture (the State) and various other agencies and organizations.

The planning project resulted in an assessment in 1989 that outlined several alternatives that could be put in place. One of those alternatives as a dual line on the upper system. The Olinda-Kula Soil and Water Conservation District was adamant that they look at the upper and lower Kula lines as an entire system.

The county and the state in partnership put in the collection improvement and the Kahakapao reservoirs in the upper system. Without that their agricultural water project would not have gone anywhere. Once that was in place they started to come up with a plan and an EIS. In 1997 they produced this watershed plan and EIS which is now being implemented in the Upper Kula water system. Since 2000 the state and the federal government together have put in about \$12 million in pipeline improvements.

They are working on the first 2 laterals of the system and extending the distribution pipeline, taking untreated water before the Olinda treatment plant and conveying it to the farmers. None of the farmers have been serviced as yet because the lateral systems have not been in place and money wise they are about 2/3 done. The intention is to take the main pipeline all the way out to the Keokeo area where the Hawaiian Homes beneficiaries are.

Once the Kimo lateral and the Pulehuiki lateral are completed there is the possibility of providing water to those farmers along those lateral systems. Before water can be provided to the farmers the State must establish an irrigation district out there, but he cannot speak for the State on their schedule and intentions. Also the State and the DWS must come to an agreement on how the water will be allocated, especially during periods of drought and they must have a clear understanding on the matter of operations maintenance.

They would like to begin planning on the Lower Kula line. The Upper Kula line with the dual system seems to be a good model to follow. The Lower Kula line would also need improvements in the collection system and storage.

They have a contract with R. M. Towill Corporation, an engineering and planning consultant to do an assessment type study. They would like to have some finalization of the reservoir and collection in hand before they move ahead with the planning. This is several years down the road but it affords them a little bit of time to complete the Upper Kula water system improvements.

Their interest in these projects is now the need to protect the farming enterprise. Without these types of water improvements farmers are at risk. There are very unique conditions that really benefit the farmers.

Unfortunately their funding for the small watershed program is declining. In the last 5 years or so they have gone from about \$100 million of construction money down to about \$30 million dollars. Last year they received nothing because the Democratic Congress had issues with war-marking so the funding for the program was declined altogether. 2008 will be a better scenario but the program funding for all their projects across the nation is down.

Rena Gansky stated that at the time this project came out and still today, they want to meet the farmers' needs for water. That's what this project is all about.

Member Howden state that he was amazed that in the design and implementation of the system they speak about the other agencies involved, evidently the DWS and the County of Maui was not intimately involved in this. It took him as a private citizen quite awhile to be even referred to NRCS for further information and Alan Murata who was handling this for the County had no real information on the design. He has been told numerous times that there is no water to put into the Upper Line. The farmers' needs are in the Lower Kula system.

The average agricultural use for 2006 for the Lower Kula system was 1, 465,000 gallons a day. The Upper Kula system was 547,000 gallons a day. It doesn't make sense when you can easily supply the Lower Kula agricultural users from the Piiholo reservoir system than to try to draw from the Upper system and according to the DWS there is no water to put in it.

Member Howden stated that he had more questions but what he would really like to see is the design. Individual farmers from Upper Kula came to him and told him they were informed that the Dual Line would run through their property.

What concerns him is at Polipoli and Middle Road the line begins to drop down, instead of keeping the water at an elevation of over 3,000 feet, and continuing it

along Waianu or Polipoli where there is easy access going mauka of Kula San. This is depriving the neighborhood that is potentially agriculturally rich.

It doesn't make sense to have that water at that elevation and then drop it down when you could feed most of the agricultural use makai simply by a lower dual line.

Mr. Kubo stated regarding the coordination between the DWS and this project, when they did the work on the early planning assessment they had a lot of dealings with the DWS. When they started the environmental assessment on the watershed plan he believes the DWS was in from the very beginning and upon completion of that planning they signed the watershed agreement.

The NRCS has worked closely with all the directors. He remembers that this is probably the fourth or fifth meeting he has attended before the Board. Also in 1993, when they began the planning they brought together the Board of Water Supply and the State Board of Agriculture in a meeting at Maui Community College. The Boards have had the opportunity to be involved in this project a lot more than Member Howden has stated.

Member Howden responded by saying that in recent years the board and the department have been totally left out of the loop. Maybe that was just a procedural oversight on the part of NRCS. He doesn't understand the presumption that there is enough water to actually put in a dual line for the upper part of the Kula system. We have this potentially great system but no water.

Mr. Kubo stated that seems to have been the case for the last few years. Their analysis showed that we go through water-short periods and that the State and the DWS would have to come to some sort of agreement on that. But it seems that we have fit the situation every year for the last few years. The benefit for the DWS is that untreated water will go to the agricultural customers thereby reducing the treatment needs at the Olinda plant.

Member Howden agreed that there is no point in treating agricultural water but he questions why one would begin with the Upper Kula system rather than the Lower Kula system.

Mr. Kubo stated that because of the 2 different systems and the difficulties in just generating one project they thought they would start with the easier phase. As it turned out the difficulties were greater than what they had anticipated. The time-frame has slipped but the intention is to provide agricultural water improvements for the lower system also. Right now they are waiting for the reservoir improvements and the flushing system improvements to be firmed up for the lower system.

Member Howden stated that it would have made more sense to begin with Lower Kula. For the upper system to be functional there need to be another sizeable



reservoir or two. It might take a decade or so to get it online in terms of an environmental review. He doesn't understand why \$12 million was sunk into a project that really won't fly without additional sources of water.

Member Howden further stated that those were his primary concerns though he is still concerned that he doesn't see the function of the Kimo lateral and had pointed out to Mike Hayama that he needs to reconsider dropping makai at Polipoli Road and Middle Road. If we find more water, it would be silly to have that water drop down there and not be able to continue out Ulupalakua.

Mr. Kubo Stated that regarding the dropping of the pipeline through those private properties, this a technical issue that they grappled with. However in order to get up on to the Haleakala Ranch lands where they really wanted to be, they would have to have a pumping station right there at Crater Road otherwise they would run into a vacuum situation in their pipeline. There were also some issues with where the gulch crossing would be. They would have wanted to avoid crossing those private properties because it would have caused further delays. The decision was mainly a Department of Agriculture decision not to put in a pump station at that point.

Regarding the potential ag areas down towards the south end of the yet to be constructed pipeline, if they could be shown that there will be agriculture higher up on the slopes he thinks that they would consider revising the alignment out there. They did make those alignment choices based on the farming that was taking place back in the mid 90's.

Member Howden asked to reiterate his request for copies of the design and asked if it was in the watershed plan.

Mr. Kubo replied no, they just have the alignment and general guideline that was put into the design project. However, the DWS has all the designs.

Member Howden asked Director Eng for copies of that, actually topographical type maps.

Director Eng stated he will check on it.

Member Robinson asked in terms of the request for further finding in 2008, who writes the grants to the feds and whether or not they might want to think about how much money is requested for assessment phase and how much is for implementation?

Mr. Kubo stated that in actuality the assessment and the implementation/construction are 2 different programs. We are not robbing from Peter to pay Paul in this case.

Vice Chair Aldridge asked if there were other facilities other than the 2 distribution laterals that were funded. Does that include some funding for any of the reservoirs or the collection system?

Mr. Kubo replied that as far as the federal participation from NRCS, no, they didn't participate in the reservoirs of the collection systems.

Member Haller asked what the capacity of this Dual Line is.

Mr. Kubo stated that they are looking at about 2 mgd, which would be the peak use but they expect the average use to be about half a million to 1 mgd day.

Member Haller asked how that will be regulated.

Mr. Kubo replied that the intention was for farmers in the Upper Kula area to convert from the county water system meter to a meter provided by the State Department of Agriculture as part of the agricultural irrigation district. All the farmers will be metered; they will be billed by the Department of Agriculture but the meter reading might be conducted by the DWS. For this particular system the Department of Agriculture would have to work in close cooperation with the DWS.

Member Holmberg asked who will ultimately own the valve that determines whether water goes into the system or not.

Mr. Kubo replied it is the Department of Agriculture. When the reservoir was built there was language that it was being built to also benefit and support agriculture. But right now there is no valve there, though the DWS is asking for a valve.

Chair Okamura asked regarding the Lower Kula assessment or plans, is there a plan for a larger Piiholo Reservoir?

Mr. Kubo stated that if they included the cost of the Piiholo Reservoir rolled into their project, they wouldn't be able to justify it. For the upper system, they were fortunate that the convergence of the state and the county effort to build the Kahakapao Reservoirs matched up with their time-line.

Member Haller asked if there was a projected completion date for this project.

Mr. Kubo stated that as far as the funding goes they are 2/3 finished, there are still miles of pipeline to be put in. A lot of it depends on the federal and state funding. If they get the type of funding they were receiving up to 2006 they probably could have been out of there by 2010.

Member Haller asked if the Board could look at the language of that agreement on that reservoir as to what the county's obligations are.

Member Howden state that there is no way for the Department to manage water use without being able to control what exists through the Dual Line

D. Discussion on Department Implementation of the Drought Guidelines, Resolution 98-18.

Chair Okamura stated he had questions on Resolution 98-18 and on the implementation of the drought guidelines. He first asked whether Resolution 98-18 was rescinded or not. It was mentioned at an earlier meeting last year that the resolution was rescinded.

Mr. Kushi stated that he was at this meeting on September 21, 2006 where there was a discussion about declaring a drought for Upcountry at that time. The minutes reflect that at that point in time, then-Director George Tengan stated that "Resolution 98-18 is no longer in effect because the Board rescinded this resolution several years ago."

Mr. Kushi further stated that he did not have the time or the resources to look at the minutes for the last four or five years. But he has been with the Board since 2002 and he does not recall this resolution being specifically rescinded. That being said, the recent drought declaration does make reference to the triggers and guidelines as set forth in Resolution 98-18. The way the Board Ruled on the drought the director has the authority to implement any conservation measures that he deems reasonable. He would need to get back to the Board to find out if there was indeed a formal board action to rescind this.

Vice Chair Aldridge stated that from what Mr. Kushi is saying is that it is irrelevant whether it was rescinded or not since the Board made drought declaration and it is up to the Department to use whatever effective guidelines they wish to implement and asked if this is correct.

Mr. Kushi stated yes and no, because if this Board was fully or semi-autonomous, he would advise the Board to do a resolution which would have the force and effect on the Department as well as on the entire county system. Since the Board is not and we really don't know what this Board is, except for appeals, the rule on drought is in limbo.

The way it is worded the Vice Chair is correct, regardless of what the resolution states, this Board or the Director could come out with other measures. In fact, this Board has, by declaring a drought and made 10% mandatory reduction for non-ag users and for Ag users a 60 day waiver. That in itself is not in conjunction with the resolution.

Chair Okamura stated that regarding the implementation of the 10% cut-back, up until now the Department has used an average. In his case, the area where he lives has lots of rain during the winter and is very dry during the summer. Considering the number of acres he has under cultivation, the extension service estimated that he would need about 12,500 gallons per day. But the average for his quota was 4,000 gallons per day. There is no way he could continue farming and still follow the average.

Those who do conserve the rest of the year would be penalized because to cut back further would be very difficult. And it varies from operation to operation. It is a problem to try to apply the 10% cut-back based on the yearly average. So he would like to throw this out to the Board to see where they could make some other recommendation.

Member Howden stated that after Sumner Erdman's testimony today, the Board might want to consider exempting livestock endeavors entirely from this and also to emphasize that other agricultural users would have access to an exemption.

He agrees with Member Haller that there should be a more intelligent use of water. It drives him nuts when he drives in Kula and sees overhead sprinklers during the heat of the day.

Chair Okamura stated that it depends on the operation. Some operations have limited water and to go through a whole cycle of watering, you have to water a small section at a time. So no way will you be able to go through a whole cycle of watering by only watering during certain times of the day. But it is hard to say anything about an operation by just looking at it. This is the problem that he had with this implementation of the 10% cut-back.

No one else in the community makes such a sacrifice as the farmer or the rancher during periods of drought. Maybe the Board could make a recommendation for livestock. Or the Board could ask the Department to look into implementation of cut-back for the future, implementing water conservation rates as opposed to cut-backs.

Director Eng asked that the Board provide some suggestions or directions on how the Department can deal with this basis for determining cut-backs. The Current basis of 400 gallons per day per customer taken at a given month or a 24 month period average is not the most equitable way to go. There are a lot of Upcountry customers who conserve year round and now we impose this 10% mandatory cut-back. It makes it quite difficult for them.

These drought rates would be one way to go. But rates and fees need to be approved by the Council. The Department's attempt this current year to have a single-family four tier classification where the highest consumer will be hit hard, got shut down by the Council. He was very disappointed on how they dealt with that

because he thought he had their concurrence all through the Water Resources Committee prior to the budget sessions.

Vice Chair Aldridge stated that if the board members do not want to see this happen every summer, they must push hard to increase the Department's ability to access water supply, build reservoirs and to deal with the real problem of drought. He suggests that the Department contact water agencies in southern California because these agencies deal with drought constantly, and they have agriculture and those golf courses and developments, all the things we have here they have there. They can tell what their management practices are and where they have had problems.

For the long term this Board must focus on the critical issues that will help solve this problem – more storage, more stable sources of water. Let's not get caught up in micro managing, let's support the Department and suggest they use the best management practices that are available.

Member Holmberg stated that he would like to second what Vice Chair Aldridge said and further stated that he doesn't know if we can ever keep up with the water demand if there also isn't a dedicated attempt to conserve. He sat in on a couple of presentations from California water districts that have server limits on water supply. For instance, Redwood City worked it out with the various users on how to make the best use of their water.

Member Haller asked if there was a way in which we can continue to exempt the farmers until such time as we can't anymore

Director Eng state that there were some things that happened that caused the Department to continue on the course we are going. They had planned to use the Kaupakalua Well to take the Ag users off the mandatory 10% cut-back, but the replaced pumps failed. They will take requests for exemptions from even single family customers who have special situations. Right now he would like to stay the course but he is open to the Board's suggestions.

Motion: by Member Howden to recommend to the Department to exempt livestock producers from the 10% mandatory water use reduction and that other agricultural users and even other members of the general public under extraordinary circumstances have the right to apply for an exemption from the director of the Department of Water Supply.

Second: by Vice Chair Aldridge

Discussion: Mr. Kushi asked for clarification. He stated that the notice of drought and the declaration on mandatory cut-back is couched in terms general class users and customers on Ag rates. Are livestock producers on separate rates?

Member Howden replied no, they are in the same category as Ag users. The Board is exempting them from the 10% without having to apply for an exemption.

Member Luck asked why is it more of a hardship on them than on the other Ag users.

Member Howden stated that Ulupalakua Ranch prepared as best they could but they are in a very dry area and when they can't market their beef then we are giving them unnecessary hardship.

Member Luck stated he doesn't understand why the Board is giving this to the livestock producer and not to other agricultural producers.

Member Howden stated this is a reluctant wake-up call for other agricultural users. It is unfortunate that HC&S is not a participant in this process, since they use the bulk of the water in Maui County.

Mr. Kushi apologized and stated that he didn't mean to get involved, whatever this Board decides is fine as far as policy, it's just that he needs to know the mechanics of the motion so he can advise the Department accordingly. As he reads the Declaration of Drought there is no exemption at all. Everyone is under the 10% mandatory because the 60-day waiver has expired. However, the Director has said that he would take requests for exemptions on a case by case basis.

Now that being said, requests for exemptions are a discretionary call. The Director may say ok to livestock farmers and he may say no to cabbage growers. Cabbage growers can come and appeal this decision. The Board may have 2,000 appeals.

Member Howden stated he understood what Mr. Kushi is saying, but this is basically an amendment of the Board's original motion in declaring a drought.

Member Holmberg stated that he supports Member Howden's idea trying to give the livestock producers a break and not have to cull their herd. But he wonders what the mechanics are to determine who is running livestock so the Director knows who gets a break.

Member Howden stated that it is already on their agricultural use applications.

Member Haller stated that her problem with this proposal is that the people who grow cabbage don't have 20,000 acres and don't have the kind of resources that the ranchers do. Hardship would in fact hit the small farmers more severely. As long as the overall water usage is down more than 10% over this time period where the farmers were asked not to comply we can still continue to have them be exempt.

Vice Chair Aldridge suggested extending the waiver another 30 days for instance and that will give the Department a chance to see in mid-September if we can extend it another 30 days.

Member Howden suggested 45 to 60 days because at least it would give people more of lead time. It's not much when you are a farmer but at least it's something. He then withdrew his original motion.

Motion: by Member Howden to recommend to the Department to extend the agricultural user exemption for another 45 days.

Second: by Member Haller

Discussion: The Chair stated that it has been moved and seconded that the Board recommends to the Department to extend agriculture waiver for another 45 days.

Mr. Kushi asked does the 45 days begin August 13<sup>th</sup>.

Member Howden suggested that it should start today.

The Chair re-stated the motion, to recommend to the Department to restore and extend the waiver for agricultural users for another 45 days beginning today.

Vote: Unanimous. Motion carried.

Member Haller proposed to have on the Board's agenda as a regular item how the Board wants to help move this county to address this long term problem. The Board needs to talk about this every month regarding long term source and capacity issues. And the second thing she wants discussed is island wide water conservation.

E. Discussion/possible action on a Recommendation for a Declaration of a Drought Warning for Central Maui and other measures the Department may take.

Director Eng directed the Board to the handout, U.S. Drought Monitor – Hawaii. It shows a state-wide map of the location of severe drought areas. The second page is the news release of July 31, 2007 announcing that the entire State of Hawaii as drought disaster area. At that time, they were offering farmers emergency loans for any losses.

One of the concerns they have is the amount of rainfall particularly the rain gauges on Puu Kukui because that watershed area is the primary source of recharge for Iao and Waihee aquifers. It has been reported that year to day the gauges have only shown 41% of normal rainfall. Last year the entire year had only 58% of normal rainfall.

The chart of Waiehu test hoe B shows the water levels since 1982 in this particular well. This gives you a good idea of how the water level has dropped over time and it is continuing to go down. The next chart is Test hole E which also shows the similar type of trend of the ground water level.

The next is the Waiehu deep monitor well. This well was drilled almost through the transition zone. The blue line is the water level which is consistent with the other wells. With this particular monitor well they can actually look at the salinity levels and changes as charted on the next page.

Over time the 2 percent line or the top of the transition zone and the 50 percent or the midpoint, have continually gone up meaning the salt transition zone is rising. If you combine this graph with the one showing the lowering water level, we can conclude that the fresh water lens is thinning out. This is a concern that has been confirmed by the USGS in their ground water modeling.

The demand for Central Maui in July the average daily was 28.3 mgd. The twelve month moving average for the Central Maui water system in July '07 it was 25.65 mgd. The twelve month moving average for July '06 was 24.9 mgd. the moving average itself has increased three quarters of mgd in one year.

It is important for us to properly manage the aquifers. The Department believes it is time to do some kind of management. The Central Maui system has pretty much have had the freedom to take as much water as growth develops.

The Director would like to propose to the Board for discussion purposes a proposal for a 10% voluntary cut-back for the Central Maui system. It has never been declared in the past. Also they would like to establish a target demand of 25.5 mgd with the Board's concurrence. They would monitor this for a month and discuss this at the next board meeting.

Member Haller stated that she would rather see this done in terms of conservation as opposed to drought. This isn't a drought situation this is 20 years of declining resources. Maybe now is the time to talk about conservation.

Member Howden stated that it is well past time we address the drop in the Iao aquifer. We have to address the Wailuku Water Company's use of public trust waters. Obviously if the State comes out with the funding that it is a district that needs to be under the State Water Use Commission purview then maybe it would be easier to slow down Wailuku Water's use. But if he were to make a recommendation he believes 25% would not be unreasonable. He is in total agreement that we begin to address this publicly and he would add that we should also keep an eye on the Wailuku Water Company's usage.



Chair Okamura asked if Waihe'e and the new treatment plant would be able to supply the same system.

Director End replied yes, they are all tied together. The Iao Aquifer wells as well as the Waihe'e Aquifer wells and the Iao Water Treatment Plant, all serve the Central Maui water system. We are trying to pump as much as we can from the Waihe'e Aquifer and we are pretty much maxxed out. As far as the Iao Surface Water Treatment Plant we are running at maximum right now.

Member Haller asked to change the Director's recommendation to include all of Maui.

Member Holmberg suggested that it would be better to start with Central Maui then gradually let people get used to it month by month.

Director Eng explained that Central Maui water system extends from Waihe'e to Paia/Kuau, Maalaea all the way to Makena.

Motion: by Member Holmberg to support the 25.5 mgd consumption target that the Board recommends to the Department a 10% voluntary usage reduction for an indefinite period of time subject to a 30-day review.

Second: by Member Haller

Discussion: Mr. Kushi asked if the motion to include that the Board has reviewed and recommends that the Director also declare a drought, because in order to start the ball rolling on these restrictions you need to overall declare a state of drought.

Member Holmberg and Member Haller agreed that the motion should be so amended.

Chair Okamura stated that it has been moved and seconded that the Board recommend the Department declare a drought and set 25.5 mgd target for consumption in the Central Maui water system with a 10% voluntary reduction subject to a periodic 30-day review indefinitely.

Vote: Unanimous. Motion carried.

F. Discussion on the Appeal Process.

The Chair asked that this item be discussed last.

G. Verbal Update on Upcountry Water System.

Vice Chair Aldridge requested that the schematic also should include the elevation of the treatment plants.

Director Eng stated that he will include that the next time.

Member Haller asked if the Department has the ability to track the Waikamoi Stream like the Wailoa Ditch.

Director Eng stated that the Department does not have that.

H. Discussion regarding the Proposed Budget Workshop for FY 2008.

Holly Perdido, Fiscal Officer, stated that the Budget Office wants the CIP program by Friday, October 12<sup>th</sup>. At the September 27<sup>th</sup> meeting they will have the CIP presentation. October 15<sup>th</sup> is the Budget Workshop where they will go over the budget and if the Board has any questions on the CIP program they can go over it at that time. The actual budget is due to the Mayor by Friday, October 26<sup>th</sup>. So then at the October 25<sup>th</sup> meeting any final questions on the budget can be answered.

Ms. Perdido noted that the time-table for the budget has been drastically pushed up.

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

1. Discussion on conservations and how the Board can move this county to think more conservation oriented.

F. Discussion on the Appeal Process (continued)

Chair Okamura asked will Corporation Counsel do the Findings of Fact and Conclusion of Law for each appeal decision.

Mr. Kushi stated that his office has internally discussed the procedures. His position will be assigned to the Board. If need be the Department may request another attorney from his office to represent them. The appellant has the choice to be represented by an attorney or not. Not in all cases will there be attorneys. In some cases if the Department staff can handle it then that's fine too.

Once the Board reaches a decision, the winning side, whether it is the appellant or the Department, drafts the findings of facts and conclusion of law and submits it to the Board. The Board at the next meeting votes on it.

For example, if the appellant wins, his or her attorney would draft findings of fact. In the event they don't have counsel, then he will do a draft.

The appellant is entitled to a contested case hearing and it is possible the Board could be issuing subpoenas. A contested case hearing is a mini court hearing, a mini trial. All appeals before this Board are considered a contested case hearing because if the party who loses is dissatisfied they can appeal it to the circuit court. So we need to be formal, such as having transcripts, witnesses being sworn under oath, examination of witnesses, and cross-examination of witnesses.

X. Division Reports

G. Division Reports for May 2007

Member Haller asked regarding the treatment facilities monthly report, is the reduction in the actual water treated a reflection of the reduced rainfall?

Director Eng stated that Olinda is a good one. Because at a certain point in time when the reservoirs were quite low, they made the decision to operate Olinda to just serve the Olinda community and to pump water up from Lower Kula to serve Upper Kula, so that would show a decline there. Also water quality affects the treatment production.

XII. Adjournment

The August 23, 2007 Board of Water Supply meeting was adjourned at 12:00 noon.

Prepared and submitted by:

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Gaye Hayashida  
Commission Support Clerk

Approved on: \_\_\_\_\_