

County of Maui Water
Supply

BOARD OF WATER SUPPLY
COUNTY OF MAUI
SPECIAL MEETING
IAO AQUIFER DESIGNATION

Taken at the David K. Trask, Jr., Office Building,
2145 Kaohu Street, Room 207, Wailuku, Maui, Hawaii,
commencing at 9:00 a.m. on December 6, 2001.

Reported By: Rachelle Primeaux, CSR #370
IWADO COURT REPORTERS, INC.

ATTENDANCE:

Members Present:

Peter Rice, Chair
Clark Hashimoto
Orlando Tagorda
Mike Nobriga
Howard Nakamura
Kent Hiranaga
Jonathan Starr

Staff Present:

Ed Kushi, Corporation Counsel
David Craddick, Director
Fran Nago, Secretary
Herb Kogasaka, Engineering
Myles Fujinaka, Engineering
George Tengan, Deputy Director
Mike Quinn, Finance
Maria Isotov, Planning

* * *

CHAIR RICE: I'm going to call to order the Board of Water Supply meeting that is on the agenda as the Designation of the Iao Aquifer. Present are Board Members Nakamura, Nobriga, Tagorda, Rice, Kent Hiranaga, Clark Hashimoto, Jonathan Starr, Director, David Craddick.

I'm going to recess that meeting until we complete the other meeting.

(Recess taken.)

CHAIR RICE: Call back to order the meeting of the Board of Water Supply on the issue of the designation of the Iao Aquifer. At this point, I'll ask for public testimony if there is any. And not having a list, I'm going to start again on my left and move around. When the hand stops -- when you raise your hand, my hand stops. Okay, Mr. Williamson, if you would come up and take a seat.

MR. WILLIAMSON: Good morning, my name is Jim Williamson, and I'm a member of the Maui Meadows Homeowners Association. We have petitioned for designation of the Iao Aquifer. Some facts, the water use recent 22.6 mgd 12-month average in June, we understand that there's about 10 mgd of water meters issued but not being used. Director Craddick is using a separate safe yield of 8 mgd for North Waihee. John Mink states that for existing North Waihee development safe yield should not be more than 4 mgd, which reduces the Director's surplus of 3.6 mgd into the deficit area.

Even this deficit would increase significantly if the meters issued but not being used are added. The difference would be then somewhere in the range of 9 mgd. Two mgd alone is Makena Resort's requirement for its new development, which already -- has already been approved by the County Council Land Use Committee, and incidentally, is up before the full Council tomorrow morning. Not a very rosy picture.

The deficit is even greater if the North Waihee and Iao Aquifers are 100 percent interconnected, which

all of the evidence points to. So much for the future load on the aquifer. Let's examine its condition under present demands.

The well levels are continuing to decline at about almost one foot per year. Wailuku shaft has a safe well level of 11 feet, and it now measures 7.8 feet. The salt level rises at about 7, even 8 feet per year. Water from Mokuhau and Waiehu Heights wells has chloride content greater than permissible by DOH standards.

The Department continues to mix this water from these wells in the overall production output, and by dilution, the end product is acceptable water quality. This is a very questionable practice for a water supply entity. So instead of 600 feet of good water to be mined, there's probably no more than 250 to 300 feet due to upconing, and this depth is being diminished day by day.

Instead of the pumping of 17.5 mgd from Iao resulting in less than the assumed safe yield of 20 mgd, considering the connectivity of the North Waihee wells, the overall pumping of 22.6 mgd is more than 10 percent over the limit. The Department evidently recognizes that the aquifer has not fully recovered in its review of permit applications for development. It has standard propitiatory language that I quote, "No guarantee of water is granted or implied as a result of related comments," end of quote. This statement is applied even if a developer has a water meter in hand, and he knows very well he is going to get the water if it is passed by the Planning Commission.

At the same time, the County Planning Department Planning Commission continues to approve projects without any inkling of the availability of water and the impact on those of us who already live here. We have to reduce the pumping out of the aquifer system. Then we can fuss with well distribution. The Iao Water Management Rule adopted in March 1999 should be applying conservation methods including reduction of water use that has never been implemented. It's a joke. Thank you.

CHAIR RICE: Any questions of Mr. Williamson?

Mr. Starr.

MR. STARR: Yeah, Mr. Williamson, once again, I commend you on the hard work and research you've done and, you know, I thank you for your concern and care. I have a question for you, and I know you've done a lot of work on this. Do you know how much water is being pumped by all, you know, all entities in Iao Aquifer or say within a mile or so of it?

MR. WILLIAMSON: No, I do not know.

MR. STARR: Okay.

CHAIR RICE: Any other questions of Mr. Williamson? Thank you, Mr. Williamson.

MR. WILLIAMSON: You're welcome.

MR. MAYER: My name is Dick Mayer, and I'm speaking on behalf of myself. I have a question and it regards the Iao Aquifer and its relationship to the Makena project, which is coming up tomorrow before the Council. The Land Use Commission when it stated, when it gave approval to the project, stated in their decision and order that the Board of Water Supply would certify that there's adequate water in Iao or adequate water available for the Makena project. The question I have is does the order ever take that kind of action?

What I have in front of me is a letter which I would like to distribute here from the Director. Pass this around. Even before you read this, if you could just bear with me for one minute and listen to a comment. This is what the Land Use Commission decision and order said, "The petitioner shall coordinate with the County of Maui Board of Water Supply to incorporate the proposed project, the Prince Hotel project, into the County Water Use and Development Plan for the area prior to the granting of the first discretionary permit for the single family, multi-family residential described in the paragraph

and the hotel and by or before one year from the issuance date of this declaration." And an addition of the order, "The petitioner shall furnish the Commission with a letter from the County of Maui Board of Water Supply confirming that."

And then it goes ahead for several conditions, the potable water allocation that will be credited to petitioner will be available to and sufficient to the proposed project as described in the petition. Availability of potable water will not be an obstacle or impediment to the development of the proposed project, and the proposed project as it is described in the petition has been incorporated into the County Water Use and Development Plan for the area and that this plan will prevent the continued overpumping of sustainable yield of the Iao Aquifer.

In response apparently a year later and within the date required, the Director sent a letter to the state Land Use Commission, and that's the letter that you have in front of you in which he certified those statements. The question I have is did the Board, which is what is required here, ever take that action.

CHAIR RICE: I don't know. The issue before this Special Board today is the Board's position on the designation of Iao Aquifer, not Makena and I don't -- this is the first time I've seen this, so I can ask the Board to take it up and get you an answer. But I wasn't the Chairman at the time, and I don't know if the Board took it up or not.

MR. MAYER: Is there anybody who was two years ago on the Board that would be --

CHAIR RICE: We want to take --

MR. TAGORDA: I don't recall that this has been brought up to the Board.

MR. MAYER: I don't believe it was.

CHAIR RICE: Mr. Mayer, the issue for the agenda today is the designation of the Iao Aquifer.

MR. MAYER: Let me go back to that point. I did want to clarify that because the Council will be looking at it tomorrow. The other question I have is in designating this, I don't know to which you've looked at the demand issue for the use of that water, whether the numbers are completely available into the future projected demand for the Iao Aquifer water use. And I'm particularly thinking of the fact that Maui Lani is growing rapidly. There will be a need for a new high school probably in that area there. There will be a need probably for Maui Community College to be formed into a four-year school.

The hospital, all the other facilities we have will have to grow to accommodate a much larger population. Tomorrow the Council will be looking at the Makena project, probably in the near future, the 670, Wailea 670 project, all of which may have implications for the Iao Aquifer. And I'm concerned that we do not have those numbers available for the people who will be working in Makena, their stores, their medical facilities, their educational facilities, their schools, all of those things to agree to which we have a good figure on knowing what the pressure will be on Iao Aquifer before decisions are being made with regard to Iao Aquifer.

CHAIR RICE: Questions of Mr. Mayer? I'm sorry, are you finished?

MR. MAYER: I'm finished.

MR. STARR: Mr. Chair, first of all, I do feel that this correspondence has a lot of bearing on the issue regarding designation, because, you know, I've examined the Land Court -- the Land Board documents, I'm sorry, the Land Use Commission documents pertaining to it. And, you know, the Land Use says that it's, you know, wanted to know from the Board, not the Department, but from the Board the

availability of water. And this letter signed by Mr. Craddick, which did not -- was not brought before the Board, because, you know, I was on the Board at that time, and it was not brought before the Board, seems to be an allocation of water for Makena Resort.

And if, you know, my understanding is correct, what we have here is an allocation of 2.13 million gallons per day of water signed by the Director for Makena Resort. And if we have an allocation of water, but we don't have that water to give, then that definitely is one of the criteria, fits one of the criteria for designation, so I want to leave it there.

CHAIR RICE: The issue of water availability is not the issue for this Board meeting.

MR. STARR: Uh-huh.

CHAIR RICE: The issues of what is available in order to make decisions about it may have some relevance to the Board's position, but the issue for this meeting, Members of the Board, is to try and determine if the Board wants to take a position on the designation. That's the issue, period, very simply. It's not about what water is available for what project. That's not what we're here to talk about. Okay. Any other questions of Mr. Mayer?

MR. TAGORDA: Mr. Chair, a question.

CHAIR RICE: Uh-huh.

MR. TAGORDA: Mr. Mayer, have you had a chance to look the at criterias on ground water designation under Hawai`i HRS rules?

MR. MAYER: No, I have not.

MR. TAGORDA: Mr. Mayer. I would just like to emphasize that one. And these things that you have

mentioned, and I read the rules. There are three of them, criterias for designation on ground water. I don't see any of those things that you have mentioned that fits into that criterias.

MR. MAYER: Excuse me for taking up your time. I apologize.

CHAIR RICE: Any other questions of Mr. Mayer? Thank you, sir.

Moving this way, any other public testimony? How about in the back here?

MS. De NAIE: Good morning, my name is Lucienne de Naie. I've been here before testifying in front of you folks. And I'm passing around a report that I've been working on about water resources in Central Maui for each of you to have a copy. The purpose of this report is not to say who is right, who is wrong, but to show the kind of information that we have and don't have about our water resources. And our conclusion here is that a lot more information is really needed in order to do the best job of managing these resources. We're here today to consider the question of whether or not this area should become designated under the State Water Code as a water management area. And I know you're all conscientious people on this Board because I've testified here many times, and I know it's a lot of work to serve on a board like this. So I'm sure it's occurred to you that there's a couple of basic questions that you would want to have good answers to about this matter.

One is does your Board and the County in general have the mandate and have the tools and have the resources that are necessary to do an effective job managing a resource like the Iao Aquifer. And I think for purposes of this discussion, you need to realize that the Iao Aquifer is connected to some other aquifers that the County is also utilizing like Waihee in some fashion. So the consideration of whether or not the County's mandate is really broad enough to

deal with the complexity of issues that have arisen over the 25-year history of utilizing this aquifer for municipal water purposes I think would be a very, very important basis of your discussion.

When the Central Maui Joint Venture Agreement was begun in '75, it was seen I think as a simpler sort of proposition. There was a sustainable yield given at the time that seemed quite adequate to meet the projected forecast of the population and growth. There seemed to be kind of a clear pathway to take. If there was just resources to fund the development of a water delivery system, then we would be able to deliver water. I think time has proven it's not as simple as we originally thought. And that's why I feel that this Board should give careful consideration as to whether or not given the complexities of the matter, which do include a lack of complete information about how the whole aquifer is functioning, lack of complete information about how the recharge rate is affected by periods of drought and rainfall by the current pumping profiles and by pumping that takes place from sources that the County has absolutely no say in because they're privately controlled and a variety of other like unknowns I feel that you would want to look at this as a complex equation and you would want all the help you could get in trying to solve it.

And the way that our system is set up right now, a little historical perspective, the State Water Code when it was first promulgated in the late '70s, early '80s, suggested that all ground water management be under State control. This was not acceptable to the counties, and I'm sure it was not acceptable to the large corporations that had use of a lot of the water resources at that time. So a compromise was reached whereby there was a safety valve built in. The counties were left to control their own water resources, and there was not an overall State management level imposed on them.

But the safety valve was the water management area designation process that if a County was having difficulty, the State as the ultimate trustee of this public resource, could step in. And I know you're all

familiar with this, and I don't want to bore you by repeating it over and over again. But I feel that if you look at kind of the history of what has gone on with this aquifer, we find that Maui's leaders, although they have probably been very sincere in their belief that local management of the County's municipal water source, that is the Iao Aquifer, has been effective, it does appear they have been willing to overlook a growing body of evidence that they have not had access to accurate information about the aquifer's capacity and recharge rates, that they have not had accurate population forecasts for the area. If you look at the old population forecast, we exceeded most of them a long time ago, and we're still going with the same aquifer source.

And they have not had accurate information about the demand that's going to be put on local levels of pumping. They also don't know the effect that prolonged drought switchover of agricultural uses that did help recharge the ground water and so forth have had because there really haven't been studies on those. And USGS brought these out in their presentation. They said these are the areas we need to study, and I think we can all agree that that is needed. At any rate, I think this is not Mr. Craddick's problem. Each of his predecessors over the past quarter century has maintained that the system is working well and I think probably sincerely thought if they followed what were the guidelines at the time, there would be plenty of water for the level of development that was approved by the County Council.

But I think those of you who have sat on this Water Board for a little while know that everybody is fighting over water here, and we haven't been very successful at making sure that there is water supplies. Now, there's an been allegation that this is because of lawsuits and so forth. But the wells that have been involved in this system, other than the initial lawsuit by Life of the Land back in 1975, have not been affected by lawsuits. Only the Haiku wells have been.

And it's just the process of bringing these

facilities on line, the expectations that lie around them, the amount of yield that they are capable of has shifted, and it's just one of those facts that has shifted around. I went through some Maui News articles and found that, you know, there's been concern expressed over management of this aquifer for the past 15 years.

In 1986, the State Department of Land and Natural Resources Commission on Water Resource Management suggested designating an area that was bounded all the way from Maalaea to Kahakuloa. And their geologist, Mr. Lum, explained that the reason for that is because the salt water intrusion in Mokuahau well was at alarming levels to him. It was already above the potable level, and he saw that as having a possibility of affecting the viability of other wells.

It was dismissed by our local County officials as a localized problem, but I think if you remember Dr. Mayer's report, salt levels are rising, the majority of the municipal wells. And I didn't see any pumping figures this year for Mokuahau Number 2, so I don't know if it's because of chloride levels or if it's because the pump was down, whatever. But those wells have traditionally had problems.

In fact, in 1975 when the EIS was done for the Central Maui transmission system, a comment was made by the County staff that although they're the existing major water source for Central Maui, drilling of additional wells and increased draft may result in salt water intrusion problems, although they did drill another well in '67. Those wells were drilled in '53, and a third well was drilled. And it has proven a problem. Even though wells have been spaced out over the aquifer and additional ones were not added to the Mokuahau area, we find a pattern of rising salt levels in wells out to Waihee.

And if you look over the projections that have been given over the years, Mr. Bagoyo, who had Mr. Craddick's job in the '80s, stated they expected a demand -- this is the Maui News, February 5th, 1988 -- expected demand for Central Maui water was expected to be 20 million gallons a day by 2005.

And under the County's plan with no new wells expected until 1990, they thought that they should have enough to deal with that. They thought that they should have 32 million gallons a day once the new wells, and I assume those were the North Waihee wells that eventually got built, were completed.

Well, here it is. We have all these additional wells and we don't really have significant additional capacity, but we do have additional demand. So I would just suggest that it would be wise for this body to seek a solution for this and get away from the past pattern of saying there is no problem. This has been the pattern of every administration since the '80s. They each say there's no problem. The large land owners come out and say there's no problem.

And, you know, you guys are where the pedal hits the metal. There has been a problem. There is a problem. All of the much wanted predictions that there would be no problems have actually proven to be untrue, and the State actually has a mandate to create a management plan for this area. Some of us feel the State doesn't do a very good job. Well, my feeling is if they've been given the job, it's up to us as citizens to make sure that they can do a good job in our local area rather than just pretend that we, who do not have the mandate to do this job or do not have the tools to do this job are going to do it ourselves.

So I hope you derive some benefit from the figures that are in this summation. They give a glimpse of how many wells are in the vicinity of the monitor well that the USGS is using for its informational purposes. And not all these wells are quote, unquote, in the Iao Aquifer. But it's important to realize that these aquifers, they're an administrative body. There can be wells slightly outside the aquifer that if they're deep enough could have a pull on that aquifer as well, and we need that information.

And it's a lot to expect our Water Department to do the vast amount of administration that they're doing and also do this kind of research. This research should be done by the State, the USGS, and

I'm hoping to do some of it as part of the grant that I'm working on, too, as well. So if you consider this very carefully, I think that you will want to take a responsible and a grown-up stance of this that you're not being penalized, you're being given an opportunity here to go to a higher level of respect and management for a very important resource. Thank you.

CHAIR RICE: Lucy, is it Lucy, is that correct?

MS. De NAIE: Lucienne.

CHAIR RICE: Lucienne, did you prepare this?

MS. De NAIE: I prepared it with the assistance of my technical advisor Terry Reim over there.

CHAIR RICE: The data was derived from the Commission on Water Resource Management?

MS. De NAIE: Yes, from their data base organizing it, so it's a bit clearer to understand.

CHAIR RICE: Would you say that this was the data, not -- the report is just a reflection of the data?

MS. De NAIE: Yes.

CHAIR RICE: The data was complete as it regards --

MS. De NAIE: No. If, in fact, if you read the introduction and, you know, I would be happy when we have more time just to look at a copy of the State database with you and show you how incomplete it is. In fact, there aren't even complete pumping figures for the County's wells, and I know that the County provides the State with that information. That's why these two agencies really need to work more closely together.

CHAIR RICE: Yeah, I agree with you. I just wanted to make that clear for the record, there's still a lot of data we still need to acquire.

MS. De NAIE: A tremendous amount, and it would benefit all of us to have this data because how can you plan in a vacuum?

CHAIR RICE: Any other questions for Lucienne?
Mr. Starr.

MR. STARR: Yes, I would like to compliment you on the work you're doing and express appreciation for it. A question, I know there's more blanks than are filled out reports as far as --

MS. De NAIE: Yes, you can see in the last couple of pages there's a lot more blanks.

MR. STARR: And I've looked at it, too. But based on what you've been able to dig up, would you be willing to wager an opinion on how much water is being pumped by entities other than the Board of Water Supply in Iao or within say a mile or so of Iao from the -- I know that's quite a few wells.

MS. De NAIE: There are a number of wells. The thing is, Jonathan, we need to look very carefully at the depth of those wells to see which ones actually draw from the aquifer. And a number of them are listed as unused in the State database. For instance, the two North Waihee wells in use are listed as unused in the State database. And the County is recording pumping figures for them, and we all know they're being pumped.

So we need to call individual well users person by person and try to find out whether they're using their wells or not, how often they're using them, how much of a withdrawal is coming out of them. So I would like to hazard a guess. I did in front of the Water Commission, and unfortunately, because I was

basing it on the State columns, I was not accurate because they had things in columns that indicated that they were being used for irrigation and actually they were County well sources.

And so I would like to hedge my bet, and I would be happy to get back to you with this information probably in another week or week and a half. That's the task for the week I guess.

MR. STARR: Can I ask you just without any numbers though, what are some of the other entities that pump water from either inside of Iao or very close to it? I know there are some golf courses.

MS. De NAIE: There's golf courses. There's parks. Actually, Mr. Craddick and the Water Department may have more information on this than I do yet because they may have, you know, chatted with some of the County folks about, you know, their well situation.

MR. STARR: While we're on the record, what are some of the other entities either in or very close to Iao?

MS. De NAIE: If you look at your column there, just in the Iao Aquifer itself, you have 47 sources. Now, if you delete the ones that are not in use, they're observation wells or they're unused or they're sealed, you know, you end up with -- and or not the municipal, the known municipal uses, you end up with a possibility of 14 up to, you know, 20 something possible pumping sources.

A few of them have some pump capacity listed in the State database, but pump capacity really doesn't mean anything. It just means there's a pump there, and it has a capacity. We really have to look beyond that. So if you just guesstimate that, the majority of these are irrigation sources, 11 of them are. Now, once again, we need to answer the question of how deep they go and whether they're diverting water that would be considered part of the aquifer and would impact the

aquifer.

And, you know, that's what I need to examine case by case, but there's a very, very good chance that you have perhaps up to a million or a million and a half gallons of water coming out of that aquifer once we get all the figures. And then we have to see the wells that actually border the aquifer. If, you know, you look at that little map in the front of your report, that shows how the aquifers are set up. There's a lot of wells that are right on the borders of these aquifers. The one with the circle shows it very clearly. There's a huge cluster right outside the border.

So we need, since these are imaginary lines, they're not absolute geological boundaries. If there's a rock wall and the water only stays on one side of that Iao line, we would really need to examine those wells as well. That's why this is going to take a little bit of time. But I would urge you guys to err on the side of caution. Since we don't have a lot of information right now and it could be forthcoming, it would be good to set up a process whereby we can have information.

CHAIR RICE: Thank you, Lucienne. Sir.

MR. WATANABE: My name is Warren Watanabe. I'm President of the Maui County Farm Bureau. The Maui County Farm Bureau urges of the Board of Water Supply to take a proactive position of proposing practices that will avoid the designation of the Iao Aquifer. We strongly feel that the designation will not be in the best interest of the County.

While seeing negative impacts to agriculture by designation, we see positive collaborative opportunities between agriculture and the County in proactive steps to avoid designation. An example is the use of recycled water by agriculture. This practice has not met with the degree of success possible due to the current expectation of having agriculture accept all of the risks and financial burdens associated with its use while other entities pass on these responsibilities and are thereby

relieved of addressing the challenges.

Agriculture can utilize this water and thereby assist with addressing the designation issue. In so doing, however, it must be a collaborative effort. If not, agriculture will continue to balk at the idea of having to use recycled water. Assistance in permitting, financial incentives, whether through tax or other incentives for infrastructural requirements and other reliefs for monitoring or other regulatory requirements are needed for widespread use.

Agriculture is not a high profit margin industry, and increased regulatory requirements that cannot be passed on to the consumer make it impossible for the industry to accept full responsibility of use without compensation. If the proper incentives are in place, use of the water would be accepted and thereby significantly contribute to addressing the topic being addressed today.

Another area in which agriculture can be of assistance is in conservation practices. We feel that the Board of Water Supply should be aggressive in promoting conservation efforts. All government entities, organizations and the public need to work cooperatively to bring about success. Changes in County and State rules and policies should be enacted as needed. Our technical expertise in the area of water conservation that practices can be used by landscapers, homeowners and other uses of Iao Aquifer water will allow Maui to maintain an attractive landscape while reducing requirements.

The USDA-NRCS, UH-CTAHR as well as our own Association of Landscape Professionals all can assist in providing information to the public. We are willing to work with you to reach practical solutions to this challenge. Experiences on Molokai tell us that designation alone does not bring about improvements in water availability. Proactive practices that will make designation unnecessary appear to be a better choice and in the public's interest. Thank you.

CHAIR RICE: Questions of Warren, Members of the Board? Thank you, Warren. Written testimony was

submitted by Stanford Carr opposing the proposal to designate and by Don Fujimoto as Don Fujimoto Civil Engineer and Member of the Mayor's Task Force on the Maui County Water Use and Development opposing designation. Would you make copies and circulate them to the Members of the Board. Any other public testimony?

Okay. Members of the Board, as I said earlier, the agenda testimony here is the Board's position on the designation. Up until now, the Board has not taken a position. At the last meeting of the Commission, the Commission voted to proceed with their designation system, and I think in light of the fact that the Board has not taken a position, it's important for us to do so one way or the other. And that was the reason for today's meeting, and I appreciate all the public testimony.

The Chair can start the discussion because the Chair does not support designation. But I do support and I actually support both the comments of Lucienne and Warren because I think there is, one, a need for a lot more data, and I think there is ways that we can work together including conservation and protect the aquifer ourselves. And the fact that -- the reason I asked the question of Lucienne is that the data that we need in order to make good management decisions is not available, and the entity that would be controlling the aquifer does not have the data.

And when they were here at our meeting, when asked the question of are they supposed to gather, the answer was yes, and are they gathering it, and answer was no. And I think we need to be proactive. We need to partner with Lucienne or whomever to get the study done, get the data, but I think it is important for Maui County to continue to control the aquifer. That's my personal opinion. Mr. Starr.

MR. STARR: I have a slightly different opinion, and I do support water management. And I think that the view that a lot of people have over what the process is is slightly -- is slightly incorrect. Right now there is no water management in Maui island. There is no entity that's responsible for

managing the water resources. That's not part of the purview of this Board, and I've heard us get blamed for not doing it, but we are basically a utility. That's not our job and nor do we have the powers or the ability to do it.

There's only one entity that is capable and competent to manage water resources, and that entity is the Water Commission. However, they can only do that under the State Water Code -- Water Code, and the Water Code, which was written and put in place about 15 years ago, was set up to manage all of the water resources, manage and protect all of the resources of the State of Hawai`i.

It had a very good intent, and frankly, it's a -- it's a good set of rules for the management. It looks at how much water is being used, how much water is going into the ground, how it's being affected. There's only one minor problem with the State Water Code, which is as a compromise at the time when it came time to pass the Water Code, instead of being implemented statewide, the Water Code was only to be implemented in a piecemeal fashion after the process called designation of a water management area.

So unless the process of designation of the water management area takes place, the Water Code does not have bearing; in other words, there is no law. So as far as water and water management goes here on Maui island, we're out in the wild, wild west. There is no law. The law that was created and was intended to protect the resources has not been triggered. And, you know, the trigger is the process of designation as a water management area.

Virtually all of Oahu, I think all of Oahu has been designated as a water management area, and that does not in any way harm or stop the Honolulu Board of Water Supply from doing their business. Actually, what it means is that they have -- they have a partner that they can work with, and it means that we don't have -- they don't have the situation there that we have here where there are hundreds of wells, but there is no pumping data for those wells and where there's no, you know, entity that is making sure that there will be water tomorrow.

One of the criteria for water management is a series of numbers called a safe water level that were in the water resources protection plan of 1997. Just to -- if those, along with the other criteria for designation, if those are exceeded, then there is supposed to be management. And just to read a few of those numbers relating to Iao, Waiehu Heights, the minimum safe water level in the resource protection plan is 9 feet. And I believe the current water level is about 8 feet, so it's a foot below. Shaft 33, the safe water level is 11 feet. I have 9 feet, so it's 2 feet below. Mokuahau, 9 feet. The last numbers I have are 7 feet. And North Waihee, the safe water level, 7 feet. It's currently at 7 feet.

Now, my own belief is that the Board and the Department are, you know, doing what we're supposed to be doing in that we're pumping at 90 percent of the sustainable yield; however, we have no -- of Iao. However, we have no idea whether there are other entities pumping one, two, three million gallons a day out of Iao Aquifer or how many millions of gallons a day are being pumped adjacent to Iao Aquifer. There is no records. We do know there are many, many scores of wells, and we do know that many of them are being pumped on a daily fashion. Right now there is no entity in power to get this information.

So, you know, I think that we need the tool of water management, and it will allow us to do our job. And without it, all we're going to do is, you know, say that we're doing our best when our best isn't good enough because we don't have the -- there's no law. You know, we're out in the lawless state and that's not good, and I don't believe that there's any mechanism for the County to use for the County to do water management.

So it's my belief that this is something that we should -- we should be part of and it's also my belief that this is the only way that we can get real water modeling, a real head and shoulders water model because it's the only way to dig up the data that would be needed to create it. And it would probably also get us help in getting the monitoring wells. We only have one monitoring well in Central Maui and now

all of Iao and the Waihee complex.

And, you know, after designation on Oahu and their aquifers, there was a lot of support on all levels, and now there are, I don't know, quite a few monitoring wells over there. And there is a water model that you can look at on computer, and I hope the Board gets to see this model because it's a great device. It can do all kinds of what-if scenarios, see if you pump this well more, what happens to that well and so on.

So, you know, my own belief is that we should -- we should be supportive of this effort. I think that Mr. Williamson, you know, is correct in his assumptions. I have the criteria for designation, and I would like to read them into the record. And I'm not sure if all the Board Members have ever heard them before, so bear with me for one moment more, okay.

These are the ground water criteria for designation, okay, whether an increase in water use or authorized planned use may cause the maximum rate of withdrawal from the ground water source to reach 90 percent of the sustainable yield of the proposed water management area. And I believe this was what Mr. Mayer was referring to when he brought us a letter showing that we have an allocation of over 2 million gallons a day of water that we don't have earlier, earlier on. Number two is that the rates times spacial patterns or depths of existing withdrawals of ground water are endangering the stability or optimum development of the ground water body due to upconing or encroachment of salt water.

Three, that the chloride content of existing wells are increasing to levels which materially reduce the value of their existing uses. We've already lost Mokuhaul wells to this. Whether excessive preventable waste of water is occurring. There are many condo complexes that use over 2,000 gallons a day per condo unit on Maui. I don't know if that's excessive preventable waste or not. There was an actual or threatened water quality degradation as determined by the Department of Health. Serious disputes respecting the use of ground water resources are occurring, whether regulation is necessary to preserve the

diminishing ground water supply for future needs as evidenced by excessive declining ground water levels or whether water development projects that have received any federal, State or County approval may result in the opinion of the Commission in one of the above conditions. Anyway, I'll leave it to other Members from here.

CHAIR RICE: Thank you. Mr. Nobriga.

MR. NOBRIGA: I support the Chairman's request to take firm action from the Board level requesting that no designation happen to Iao Aquifer. I think the Department and this Board has taken outstanding efforts in the last six months to really finally get a handle on what's going on with our central system.

I would really like to hear from Ellen Kraftsow if she could summarize her efforts.

MS. KRAFTSOW: Sorry, I just came back to the room. Summarize my efforts on?

MR. CRADDICK: I'm not sure what the question is.

MR. NOBRIGA: There was no question.

MS. KRAFTSOW: On resource protection or Iao issues?

CHAIR RICE: On Iao.

MR. NOBRIGA: I just said I wanted to hear from you. I like listening to you, not anything specific.

MS. KRAFTSOW: There are a number of wells that have not -- for which there is not adequate information. This has been a matter of concern, not just to certain members of the public that are more akamai, but also to Department staff for many years. We have talked to the State Water Commission about it. They have difficulty with the staffing that they have getting all the information.

However, they have made efforts to go out into the field and verify the status of some of those wells. Those efforts are still ongoing. The Kahului aquifer, as you know, is pumped tremendously over its quote, unquote, sustainable yield of like 1 or 2 million, but that's mostly recharge, irrigation recharge. We have watershed protection measures and ground water protection measures in place. It may be the Iao rule needs a second glance, but it exists. And it was a step in the right direction.

And we have at times in the past, many years ago, requested for certain projects that people who are developing private wells be required to report to us as well as the Commission so that we could keep closer tabs on that. Those requests have never been honored, and to be fair, we have not made them in years. They were never honored, and we for the most part stopped making them. We could start making such requests again when people come in for private well requests.

But as far as getting a handle on all the unutilized wells, that's something we're probably going to have to work with the State Water Commission on. I think for me the pivotal question is will it really protect the aquifer to have the State managing it.

And to me, it's like we have 150 give or take staff dedicated to water on Maui, all very qualified in what they do. And the State Water Commission has 19 staff, also very qualified, all in Honolulu and all completely swamped. We are actively working to protect the resource better and to distribute our pumpage and working with the Planning Department to improve land use review so that it better accounts for water issues.

So while I won't say that we're perfect, I don't see that there's any real protected value in designating the aquifer. I think there may be some things we can do to protect the aquifer better on Maui by working better together that we should talk about, but I don't think the designation is the answer. I think we work very well with the Commission and will continue to. And that's all I have to say about that

right now.

CHAIR RICE: Mr. Tagorda.

MR. TAGORDA: Thank you, Mr. Chair.

MR. NOBRIGA: Thank you.

MR. TAGORDA: I really want to -- would like to maintain a strong position against designation, and I think I like to go along with the Chair's position on this. I think over the past, the Department and the Board of Water Supply have done tremendous effort, good faith effort with good results in trying to preserve and treasure and protect the aquifer. And I think this should stay in Maui. Maui people should be the one protecting this resources instead of the State.

To me, designation is another layer of regulations, which the Department, the Board of Water Supply can do. The latest 12-month moving average I believe was 17.5 unless it's changed. And the Commission on Water Resource Management giving Iao Aquifer with 20 million sustainable yield is less than the 90 percent than what's been set as a criteria in this administrative rules wherein the State Commission on Resource Management can use to designate.

I have read this eight criterias, and none of these are occurring right now. So and if there is one criteria that is occurring or present, the State Commission on Water Resources can use this as a tool to designate. But again, I would be very strongly asking the State Commission on Water Resource Management to at least provide us some factual data that such criterias are occurring before they designate.

And I think the Board of Water Supply, the Department of Water Supply over the past years have done a lot of things to preserve to protect the aquifer. We have spread pumpage. We have new wells, the North Waihee wells on line. We even budgeted funds for new wells on the vicinity of Maluhia all the

way to Kahakuloa to spread pumpage to preserve the aquifer. And I think -- thinking about H`Poko well, which is under court litigation, that is ready to be integrated to Central Maui in case the aquifer goes to 90 percent sustainable yield.

And also, I believe the Board have approved with Iao, with A&B or C. Brewer that Iao/Waikapu, this agreement that we can use surface water. We have Iao membrane ready to go. Those are all in place to protect our aquifer. The State, I don't know, we also have a truth in not only the State to protect our resources and the best protector of this aquifer is the people of Maui, not the State. To me, it's just an added regulation for the people of Maui, and it won't serve no purpose. Thank you, Mr. Chair.

CHAIR RICE: Anyone else first? Mr. Hashimoto.

MR. HASHIMOTO: I think I support the Chair's view that to not designate the Iao Aquifer to the State. Because I guess, you know, everybody has already said their piece, and I agree with those views.

CHAIR RICE: Mr. Starr.

MR. STARR: I would just like to remind my fellow Board Members that our Director Mr. Craddick recently certified to the Board that we have 3.6 million gallons a day of extra water available for use in Central and South Maui. Then he said but that may be wrong because other members of his staff prepared the report and not him. It's my observation that what we're doing right now is we're pumping everything we possibly can.

We're pumping certainly over 90 percent of the sustainable yield of Iao for the last several months. We're pumping over 4 million gallons a day from the very southern portion of North Waihee, which even Mr. Mink feels is excessive, that that number should be kept in the low threes, so we're exceeding what we should be pumping under the current configuration in

North Waihee by about a million gallons a day.

We don't have any other water to put into the system right now. It looks like we have a commitment by the Director of 2 million gallons a day for -- for Seibu that he made in the name of the Board several years ago without approval by the Board. And, you know, we're not doing anything about it. We are looking for other sources, and I think that that's an imperative and that's a good thing, but we don't have them. And until we have them, we have no place to go.

Hamakua Poko perhaps in the future can be added to Central Maui; however, it's the only thing that's keeping us from having to declare mandatory cutbacks upcountry until our new well is in. And in any case, we're prohibited by the courts from adding it into the Central Maui system. So if we needed it, if we wanted it, we still couldn't use it because we have a court ruling against its use as of right now. That may change.

Theoretically, we were supposed to be able to get a maximum of 300,000 gallons a day from Wailuku Ag and its successors for use in the treatment plant. I understand that that has not been able to be finalized or there's some problems with the Department of Health. I get a different answer every time I ask David about that, but it's not -- we're not able to use it yet for whatever reason.

So I think we're in a very tricky situation, and I hate to see us pretend that we're not. You know, it seems that the first step should be acknowledging that we're in a very -- a very ticklish situation here in Central Maui and Iao. And if we try to say everything is all right, we're only going to get into it deeper.

MR. NAKAMURA: Mr. Chairman, I agree with your position as well as those of what seems to be the majority of the Board. And that's not to say that some of the issues raised by Mr. Williamson or Ms. De Naie and others are not valid, and Mr. Starr. I think they are valid issues, and I think they are issues that the Board needs to face. And I think the Board has been taking steps to address them. And I

think the core issue is what agency is best able to manage.

And at this point, I don't see any reason why that entity should not be the County and the Board. There has been comment made and observation made that we don't have sufficient data on existing wells, and I think that's true and that's a function that is supposed to be performed by the State. And they haven't been able to obtain that data, and so that doesn't give me a whole lot of confidence that, you know, that they're going to be able to go beyond that and effectively manage the area. So, you know, water is a key component of community planning, and I think planning is best done at the local level, so I support the position, as I said, that the Chair has suggested.

CHAIR RICE: Mr. Nobriga, did you want to say something?

MR. NOBRIGA: Sorry. Our Board is not filled up today. I know we are missing a few members, and I know this matter is of utmost importance. I realize we will need to submit a vote of five, correct?

CHAIR RICE: Uh-huh.

MR. NOBRIGA: But I'm ready to put it to a vote right here and now. Let's do it. Yay or nay.

CHAIR RICE: I would like to make just one final comment in regards to some of Mr. Starr's concerns, and I share Mr. Nakamura's, some of his comments that there's no denying that there are issues for the Board to deal with and that I think the issue is who is best to solve them. And the answer in my mind is Maui. But when I say that I oppose the designation, I say that with the caveat that I think we do need to get the information that in order to manage the water, I do not think we need any law that mandates that it is our responsibility to do water management.

I think it is implied in our duty to manage water, and I think the reason why Oahu is entirely

designated is that they didn't manage the water until it got to a critical level. And if we want to let Maui get to that point, we will end up in the same situation that they are. And I would like to suggest and I would absolutely believe that the Commission would be happy to hear that the Maui Board has allocated funds to get some of this stuff done because we do have the staff and we have some resources and it is a very important thing for Maui that we oppose the designation with the caveat that we're willing to work with them to gather the information that's needed to do the proper water management and we're willing to make the hard decisions that are necessary when we have a problem, and that's the position I think we should take. Mr. Craddick.

MR. CRADDICK: Well, in light of the discussion there, you know, you were saying that Honolulu didn't manage. In fact, Honolulu Board of Water Supply had a well permitting plan since the '30s almost, and they permitted wells, monitored the use from those wells, actually even have rules that did require sealing of wells. And this Board certainly has the authority to do that under the Charter and the State Constitution. So the fact that they got designated because the plan uses were over 90 percent of their sustainable use, I would just like to bring to the Board's attention the sustainable yield on this island. 476 million gallons a day is the sustainable use. We're currently using around 40 of that.

So there is certainly available water on this island where there's not that problem with the planned uses going over 90 percent of the sustainable yield of all the aquifers. And I believe we are certainly able to manage the aquifers, as you say, here locally certainly given the rules to do so.

CHAIR RICE: Well, I would -- I don't want to get into what someone believes the sustainable yield on Maui is. I think I want to say that we have issues. We agree that we have issues. We need to learn how to manage them and we want to work with the State Commission in order to get the data to manage

them, whatever that amount of water needs to be. I don't want something coming out of this meeting someone saying we have 479 million gallons a day. That's not what we're here to talk about. We're going to get into an argument if we start talking about that. We're here to talk about our position on the designation. For the reasons that I explained earlier, I think it's important that we oppose it.

MR. TAGORDA: Mr. Chair, last statement. Maybe just to convince the State Commission of Resource Management against this designation, I think I urge this Board to look into the program of leak detection very seriously and ongoing conservation in the island. And also I like to get that comment that Mr. Watanabe said. Let's go on and think about the water use management program with the Public Works Department it was. If we can utilize all this water, I think we are safer in the future.

CHAIR RICE: Mr. Craddick.

MR. CRADDICK: Just real short. As I told the Board before, when we were originally looking at designation back in 1996, our unaccountable water was 15 percent. It is right now less than 5 percent, so we've done an extremely good job on reducing our unaccounted for water. It's way below almost half the national average as far as unaccounted for water.

CHAIR RICE: Thank you, Mr. Craddick.
Mr. Nobriga.

MR. NOBRIGA: Mr. Chairman, I move at this time that you, the Chair, respond to the State Water Commission on behalf of this Board stating that we do receive and recognize the many challenges that we face with the management of Iao Aquifer, that your Board very much supports the direction of this Board and leaving the management of Iao Aquifer here on Maui. And we urge that the State Commission take no action on designation of Iao Aquifer.

CHAIR RICE: That's your motion?

MR. NOBRIGA: That's the motion.

CHAIR RICE: Is there a second?

MR. HASHIMOTO: Second.

CHAIR RICE: It's been moved and seconded. Discussion?

MR. STARR: Mr. Chair.

CHAIR RICE: Mr. Starr.

MR. STARR: In the event this is not a unanimous vote, I would like it to be made clear it's not unanimous. And if there's a minority on this, that they be able to pursue making their comments and their beliefs clear.

CHAIR RICE: You're always free to speak as an individual, Mr. Starr.

MR. STARR: But I would like to make it clear that it's -- whether it is or not unanimous in the letter.

CHAIR RICE: Sure.

MR. STARR: Thank you.

CHAIR RICE: Anyone has a problem with that?

MR. TAGORDA: No. Call for the question.

CHAIR RICE: All in favor, signify by saying aye.

VOICES: Aye.

CHAIR RICE: Opposed say nay.

MR. STARR: Nay.

CHAIR RICE: Let the record show there was one opposed, Mr. Starr.

MR. NOBRIGA: Mr. Chairman, could you identify what the vote was.

CHAIR RICE: You want a roll call?

MR. NOBRIGA: Well.

CHAIR RICE: All in favor, they were all aye's and one nay.

MR. NOBRIGA: But did you state that for the record there was so much votes aye, nay?

CHAIR RICE: For the record, there's six aye's and one nay.

MR. NOBRIGA: Thank you, Mr. Chair.

CHAIR RICE: There being no other business for this meeting, this meeting is adjourned.

(The meeting concluded at 11:50 a.m.)

IWADO COURT REPORTERS, INC.

"By Water All Things Find Life"

Department of Water Supply
County of Maui
P.O. Box 1109
Wailuku, HI 96793-6109
Telephone (808) 270-7816
Fax (808) 270-7951

[\[Back\]](#)