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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
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STAFF SUBMITTAL

for the meeting of the
COMMISSION ON WATER RESOURCE MANAGEMENT

February 18, 2009
Honolulu, Oahu

Mr. Bryan Sarasin
Mr. John Varel

Maui Department of Water Supply (MDWS)
APPLICATIONS FOR WATER USE PERMITS

Waihee-Sarasin Well (Well No. 5631-08) WUPA 853, TMK 3-2-007:016	Future (Domestic and Agricultural) Use of 0.051 mgd
Waihee-Varel Well (Well No. 5631-07) WUPA 825, TMK 3-2-001:001	Future (Domestic and Agricultural) Use of 0.041 mgd
Iao Tank Site Well (Well No. 5230-03) WUPA 846, TMK 3-5-001:021	New (Additional Municipal) Use of 0.802 mgd
Mokuhaul Well 3 (Well No. 5330-11) WUPA 847, TMK 3-3-002:024	New (Additional Municipal) Use of 0.589 mgd
Waikapu Tank Site Well (Well No. 5131-01) WUPA 848, TMK 3-5-004:099	New (Additional Municipal) Use of 0.900 mgd
Iao Tunnel - Kepaniwai (Well No. 5332-02) WUPA 852, TMK 3-3-003:003	New (Additional Municipal) Use of 0.840 mgd

Iao Ground Water Management Area, Maui

APPLICANT:

Mr. Bryan Sarasin
P.O. Box 218
Wailuku HI 96793

Mr. John Varel
P.O. Box 1468
Wailuku HI 96793

Mr. Jeffrey K. Eng, Director
Maui Department of Water Supply
200 South High Street
Wailuku HI 96793

LANDOWNER:

Same

Same

Same *and* (for 5332-02)
Wailuku Water Co.
255 East Waiko Road
Wailuku HI 96793

SUMMARY OF REQUEST:

Two private applicants request that the Commission approve ground water use permit applications (WUPAs) for **potable basal** ground water for **new** agricultural and domestic uses in the northern portion of the Iao Aquifer System Area. The Maui Department of Water Supply (MDWS) seeks approval of four permits – three for **basal** and one for **high-level** sources in the mid- to southern portion of the Iao Aquifer System Area for new (additional) municipal uses, as follows:

Sarasin: an allocation of 0.051 million gallons per day (mgd), for one domestic household and 0.85 acres of agricultural irrigation.

Varel: an allocation of 0.041 mgd for 5 domestic households and 350.5 acres of agricultural irrigation (request amended at the hearing to 0.400 mgd)

Maui Department of Water Supply (MDWS): additional allocations totaling 3.132 mgd for municipal uses from four distinct sources.

Well Name	Existing mgd (WUP)	New request mgd (WUP)	Total mgd
5230-03 Iao Tank Site Well	0.498 (823)	0.802 (846)	1.300
5131-01 Waikapu Tank Site	2.000 (816)	<u>0.900 (848)</u>	2.589
	<u>0.400 (824)</u>	2.291	<u>1.300</u>
other MDWS basal	2.898		5.189
total MDWS basal	<u>14.178</u>		<u>14.178</u>
	17.076		19.367
5330-05 Kehalani Mauka	0.613 (865)	--	0.613
5531-01 Living Waters	<u>0.020 (704)</u>	--	<u>0.020</u>
total other basal	0.633		0.633
Total Iao	17.709	2.291	20.000
high-level applications pending,	subject to	CCH-MA06-01	
5332-03 Iao Tunnel	1.359 (a)	0.841	2.200
5332-05 Kepaniwai Well	<u>1.042</u>		<u>1.042</u>
total MDWS high-level (a)	2.401 (b)		3.242
Total MDWS		3.132	

(a) Original GWUPA 680 for 1.418 revised to 1.359; signed by both Wailuku Water Co. (WWC) and MDWS. By private agreement, WWC takes overflow not used by MDWS, assigned GWUPA 738, but never accepted as complete, as the amount was not identified (staff averaged use for estimate of 0.527 mgd as of July 2003).

(b) not yet permitted, pending contested case hearing CCH-MA06-01 D&O on high-level and IIFS.

Objections to these water use permits led to a public hearing on December 16, 2008 to gather further public testimony. This is the first time the Commission must decide between competing GWUPA applications that cannot all be accommodated within the present sustainable yield estimate for a Ground Water Management Area (GWMA).

LOCATION MAP: See Exhibit 1

BACKGROUND:

January 23, 2003 Well Construction Permit Application received from John Varel; issued February 25, 2003.

May 14, 2003 Well Construction Permit Application received from Bryan Sarasin; issued June 4, 2003.

July 21, 2003 Iao Ground Water Management Area officially designated through publication of public notice on that date. Actual existing users, other than individual domestic users who are exempted under the Code, had one year from this date to apply for continued existing uses.

- June 21, 2004 The Supreme Court rendered its opinion (“Waiahole II”) in the remanded Waiahole Decision and Order of December 28, 2001, clarifying the Commission’s consideration of water use permit criteria. This opinion emphasized the importance of practicable alternatives and the careful calculation of appropriate “duties” (per-unit water use).
- June 25, 2004 Earthjustice filed a petition on behalf of Hui O Na Wai Eha and Maui Tomorrow to amend the interim instream flow standards (IIFS) for four Wailuku District Streams (Na Wai Eha): Waihee, Waiehu, Iao, and Waikapu, which overlap the Iao GWMA.
- July 21, 2004 The one-year deadline for filing Iao GWUPAs for existing use. Applications were received for sources in the caprock, basal, and high-level portions of the Iao Aquifer System Area.
- September 22, 2004 Due to objections to many GWUPAs, the Commission approved a public hearing for all existing and new water use permit applications from the Iao Ground Water Management Area.
- September 7, 2005 At the close of the third session of the public hearing, objections to the caprock aquifer water use applications were withdrawn, and these applications were scheduled for action.
- September 28, 2005 The Commission approved GWUPAs for the caprock aquifer. It also deferred action on the high-level source applications due to the the filing of the petition to amend the IIFS, because of probable interaction between high-level sources and stream flow.
- January 11, 2006 In a pre-hearing conference between contesting parties, the petitioning parties announced that discussions between applicant and petitioners had resolved the objections to basal GWUPAs. They withdrew their petition for a contested case hearing on the basal GWUPAs, which now allows them to be scheduled for action. The hearing officer directed staff to proceed for action on these GWUPAs.
- February 15, 2006 As objections to the basal GWUPAs were withdrawn, the Commission proceeded to approve them. At this point, outstanding applications for new uses from the basal aquifer could be processed for action.
- In separate action, the Commission approved a combined contested case hearing for the high-level aquifer GWUPAs and the petition to amend the interim instream flow standards for four Wailuku District Streams (Na Wai Eha): Waihee, Waiehu, Iao, and Waikapu, because of probable interaction between high-level sources and stream flow.

- December 6, 2006 EarthJustice, on behalf of Hui O Na Wai Eha and Maui Tomorrow, filed a petition to designate the four hydrologic units of the Wailuku District as surface water management areas. A public hearing was held in Wailuku on April 26, 2007.
- Following the compiling of Findings of Fact, the Commission approved the designation of the four hydrologic units of Na Wai Eha as a surface water management area.
- August 10, 2007 John Varel's Well Completion Report accepted as complete, following two extensions of the permit expiration.
- December 3-14, 2007 Following the standing hearing, motions, scheduling, and evidentiary filings, the contested case hearing for high-level sources and instream flow standards began on this date. Further hearings continued in January through October of 2008.
- March 7, 2008 Completed GWUPAs for three basal wells were received from MDWS by the Commission. On April 3, 2008, a completed water use permit application was received for a MDWS high-level source.
- March 16, 2008 The surface waters of the four Wailuku District streams (Na Wai Eha) were designated as Surface Water Management Areas. The public notice of this decision was April 30, 2008, the effective date of designation. Existing users have one year (to April 30, 2009) to file water use applications for uses in effect as of that date.
- June 23, 2008 Bryan Sarasin's Well Completion Report accepted as complete, following two extensions of the permit expiration.
- July 28, 2008 The first of two private well GWUPAs was filed as a consequence of the applicants' inability to acquire a reliable supply from their former source, the Waihee Ditch, which is now under the combined contested case hearing. On August 28, 2008, a GWUPA for a second private well was received.
- September 26, 2008 The original deadline for filing proposed findings of fact in the Na Wai Eha combined contested case hearing on high-level sources and instream flow standards. This was superseded by a motion to reopen evidentiary offerings, which were heard on October 14, 2008, and set a new deadline of December 5, 2008 for proposed Findings of Fact and Decision and Order.
- December 5, 2008 Proposed Findings of Fact, Conclusions of Law, and Decision and Order by parties to the contested case hearing CCH-MA06-01 were submitted to the hearings officer.

December 16, 2008 Following objections to all six current GWUPAs, a public hearing was held in Wailuku. No contested case was requested by the close of the public hearing.

December 26, 2008 By the end of ten days following the public hearing, additional public comments were received.

ANALYSIS/ISSUES:

Section 174C-49(a) of the State Water Code establishes seven (7) criteria that must be met to obtain a water use permit. An analysis of the proposed permit in relation to these criteria follows:

(1) Water availability

Through the Hawaii Water Plan, the Commission has adopted 20 mgd as the sustainable yield for the Iao (basal) Aquifer System Area. Individual existing water use permits in this aquifer system area are shown in Exhibit 2. Table 1 summarizes the current aquifer ground water conditions:

Table 1. Iao Aquifer System (basal)

<u>ITEM</u>	Iao Aquifer System Area (mgd)
Sustainable Yield	20
Less: Other Existing Water Use Permits (shown in Exhibit 2)	17.709
Reservation to DHHL	0.000
Subtotal (Current Available Allocation)	2.291
Less: Mr. Bryan Sarasin	0.051
Mr. John Varel (all applications shown in Exhibit 3)	0.041
MDWS*	<u>2.291</u>
	2.383
Subtotal (Potential Available Allocation/Allocation Deficit)	-0.092

* The Iao Tunnel is a high-level source, and assumed to reduce discharge to stream flow but not counted against basal aquifer yield. The high-level aquifer also contributes to the basal aquifer, but the assumption that high-level sources affect surface water in a one-to-one relationship reduces accounting of underflow to zero.

Exhibit 2 shows ten MDWS sources totaling 17.076 mgd, which includes a recent transfer of 78,000 gpd from Kehalani, making it apparent that the MDWS request intended to capture all the remaining estimated sustainable yield from the Iao Basal Aquifer. Such a transfer from Kehalani was allowed by the contested case concerning Waikuku Shaft, CCH-MA05-01, and may be administratively reallocated to MDWS by their request under Declaratory Rule ADM97-A1.

There is not enough water to satisfy all the competing requests at this time. The County's numerical modeling efforts over the past 6 years may show that with appropriate well spacing and

construction, the resource may accommodate these application requests. However, until the sustainable yield is officially increased by the Commission, these requests cannot all be accommodated as requested.

The high-level request for 0.841 mgd is separate and subject to an impending decision in the Na Wai Eha contested case (CCH-MA06-01) concerning the interaction of high-level sources and stream flow, the amending of interim instream flow standards, and the identification of surface water amounts available for off-stream use. This request is for an amount in addition to the existing application (initially 1.418 mgd but revised to 1.359 mgd), for a new total request of 2.2 mgd. The portal of the tunnel opens onto property owned by WWC, which co-signed for the original application. The main portion of the tunnel is on property under Executive Order 751 from the State of Hawaii to Maui County.

(2) Reasonable-beneficial

Section 174C-3 HRS defines "reasonable-beneficial use" as
"...the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is both reasonable and consistent with the state and county land use plans and the public interest".

Sarasin:

I. Purpose of Use

Individual domestic use: one household;
 Irrigation: 0.1 acres of garden; 0.75 acres of commercial nursery.

II. Quantity Justification

Use:	Requested Amount:	Standard:
Individual household use*	600 gallons per day (gpd)	County planning standard experience on this property (equivalent of 6,000 gad) experience on this property (equivalent of 66,667 gad)
Irrigation – garden* (* legally exempt)	600 gpd for 0.1 ac	
nursery	50,000 gpd for 0.75 ac.	
Total	51,200 gpd or 0.051 mgd.	

III. Efficiency of Use

The applicant has not explained how the operation is as water-efficient as possible. As a guideline, Staff has used the Irrigation Water Requirement Estimation Decision Support System (IWREDSS) developed by the University of Hawaii's College of Tropical Agriculture and Human Resources (UH/CTAHR), contracted by the Commission. This parcel requires a range from 1,964 to 3,697 gad for irrigating both typical garden crops and nursery crops. The median figure, 2,768 gad, represents an amount that will meet crop requirements 50% of the time based on historical rainfall. Based on the suggestion of CTAHR, staff selected an amount that assumes a five-year drought (80% probability of exceedence), 3,162 gad expressed as a 12-month moving average. For 0.85 acre, this comes to **2,688 gpd** for garden and nursery irrigation.

IV. Analysis of Practical Alternatives

The applicant has responded to **four** potential alternatives to the proposed use of potable basal water. An analysis of each of the alternatives is as follows:

1. Ditch - The proposed ground water use is, in itself, an alternative to the original source for these activities, the Waihee Ditch. Mr. Sarasin has been unable to get commitments from the purveyor for continued access to ditch water.
2. Municipal water is unavailable for agricultural use;
3. Municipal reclaimed water is not available at this site;

Household effluent is proposed to be used at the rate of from 200-300 gpd for the garden, in addition to the requested allocation. This requires action by Department of Health.

4. Desalting is neither commercially available nor a practical alternative for this land-locked parcel.

Varel:

I. Purpose of Use

Individual domestic use: five households;

Irrigation: 340 ac of macadamia nuts; 5 ac other fruit trees; 2 ac nursery crops; 3.5 ac native reforestation

II. Quantity Justification

Use:	Requested Amount:	Standard:
Individual household use* (*legally exempt)	600 gallons per day (gpd)	County planning standard
Irrigation – mac nuts	39,000 gpd	(experience on this property)
fruit trees	500 gpd	“
nursery	250 gpd	“
native reforestation	350 gpd	“
Total	40,700 gpd or 0.041 mgd.	(experience on this property)

At the December 16, 2008 public hearing, Mr. Varel requested an increase of total allocation to 0.400 mgd.

III. Efficiency of Use

The applicant states that its operations need to be water-efficient to avoid pumping costs; the preferred irrigation will be naturally-occurring rainfall. Using IWREDSS as a guideline, this parcel requires a range from 1,756 to 3,526 gad for irrigating macadamia nuts. The median figure, 2,671 gad, represents an amount that will meet crop requirements 50% of the time based on historical rainfall. Based on the suggestion of CTAHR, staff selected an amount that assumes a five-year drought (80% probability of exceedence), 3,065 gad expressed as a 12-month moving average. For 340 acres, this comes to **1,042,128 gpd** (1.042 mgd).

Applying this model to fruit trees, nursery, and native forest as perennial generic crops, this parcel requires a range from 1,967 to 3,861 gad. The median figure, 2,916 gad, represents an amount that will meet crop requirements 50% of the time based on additional rainfall, based on the suggestion of CTAHR. Staff selected an amount that assumes a five-year drought (80% probability of exceedence), 3,333 gad expressed as a 12-month moving average. For 10.5 acres, this comes to **34,996 gpd**.

The combined irrigation total needed is therefore estimated by the model at **1,077,124 gpd**.

IV. Analysis of Practical Alternatives

The applicant has responded to **four** potential alternatives to the proposed use of potable basal water. An analysis of each of the alternatives is as follows:

1. Ditch - The proposed ground water use is, in itself, an alternative to the original source for these activities, the Waihee Ditch. Mr. Varel has been unable to get commitments from the purveyor for continued access to ditch water.
2. Municipal water is not being allocated to agricultural uses;
3. Municipal reclaimed water is not available at this site;
4. Desalting is neither commercially available nor a practical alternative for this mauka parcel.

Maui Department of Water Supply (MDWS)

I. Purpose of Use

The enumerated municipal uses include domestic, commercial, industrial, hotel, schools, landscape irrigation, and others.

II. Quantity Justification

MDWS identifies the total number of service connections to be served by these sources as a pro-rata share of the total available supply from all sources to the Central Maui Service Area (CMSA). The County plans for these uses according to adopted standards; the Commission accepts these standards in deference to County authority.

The filings indicate that the four sources will provide percentages of the total number of service connections for all types of uses in the CMSA, and although it is anticipated that each source will increase its use after the first year (2008), each will remain static for the remaining three years of the request (2009-2011), a declining percentage of the ever-growing number of service connections in the CMSA, on the order of about one-quarter the total service connections.

III. Efficiency of Use

MDWS has adopted rules to encourage conservation, and water availability rules to enforce shortfalls in available source supplies.

IV. Analysis of Practical Alternatives

The applicant has variously responded to four potential alternatives to the proposed use of potable basal water. An analysis of each of the alternatives is as follows:

1. Ditch - MDWS treats between 2 and 3 mgd of diverted stream flows from the Iao Ditch, and is cooperating in a private proposal to expand surface water treatment from the Waihee Ditch.
2. Municipal water is provided as potable water, regardless of the required water quality of the end use;
3. Municipal reclaimed water is used as much as possible, still in limited quantities;
4. Desalting is not currently economically viable.

However, public comments from former mayor Alan Arakawa (Exhibit 4) list several additional alternatives that could be effectuated.

(3) Interference with other existing legal uses

The Maui DWS objected to the Sarasin and Varel applications in part, later repeated by reference by the Office of the Mayor, because those proposed GWUPs compete with MDWS applications for water to be used for municipal purposes. Also, an earlier request by MDWS to create a municipal water reservation for the balance of the aquifer's sustainable yield was deferred by staff pending adoption of a Water Use and Development Plan, which is to lay out the total projected need and to identify available sources to serve those uses.

Pump test data for all these wells show that the proposed pumping rates will not interfere with other neighboring wells. The two private wells in the northern portion of Iao are spatially separated from other wells and will draw relatively small amounts from an area of the aquifer that shows rapid recovery time after cessation of pumping. This indicates that the impact zone of the proposed pumping is small and will not affect nearby wells. The County is attempting to spread the pumpage formerly overconcentrated in a few well fields in the southern portion of Iao, thereby enabling them to increase total pumpage from a better optimized configuration of wells. The County has been using a yet-to-be-published 3-D numerical model with the U.S. Geological Survey (USGS), as offered by the County and adopted by the Commission to avoid designation under previous actions.

Bryan Sarasin objected to the County applications in the belief they may affect availability of water for his well. John Varel raises a similar objection, in that the County's request may hamper his ability to use water from a well he developed. Both stated at the public hearing that they would not have drilled their wells if they had known the County could take the remaining available ground water. However, both of these wells were applied for and approved just prior to the official date of designation and both were granted extensions to finish the wells for several years pending decisions on water use applications for existing ground water use as of the date of designation.

Both Mr. Sarasin and Mr. Varel point out in their applications that the only reason they had drilled wells was that the former reliance on use of the Waihee Ditch was lost and that the County would not provide agricultural service. Potable ground water was not their first choice but is now their only choice. In normal weather, rainfall accounts for a major portion of their irrigation requirements, but continuing drought raised the necessity of a more reliant backup source.

(4) **Public interest**

The Public interest is defined under §174C-2 - Declaration of policy, as follows:

“(c) The state water code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest.”

Additionally, there have been Public comments / objections to these applications, which are summarized as follows:

1. Mr. Clyde Kahalehau: a) there should be no urban development in this agricultural area that used to be in taro; b) use of the Waihee and Spreckels Ditches should be sufficient for both Sarasin and Varel; c) there is no water in the streams; d) Sarasin has not made his nursery yet.

Development is a county planning function, not under the Commission’s jurisdiction; the current proposal is consistent with existing county zoning. The use of the Waihee Ditch is currently in a contested case hearing (CCH MA06-01), with proposed findings and decision-making due in Spring 2009. The deadline for filing surface water use permits for diverted streamflow from the ditch system is April 30, 2009. While all the applicants have indicated their intention to file, the outcome of this process cannot be known at this time. No diversion from any stream is contemplated in these applications, although MDWS is currently purchasing service from Iao Waikapu Ditch and has indicated plans to participate in a new treatment plant using water from the Waihee and Spreckels Ditches at Hopoi.

2. MDWS: private wells in MDWS’ service area may lack comprehensive conservation and resource protection programs, because *“private wells may be poorly sited or inadequately designed...(and) may provide contamination routes to the aquifer if they are not subject to the same wellhead protection scrutiny applied to DWS’s (sic) wells...(the applications) do not provide sufficient information to demonstrate that (they) are appropriately sited and designed, will not interfere with legally-permitted wells, and that necessary wellhead protection measures are in place.”*

The Department did not cite any particular siting, construction, or wellhead protection deficiencies, nor has it provided information or evidence of its own wells' siting, construction, and wellhead protection considerations. Also, the Department of Health did not raise any siting concerns during review. The Well Construction and Pump Installation Permit Application contains minimum construction requirements that should address protection of the aquifer from contamination. All well construction permits are required to meet Hawaii Well Construction and Pump Installation Standards and be constructed by a licensed driller. The same licensed driller who constructed the two private wells has done several MDWS wells.

(5) **State & county general plans and land use designations**

The proposed uses for Sarasin and Varel are in the State **Agriculture** District, and the county zoning is **Agriculture**. Therefore, the proposed use is consistent with these land use designations.

Normal agency review includes:

- 1) the State's Department of Land and Natural Resources (DLNR) divisions for State Parks, Aquatic Resources, Historic Preservation, and Land; the Department of Health (DOH) branches for Clean Water, Safe Drinking Water, and Wastewater; the Department of Hawaiian Home Lands (DHHL); the Land Use Commission (LUC); and the Office of Hawaiian Affairs (OHA).
- 2) the County's County Council, Department of Planning and Permitting, and the Department of Water Supply;

Constructive and due care comments have been made through this review. Sarasin's and Varel's proposed domestic and agricultural uses are consistent with the state and county general plans and land use designations. The land is zoned agriculture and lies outside the main urban development area on land reputed to be of high agricultural productivity.

(6) **County land use plans and policies**

Normal County review includes County Council, Department of Planning and Permitting, and MDWS. MDWS has objected that the private well withdrawals interfere with County desire to reserve all remaining available supply for its municipal uses.

(7) **Interference with Hawaiian home lands rights**

All permits are subject to the prior rights of Hawaiian home lands. DHHL and OHA have reviewed this application and made no comments or objections. Further, standard water use permit conditions 3.g., 6., and 9.f. notify all water use permittees that their permits are subject to and cannot interfere with Hawaiian home land rights. MDWS represents that anticipated uses by the DHHL are incorporated into the County's water supply commitments. There are additional Hawaiian Home Lands in Puunene, toward Kihei, with very general plans and no timeline for implementation.

DISCUSSION:

The major issues concerning these competing GWUPAs are:

1) Lack of clarity on alternative sources

MDWS questioned the professed lack of alternatives for Varel and Sarasin, as they are not yet pumping but nonetheless apparently are using water. This contradicts Mr. Kahalehau's public hearing testimony that they are not farming, thus do not need the additional water. No further evidence was offered that alternatives had been exhausted or prevented. Staff does not believe it yet has a full and objective view of alternative water availability to these applicants.

MDWS challenged the staff's public hearing submittal statement that the County "conceivably has alternatives in other locales to augment the Iao Aquifer System Area supply". MDWS contends that it has no real, practical alternatives to its proposed uses from the Iao Aquifer System Area. They note the practical difficulty and doubtful hydrological advisability of new wells either to the north, in the Waihee Aquifer, or south, in the Waikapu Aquifer, and MDWS Director Jeffrey Eng's supplemental testimony dated December 22, 2008, following the public hearing, points to a consent decree requiring exhaustion of surface water options in the Wailuku District before contemplating ground water development in East Maui.

Post public hearing testimony (Exhibit 4) submitted by former Mayor Alan Arakawa emphasized alternatives for MDWS:

- 1) acquiring the Wailuku Water Distribution Company (WWDC) and its service capacity; or alternatively, acquiring the surface water system of WWDC; or negotiating for service from WWDC;
- 2) expedite completion of Maui Lani Wells 5, 6, & 7 (Well Nos. 5229-04, 05, & 06), for which there is already a shared use agreement;
- 3) rescind the law banning use of Hamakuapoko Wells 1 & 2 (Well Nos. 5420-02 & 5320-01), which have Department of Health and EPA approvals for completed contaminant treatment;
- 4) implementation of distribution lines for 11 mgd wastewater effluent going into injection wells;
- 5) complete the surface water treatment plant planned for Hopoi;
- 6) purchase water from private users;
- 7) develop wells in other (unspecified) aquifers;
- 8) desalting;
- 9) stricter application of the "Show Me the Water" bill requiring private developers to provide their own sources;
- 10) require more conservation practices of both the County system (service upgrades) and private users (more efficient use).

Staff's position is that all of these are viable alternatives, although probably all require more time and expense to implement than this request by MDWS for potable demands.

It has also been brought to staff's attention that the two private well owners have access to county domestic water meters. The well owners have represented that they made a decision to proceed with their own wells instead, to establish greater self-reliance, to avoid the costs of lengthy piping from the County water line up to their storage, and in Mr. Varel's case a booster system from the existing meter.

They also wished to avoid paying domestic water rates for irrigation water. They have not provided a comparison of their own well construction and pump operation costs to an exploration of the costs of alternatives, but having been informed of the Commission's need to understand this comparison, they are preparing information for the Commission.

2) Varel's request to amend his application at the hearing

At the public hearing and with subsequent post-hearing written testimony (Exhibit 5), MDWS challenged the ability of the Commission to allow Varel's amended request from 0.041 to 0.400 mgd, a tenfold increase, at the hearing without adequate public notice. They stated their belief that more contrary interest would have been shown if the enlarged request had been legally noticed in advance. They conclude that a new application with the enlarged request should follow normal procedure. Otherwise, MDWS expressed that they would request a contested case hearing by the close of the public hearing if 0.400 mgd became the requested amount to go before the Commission.

Staff concurs that, while appropriate amendment is always welcome before the close of the hearing, in the interest of gathering complete information, the significance of the tenfold increase in the request is tantamount to invalidating the terms of the accepted application. To take favorable action at this point does raise the question of adequate public notice for testimony, including wider options toward a contested case hearing. Staff's recommendation provides a rationale for Commission priorities at the present time and does not foreclose a new application for additional amounts.

3) Accommodating requests with limited water availability

Limiting total pumpage from the Iao basal Aquifer to the estimated sustainable yield requires the staff to find a solution that eliminates the excess request total of 0.092 mgd. Water Code Section 174C-54 states:

"If two or more applications which otherwise comply with section 174C-49 are pending for a quantity of water that is inadequate for both or all, or which for any other reason are in conflict, the commission shall first, seek to allocate water in such a manner as to accommodate both applications if possible; second, if mutual sharing is not possible, then the commission shall approve that application which best serves the public interest."

Thus, it provides that competing applications be accommodated as far as possible, and failing that approve allocations that best serve the public interest, as described in 174C-2(c):

"The state water code shall be liberally interpreted to obtain maximum beneficial use of the waters of the state for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest."

As a preliminary issue, individual domestic water uses are exempt from obtaining a water use permit. The applicable Maui County standard is 600 gpd as household use or 3,000 gad for large lots. Applying this to the two private well applicants would result in a total of 6,000 gad (0.006 mgd), in contrast to the accepted application total of 0.092 mgd or the requested amended total of 0.451 mgd.

Second, two of the wells for which MDWS is requesting a water use permit, the Waikapu Tank Site Well (5131-01) and the Iao Tank Site Well (5230-03) do not yet have pumps installed nor pump installation permits (PIPs). The Waikapu Tank Site PIP was issued January 29, 2009, but the Iao Tank Site pump installation permit application, while anticipated, is not yet submitted (may be in process by the date of this meeting).

Third, Spring 2009 is the anticipated issuance date for the decision in the Na Wai Eha contested case hearing to amend the interim instream flow standards for the four streams currently diverted into the Wailuku ditch system, the availability of water for diversion to off-stream use, and disposition of high level GWUPAs. The two private well owners have also verbally indicated they intend to apply for a share of this water (deadline April 30, 2009), as has the MDWS for another portion of its supply to the Central Maui Service Area (CMSA). The process of reviewing and issuing surface water use permits will follow the determination of IIFS – first the uses existing as of the April 30, 2008 designation date, and second, new uses proposed after April 30, 2008, and it is therefore conceivable that the non-potable requests represented here have alternatives. Rather than anticipating a decision accommodating the amount of these requests, the Commission could nonetheless defer some of the uses requested here for the short period required to identify the potential of this alternative, and return to these issues contingent upon its decision in the contested case.

Fourth, the overriding priorities for potable ground water, a public trust resource, are a short list of uses that includes domestic use. Municipal uses include domestic use – an estimated 60% thereof, looking at a bar chart presented by MDWS at the public hearing (see Exhibit 6) – but also non-domestic consumption classes: commercial, industrial, hotel, irrigation, and recreational uses. These non-individual public trust uses are candidates for finding alternative sources, and hopefully the Na Wai Eha case and/or the Water Use and Development Plan (WUDP) will address this issue, as it was not directly addressed at the public hearing. Consequently, there is a presumptive priority for about 60% of the total requested from these municipal wells (2.291 mgd), or 1.375 mgd. Conversely, agriculture and other non-public trust uses are a lower priority in competition for public trust resources, and the Supreme Court's emphasis on finding alternatives for non-public trust uses has become an important consideration. The private properties in question were formerly sugar lands, historically irrigated from the Waihee Ditch diverting surface flows from Waihee Stream. The proprietors of the ditch system have been barred by the Public Utilities Commission (PUC Docket 2008-0025) from offering new service, pending the decision and order by the Commission in CCH-MA06-01 (Na Wai Eha) and the issuance of water use permits for the Na Wai Eha Surface Water Management Area (SWMA) and will be regulated to serve water use permit holders in their publicly defined service area. The well owners plan to apply for surface water use permits by the existing use filing deadline of April 30, 2009, and it is unknown whether they can be accommodated.

It is understood that MDWS' CMSA does not currently have the capacity to deliver water to demands with different water quality requirements, to distinguish between potable and non-potable classes, nor to enforce conservation practices. It delivers potable water to all customers. While the WUDP may begin to address these capabilities, total demand drives the delivery of service. Commitments will be

made according to water availability. In short, denying portions of the total MDWS request may not be completely debilitating, and marginal limitations on allocation may be absorbed by decisions in process. Unfortunately, we do not yet have the total aggregate profile of region-wide demand to be provided by the WUDP.

Staff is given to understand that MDWS is proceeding with deliberate speed on the installation of pumps in the Iao Tank Site and Waikapu Tank Site Wells. These are intended to spread pumpage in the Iao basal aquifer and phase out the concentrated pumpage at Wailuku Shaft 33, the largest single source for MDWS and one with increasing safety issues. The Mokuhau Wells 1-3 were pumped heavily in the past, and the deepest of the three, Mokuhau 2, has been taken off-line due to rising chloride problems. The current request raises the pumpage at Mokuhau 3, which seems to have steady water levels and chlorides in this shallower well.

Consequently, the staff's recommendation reflects a maximum commitment that can be made by the Commission at this time, while respecting that decisions to come may provide some relief from the consequent deferral of these applications.

The private well users are resorting to ground water for lack of immediate alternatives on their own land, while the County conceivably has alternatives in other locales to augment the Iao Aquifer System Area supply. Because individual domestic use is exempt from ground water use permitting, each applicant may use 3,000 gpd for this purpose without a water use permit. They will, however, need a water use permit for needs above and beyond these amounts.

RECOMMENDATION:

1. Approve a pump installation permit for Well No. 5631-08 for a 160 gpm pump with the understanding that the well will only be used for domestic purposes at this time. Monthly flowmeter readings shall be recorded and reported to the Commission. The Certificate of Pump Installation Completion will reflect these limitations.
2. Defer action on the request for new non-public trust ground water irrigation uses in Water Use Permit Application No. 853, Waihee-Sarasin Well (Well No. 5631-08) until a decision and order for CCH-MA06-01 is approved by the Commission.
3. Approve a pump installation permit for Well No. 5631-07 for a 65 gpm pump with the understanding that the well will only be used for domestic purposes at this time. Monthly flowmeter readings shall be recorded and reported to the Commission. The Certificate of Pump Installation Completion will reflect these limitations.
4. Defer action on the request for new non-public trust ground water irrigation uses in Water Use Permit Application No. 825, Waihee-Varef Well (Well No. 5631-07) until a decision and order for CCH-MA06-01 is approved by the Commission.
5. Approve Water Use Permits Nos. 846, 847, and 848 for the reasonable-beneficial for existing and requested additional new *domestic* use of potable ground water from Maui Department of Water Supply wells, or 60% of the requested amounts for a total of 1.374 mgd, as shown below (amounts in million gallons per day (mgd)):

<u>WUP No.</u>	<u>Well No.</u>	<u>Well Name</u>	<u>Request</u>	<u>60% of Request</u>
846	5230-03	Iao Tank Site	0.802 mgd	0.481 mgd

847	5330-11	Mokuhau 3	0.589 mgd	0.353 mgd
848	5131-01	Waikapu Tank	<u>0.900 mgd</u>	<u>0.540 mgd</u>
		(total)	2.291 mgd	1.374 mgd

remaining Iao balance: 0.916 mgd

6. Defer action the additional new use amount of the balance of 40% of non-public trust needs of MDWS until a decision and order for CCH-MA06-01 is approved by the Commission.
7. Defer action on Water Use Application No. 852 for reasonable beneficial use of a new total of 2.200 mgd from Iao Tunnel (Well No. 5232-02), pending a decision on the Na Wai Eha contested case hearing (CCH-MA-06-01).

Respectfully submitted,


 KEN C. KAWAHARA, P.E.
 Deputy Director

- Attachment(s): A (Water Use Permit Detailed Information)
 B (Water Use Permit Standard Conditions)
 C (Pump Installation Permit Standard Conditions)
- Exhibit(s): 1 (Location Map)
 2 (Existing Water Use Permits and 12-Month Moving Average Withdrawal)
 3a-f (Pending Water Use Permit Applications)
 4 (Letter from Alan Arakawa on behalf of Sarasin and Varel)
 5 (Letter from Jeffrey Eng, Director of Maui DWS)
 6 (Bar chart comparing use amounts by consumption class, provided by MDWS through its CMSA, presented at public hearing December 16, 2008)

APPROVED FOR SUBMITTAL:


 LAURA H. THIELEN
 Chairperson

WATER USE PERMIT DETAILED INFORMATION

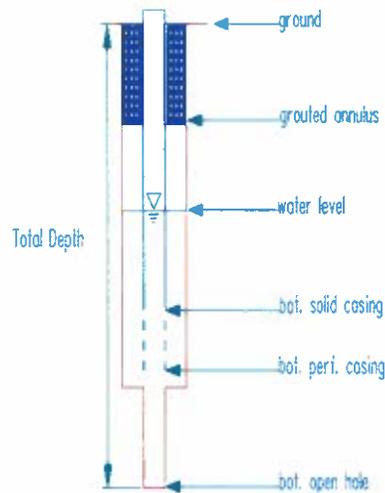
Source Information

AQUIFER: Iao System, Wailuku Sector, Maui
 Sustainable Yield: 20 mgd
 Existing Water Use Permits: 17.709 mgd
 Available Allocation: 2.291 mgd
 Total other pending applications: 2.261 mgd
 This application: 0.051 mgd

WELL: Waihee-Sarasin Well (Well No. 5631-08)
 Location: 54-345 Kamehameha Hwy, Maui, TMK: 3-2-007:016
 Year Drilled: 2006
 Casing Diameter: 8 in.
Elevations (msl= 0 ft.)
 Water Level: 10 ft.
 Ground: 170 ft.
 Bottom of Solid Casing: 165 ft.
 Bottom of Perforated: 185 ft.
 Bottom of Open Hole: na ft.

Total Depth: 185 ft.
 Grouted Annulus Depth: 120 ft.

Pump Capacity 160 gpm



Use Information

Quantity Requested:	0.051 gallons per day.
Type of New Water Use:	Agricultural
Place of Water Use:	TMK: 3-2-007:016
Reported Water Usage:	0 gpd
Nearby Similar Water Usage:	0 gpd
Iao Aquifer System	
Current 12-Month Moving Average Withdrawal (See Exhibit 2):	17.709 mgd

Nearby Surrounding Wells and Other Registered Ground Water Use

There are other wells within a mile of the well (see Exhibit 1). Most of these wells are currently in use. Information from the registration program indicates there are possibly 16 existing wells in the Iao Aquifer System.

Public Notice

In accordance with HAR §13-171-17, a public notice was published in the Honolulu Advertiser on August 11, 2008 and August 11, 2008 and a copy of the notice was sent to the Mayor's office. Copies of the completed application were sent to the Department/Board of Water Supply, Planning Department, Department of Land Utilization (Oahu only), Department of Health, Department of Hawaiian Home Lands, Office of Hawaiian Affairs, the various divisions within the Department of Land and Natural Resources, and other interested parties for comments. Written comments and objections to the proposed permit were to be submitted to the Commission by August 28, 2008.

WATER USE PERMIT DETAILED INFORMATION

Source Information

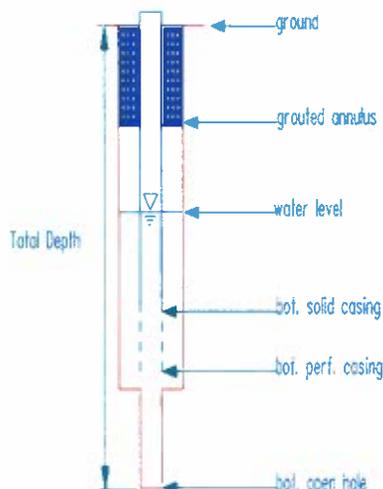
AQUIFER: Iao System, Wailuku Sector, Maui
 Sustainable Yield: 20 mgd
 Existing Water Use Permits: 17.709 mgd
 Available Allocation: 2.291 mgd
 Total other pending applications: 2.342 mgd
 This application: 0.400 mgd

WELL: Waihee-Varel Well (Well No. 5631-07)
 Location: Waihee Valley Road, Maui, TMK: 3-2-001:001
 Year Drilled: 2007
 Casing Diameter: 6 in.

Elevations (msl= 0 ft.)
 Water Level: 8.5 ft.
 Ground: 240 ft.
 Bottom of Solid Casing: 245 ft.
 Bottom of Perforated: 265 ft.
 Bottom of Open Hole: na ft.

Total Depth: 265 ft.
 Grouted Annulus Depth: 200 ft.

Pump Capacity 60 gpm



Use Information

Quantity Requested: 0.043 gallons per day.
Type of New Water Use: Domestic and Agriculture
Place of Water Use: TMK: 3-2-001;001

Reported Water Usage: 0 gpd
Nearby Similar Water Usage: 0 gpd

Iao Aquifer System
Current 12-Month Moving Average Withdrawal (See Exhibit 2): 17.709 mgd

Nearby Surrounding Wells and Other Registered Ground Water Use

There are other wells within a mile of the well (see Exhibit 1). Most of these wells are currently in use. Information from the registration program indicates there are possibly 16 existing wells in the Iao Aquifer System.

Public Notice

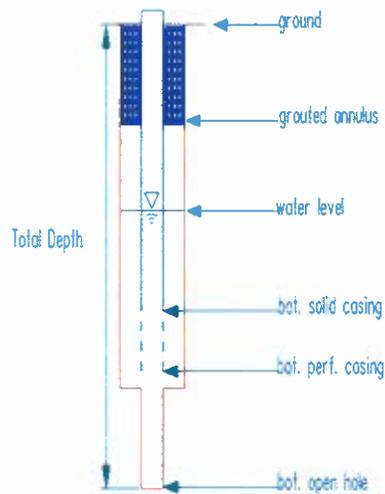
In accordance with HAR §13-171-17, a public notice was published in the Honolulu Advertiser on September 17, 2008 and September 24, 2008 and a copy of the notice was sent to the Mayor's office. Copies of the completed application were sent to the Department/Board of Water Supply, Planning Department, Department of Land Utilization (Oahu only), Department of Health, Department of Hawaiian Home Lands, Office of Hawaiian Affairs, the various divisions within the Department of Land and Natural Resources, and other interested parties for comments. Written comments and objections to the proposed permit were to be submitted to the Commission by August 28, 2008.

WATER USE PERMIT DETAILED INFORMATION

Source Information

AQUIFER: Iao System, Wailuku Sector, Maui
 Sustainable Yield: 20 mgd
 Existing Water Use Permits: 17.709 mgd
 Available Allocation: 2.291 mgd
 Total other pending applications: 0.451 mgd
 These applications: 2.291 mgd

MDWS WELL NOs:	5230-03	5330-11	5131-01
TMK Location:	3-5-1:21	3-3-2:24	3-5-4:99
Year Drilled:	2005	1967	1999
Casing Diameter (inches):	20	18	18
Elevation (msl= 0 ft.)	506	354	764
Total Depth (ft):	608	361	870



Use Information

Quantity Requested: 2,291,000 gallons per day.
 Future Type of Water Use: Municipal
 Place of Water Use: Central Maui Service Area

Reported Water Usage:	0 gpd
Nearby Similar Water Usage:	0 gpd

Iao Aquifer System	
Current 12-Month Moving Average Withdrawal (See Exhibit 2):	17.709 mgd

Nearby Surrounding Wells and Other Registered Ground Water Use

There are other wells within a mile of the well (see Exhibit 1). Most of these wells are currently in use. Information from the registration program indicates there are possibly 16 existing wells in the Iao Aquifer System.

Public Notice

In accordance with HAR §13-171-17, a public notice was published in the Honolulu Advertiser on August 11, 2008 and August 11, 2008 and a copy of the notice was sent to the Mayor's office. Copies of the completed application were sent to the Department/Board of Water Supply, Planning Department, Department of Land Utilization (Oahu only), Department of Health, Department of Hawaiian Home Lands, Office of Hawaiian Affairs, the various divisions within the Department of Land and Natural Resources, and other interested parties for comments. Written comments and objections to the proposed permit were to be submitted to the Commission by August 28, 2008.

STANDARD WATER USE PERMIT CONDITIONS

1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)
2. The right to use ground water is a shared use right.
3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
 - a. Can be accommodated with the available water source;
 - b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
 - c. Will not interfere with any existing legal use of water;
 - d. Is consistent with the public interest;
 - e. Is consistent with State and County general plans and land use designations;
 - f. Is consistent with County land use plans and policies; and
 - g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).
4. The ground water use here must not interfere with surface or other ground water rights or reservations.
5. The ground water use here must not interfere with interim or permanent instream flow standards. If it does, then:
 - a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
 - b. The interim or permanent instream flow standard, as applicable, must be amended.
6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.
7. The water use permit application and submittal, as amended, approved by the Commission at its February 18, 2009 meeting are incorporated into this permit by reference.
8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.
9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
 - a. protect the water sources (quantity or quality);
 - b. meet other legal obligations;
 - c. insure adequate conservation measures;

- d. require efficiency of water uses;
- e. reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
- f. meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
- g. carry out such other necessary and proper exercise of the State's and the Commission's police powers under law as may be required.

Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

- 10. An approved flowmeter(s) must be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a yearly basis (attached).
- 11. This permit shall be subject to the Commission's periodic review of the Waihee Aquifer System's sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the Waihee Aquifer System, or relevant modified aquifer(s), is reduced.
- 12. A permit may be transferred, in whole or in part, from the permittee to another, if:
 - a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of the use, remain the same; and
 - b. The Commission is informed of the transfer within ninety days.

Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

- 13. The use(s) authorized by law and by this permit do not constitute ownership rights.
- 14. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances which will affect the permittee's water use.
- 15. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservation, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period of forfeiture.

16. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee's water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the Iao Ground Water Management Area.
17. The water use permit shall be subject to the Commission's establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.
18. Special conditions in the attached cover transmittal letter are incorporated herein by reference.
19. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.

PUMP INSTALLATION PERMIT

Aloha Well, Well No. 1234-56

Note: This permit shall be prominently displayed at the site until the work is completed

In accordance with Department of Land and Natural Resources, Commission on Water Resource Management's Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", this document permits the pump installation for Aloha Well (Well No. 1234-56) at TMK 5-5-5: 55, Oahu, subject to the Hawaii Well Construction & Pump Installation Standards (HWCPIS - February 2004) which include but are not limited to the following conditions:

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules (HAR).
2. No withdrawal of water shall be made other than for testing until a Certificate of Pump Installation Completion has been issued by the Commission.
3. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.
4. The pump installation permit shall be for installation of a **Error! Reference source not found.** gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.
5. A water-level measurement access shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels.
6. The permittee shall install an approved meter or other appropriate means for measuring and reporting withdrawals and appropriate devices or means for measuring chlorides and temperature at the well head.
7. Well Completion Report Part II shall be submitted to the Chairperson within sixty (60) days after completion of work work (please contact staff or visit www.hawaii.gov/dlnr/cwrm/resources_permits.htm for current form).
8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.
9. The pump installation permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.
10. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.
11. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.
12. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.
13. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.
14. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

Date of Approval: **January 1, 2000**
Expiration Date: **January 1, 2002**

LAURA H. THIELEN, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed and understand that I shall not commence work until I and the pump installer have signed, dated, and returned the permit to the Commission. I understand that this permit is not to be transferred to any other entity. I also understand that non-compliance with any permit condition may be grounds for revocation and fines of up to \$5,000 per day starting from the permit date of approval.

Installer's Signature: _____ C-57, C-57a, or A License #: _____ Date: _____

Printed Name: John Doe Firm or Title: Aloha Water Company

Please sign both copies of this permit, return one to the Chairperson, and retain the other for your records.

ATTACHMENT C



Aquifer System Water Use Permit Index (non-saltwater/non-caprock)

ISLAND OF MAUI

WUP No	Approved	Applicant	Well No.	Well Name	WUP (mgd)	12-MAV (mgd)
WMA Aquifer System: lao				Sustainable Yield = 20		
824	1/31/2007	Maui DWS	5131-01	Waikapu Tank	0.400	
823	1/31/2007	Maui DWS	5230-03	lao Tank	0.498	
864	1/31/2007	Maui DWS	5330-05	Shaft 33	4.878	
865	1/31/2007	Kehalani Mauka, LLC	5330-05	Shaft 33	0.613	
815	2/15/2006	Maui DWS	5330-09	Mokuhau 1	1.500	
816	2/15/2006	Maui DWS	5330-11	Mokuhau 3	2.000	
817	2/15/2006	Maui DWS	5430-01	Waiehu Hts 1	0.500	
818	2/15/2006	Maui DWS	5430-02	Waiehu Hts 2	0.500	
819	2/15/2006	Maui DWS	5431-02	Waihee 1	1.900	
820	2/15/2006	Maui DWS	5431-03	Waihee 2	1.500	
821	2/15/2006	Maui DWS	5431-04	Waihee 3	3.400	
704	2/15/2006	Living Water Foundation, LLC	5531-01	Waihee Mauka 1	0.020	
<i>Summary for 'SYSTEM' = lao (12 detail records)</i>						
Totalling					17.709	
Available					2.291	

CHARMAINE TAVARES
Mayor



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauewater.org

JEFFREY K. ENG
Director
RECEIVED
ERIC H. YAMASHIGE, P.E., L.S.
Deputy Director

08 OCT 3 09:22

COMMISSION ON WATER
RESOURCE MANAGEMENT

September 30, 2008

Mr. Ken C. Kawahara, P.E., Deputy Director
Commission on Water Resource Management
State of Hawaii
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Via Fax and Mail

COPY

Dear Mr. Kawahara:

SUBJECT: WATER USE PERMIT APPLICATIONS FOR MOKUHAU 3, WELL NO. 5330-11 (WUPA 847); WAIKAPU TANK SITE WELL, WELL NO. 5131-01 (WUPA 848); AND IAO TANK SITE WELL, WELL NO. 5230-02 (WUPA 846)

This is in response to your letter of May 29, 2008 requesting clarifications of our "new use" water use permit applications for the above-captioned wells located within the Iao aquifer. We address your concerns in the same order they were posed.

1. In reviewing the applications, it appears that the new requested amounts are in addition to approved amounts existing as of July 21, 2003. The application itself does not distinguish between them. Please identify the quantity of new uses that have arisen since July 21, 2003, and the shortfall of current sources in meeting the new demand. Please complete Table 2 of the new application form (enclosed; please disregard the term "Existing Use" for this purpose). We recommend for the future either that 1) Application Item 14 ("Remarks") identify this fact, or 2) the table should reflect both the existing and additive new use to reflect the correct pumpage total. If you wish to explain the request in contrast to total use in the Central Maui Service Area, please attach a separate statement clarifying this distinction between pre and post July 21, 2003 uses.

"By Water All Things Find Life"

The Department of Water Supply is an Equal Opportunity provider and employer. To file a complaint of discrimination, write: USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington DC 20250-9410. Or call (202) 720-5964 (voice and TDD)

EXHIBIT 3 

The requested identification of existing and new uses must be described in relation to the Central Maui System as a whole, rather than limited to existing and new uses within the Iao aquifer, because water from the Iao Tunnel, from DWS's wells in the Iao and Waihee aquifers, and surface water are mixed. Thus, water from Mokuahau 3, the Waikapu Tank Site Well, and the Iao Tank Site Well can serve different areas within the Central Maui system. As stated on Table 2 of the existing use and new use application forms, the number of service connections for the Central Maui system increased from 17,391 at the time of designation to 20,827 as of December 31, 2007. The actual number of new service connections since designation, based on corrected billing data, is 3,054. Production demand for the Central Maui system has increased by 2.04 mgd from 23.309 mgd at the time of designation to 25.349 mgd. Consumption for the 3,054 meters that have been issued since designation was 1.759 mgd as of December 31, 2007. Estimated use for issued meters that do not yet show consumption was .635 mgd. The new use request of 2.291 mgd from Mokuahau 3, the Waikapu Tank Site Well, and the Iao Tank Site Well will serve existing service connections, meters issued before designation that are not yet in active use, and new use anticipated in the near future. Please find below water use categories, quantity in gallons per day, and number of services per water use category for new uses with active consumption. The table also shows anticipated consumption from newly-issued meters that are not yet active.

Table 1. New Use Active Meters and Installed Meters with Inferred Use

Use Category	Total Consumption GPD	# Services	Average Consumption GPD	Inferred Use GPD	# Services	Average Inferred Use GPD
AG	16,048.52	1	16,048.52			
COMMERCIAL	133,735.74	67	1,996.06	70,726.00	12	5,893.83
STATE HOUSING	1,395.08	1	1,395.08			
HOTEL	1,080.66	1	1,080.66	47,708.00	1	47,708.00
INDUSTRIAL	6,424.26	6	1,070.71	13,700.00	3	4,566.67
IRRIGATION	229,147.54	25	9,165.90	19,003.00	7	2,714.71
MULTI-FAMILY	211,480.33	53	3,990.19	40,598.00	3	13,532.67
PARKS	2,329.50	2	1,164.75			
RELIGIOUS	21,617.70	6	3,602.95			
SCHOOLS	1,350.82	1	1,350.82			
SINGLE-FAMILY	1,061,071.80	2247	472.22	410,930.00	595	690.63
STATE FACILITY	19,318.69	3	6,439.56			
TEMP CONSTRUCTION	54,145.57	16	3,384.10	26,000.00	2	13,000.00
FEDERAL	480.9836066	1	480.98	6,600.00	1	6,600.00
TOTAL:	1,759,627.21	2,430		635,265.00	624	

Mr. Ken C. Kawahara
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September 30, 2008

DWS billed 22.16 mgd consumption as of December 31, 2007, which leaves 3.18 mgd for uses that are not billed, such as water used for line flushing and firefighting. Potential system losses are aggressively addressed through leak detection by DWS's staff conservation specialist. Please find attached the availability calculations for the Central Maui system as of March 31, 2008.

2. The column requesting gpd/unit is filled in using the term "services". This does not provide a clear basis for evaluating units and "duties" (per unit use) to determine reasonable-beneficial use, nor distinguish between uses requiring drinking water and those that may use non-potable water. Please complete Table 2 of the "new" use application (enclosed).

Please refer to Table 1 "New Use Active Meters and Installed Meters with Inferred Use" to clarify per unit use. The table also shows the number of services and use by irrigation meters. At this time, DWS does not serve non-potable water on our Central Maui system. Some preliminary research of potential commercial projects where reclaimed water can off-set potable sources have been initiated in the Water Use and Development Plan (WUDP) process. DWS strongly encourages new developments to utilize non potable sources where available, such as on site brackish wells. Commercial properties are required to use reclaimed water for non potable needs if located within 100 feet of a R-1 reclaimed water distribution line.

3. Please provide a discussion on consistency with land use designations. This may be an opportunity to describe how the County meets commitments to planned authorized use, and what administrative tools protect the public trust.

All of DWS's WUPAs, whether for basal sources, high-level sources, or "new uses," are consistent with state and county land use designations, including the County's General Plan and the Kahului-Wailuku Community Plan. CWRM has already determined that DWS's basal aquifer sources are consistent with applicable plans, land use classifications, and land use policies. The same evidence supports the same finding with respect to the requested "new uses."

Moreover, source development is consistent with land use planning and designations as demand projections prepared in the WUDP process are derived directly from the County Planning Department's socio-economic forecast. Therefore, DWS strives to develop sources and infrastructure to meet demand for authorized planned projects if these projects are included in the Planning Department's socio economic forecast. DWS tracks and estimates demand for pending and approved subdivisions, committed projects with all land use approvals, projects with community plan designations, and conceptual projects without land use approvals to determine short and long term

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availability. Projects subject to the County's availability policy, codified in Title 14, Chapter 12 of the Maui County Code, must identify a long-term, reliable supply of water for subdivision approval. DWS implementation of Chapter 12 has resulted in denial of subdivision construction plans where a long-term reliable supply of water cannot be verified.

Chapter 12 specifically creates an administrative tool to protect public trust uses. The policy's purpose is stated as follows: "The Council acknowledges and affirms that water is a natural and cultural resource that must be protected, preserved, and managed as a public trust, and hereby establishes a policy that requires verification of a long-term, reliable supply of water before subdivisions are approved."

Another administrative tool to protect the public trust uses is the Iao Water Shortage Plan (Maui County Administrative Rule, Title 16). Its purpose is to prevent over pumping of the Iao aquifer. Pumpage and chloride conditions define when mandatory restrictions must be implemented. Restrictions include a moratorium on meter issuance and installation.

4. Practicable alternatives must be addressed. As municipal supplies serve multiple uses, including both potable and non-potable, public trust and non-public trust, the application must show that the requested amounts cannot be met by practicable alternatives to potable public trust resources. Please use Table 3 of the "new" use application.

DWS notes that the various categories on CWRM's Table 3 are not specified in the State Water Code. HRS § 174C-49 sets forth the criteria that applicants must meet. Nonetheless, DWS will address each category on Table 3 to the best of its ability. In doing so, DWS does not waive its legal objections to the imposition of these specific categories.

Municipal Sources

DWS has no real, practical alternatives to the requested new uses. DWS has considered drilling new wells in the Northern portion of the Waihee aquifer and in the Kahakuloa aquifer, but CWRM has asked DWS to limit its withdrawals from the Waihee aquifer, and recent discussions with USGS have led DWS to conclude that new wells in these areas may not be as productive or cost-effective as previously hoped. USGS has advised DWS that the Waikapu aquifer may be a better place to seek new sources of supply, but the current sustainable yield of that aquifer is 2 mgd, and DWS faces competition from private landowners for the available water in the Waikapu aquifer.

Moreover, DWS is precluded from developing more wells in East Maui in the immediate future due to the entry on December 22, 2003 of a consent decree in The Coalition to Protect East Maui Water Resources et al. v. Board of Water Supply et al., Civil No. 03-1-0008(3). In that case, the Plaintiffs demanded that before looking to East Maui as a source of groundwater, DWS look first to surface water drawn from the Waikapu, Iao, and/or Waihee hydrologic units. Therefore, DWS has vigorously pursued surface water sources as required under the Consent Decree.

Wastewater reuse

Use of recycled water would require extensive capital cost and further quantification of end-uses and technical potential. Based on preliminary analyses in the WUDP process, a \$50 million capital cost to extend the County's reclaimed water distribution system to the Wailea area would only displace 3 mgd of potable water. Expansion of the recycled water system in South and Central Maui will need to be funded by developers, major land owners, and State and Federal agencies, in addition to DWS. Thus, increased use of reclaimed water is a long-term goal, rather than an alternative that is available at this time to meet current demand.

Ditch system

The County does not own or operate a ditch system. As CWRM knows, diverted surface water currently conveyed through irrigation ditches owned or operated by HC&S and Wailuku Water Company, is directly affected by CWRM's designation of a surface water management area for Na Wai Eha. DWS has entered into discussions with Alexander & Baldwin concerning the potential for another surface water treatment plant. However, those discussions are still in a preliminary phase, and Alexander & Baldwin's ability to supply surface water to DWS, conveyed through HC&S's or Wailuku Water Company's ditch system, may be limited, depending on the outcome of the pending petitions to amend interim instream flow standards for the Na Wai Eha streams, and the allocations of surface water due to designation.

Desalinization

A plant for desalination of Central Maui brackish ground water would have extensive energy needs and could potentially require new power generation plants. Other issues include cost volatility, disposal of brine, and how to meet greenhouse gas emission reduction objectives. While DWS continues to investigate the potential for desalinization, this strategy does not present a viable alternative to meet current demand.

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Surface water

See discussion above under "Ditch system."

Other

CWRM's chart does not include conservation as a specific category, but DWS recognizes that conservation efforts can be a very cost effective way to stretch a limited water supply. In response to specific questions and comments from CWRM staff and others, DWS has previously presented to CWRM supply side and demand side information for all of the WUPAs under consideration in the on-going contested case hearings.

DWS has also previously demonstrated its efforts at conservation, including a program that provides low-flow fixtures, free of charge, and public education programs. These efforts have been successful in reducing demand by about 500,000 gallons per day. CWRM was satisfied with these efforts with respect to DWS's basal sources. These conservation efforts relate equally to the proposed new uses.

Moreover, DWS has taken additional steps to improve water conservation. DWS aggressively pursued filling a vacant position on its staff for a Conservation Specialist. On July 2, 2007, DWS filled that position. The Conservation Specialist is responsible for, among other things, helping to plan and implement all aspects of conservation work, including office and field operations. Among other things, field operations include leak detection in water systems, commercial and industrial operations, residences, and irrigation systems; repair or arranging for repair of leaks and other problems identified; replacement of fixtures as appropriate; suggestions for plant materials as appropriate; analysis and presentation of findings; and public presentations. DWS's new hire meets with community groups and homeowners' associations to increase awareness of and compliance with good conservation practices. The work of the Conservation Specialist is in addition to the conservation work performed by a staff member of DWS's planning branch on a part-time basis.

DWS has additional on-going conservation efforts. DWS continues its practice of having booths at community events, including the upcoming annual Maui County Fair, at which conservation information is provided and low flow shower heads, lavatory aerators, and garden hose nozzles are distributed free of charge.

In addition, I encourage conservation during a radio program on which I appear, and during weekly interviews I give to the Maui News. I also make conservation a cornerstone of my presentations to civic and professional organizations, such as the

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American Institute of Architects. In addition to my public outreach efforts, Jacky Takakura, DWS Administrative Officer, visits schools to educate Maui children on water conservation.

As you know, on August 23, 2007, I appeared before the County of Maui's Board of Water Supply, and requested the Board to issue a drought declaration, which it did. Immediately thereafter, I called for a voluntary 10 % reduction in water use from customers on the Central Maui System. Although Upcountry Maui customers are frequently required to conserve due to drought conditions, this was the first time that Central Maui System users were also asked to cut back. DWS set a goal of 25.5 mgd, and I warned the public that if voluntary efforts were not sufficient, mandatory restrictions on Central Maui System customers would be necessary. To date, the customers of the Central Maui system have been remarkably successful in achieving the voluntary cutback goal of 25.5 mgd, even in the dry summer months.

5. How are the Department of Hawaiian Home Lands requests for water from lao incorporated in these applications?

DWS's Central Maui system serves homes built by the Department of Hawaiian Homelands (DHHL). DWS places a high priority on DHHL and issued water reservations post designation so that water could be secured for planned expansion of Hawaiian Home Lands projects. DHHL's current use and anticipated demand for reserved water are included in DWS's request for an additional 2.291 mgd from Mokuhaul 3, the Waikapu Tank Site Well, and the lao Tank Site Well.

6. Please provide a discussion on meeting the public interest. The Code provides that maximum beneficial use must still make adequate provision for enumerated uses declared to be in the public interest. Please provide a statement of how your maximum beneficial use makes adequate provision for these protected uses. Please complete item #15 of the new water use forms (enclosed; please disregard the term "Existing Use" for this purpose).

CWRM concluded on February 15, 2006 and January 31, 2007 that DWS's basal source withdrawals serve the public interest. DWS's proposed "new uses" from Mokuhaul 3, the Waikapu Tank Site Well, and the lao Tank Site Well serve the public interest in precisely the same way.

Domestic and municipal uses are protected public trust uses. The declaration of policy found in HRS § 174C-2(c) recognizes a high priority for municipal uses. As shown in Table 1, "New Use Active Meters and Installed Meters with Inferred Use," domestic uses, such as single-family and multi-family uses, account for approximately two-thirds

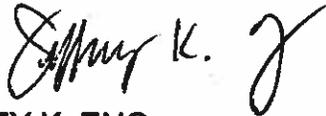
Mr. Ken C. Kawahara
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September 30, 2008

of the Central Maui system services. DWS's proposed "new uses" from Mokuhou 3, the Waikapu Tank Site Well, and the Iao Tank Site Well are "municipal uses," and approximately two-thirds are for domestic uses.

We appreciate your patience as my colleagues and I have sought to provide the information requested in your May 29, 2008 letter in the format that your letter specified. We understand that the application forms are new, and note that they were not yet in use when we submitted our new use applications. In some instances, the information sought on the new form did not seem to be applicable to a municipal purveyor of water such as DWS. In other instances, the information sought did not appear to be required under Chapter 174C. We expect that the application process will continue to be refined, and we are certainly willing to assist in that regard. In the meantime, we trust that with the additional information provided, our March 5, 2008 new use application for Mokuhou 3, Well No. 5330-11; Waikapu Tank Site Well, Well No. 5131-01; and Iao Tank Site Well, Well No. 5230-02 will now be deemed complete.

Should you have any questions, please contact me at 808-270-7816. I also ask that you please copy Deputy Corporation Counsel Jane Lovell with all correspondence relating to this new use application.

Sincerely,



JEFFREY K. ENG
Director

emb

Enclosure: DWS Availability sheet dated 03/31/08

copy w/enc: DWS Engineering Division
Jane E. Lovell, Deputy Corporation Counsel
Edward S. Kushi, Jr., Deputy Corporation Counsel

Central Maui - Availability Information										03/31/06
										REMAINING CAPACITY BY SYSTEM STANDARDS
	GPM	Pumping	2/3	2/3 of 2/3				MAV Use	MAV +21%	
Iao Aquifer Basal										
Mokuaou 1	2,500	3,600,000	2,400,000	1,600,000				794,545	981,400	
Mokuaou 2		0	0	0				0	0	
Mokuaou 3	4,040	5,817,600	3,878,400	2,585,600				2,651,388	3,087,177	
Waihee 1	2,680	3,859,200	2,572,800	1,715,200				1,502,992	1,818,620	
Waihee 2	2,680	3,859,200	2,572,800	1,715,200				2,150,804	2,602,594	
Waihee 3	3,550	5,132,000	3,408,000	2,272,000				3,626,921	4,287,574	
Waihehu Heights 1	950	1,368,000	912,000	608,000				24,370	28,488	
Waihehu Heights 2	1,060	1,526,400	1,017,600	678,400				857,932	798,097	
Waikiki Shaft	3,512	5,057,280	3,371,520	2,247,680				5,014,836	6,067,951	
Iao Tank Site Well	none yet	0	0	0						
Waikapu Well	none yet	0	0	0						
SUBTOTAL	30,199,680	30,199,680	20,133,120	13,422,080				16,223,885	19,630,901	-2,801,805
<i>2/3 capacity is 20,133,120 without repair/well or 20,718,720 with, modified downward to account for aquifer limitations in historical method</i>										
Iao Non-Basal										
Iao Tunnel	1,763,160	1,763,160	1,410,528	1,576,560				1,744,089	2,110,359	
Keponawai	610	878,400	585,600	390,400				765,827	926,651	
	1,763,160	2,641,560	1,996,128	1,966,960				2,509,926	3,037,010	-167,539
<i>standard of 80% inflow is more conservative than 1 SD here.</i>										
Iao Treatment Plant Capacity										
	Peak Day	Peak Day	Avg Day	Avg Day	Med Less 1 SD**	MAV Use	MAV +21%			
	3,476,820	3,476,820	2,317,680	1,500,000	659,486	473,880,000	1,298,301	1,570,945		
<i>Rated capacity of treatment plant is 2,317,680 but actual performance varies.</i>										
Waihee Aquifer										
	Peak Day	Peak Day	2/3	2/3 of 2/3						
	3,476,820	3,476,820	2,317,680	1,500,000	659,486	473,880,000	1,298,301	1,570,945	201,688	
North Waihee # 1	1,150	1,656,000	1,104,000	736,000				1,281,826	1,584,230	
North Waihee # 2	1,060	1,526,400	1,017,600	678,400				1,107,499	1,340,073	
Kaooa 1	1,200	1,728,000	1,152,000	768,000				1,415,345	1,712,568	
Kaooa 2	1,275	1,836,000	1,224,000	816,000				1,825,671	1,967,062	
Kupaa	none yet	0	0	0				0	0	
Mauihala	none yet	0	0	0				0	0	
Waioala	none yet	0	0	0				0	0	
Waioana	none yet	0	0	0				0	0	
SUBTOTAL	6,746,400	9,746,400	4,497,600	2,998,400				6,540,441	6,703,934	-2,642,041
<i>2/3 capacity is 4,497,600, however this was modified downward to account for aquifer limitations in historical method</i>										
TOTAL BEFORE REMOVING PUMP	42,166,060	43,084,460	28,944,738	19,887,440				25,672,553	30,942,790	-6,685,113
LARGEST PUMP OUT OF SERVICE		(5,817,600)	(3,876,400)	(2,585,600)						-2,685,600
DEMAND ADJUSTMENTS		48,882,060	32,823,138	22,473,040						
Reserved Other Than DRHL										-36,160
DHHL Outstanding Reserved										-12,000
Near Term - Not Reserved										
Recently Issued Meters										-1,088,026
Subdivisions										-2,013,545
Sub'd Approved - Meter Approval Not Completed										-8,707,671
Pending										-16,139,021



State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
 Department of Land and Natural Resources
APPLICATION FOR WATER USE PERMIT
 Groundwater or Surface Water

For Official Use Only:
 RECEIVED
 08 MAR 7 8:45
 HAWAIIAN WATER RESOURCES DIVISION

Instructions: Please print in ink or type and send 15 copies of completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96808. Application must be accompanied by a non-refundable filing fee of \$25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-0225. For further information and updates to this application form, visit <http://www.hawaii.gov/dlnr/cwrm>.

PERMITTEE INFORMATION

1. (a) APPLICANT (b) LANDOWNER OF SOURCE
 Firm/Name MAUI COUNTY DEPT. OF WATER Firm/Name COUNTY OF MAUI
 Contact Person JEFFREY K. ENG, DIRECTOR Contact Person CHARMAINE TAVARES, MAYOR
 Address 200 S HIGH ST, WAILUKU, HI Address 200 S HIGH ST, WAILUKU, HI 96793
 Phone 808-270-7816 Fax 808-270-7833 Phone 808-270-7855 Fax 808-270-7870
 E-mail jeffrey.eng@co.maui.hi.us E-mail jeffrey.eng@co.maui.hi.us

SOURCE INFORMATION

2. WATER MANAGEMENT AREA: IAO AQUIFER ISLAND: MAUI
 3. (a) EXISTING WELL/STREAM DIVERSION NAME AND STATE NUMBER: _____
 (If source doesn't presently exist, please attach well construction/stream diversion permit or application.)
 (b) PROPOSED (NEW) WELL/STREAM DIVERSION NAME: IAO TANK SITE 5230-02
 (c) LOCATION: Address _____ Tax Map Key: 3 - 5 - 01 : 021
 (Attach and show source location on a USGS map, scale 1"=2000', and a property tax map)
 4. SOURCE TYPE (check one): Stream Basal Dike-confined Perched Caprock
 5. METHOD OF TAKING WATER (check one): Artesian Well & Pump Diverted Surface Other (explain)
 6. SPECIAL MANAGEMENT AREA PERMIT (SMAP)
 Required, SMA # _____ date approved _____
 Not Required (attach documentation from applicable County agency)
 I have not checked with the county about whether or not an SMA Permit is required. I understand that checking with the County prior to making this application will expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

USE INFORMATION

7. LOCATION OF PROPOSED WATER USE: (If possible, show on same maps as source location. Otherwise, attach similar maps)
 (a) PUC-Regulated Private System Intended Dedication to Dept. /Board of Water Supply Non-PUC-Regulated Private System
 (b) Tax Map Key: Please complete Table 1 on back of application and shade applicable portion of property tax map.
 8. QUANTITY OF WATER REQUESTED: 0.802 MILLION gallons per day (averaged over 1 year)
 9. METHOD OF MEASUREMENT: Flowmeter Open-pipe Weir Orifice Other (explain)
 10. QUALITY OF WATER REQUESTED: Fresh Brackish Salt Potable Non-Potable
 11. PROPOSED USE: Municipal (including hotels, stores, etc.) Individual Domestic Irrigation
 Industrial Military Other Explain
 12. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION: 24 HOURS
 (daytime hours of operation; example, 7 a.m. to 2 p.m.)
 13. APPLICANT MUST ESTABLISH THAT THE PROPOSED USE OF WATER:
 (a) Can be accommodated with the available water source.
 (b) Is a reasonable-beneficial use.*
 (c) Will not interfere with any existing legal use.
 (d) Is consistent with the public interest.
 (e) Is consistent with state and county general plans and land use designations.
 (f) Is consistent with county land use plans and general policies.
 (g) Will not interfere with the rights of the Department of Hawaiian Home Lands.

* Section 13-171-2, Hawaii Revised Statutes -

"Reasonable-beneficial use" means the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is not wasteful and is both reasonable and consistent with the state and county land use plans and the public interest.

14. REMARKS, EXPLANATIONS: _____
 15. By checking this box, you acknowledge that you are responsible for paying the public notice fee associated with this application, and you will follow later instructions by staff regarding payment of these fees. If you do not check this box, your application will not be accepted as complete.

NOTE: Signing below indicates that the signatories understand and swear that: 1) the information provided on this application is accurate and true to the best of their knowledge; 2) Item 14 is the responsibility of the applicant prior to Commission approval; 3) if necessary, further information may be required before the application is considered complete; 4) if a water use permit is granted by the Commission, this permit is subject to prior existing permitted uses, changes in sustainable yields and instream flow standards, reserved uses as defined by the Commission, and Hawaiian Home Lands future uses; and 5) Upon permit approval, a water shortage plan must be submitted by the applicant should the Commission require one.

Applicant (print) JEFFREY K. ENG Landowner (print) COUNTY OF MAUI
 Signature Jeffrey K. Eng Signature Charmaine Tavares
 Date 2/12/08 Date 02-12-08
 CHARMINE TAVARES, MAYOR

TABLE 1. TMS TO USE REQUESTED WATER

1	2	3	4	5	6	7	8	9	10	11	12	13	14
PROJECT NAME & PHASES (include address if applicable) identify project no. on TMS map	EXISTING or NEW USE (if existing, give date of first use)	POTABLE or NONPOTABLE	TMS	STATE LUD CODE	CURRENT COUNTY ZONING CODE	SPECIAL MANAGEMENT AREA PERMIT REQUIRED? (Y/N)	UNITS OF NET ACRES	GPM/UNIT OF SERVICE	4-YEAR CUMULATIVE PROJECTED DEMAND				ULTIMATE DEMAND (TO BUILD-OUT)
									YEAR 1 2007 (year)	YEAR 2 2009 (year)	YEAR 3 2009 (year)	YEAR 4 2010 (year)	
1. Central system								20,827	25,960	26,508	27,059	27,612	
2								services	MGD	MGD	MGD	MGD	
3. Iao Tank Site	new	potable	multiple	various	various	N	various	960					
4								services*	1,300	1,300	1,300	1,300	
5								*based on fraction of	MGD	MGD	MGD	MGD	
6								MAV for the source versus					
7								Central system MAV					
8													
9													
10													
11													
12													
13													
14													
TOTAL GPD													

Additional demand to be met by Wailes, surface or other sources including any additional yield from the aquifer



State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR WATER USE PERMIT
 Groundwater or Surface Water

For Official Use Only:

RECEIVED

MAR 7 8:44

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PERMITTEE INFORMATION

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 Firm/Name MAUI COUNTY DEPT. OF WATER
 Contact Person JEFFREY K. ENG, DIRECTOR
 Address 200 S HIGH ST, WAILUKU, HI
 Phone 808-270-7816 Fax 808-270-7833
 E-mail jeffrey.eng@co.maui.hi.us

(b) LANDOWNER OF SOURCE
 Firm/Name COUNTY OF MAUI
 Contact Person CHARMAINE TAVARES, MAYOR
 Address 200 S HIGH ST, WAILUKU, HI 96793
 Phone 808-270-7855 Fax 808-270-7870
 E-mail jeffrey.eng@co.maui.hi.us

SOURCE INFORMATION

2. WATER MANAGEMENT AREA: IAO AQUIFER ISLAND: MAUI

3. (a) EXISTING WELL/STREAM DIVERSION NAME AND STATE NUMBER: MOKUHAU 3 WELL 5330-11
 (If source doesn't presently exist, please attach well construction/stream diversion permit or application.)

(b) PROPOSED (NEW) WELL/STREAM DIVERSION NAME: _____

(c) LOCATION: Address _____ Tax Map Key: 3 - 3 - 02 : 024
 (Attach and show source location on a USGS map, scale 1"=2000', and a property tax map)

4. SOURCE TYPE (check one): Stream Basal Dike-confined Perched Caprock

5. METHOD OF TAKING WATER (check one): Artesian Well & Pump Diverted Surface Other (explain)

6. SPECIAL MANAGEMENT AREA PERMIT (SMAP)
 Required, SMA # _____ date approved _____
 Not Required (attach documentation from applicable County agency)
 I have not checked with the county about whether or not an SMA Permit is required. I understand that checking with the County prior to making this application will expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

USE INFORMATION

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 (a) PUC-Regulated Private System Intended Dedication to Dept./Board of Water Supply Non-PUC-Regulated Private System
 (b) Tax Map Key: Please complete Table 1 on back of application and shade applicable portion of property tax map.

8. QUANTITY OF WATER REQUESTED: 0.589 MILLION gallons per day (averaged over 1 year)

9. METHOD OF MEASUREMENT: Flowmeter Open-pipe Weir Orifice Other (explain)

10. QUALITY OF WATER REQUESTED: Fresh Brackish Salt Potable Non-Potable

11. PROPOSED USE: Municipal (including hotels, stores, etc.) Individual Domestic Irrigation
 Industrial Military Other Explain

12. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION: 24 HOURS
 (daytime hours of operation; example, 7 a.m. to 2 p.m.)

13. APPLICANT MUST ESTABLISH THAT THE PROPOSED USE OF WATER:
 (a) Can be accommodated with the available water source.
 (b) Is a reasonable-beneficial use.*
 (c) Will not interfere with any existing legal use.
 (d) Is consistent with the public interest.
 (e) Is consistent with state and county general plans and land use designations.
 (f) Is consistent with county land use plans and general policies.
 (g) Will not interfere with the rights of the Department of Hawaiian Home Lands.

* Section 13-171-2, Hawaii Revised Statutes -

"Reasonable-beneficial use" means the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is not wasteful and is both reasonable and consistent with the state and county land use plans and the public interest.

14. REMARKS, EXPLANATIONS: _____

15. By checking this box, you acknowledge that you are responsible for paying the public notice fee associated with this application, and you will follow later instructions by staff regarding payment of these fees. If you do not check this box, your application will not be accepted as complete.

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Applicant (print) JEFFREY K. ENG

Landowner (print) COUNTY OF MAUI

Signature *Jeffrey K. Eng*

Signature *Charmaine Tavares*
 CHARMAINE TAVARES, MAYOR

Date 2/12/08

Date 2/12/08

TABLE 1. TMS TO USE REQUESTED WATER

1	2	3	4	5	6	7	8	9	10-13				14
									YEAR 1 2007 (year)	YEAR 2 2008 (year)	YEAR 3 2009 (year)	YEAR 4 2010 (year)	
PROJECT NAME & PHASES (include address if applicable) Identify project no. on TMK map	EXISTING or NEW USE (if existing, TB in date of first use)	POTABLE or NONPOTABLE	TMK	STATE LUD	CURRENT COUNTY ZONING CODE	SPECIAL MANAGEMENT AREA PERMIT REQUIRED? (Y/N)	UNITS OF NET ACRES	GPD/ACRE	YEAR 1 2007 (year)	YEAR 2 2008 (year)	YEAR 3 2009 (year)	YEAR 4 2010 (year)	ULTIMATE DEMAND GPD (TO BUILD OUT)
1. Central system								20,827	25,960	26,508	27,059	27,612	
2								services	MGD	MGD	MGD	MGD	
3. Mokuhan 3 Well	new	potable	multiple	various	various	N	various	1,831					
4								services*	2,589	2,589	2,589	2,589	
5								*based on fraction of MAV for this source versus	MGD	MGD	MGD	MGD	
6								Central system MAV					
7													
8													
9													
10													
11									Additional demand to be met by Wahehe, surface or other sources including any additional yield from Leo aquifer				
12													
13													
14													
TOTAL GPD													



State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
 Department of Land and Natural Resources
APPLICATION FOR WATER USE PERMIT
 Groundwater or Surface Water

For Official Use Only:
 RECEIVED
 08 MAR 7 8:44

Instructions: Please print in ink or type and send 15 copies of completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. Application must be accompanied by a non-refundable filing fee of \$25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-0225. For further information and updates to this application form, visit <http://www.hawaii.gov/dlnr/cwrm>.

PERMITTEE INFORMATION

1. (a) APPLICANT

Firm/Name MAUI COUNTY DEPT. OF WATER
 Contact Person JEFFREY K. ENG, DIRECTOR
 Address 200 S HIGH ST, WAILUKU, HI
 Phone 808-270-7816 Fax 808-270-7833
 E-mail jeffrey.eng@co.maui.hi.us

(b) LANDOWNER OF SOURCE

Firm/Name COUNTY OF MAUI
 Contact Person CHARMAINE TAVARES, MAYOR
 Address 200 S HIGH ST, WAILUKU, HI 96793
 Phone 808-270-7855 Fax 808-270-7870
 E-mail jeffrey.eng@co.maui.hi.us

SOURCE INFORMATION

2. WATER MANAGEMENT AREA: IAO AQUIFER ISLAND: MAUI
3. (a) EXISTING WELL/STREAM DIVERSION NAME AND STATE NUMBER: _____
 (If source doesn't presently exist, please attach well construction/stream diversion permit or application.)
- (b) PROPOSED (NEW) WELL/STREAM DIVERSION NAME: WAIKAPII TANK SITE 5131-01
- (c) LOCATION: Address _____ Tax Map Key: 3 5 04 099
 (Attach and show source location on a USGS map, scale 1"=2000', and a property tax map)
4. SOURCE TYPE (check one): Stream Basal Dike-confined Perched Caprock
5. METHOD OF TAKING WATER (check one): Artesian Well & Pump Diverted Surface Other (explain)
6. SPECIAL MANAGEMENT AREA PERMIT (SMAP)
 Required, SMA # _____ date approved _____
 Not Required (attach documentation from applicable County agency)
 I have not checked with the county about whether or not an SMA Permit is required. I understand that checking with the County prior to making this application will expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

USE INFORMATION

7. LOCATION OF PROPOSED WATER USE: (If possible, show on same maps as source location. Otherwise, attach similar maps)
 (a) PUC-Regulated Private System Intended Dedication to Dept./Board of Water Supply Non-PUC-Regulated Private System
 (b) Tax Map Key: Please complete Table 1 on back of application and shade applicable portion of property tax map.
8. QUANTITY OF WATER REQUESTED: 0.9 MILLION gallons per day (averaged over 1 year)
9. METHOD OF MEASUREMENT: Flowmeter Open-pipe Weir Orifice Other (explain)
10. QUALITY OF WATER REQUESTED: Fresh Brackish Salt Potable Non-Potable
11. PROPOSED USE: Municipal (including hotels, stores, etc.) Individual Domestic Irrigation
 Industrial Military Other Explain
12. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION: 24 HOURS
 (daytime hours of operation; example, 7 a.m. to 2 p.m.)
13. APPLICANT MUST ESTABLISH THAT THE PROPOSED USE OF WATER:
 (a) Can be accommodated with the available water source.
 (b) Is a reasonable-beneficial use.*
 (c) Will not interfere with any existing legal use.
 (d) Is consistent with the public interest.
 (e) Is consistent with state and county general plans and land use designations.
 (f) Is consistent with county land use plans and general policies.
 (g) Will not interfere with the rights of the Department of Hawaiian Home Lands.

* Section 13-171-2, Hawaii Revised Statutes -
 "Reasonable-beneficial use" means the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is not wasteful and is both reasonable and consistent with the state and county land use plans and the public interest.

14. REMARKS, EXPLANATIONS: _____
15. By checking this box, you acknowledge that you are responsible for paying the public notice fee associated with this application, and you will follow later instructions by staff regarding payment of these fees. If you do not check this box, your application will not be accepted as complete.

NOTE: Signing below indicates that the signatories understand and swear that: 1) the information provided on this application is accurate and true to the best of their knowledge; 2) item 14 is the responsibility of the applicant prior to Commission approval; 3) if necessary, further information may be required before the application is considered complete; 4) if a water use permit is granted by the Commission, this permit is subject to prior existing permitted uses, changes in sustainable yields and instream flow standards, reserved uses as defined by the Commission, and Hawaiian Home Lands future uses; and 5) upon permit approval, a water shortage plan must be submitted by the applicant should the Commission require one.

Applicant (print) JEFFREY K. ENG
 Signature *Jeffrey K. Eng*
 Date 2/12/08

Landowner (print) COUNTY OF MAUI
 Signature *Charmaine Tavares*
 Date 02-12-08

TABLE 1. TMKS TO USE REQUESTED WATER

1 PROJECT NAME & PHASES (includes address if applicable; identify project no. on TMK map if applicable)	2 EXISTING or NEW USE (if existing, fill in date of first use)	3 POTABLE or NONPOTABLE	4 TMK	5 STATE LUD	6 CURRENT COUNTY ZONING CODE	7 SPECIAL MANAGEMENT AREA PERMIT REQUIRED? (Y/N)	8 UNITS OF NET ACRES	9 GROSS UNIT or GPD/ACRE	10 4-YEAR CUMULATIVE PROJECTED DEMAND				13 YEAR 4 2010 (year)	14 ULTIMATE DEMAND GPD (TO BUILD OUT)
									YEAR 1 2007 (year)	YEAR 2 2008 (year)	YEAR 3 2009 (year)	YEAR 4 2010 (year)		
1. Central system								20,827	25,960	26,599	27,069	27,612		
2								services	MGD	MGD	MGD	MGD		
3. Waikapu Tank Site Well	new	potable	multiple	various	various	N	various	960						
4								services*	1,300	1,300	1,300	1,300		
5								*based on fraction of	MGD	MGD	MGD	MGD		
6								requested new use for this source versus						
7								Central system MAW						
8														
9														
10														
11														
12														
13														
14														
TOTAL GPD														

Additional demand to be met by Waikapu surface or other sources including any additional yield from Ma aquifer



State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR WATER USE PERMIT

For Official Use Only:

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Groundwater or Surface Water

Instructions: Please print in ink or type and send 15 copies of completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. Application must be accompanied by a non-refundable filing fee of \$25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 587-0225. For further information and updates to this application form, visit <http://www.hawaii.gov/dlnr/cwrm>.

PERMITTEE INFORMATION

1. (a) APPLICANT
 Firm/Name Maui County Dept. of Water
 Contact Person Jeffrey K. Eng, Director
 Address 200 S High St., Wailuku, HI 96793
 Phone 808-270-7816 Fax 808-270-7833
 E-mail jeffrey.eng@co.maui.hi.us

(b) LANDOWNER OF SOURCE
 Firm/Name County of Maui
 Contact Person Charmaine Tavares, Mayor
 Address 200 S High St., Wailuku, HI 96793
 Phone 808-270-7855 Fax 808-270-7870
 E-mail jeffrey.eng@co.maui.hi.us

SOURCE INFORMATION

2. WATER MANAGEMENT AREA: Iao Aquifer ISLAND: Maui

3. (a) EXISTING WELL/STREAM DIVERSION NAME AND STATE NUMBER: Iao Tunnel 5332-02
 (If source doesn't presently exist, please attach well construction/stream diversion permit or application.)

(b) PROPOSED (NEW) WELL/STREAM DIVERSION NAME: Iao Valley, Wailuku, Maui Tax Map Key: 3-3 -03 :003

(c) LOCATION: Address _____ Tax Map Key: _____
 (Attach and show source location on a USGS map, scale 1"=2000', and a property tax map)

4. SOURCE TYPE (check one): Stream Basal Dike-confined Parched Caprock

5. METHOD OF TAKING WATER (check one): Artesian Well & Pump Diverted Surface Other (explain)
tunnel intake pipe

6. SPECIAL MANAGEMENT AREA PERMIT (SMAP)
 Required, SMA # _____ date approved _____
 Not Required (attach documentation from applicable County agency)
 I have not checked with the county about whether or not an SMA Permit is required. I understand that checking with the County prior to making this application will expedite my review. I further understand that issues raised by this agency may delay or result in denial of the permit issuance, or revocation of the permit after it is issued.

USE INFORMATION

7. LOCATION OF PROPOSED WATER USE: (If possible, show on same maps as source location. Otherwise, attach similar maps)
 (a) PUC-Regulated Private System Intended Dedication to Dept. /Board of Water Supply Non-PUC-Regulated Private System
 (b) Tax Map Key: Please complete Table 1 on back of application and shade applicable portion of property tax map.

8. QUANTITY OF WATER REQUESTED: 0.84 million gallons per day (averaged over 1 year)

9. METHOD OF MEASUREMENT: Flowmeter Open-pipe Weir Orifice Other (explain)

10. QUALITY OF WATER REQUESTED: Fresh Brackish Salt Potable Non-Potable

11. PROPOSED USE: Municipal (including hotels, stores, etc.) Individual Domestic Irrigation
 Industrial Military Other Explain

12. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION: 24 hours
 (daytime hours of operation; example, 7 a.m. to 2 p.m.)

13. APPLICANT MUST ESTABLISH THAT THE PROPOSED USE OF WATER:
 (a) Can be accommodated with the available water source.
 (b) Is a reasonable-beneficial use.*
 (c) Will not interfere with any existing legal use.
 (d) Is consistent with the public interest.
 (e) Is consistent with state and county general plans and land use designations.
 (f) Is consistent with county land use plans and general policies.
 (g) Will not interfere with the rights of the Department of Hawaiian Home Lands.

* Section 13-171-2, Hawaii Revised Statutes -

"Reasonable-beneficial use" means the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is not wasteful and is both reasonable and consistent with the state and county land use plans and the public interest.

14. REMARKS, EXPLANATIONS: _____

15. By checking this box, you acknowledge that you are responsible for paying the public notice fee associated with this application, and you will follow later instructions by staff regarding payment of these fees. If you do not check this box, your application will not be accepted as complete.

NOTE: Signing below indicates that the signatories understand and swear that: 1) the information provided on this application is accurate and true to the best of their knowledge; 2) item 14 is the responsibility of the applicant prior to Commission approval; 3) if necessary, further information may be required before the application is considered complete; 4) if a water use permit is granted by the Commission, this permit is subject to prior existing permitted uses, changes in sustainable yields and instream flow standards, reserved uses as defined by the Commission, and Hawaiian Home Lands future uses; and 5) upon permit approval, a water shortage plan must be submitted by the applicant should the Commission require one.

Applicant (print) Jeffrey K. Eng
 Signature *Jeffrey K. Eng*
 Date 3/31/08

Landowner (print) County of Maui
 Signature *Charmaine Tavares*
 Date 04-01-2008

TABLE 1. TMKs TO USE REQUESTED WATER

1	2 EXISTING OR NEW USE (if existing, fill in date of first use)	3 POTABLE OR NONPOTABLE	4 TMK	5 STATE LUD	6 CURRENT COUNTY ZONING CODE	7 UNITS OR NET ACRES	8 GPD/UNIT OR GPD/ACRE	9-YEAR CUMULATIVE PROJECTED DEMAND				10 ULTIMATE DEMAND (GPD/TO BUILD OUT)
								YEAR 1 08 (year)	YEAR 1 09 (year)	YEAR 1 10 (year)	YEAR 1 11 (year)	
1. Central system							21,270	25,960	26,420	26,902	27,386	
2							services	MGD	MGD	MGD	MGD	
3. Iao Tunnel	new	potable	multiple	various	various	various	1,276	2,200	2,200	2,200	2,200	
5							services*	2,200	2,200	2,200	2,200	
6							*based on fraction of MAV for this source versus	MGD	MGD	MGD	MGD	
7							Central system MAV					
9												
10												
11												
12												
13												
14												
TOTAL GPD												

DEPARTMENT OF PLANNING AND PERMITTING SIGNATURE _____ DATE _____



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

APPLICATION FOR GROUND WATER USE PERMIT
FOR AN EXISTING USE IN THE [REDACTED] GROUND WATER
MANAGEMENT AREA IAO

NEW

For Official Use Only:

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08 JUN 13 10:39

COMMISSION ON WATER
 RESOURCE MANAGEMENT

For detailed instructions on filling out this application form, refer to the attached instruction sheet.

APPLICANT INFORMATION

Note: In accordance with §174C-51(1)(b) HRS, "In the event a lessee, licensee, developer, or any other person with a terminable interest or estate in the land, which is the water source of the permitted water, applies for a water permit, the landowner shall also be stated as a joint applicant for the water permit."

1. APPLICANT'S NAME/COMPANY BRYAN SARASIN SR.		Applicant's Contact BRYAN		2. SOURCE LANDOWNER'S NAME/COMPANY BRYAN SARASIN		Source Landowner's Contact BRYAN	
Applicant's Mailing Address Box 218 Wai'anae Hi 96793 C: 870 7304				Source Landowner's Mailing Address Box 218 Wai'anae Hi 96793			
Applicant's Phone 242-4169		Applicant's Fax 244-4843		Source Landowner's Phone 242-4169		Source Landowner's Fax 244-4843	

EXISTING SOURCE INFORMATION

Description of Source	Pumpage at Source																																																																
<p>The following must be attached before this application is accepted as complete:</p> <ul style="list-style-type: none"> Portion of 7.5-Minute Series USGS topographic map (scale 1:24,000) with source location labeled and include the name of the quad map Property tax map, showing source location referenced to established property boundaries Photograph of the source 	<p>9. TABLE 1: 12-MONTH AVERAGE CALCULATION AS OF THE DATE OF DESIGNATION</p> <table border="1"> <thead> <tr> <th rowspan="2">MM/YY</th> <th rowspan="2">AVERAGE DAILY PUMPAGE FOR THE MONTH (GALLONS PER DAY)</th> <th colspan="4">Check one per row</th> </tr> <tr> <th>measured</th> <th>estimated</th> <th>active but unknown</th> <th>inactive</th> </tr> </thead> <tbody> <tr><td>[REDACTED]</td><td>[REDACTED]</td><td></td><td></td><td></td><td></td></tr> <tr><td>[REDACTED]</td><td>[REDACTED]</td><td></td><td></td><td></td><td></td></tr> <tr><td>[REDACTED]</td><td>[REDACTED]</td><td></td><td></td><td></td><td></td></tr> <tr><td>[REDACTED]</td><td>[REDACTED]</td><td></td><td></td><td></td><td></td></tr> <tr><td>[REDACTED]</td><td>[REDACTED]</td><td></td><td></td><td></td><td></td></tr> <tr><td>[REDACTED]</td><td>[REDACTED]</td><td></td><td></td><td></td><td></td></tr> <tr><td>[REDACTED]</td><td>[REDACTED]</td><td></td><td></td><td></td><td></td></tr> <tr><td>[REDACTED]</td><td>[REDACTED]</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"> <p>AVERAGE OF PUMPAGE LISTED ABOVE</p> </td> <td colspan="4"> <p>Not Applicable.</p> </td> </tr> </tbody> </table>	MM/YY	AVERAGE DAILY PUMPAGE FOR THE MONTH (GALLONS PER DAY)	Check one per row				measured	estimated	active but unknown	inactive	[REDACTED]	[REDACTED]					<p>AVERAGE OF PUMPAGE LISTED ABOVE</p>		<p>Not Applicable.</p>																																													
MM/YY				AVERAGE DAILY PUMPAGE FOR THE MONTH (GALLONS PER DAY)	Check one per row																																																												
		measured	estimated		active but unknown	inactive																																																											
[REDACTED]		[REDACTED]																																																															
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<p>AVERAGE OF PUMPAGE LISTED ABOVE</p>		<p>Not Applicable.</p>																																																															
3. ISLAND MAUI																																																																	
4. GROUND WATER MANAGEMENT AREA IAO																																																																	
4A. SUSTAINABLE YIELD FOR ITEM 4 ABOVE 20 mgd																																																																	
5. STATE WELL NUMBER 5631-08																																																																	
6. WELL NAME Wai'anae-SARASIN																																																																	
7. SOURCE TMK 3 2 007 016 zone sec plat parcel																																																																	
8. FLOWMETER INFORMATION																																																																	
<p>Does the source have a water meter with totalizer for measuring flow?</p> <p><input type="checkbox"/> Yes, Installation date: _____</p> <p>If yes, describe flowmeter, and enter measured amounts in Table 1.</p> <p><input checked="" type="checkbox"/> No</p> <p>If no, explain how you are measuring flow to justify amounts shown in Table 1.</p> <p>no permit yet I am applying for a pump permit</p>																																																																	

NOTE: Signing below indicates that the signatories understand and swear or affirm that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that: 1) if necessary, further information may be required before the application is considered complete; 2) if a water use permit is granted by the Commission, the permit will be subject to, but not limited to, any existing legal uses, changes in sustainable yields and instream flow standards, Hawaiian Home Lands uses and any other conditions imposed by the Commission; and 3) the applicant is responsible for paying the public notice fees associated with this application.

10. APPLICANT BRYAN SARASIN SR. [Signature] Bryan Sarasin 6-13-08 Signature Print Date	11. SOURCE LAND OWNER BRYAN SARASIN [Signature] Bryan Sarasin 6-13-08 Signature Print Date
---	---

OTHER PERTINENT INFORMATION

14. TABLE 4: ALTERNATIVES ANALYSIS

Alternative	Potable Attach additional sheets if necessary	Non-potable Attach additional sheets if necessary
Municipal sources Yes	600gpd	
Wastewater reuse PRIVATE SPRAY WATER SYSTEM		200-300 gpd
Ditch system Kuleawa. UNRELIABLE SOURCE.		51,000gpd.
Desalinization NO	no plant near the ocean (no access)	no facility (Telcom 28 July 08)
Surface water NO	no treatment plant available	some water available only for Kuleawa users w/ appurtenant rights; ditch not providing service to others
Other (specify) RAIN FALL		

15. PUBLIC INTEREST

174C-2(C) states that: *The state water code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest.*

Explain below how the uses in your application are consistent with the public interest.

The existing Kuleawa Ditch Service has been unreliable and the owners are not providing a reliable service to the public.



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

**APPLICATION FOR GROUND WATER USE PERMIT FOR
 PROPOSED NEW USE IN A DESIGNATED GROUND WATER
 MANAGEMENT AREA**

For Official Use Only:

RECEIVED

08 AUG 28 A 8:30

FORM GWUPA-N

- Application for New Use
 Application to Modify WUP No. _____

COMMISSION ON WATER
 RESOURCE MANAGEMENT

For detailed instructions on filling out this application form completely, refer to the attached instructions. Incomplete applications will not be accepted for processing.

The following must be attached before this application is accepted as complete:

- Portion of 7.5-Minute Series USGS topographic map (scale 1:24,000) with source location labeled and include the name of the quad map.
- Property tax map, showing source location referenced to established property boundaries.
- Photograph(s) of the source(s) and location(s) of proposed end use(s), if applicable.

APPLICANT INFORMATION

Note: In accordance with §174C-51(1), HRS, the landowner shall be the joint applicant in the event the applicant is a lessee, licensee, developer, or any person with a terminable interest or estate in the land that is the water source of the permitted water.

1. APPLICANT'S INFORMATION			2. SOURCE LANDOWNER'S INFORMATION		
Name/Company John Varel		Contact Person	Name/Company same		Contact Person
Mailing Address P.O.Box 1468 Wailuku HI 96793			Mailing Address		
Phone 357-0702	Fax 242-9009	E-mail jvarel@fusionstorm	Phone	Fax	E-mail

SOURCE INFORMATION

3. ISLAND Maui	4. GROUND-WATER MANAGEMENT AREA Iao	4A. SUSTAINABLE YIELD FOR ITEM 4 20 MGD
-------------------	--	--

5. SOURCE INFORMATION
 Attach additional sheets, if necessary.

Well Number (if known)	Well Name	Existing or Proposed?	TMK	Flowmeter Installed?
5631-07	Waihee-Varel	new	3 - 2 - 001 : 001 zone - sector - plat - parcel	<input type="checkbox"/> Yes, date installed ___ / ___ / ___ <input type="checkbox"/> No
			zone - sector - plat - parcel	<input type="checkbox"/> Yes, date installed ___ / ___ / ___ <input type="checkbox"/> No
			zone - sector - plat - parcel	<input type="checkbox"/> Yes, date installed ___ / ___ / ___ <input type="checkbox"/> No
			zone - sector - plat - parcel	<input type="checkbox"/> Yes, date installed ___ / ___ / ___ <input type="checkbox"/> No
			zone - sector - plat - parcel	<input type="checkbox"/> Yes, date installed ___ / ___ / ___ <input type="checkbox"/> No
			zone - sector - plat - parcel	<input type="checkbox"/> Yes, date installed ___ / ___ / ___ <input type="checkbox"/> No

PROPOSED USE INFORMATION §§174C-51(4), (5), (6), HRS

6. TOTAL QUANTITY OF WATER REQUESTED: In the space below, enter total from Box M in Item 11 (Table 1) of this application.
 40,000 gallons per day, averaged over 1 year.

7. PROPOSED USE(S): Agriculture Domestic Industrial
 Check all that apply. Irrigation Military Municipal

8. LOCATION OF PROPOSED WATER USE(S): Show the location of the proposed use on the same USGS and TMK maps as the proposed source location. Otherwise, attach similar maps. See Item 11 (Table 1, column B) of this application.

NOTE: Signing below indicates that the signatories understand and affirm that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that: 1) if necessary, further information may be required before the application is considered complete; 2) if a water use permit is granted by the Commission, this permit is subject to any existing legal uses, changes in sustainable yields and instream flow standards, reserved uses as defined by the Commission, and Hawaiian Home Lands future uses; and 3) the applicant is responsible for paying the public notice fees associated with this application.

9. APPLICANT Signature John Varel Print Name Date 8/26/08	10. SOURCE LANDOWNER Signature John Varel Print Name Date 8/26/08
--	--

PROPOSED NEW USE OR MODIFIED USE INFORMATION

11. TABLE 1: LAND USE CONSISTENCY / EFFICIENCY OF USE (Attach additional copies, if necessary.)

LAND USE CONSISTENCY		EFFICIENCY OF USE										
A	B	C	D	E	F	G	H	I	J			
PURPOSE / WATER USE CATEGORY (See the instructions for water use category descriptions.)	THINK FOR PROPOSED LOCATION OF USE ATTACH THE FOLLOWING: • Property tax map, showing proposed location of use referenced to established property boundaries. • Photograph of the area of proposed use.	STATE LAND USE DISTRICT	CDUP REQUIRED? Check the appropriate box, and write in the date approved, if applicable.	COUNTY ZONING CODE	SMAP REQUIRED? Check the appropriate box, and write in the date approved, if applicable.	UNITS OR NET ACREAGE	GPD/UNIT or GPD/ACRE	QUANTITY OF USE (GPD)	JUSTIFICATION FOR QUANTITY OF WATER REQUESTED (If applicable, attach additional sheets showing how the quantity was calculated.) For irrigation uses, see Table 2.			
USES THAT REQUIRE POTABLE (DRINKING) WATER												
domestic	3 - 2 - 001 : 001 parcel	AG	<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No	Ag	<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No	1	600	600	County standard, effluent to be recycled in garden.			
			<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No							
			<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No							
			<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No							
USES THAT DO NOT REQUIRE POTABLE WATER												
Macadamia nuts	3 - 2 - 001 : 001 parcel	AG	<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No	Ag	<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No	340	4,400	39,000	supplement to rainfall catchment, based on Hawaii Dept. of Agriculture use standards; local experience indicates far less for mature mac nut trees, to be used instead on fruits and nursery.			
Fruit trees	3 - 2 - 001 : 001 parcel	AG	<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No	Ag	<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No	5	4,000	500	*			
nursery	3 - 2 - 001 : 001 parcel	AG	<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No	Ag	<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No	2	5,000	250	*			
reforestation	3 - 2 - 001 : 001 parcel	AG	<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No	Ag	<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired / / <input checked="" type="checkbox"/> No	3.5	4,000	350	*			
								TOTAL POTABLE USE	K 600	GPD		
								TOTAL NON-POTABLE USE	L 40,100	GPD		
								TOTAL QUANTITY OF WATER REQUESTED (sum of total potable use and total non-potable use) =	M 40,700	GPD		

Please explain if there are any limitations (e.g., legal, contractual) on the proposed water use(s) described in Table 1. Ref. §174C-5(5), HRS.
Only limitation is on current access to ditch water, purveyor unreliable

OTHER PERTINENT INFORMATION

13. TABLE 3: ALTERNATIVES ANALYSIS

	A. Analysis of potable alternatives Attach additional sheets if necessary.	B. Analysis of non-potable alternatives Attach additional sheets if necessary.
Municipal sources	hooking up to municipal source would incur expense of tying in and lengthy lateral to household use	Municipal source will not serve agriculture
Wastewater reuse		Not available in this area; domestic effluent will be recycled for garden
Ditch system		Formerly the only available source; purveyor unwilling to serve all users; price of water too high for agriculture
Desalination		No service available; no access to ocean; not cost-competitive as private source for agriculture
Surface water		Limited access to stream; limited flows at that location; lengthy piping would incur additional cost for unreliable source (subject to instream flow standard)
Other (specify)		

14. PUBLIC INTEREST

§174C-2(C), HRS states: *The state water code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest.*

Explain below how the proposed new use(s) in your application are consistent with the public interest.

Uses are agricultural and reforestation. Agriculture is in the public interest; reforestation of native species is an enhancement of habitat, in the public interest

15. INTERFERENCE WITH THE RIGHTS OF THE DEPARTMENT OF HAWAIIAN HOME LANDS

Explain below how the proposed new use(s) of water will not interfere with the rights of the Department of Hawaiian Home Lands, as provided in section 221 of the Hawaiian Homes Commission Act.

Hawaiian Home Lands do not have wells in this area, no plans to develop them; DHHL is on County system

16. INTERFERENCE WITH ANY EXISTING LEGAL USES

Explain below how the proposed new use(s) of water will not interfere with any other existing legal use(s) of water.
There are no other wells within half a mile, none down-gradient.

Alan M. Arakawa
407 Kamehameha Avenue
Kahului, Hawaii 96732
December 26, 2008

RECEIVED

08 DEC 29 A 8:39

COMMISSION ON WATER
RESOURCE MANAGEMENT

State of Hawaii
Department of Land and Natural Resources
State Commission on Water Resource Management
c/o Deputy Director Ken Kawahara
P.O. Box 621
Honolulu, Hawaii 96809

RE: Water Use Permit Application for Waihee-Sarasin Well (Well No. 5631-08),
WUPA 853, TMK-3-2-007:016
and
Water Use Permit Application for Waihee-Varel Well (Well No. 5631-07),
WUPA 825, TMK 3-2-001:001

Dear State Commission on Water Resource Management,

Please receive the follow-up comments below pertaining to the December 16, 2008 discussion at the State Commission on Water Resource Management committee meeting:

- 1) Applications for Water Use Permits for Waihee-Sarasin Well (Well No. 5631-08), WUPA 853, TMK-3-2-007:016 and your Public Hearing Draft submittal. (Mr. Bryan Sarasin)
- 2) Applications for Water Use Permits for Waihee-Varel Well (Well No. 5631-07), WUPA 825, TMK 3-2-001:001 and your Public Hearing Draft submittal. (Mr. John Varel)

We note that:

On August 28, 2008, a completed WUPA was received from Mr. John Varel by the Commission.

On September 17 and 24, 2008, Public Notice for John Varel's application was published in the Maui News (Maui County's largest and most comprehensive source for written public information.)

On September 26, 2008 Maui County Department of Water Supply submitted an objection to Mr. Varel's application for which the reasons are still not clear.

On October 23 and 30, 2008, Public Notice for Maui County's WUPA for Well No. 5131-01 – Waikapu Tank Site Well, Well No. 5230-03 Iao Tank Site Well, and Well No. 5330-09 Mokuhaui Well 3 was published in the Maui News.

On October 29, 2008, Bryan Sarasin and John Varel submitted preliminary objections to Maui County Water Department Applications for the wells listed above.

EXHIBIT 4

On November 14, 2008, Bryan Sarasin and John Varel submitted written objections to Maui County Water Department Applications for the wells listed above.

On November 14, 2008, Public Hearing Notice for six concurrent applications was published in the Maui News: Bryan Sarasin's and John Varel's individual wells and four Maui County Department of Water supply sources.

Please note that both Bryan Sarasin and John Varel have previously applied for and were granted permits to drill wells on their respective properties from the State Commission on Water Resource Management and have subsequently completed the process of digging those permitted wells, at great expense to themselves. (Certificates of Well Construction Completions for Waihee-Sarasin Well No. 5631-08, TMK 3-2-007:016 and Waihee-Varel Well No. 5631-07, TMK 3-2-001:001 are attached.)

For the sake of clarity in our comments below, we will follow the Section on Analysis/Issues of the Public Hearing Draft Submittal by the State Commission of Water Resource Management dated December 16, 2008. The Public Hearing discusses the seven criteria that must be met under Section 174C-49(a) of the State Water Code in order to receive a Water Use Permit.

(1) Water Availability

We agree with your staff analysis that the Commission has adopted 20 mgd as the sustainable yield for the Iao Aquifer System and that 17.709 mgd has been granted to existing water use permits. We also agree that the current available allocation balance is 2.291 mgd.

Please note that of the 17.709 mgd granted to date, all but 0.633 has been allocated to the County of Maui Department of Water Supply.

(2) Reasonable-beneficial

We agree with the interpretation of Section 174C-49(a) of the State Water Code that defines "reasonable-beneficial use" as "... the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is both reasonable and consistent with the state and county land use plans and the public interest".

Sarasin:

I. *Purpose of Use*

Individual domestic use: one household

Irrigation 0.1 acres garden, 0.75 acres commercial nursery, aquaculture project, and taro loi

II. *Quantity Justification*

Use:

Individual Household use: 600 gpd

Irrigation needs: We disagree with the irrigation needs. Currently, the farm uses approximately 1.2 mgd and we feel that our request of 51,200 gpd to support the farm in case of inconsistent surface water availability is reasonable.

III. Efficiency of Use

The Sarasins use Kuleana water to keep fresh water running through their ponds to minimize bacteria growth associated with stagnant or slow water flow. Much of the rest of the plants are hand-watered, minimizing over or under-watering, associated with automatic sprinkler systems. The Sarasin's are currently recharging the aquifer at a greater rate than they would be drawing water from the well; this will replenish the aquifer for current and further use.

IV. Analysis of Practical Alternatives

We agree with the staff's analysis of the four potential alternatives to the proposed use of potable basal water.

1. Ditch – "The proposed ground water use is, in itself, an alternative to the original source for these activities, the Waihee Ditch." We have been unable to get commitments from the purveyor for continued access of ditch water.
2. "Municipal water is unavailable for agriculture use."
3. "Municipal reclaimed water is not available at this site. Household effluent will be used at the rate of from 200 – 300 gpd for the garden."
4. "Desalting is neither commercially available nor a practical alternative for this land-locked parcel."

Varel:

We agree completely with all of the Department's analysis. We acknowledge that our original estimates are much too low and that the Department's recommendation of approximately 340,000 gpd is more practical. We would, however, request a 400,000 gpd allocation.

Maui County Department of Water Supply (MDWS)

We disagree strongly with the County's quantity justification. We contend that the County does not account for private water source contributions, nor does it take into consideration water resources that could be made available if not for bad legislative and administrative decisions. The following is a list of options that are available to the County that could increase the amount of water available to its constituents:

- 1) The County could immediately acquire, through eminent domain (condemnation), the Wailuku Water Distribution Company and in the process, more than double the County's water distribution capability.
- 2) The County could purchase the surface water systems from the Wailuku Water Distribution Company.
- 3) The County could negotiate for surface water from the Wailuku Water Distribution Company and/or A&B, to allow for growth in increments as the County needs it.

- 4) The County could expedite the acquisition of the three Maui Lani Wells that are currently under construction and that are nearly completed. They could use this water to supplement their immediate needs. (Maui Lani has already negotiated a shared use agreement with the County.)
- 5) The County could rescind the law banning the use of the Hamakuapoko Wells and allow it be used to supplement the water system. (The Hamakuapoko Wells meet all State Department of Health (DOH) and Federal EPA requirements. Several years ago, the courts mandated that filters be installed in the wells to remove contaminants up to the level required by the State DOH and the Federal EPA standards and this has been completed.)
- 6) The County has over 11 mgd of wastewater effluent that is going into injection wells. This water could and should be used to replace potable water that is currently being used for irrigation. Kihei and Lahaina Wastewater Reclamation Plants are both tertiary plants. Kahului Wastewater Reclamation Plant is a secondary plant. Both Kihei and Lahaina Plants already have some reuses taking place but more of the effluent should be reused. Kahului Plant should be upgraded to tertiary and then the reclaimed water can and should be reused.
- 7) The County has been working with A&B to create a Water Treatment Plant that has a projected capacity of 6 – 11 mgd. This Plant should be completed.
- 8) The County could purchase more water from private sources.
- 9) The County could develop more water from other aquifers.
- 10) Desalinization is another alternative. The Maui County Council recently passed the Makena project of Everett Dowling who has proposed possible use of desalinization. The County did not object. With housing that costs in the millions of dollars, desalinization may be cost effective.
- 11) The County Council has created a "Show Me the Water Bill" that requires developers to provide the County with water if they are going to develop properties. Wailea 670 (Honoula), A&B, Maui Lani, and Jesse Spenser are some of the developer groups that may add water to the County supply.
- 12) The County could upgrade its distribution system to minimize old, clogged or leaking systems.
- 13) The County could require all major water users to install water efficient equipment.
- 14) The County could acquire surface water systems that it does not currently own and split agriculture and domestic water users. Water for agricultural use does not need to be treated.

(3) Interference with other existing legal uses

We agree with the staff analysis but would add that the County system has been glacially slow in responding to the needs of the community. The issuance of private water meters of adequate size for agricultural use may not occur for decades into the future.

Without adequate water, the property owners will not be able to utilize their properties for the purpose of agriculture as stated by State and County Zoning or Community Plans.

It should be noted that the County has been denying Upcountry Maui property owners the capability of expanded agricultural use for decades.

Property owners should not have to suffer financially and be prevented from seeking productive use of their properties because of poor water management by the County.

(4) Public Interest

We agree with the Public Interest definitions under §174C-2 Declaration of policy.

1. We agree with staff comments to Mr. Clyde Kahalehau . Furthermore, we are asking for well water allocations which will not take water from the Waihee and Spreckles ditches nor will these wells divert stream water. Also, Mr. Kahalehau alleges ownership of Mr. Bryan Sarasin's property. We will provide, at your request, documentation registered with the State of Hawaii that verifies Bryan Serasin's ownership of said property.
2. We agree with State Commission on Water Resource Management staff assessment. We further point out that the County comments seem to be weak arguments at best, insulting at the worst.

The well uses by Sarasin and Varel will be on site and will not be transported out of the district.

The Sarasin and Varel wells will fulfill State and County zoning goals.

The Sarasin and Varel Wells were constructed by the same contractor that the County of Maui has used and its ludicrous to assume that he would deliberately introduce contaminants to the applicant's wells that would be any different from those in the County's wells.

The County has no domestic use wells down line from the Sarasin or Varel wells. Insinuations of contamination of domestic water sources are silly.

The ground normally filters naturally occurring contaminants from ground water and the Maui County Department of Water Supply has produced no scientific evidence of any contaminants nor have they provided any proof of substandard construction.

(5) State & County general plans and land use designations

We agree with State Commission on Water Resource Management staff assessment that both the Sarasin and Varel properties and their water use are consistent with State and County land use designations.

(6) County land use plans and policies

We concur with State Commission on Water Resource Management staff assessment and comments. We furthermore point out that it is the County's inability to provide the necessary water to allow the property owners the capability to meet the County and State land use intents. The County should not be allowed to use the argument that granting water to our wells would diminish the County's ability to provide water for municipal users, unless this can be proven. To our knowledge, the County has yet to identify future users and the water resources it expects to provide services for these unidentified users.

(7) Interference with Hawaiian Home lands rights

We agree with State Commission on Water Resource Management staff analysis. Varel and Sarasin wells will have virtually no impact on Hawaiian Home Lands projects.

From a historical perspective, we would like to point out that for generations past, both of these properties were heavily farmed and irrigated. These properties contained hundreds of taro loi. Wailuku Sugar Company also planted this area with sugar cane. The properties were traditionally flooded or furrow irrigated with quantities of water that in all probability would be greater than the amounts we are requesting. In essence, we're asking for volumes of water that have traditionally been used to irrigate these lands before Wailuku Water Company diverted water off-site through their irrigation ditches.

Thank you very much for your consideration.

Sincerely,



Alan M. Arakawa
Former Mayor of Maui County
On Behalf of John Varel and Bryan Sarasin

Attachments: Certificate of Well Construction Completion for Well No. 5631-08, TMK 3-2-007:016
Certificate of Well Construction Completion for Well No. 5631-07, TMK 3-2-001:001

CHARMAINE TAVARES
Mayor



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

JEFFREY K. ENG
Director
RECEIVED
ERIC H. YAMASHIGE, P.E., L.S.
Deputy Director
08 DEC 30 9:15

COMMISSION ON WATER
RESOURCE MANAGEMENT

December 22, 2008

Honorable Laura H. Thielen
Chairperson
State of Hawaii
Department of Land and Natural Resources
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. Box 621
Honolulu, Hawaii 96809

VIA FAX AND MAIL

Dear Chairperson Thielen:

Re: Water Use Permit Application
Iao Ground Water Management Area, Maui
WUPA No. 825, Waihee-Varel Well, Well No. 5631-07

Please accept this letter as supplemental written testimony submitted on behalf of the County of Maui's Department of Water Supply ("DWS") in opposition to WUPA No. 825 submitted by John Varel for Well No. 5631-07.

When the DWS reviewed and commented on Mr. Varel's WUPA No. 825, the first page of Mr. Varel's application, filed on August 28, 2008, stated the amount requested as 40,000 gpd (although the amount was stated as 43,100 gpd on page 2 of Mr. Varel's Form GWUPA-N). On November 14, 2008, the public hearing notice for Mr. Varel's and five concurrent applications was published in the Maui News. The December 16, 2008 public hearing notice for WUPA No. 825 stated that the amount requested by Mr. Varel was 0.043 mgd. In declining to request a contested case at the end of the December 16, 2008 public hearing, the DWS was proceeding on the assumption that Mr. Varel would not be allowed to make an ad hoc, nearly 10-fold increase in the requested amount, from 0.043 mgd to 0.400 mgd, without advance notice to the parties and the public.

"By Water All Things Find Life"

The Department of Water Supply is an Equal Opportunity provider and employer. To file a complaint of discrimination, write: USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington DC 20250-9410. Or call (202) 720-5964 (voice and TDD)

EXHIBIT 5 r

We do not believe that the State Water Code or the Commission's own rules allow for an "amendment" of a WUPA of such magnitude without advance notice to the public and interested parties. Neither the DWS nor the public had any notice that Mr. Varel was going to orally "amend" his WUPA at the hearing to request 0.400 mgd instead of 0.043 mgd. If Mr. Varel wishes to amend WUPA No. 825, the appropriate procedure would be for him to withdraw his existing application in the amount of 0.043 mgd and to replace it with a new or amended application in whatever other amount he deems appropriate, followed by a public hearing on the new or amended application.

The only WUPA on file with the Commission at this time for Well No. 5631-07 is the WUPA No. 825 in the amount of 0.043 mgd. However, if the Commission has any inclination to consider Mr. Varel's oral "amendment" to WUPA No. 825, the DWS asks that the public hearing on WUPA No. 825 be re-opened, after appropriate notice to the public, so that all interested persons can comment on the newly-stated amount. Should Mr. Varel revise his WUPA to request 0.400 mgd, DWS will request a contested case at the close of the re-opened hearing.

I also wish to respond to a comment made in the Staff Submittal dated December 16, 2008 concerning both the Varel and Sarasin WUPAs. Page 11 of the Staff Submittal states that WUPA Nos. 825 and 853 are for "agricultural uses [which] are not public trust uses but in this case without viable non-potable alternatives at this time." The DWS requests proof that both Varel and Sarasin have pursued non-potable water sources to an exhaustive extent, being that non-potable water would be the water source of choice for their intended uses, and further because their properties apparently had at one time non-potable water sources available to them. Therefore, since only 2.291 mgd remain in the Iao basal aquifer, that water should remain available solely for the DWS' municipal and domestic uses.

Finally, page 10 of the Staff Submittal dated December 16, 2008 states that "the County conceivably has alternatives in other locales to augment the Iao Aquifer System Area supply." The DWS takes exception to this statement. The DWS has no real, practical alternatives to its proposed new uses from the Iao aquifer. The DWS has considered drilling new wells in the Northern portion of the Waihee aquifer and in the Kahakuloa aquifer, but CWRM has asked the DWS to limit its withdrawals from the Waihee aquifer, and recent discussions with USGS have led us to conclude that new wells in these areas may not be as productive or cost-effective as previously hoped. USGS has advised that the Waikapu aquifer may be a better place to seek new sources of supply, but the current sustainable yield of that aquifer is only 2 mgd and the DWS is competing with private landowners for the available water in the Waikapu aquifer. The DWS is

Honorable Laura H. Thielen
December 22, 2008
Page 3

precluded from developing more wells in East Maui in the immediate future due to the entry on December 22, 2003 of a consent decree in The Coalition to Protect East Maui Water Resources et al. v. Board of Water Supply et al., Civil No. 03-1-0008(3). In that case, the Consent Decree requires that before looking to East Maui as a source of groundwater, the DWS look first to surface water drawn from the Waikapu, Iao, and/or Waihee hydrologic units.

The DWS is in discussions with Alexander & Baldwin concerning the potential for another surface water treatment plant. However, those discussions are still in a preliminary phase, and Alexander & Baldwin's ability to supply surface water to the DWS may be limited, depending on the outcome of the Petition for Amendment of Instream Flow Standards for Na Wai Eha and on the outcome of the proposed designation of a surface water management area. In short, the remaining sustainable yield of the Iao basal aquifer is the DWS's most reasonable and cost effective potable source for the County.

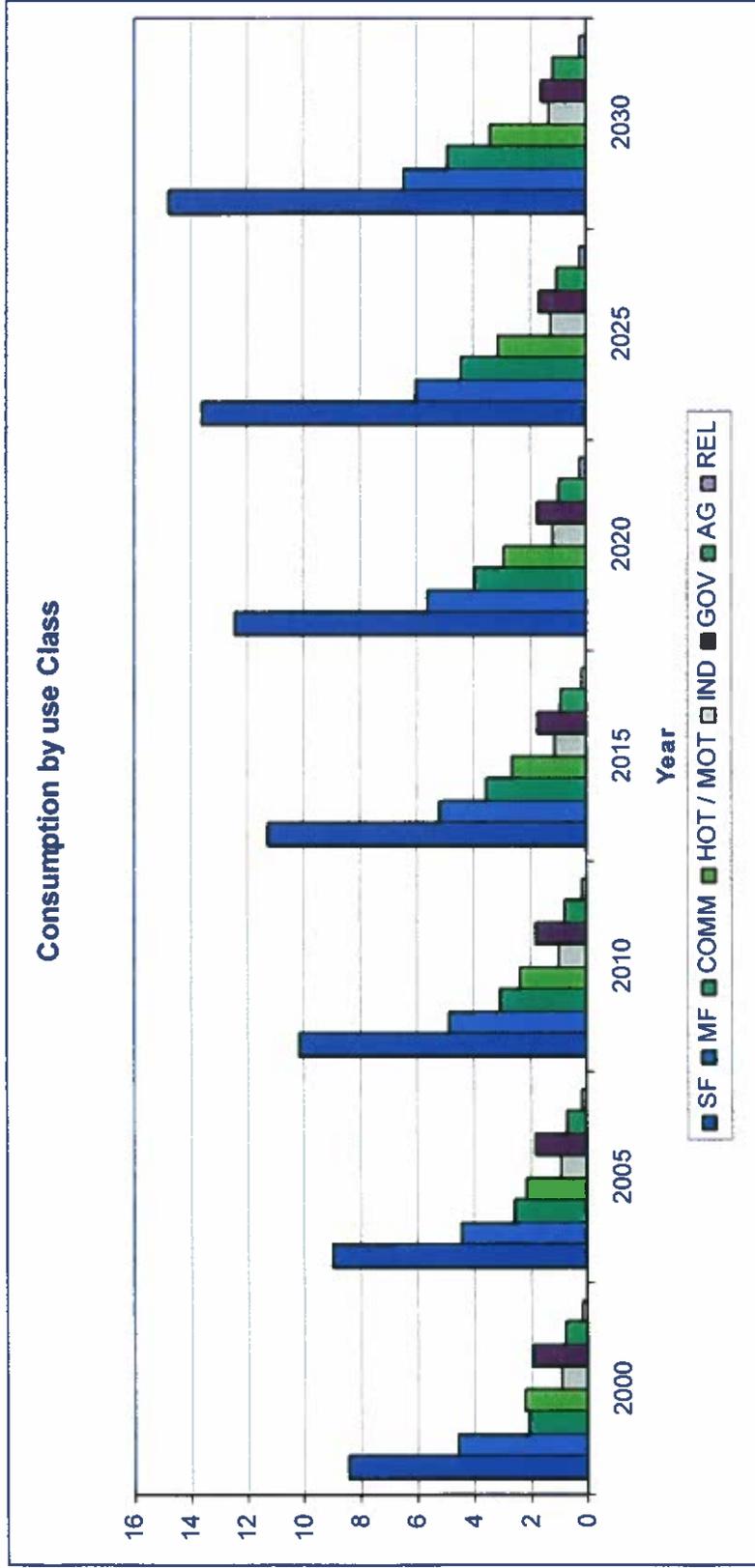
Sincerely,



JEFFREY K. ENG
Director of Water Supply

copy: Jane E. Lovell, Deputy Corporation Counsel
Edward S. Kushi, Jr., Deputy Corporation Counsel

The Biggest Use is For Domestic Water



(CWRM staff note for exhibit)
 example: add "SF" (single family dwellings) and "MF" (multifamily dwellings) for 2010:
 ~ 10 mgd + ~ 5 mgd = 15 mgd, as percentage of total ~ 25 mgd, roughly 60%.