Mr. George Y. Tengan, Director  
County of Maui  
Department of Water Supply  
200 South High Street  
Wailuku, HI 96793  

Dear Mr. Tengan:  

Ground Water Source Monitoring for Water Use Permits  
Iao Ground Water Management Area  

We received your letter dated June 5, 2006, identifying efforts to comply with reporting requirements of the water use permits for Iao basal sources and transmittal of your water shortage plan. In regard to water use reporting, we understand that some wells are not currently outfitted to measure all the required parameters, and that the priorities for replacement and overhaul do not necessarily correspond to those wells needing monitoring equipment installation or replacement.

Our requirements are not intended to be burdensome, and we understand the need to perform these installation and replacement functions economically and efficiently. We are happy to develop a schedule with you to assure that each well receives timely attention according to your overall maintenance priorities. Please transmit your current maintenance schedule, identifying your proposed installation or replacement plans at your earliest convenience. At some point, we would like to consult with you to compare this schedule with the well operations plan that will guide pumpage from the respective wells to meet your production targets consistent with your applications for water use arising since July 21, 2003 (the date of designating the Iao Ground Water Management Area). It may be that certain wells will emerge as priorities for monitoring, which could affect the schedule in question.

We concur that Mokuhau Well #2 could be used for monitoring, simplifying the need to monitor the two other wells, although if it is not properly outfitted, Well 3 can perform this function for the time being. Our information for Waiehu Heights Wells is that Well #1 had an airline installed at −24.0 ft, msl during pump testing, but we have no information since; Well #2 pump was replaced in 1999, with the airline set at −17.0 ft.

Your transmitted water shortage plan referring to the Iao Water Management Rule is acceptable. We are currently developing Commission-adopted water shortage plans for other ground water management areas, and this rule will help toward developing the Commission’s water shortage plan for Iao.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.

Sincerely,

DEAN A. NAKANO  
Acting Deputy Director
June 5, 2006

Mr. Dean Nakano, Acting Deputy Director
State of Hawaii Department of Land and Natural Resources
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Re: Existing Water Use Permit Applications: Requirements for Monitoring, Reporting, and Shortage Plan
Mokuhau 1, Well No. 5330-09; Mokuhau 3, Well No. 5330-11; Waihee 1, Well No. 5431-02; Waihee 2, Well No. 5431-03; Waihee 3 Well No. 5431-04; Waiehu Hts 1, Well No. 5430-01; Waiehu Hts 2, Well No. 5430-02;

Dear Mr. Nakano:

Thank you for forwarding the Existing Use Permit approvals for the subject wells. The Department intends to fully comply with all conditions. Unfortunately, some of our wells are not presently outfitted for all the requested measurements. The specific condition of each of the wells in question is delineated below.

Will the current status as delineated below suffice, or if not - would it be possible to work out a schedule by which the pumps can be pulled and retrofitted on a regular maintenance budget? At this time there are other pumps in the system which have more urgent need of overhaul, and these pump replacements can cost upwards of $200,000 each. Therefore, additional time to meet this condition gradually based on some agreed-upon schedule would be most appreciated.

MOKUHAU
Mokuhau #1 has no airline or gauge tube with which to monitor water levels.
Mokuhau #2 is not in use. Although the well could be used for monitoring, it isn't pumping
Mokuhau #3 has the necessary tube & probe

WAIEHU HEIGHTS
Waiehu Heights #1 has an old airline, but staff is evaluating the condition to see if it can be used.
Waiehu Heights #2 has an old airline, but staff is evaluating the condition to see if it can be used.
In addition, the wells are old and at this point we have not located information as to the elevation/depth at end of airline. Any assistance that CWRM could offer in this regard would be appreciated.

WAIHEE
Waiehe #1 has an airline, but staff is evaluating the condition to see if it can be used.
Waiehe #2 has the same status as Waiehe #1, but will be replaced soon. At that time the appropriate tube and probe can be installed.
Waiehe #3 (579) has the necessary monitoring tube & probe

By Water All Things Find Life
The stated requirements also include a water shortage plan. The text of our existing water shortage plan is included for your review as “Attachment A”. The plan does need some update, and staff will proceed to work on that. Will this suffice for purposes of meeting the deadline? If not, we respectfully request an extension to the June 10th deadline.

Should you have any questions, please contact our Water Resources and Planning Division at (808) 244-8550.

Sincerely,

George Y. Tengan, Director

[Signature]

c: Engineering Division
Jane Lovell
Ed Kushi
Water Shortage Plan

Iao Water Management Rule (Maui County Administrative Rule Title 16, Ch 9) offered as the County's water shortage plan for wells in Iao. See copy in folder for Mokuhaul 1-3 (Well Nos. 5330-09 through -11)
May 23, 2006

Mr. David Singer  
Waiehu Aina, LLC  
P.O. Box 3017  
Wailuku, HI 96793  

Dear Mr. Singer:

Information Correction for Water Use Permit 703  
Waihee Well 3 (Well No. 5431-04)

This is to correct landowner information on Water Use Permit 703 for Waihee Well 3 (Well No. 5431-04), issued May 8, 2006. That document named David Singer as the landowner, but the property is owned by Waiehu Aina, LLC, while David Singer is the contact person at the same address. The corrected page of the water use permit is enclosed and there are no other changes to the permit.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.

Sincerely,

DEAN A. NAKANO  
Acting Deputy Director

Cl:ss  
Enclosure

c: George Tengan, Maui Department of Water Supply  
Jane Lovell, Maui Department of the Corporation Counsel
GROUND-WATER USE PERMIT
WUP NO. 703

PERMITTEE

<table>
<thead>
<tr>
<th>Permittee/Water User</th>
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<tr>
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<td>Waiehu Aina, LLC</td>
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<td>200 South High Street</td>
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PERMITTED USE INFORMATION

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<tr>
<th>Location of water use</th>
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Pursuant to Hawaii's State Constitution, Article XI, Section 7, Hawaii Revised Statutes, Chapter 174C; Hawaii Administrative Rules, Chapters 13-167 through 13-171; and Hawaii decisional law and custom, the permittee is hereby authorized to use ground water from the sources and in the amount and from and upon the locations described above; subject however, to the requirements of law including but not limited to the following conditions:
May 8, 2006

Mr. George Tengan
County of Maui
Department of Water Supply
200 South High Street
Wailuku, HI 96793

Dear Mr. Tengan:

Notice of Commission Action

Maui DWS Iao Basal Source Existing Use WUPAs
Mokuhaum Well 1 (5330-09, WUP 700) TMK: 3-3-2:24
Mokuhaum Well 3 (5330-11, WUP 701) TMK: 3-3-2:24
Waiehu Heights Well 1 (5430-01, WUP 697) TMK: 3-3-2:28
Waiehu Heights Well 2 (5430-02, WUP 698) TMK: 3-3-2:28
Waihee Well 1 (5431-02, WUP 695) TMK: 3-2-17:31
Waihee Well 2 (5431-03, WUP 696) TMK: 3-2-17:31
Waihee Well 3 (5431-04, WUP 703) TMK: 3-2-17:18

This letter serves as your official notice of action taken by the Commission on Water Resource Management (Commission) on the subject application. By a unanimous vote of the Commission at their meeting on February 15, 2006, the Commission:

A. Approved the water use permits for the reasonable-beneficial municipal use of the following Maui Department of Water Supply (MDWS) basal wells, amounts as requested by MDWS in the original applications, computed as the 12-MAV as of June 30, 2003, not adjusted for metering errors:

Mokuhaum Well 1 (5330-09, WUP 700), 1.994 mgd
Mokuhaum Well 3 (5330-11, WUP 701), 2.221 mgd
Waiehu Heights Well 1 (5430-01, WUP 697), 0.165 mgd
Waiehu Heights Well 2 (5430-02, WUP 698), 1.415 mgd
Waihee Well 1 (5431-02, WUP 695), 1.480 mgd
Waihee Well 2 (5431-03, WUP 696), 2.439 mgd
Waihee Well 3 (5431-04, WUP 703), 1.513 mgd

subject to the standard water use permit conditions and the following special condition:

1. Should alternative permanent sources of water be found for these uses, then the Commission reserves the right to revoke this permit, after a hearing.

If you have any questions, please contact Charley Ice of Commission staff at 587-0251.

Sincerely,

DEAN A. NAKANO
Acting Deputy Director
May 8, 2006

Mr. George Tengan
County of Maui
Department of Water Supply
200 South High Street
Wailuku, HI 96793

Dear Mr. Tengan:

Approval of Water Use Permit for Well No. 5431-04
Iao Ground-Water Management Area, Maui

This letter transmits your water use permit for Waihee Well 3 (Well No. 5431-04) for use of 1.513 million gallons per day (mgd) of water on a 12-month moving average basis, as of June 30, 2003, that was approved by the Commission on Water Resource Management (Commission) on February 15, 2006. As part of the Commission's approval, the following special condition was added and is part of your permit under Standard Permit Condition 19:

**Special Condition**

1. Should alternative permanent sources of water be found for these uses, then the Commission reserves the right to revoke this permit, after a hearing.

Enclosed with this letter of approval are the following:

1. Your water use permit
2. Your official monthly water use report form

Please be sure to read the conditions of your approved permit.

We draw your attention to two key conditions of your permit that require your response. First, you are required to keep a record of your monthly total pumpage, water level, salinity, and water temperature. This information must be submitted to the Commission on a regular monthly basis using the enclosed water use report form. You should make copies of the enclosed report form as needed.
Second, you are required to submit a water shortage plan to the Commission within thirty (30) days of the issuance date of this permit. Your water shortage plan simply identifies what you are willing to do should the Commission declare a water shortage situation in the Iao Ground-Water Management Area and can be as short as a one page letter. In a water shortage situation, the Commission may require temporary reductions in pumpage from all sources. The Commission is required, by law, to formulate a plan to implement such area-wide reductions, which should accommodate, include, and be consistent with your plans. Therefore, your help, by submitting your water shortage plan, is greatly needed in formulating the Commission's overall Water Shortage Plan.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251.

Sincerely,

[Signature]
Peter T. Young
Chairperson

Attachments

c: Jane Lovell, County of Maui, Department of the Corporation Counsel
David Singer
# GROUND-WATER USE PERMIT

**WUP NO. 703**

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<td>David Singer</td>
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<td>P.O. Box 3017</td>
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Pursuant to Hawaii's State Constitution, Article XI, Section 7, Hawaii Revised Statutes, Chapter 174C; Hawaii Administrative Rules, Chapters 13-167 through 13-171; and Hawaii decisional law and custom, the permittee is hereby authorized to use ground water from the sources and in the amount and from and upon the locations described above; subject however, to the requirements of law including but not limited to the following 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 15, 2006 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 including other correlative rights;
   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 monthly basis (attached).
11. This permit shall be subject to the Commission's periodic review of the Iao 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 Iao 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 that 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. 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.

19. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

Attachment

c: Jane Lovell, County of Maui, Department of the Corporation Counsel
David Singer
PETITION REQUESTING A CONTESTED CASE HEARING BEFORE THE COMMISSION ON WATER RESOURCE MANAGEMENT

NOTE: THIS PETITION IS TO BE FILED IN PERSON OR MAILED AND POSTMARKED WITHIN 10 DAYS OF THE PUBLIC HEARING OR COMMISSION MEETING AT WHICH THE REQUEST FOR A CONTESTED CASE HEARING WAS MADE.

(Please submit an original and 3 copies, pursuant to HAR 13-167-25(c)).

IF MAILED, SEND TO: Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawai‘i 96809
Phone: (808) 587-0225 Fax: (808) 587-0219

IF DELIVERED: Commission on Water Resource Management
1151 Punchbowl St., Rm. 227, Kalanimoku Bldg.
Honolulu, Hawai‘i 96813

Please provide the following information:
(If there is not sufficient space to fully answer any of the items noted below, please use additional sheets of paper)

1. NAME:

Hui o Nā Wai ʻEhā ("Hui") and Maui Meadows Homeowners Association ("Maui Meadows"). Please see the attached documents regarding Earthjustice’s authority to represent the Hui and Maui Meadows in this matter.

(If you are representing an organization, please attach the resolution, meeting minutes, or other evidence that provides your authority.)

2. ADDRESS:

Please direct all correspondence and other communications to Earthjustice via the contact information provided in items 3 & 4.

Hui o Nā Wai ʻEhā
c/o John V. Duey, Vice President
575A ʻIao Valley
Wailuku, Hawai‘i 96793-3007

Maui Meadows Homeowners Association
c/o Jim Williamson, Vice President
672 Kumulani Drive
Kihei, Hawai‘i 96753
PHONE:
John V. Duey: (808) 242-8565
Jim Williamson: (808) 874-6151

FAX:
Not applicable

3. ATTORNEY OR CONTACT PERSON:
D. Kapua Sproat Esq., Earthjustice

4. ADDRESS:
Earthjustice
223 South King St.
Suite 400
Honolulu, Hawai'i 96813-4501

PHONE:
599-2436, extension 16

FAX:
521-6841

5. SUBJECT MATTER:

The subject matter for this contested case hearing includes the following Maui County/Maui Department of Water Supply's ("MDWS's") Water Use Permit Applications ("WUPA") for the 'Īao Ground Water Management Area:

<table>
<thead>
<tr>
<th>Name</th>
<th>Well No.</th>
<th>WUPA No.</th>
<th>Source TMK</th>
<th>Amount (mgd)</th>
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<td>Mokuhau Well 1</td>
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The Hui and Maui Meadows have continued to meet and work with MDWS and the State Office of Hawaiian Affairs in an effort to resolve the parties concerns and objections and avoid a contested case hearing altogether. If such efforts are successful, the Hui and Maui Meadows expect to withdraw their request for a contested case regarding MDWS's WUPA.

Kehalani Mauka orally requested a contested case at the October 7, 2005 public hearing for WUPA number 707 (Well No. 5330-05, TMK 3-5-1:1) for 5.55 million gallons per day.
The Hui and Maui Meadows now expect to intervene (instead of petitioning to be a party) in that contested case, and request written notice of the deadline to file such an application.

6. **DATE OF PUBLIC HEARING/COMMISSION MEETING:**

The Commission on Water Resource Management, at its September 22, 2004 meeting, approved a public hearing that commenced on October 28, 2004, was continued on April 22, 2005, and closed on September 7, 2005. Several parties, including the Hui and Maui Meadows, made oral requests for a contested case prior to the close of the September 7, 2005 hearing.

7. **WHAT IS THE LEGAL AUTHORITY UNDER WHICH THE PROCEEDING, HEARING OR ACTION IS TO BE HELD OR MADE (CITE APPLICABLE SECTION OF CONSTITUTION, STATUTES, OR ADMINISTRATIVE RULES):**

This contested case will be held pursuant to the legal authority of the Hawai'i State Constitution, Water Code (and administrative rules), and Administrative Procedure Act, including:

- Hawai'i Const. art. XI §§ 1, 7
- Hawai'i Const. art. XII § 7
- Haw. Rev. Stat. ch. 174C (including § 174C-60)
- Haw. Rev. Stat. ch. 91
- Haw. Admin. R. § 13-167 (including subchapter 4, e.g., §§ 13-167-52, 54)

8. **ARE YOU HAWAIIAN?**

Members of the Hui are Native Hawaiian.

9. **WHAT IS THE TAX MAP KEY OF THE PROPERTY ON WHICH YOU RESIDE?**

Hui members reside on property in the `Īao aquifer with multiple tax map key numbers, including:

- TMK #3-2-05-(011), (013), (015), (017), (019), (039)
- TMK #3-2-02-(002), (007), (011)
- TMK #3-2-01-005
- TMK #3-2-02-(003), (004), (005), (007), (008), (009), (010)
- TMK #3-3-01-(054), (041)
- TMK #3-3-01-007
- TMK # 3-5-03-(011), (018)

Members of Maui Meadows reside on property in the `Īao aquifer with multiple tax map key numbers, including:

- TMK #2-1-018-011
- TMK #2-1-013-083
10. WHAT IS THE TAX MAP KEY OF THE PROPERTY CONSIDERED IN THIS ISSUE?

The tax map keys of the affected properties include those listed in items 5, 9, and 11.

11. WHAT IS THE TAX MAP KEY OF THE PROPERTY OR PROPERTIES WHICH YOU OWN IN THE VICINITY OF THE PROPERTY CONSIDERED IN THIS ISSUE?

Hui members own property in the ‘Iao aquifer with multiple tax map key numbers, including:

- TMK #3-2-05-(011), (013), (015), (017), (019), (039)
- TMK #3-2-02-(002), (007), (011)
- TMK #3-2-01-005
- TMK #3-2-02-(003), (004), (005), (007), (008), (009), (010)
- TMK #3-3-01-(054), (041)
- TMK #3-3-01-007
- TMK #3-5-03-(011), (018)

Members of Maui Meadows own property in the ‘Iao aquifer with multiple tax map key numbers, including:

- TMK #2-1-018-011
- TMK #2-1-013-083

12. WHAT, IF ANY, ACTIVITIES HAVE YOU ENGAGED IN ON THE PROPERTY CONSIDERED IN THIS ISSUE?

The activities that the Hui and Maui Meadows have engaged in on the property impacted by this contested case are detailed in item 13, below. The Hui and Maui Meadows can provide additional information to this Commission upon request.

13. WHAT IS NATURE AND EXTENT OF YOUR INTEREST THAT MAY BE AFFECTED?

Hui o Nā Wai ‘Ehā is a community-based organization that was formed to promote the conservation and appropriate management of Hawai‘i’s natural and cultural resources and the practices that depend on them. The Hui strives to protect and restore streams, springs, oceans, estuaries, native flora and fauna, and the activities that rely on these resources, especially the perpetuation of traditional and customary Native Hawaiian practices. Hui members live, work, and play in the ‘Iao ground water management area, and rely on and routinely use ground water from this hydrologic unit as well as surface water from ‘Iao, Waihe‘e, Waiehu, and Waikapū streams and their near shore marine waters for fishing, swimming, agriculture, aquaculture, research, photography, educational programs, aesthetic enjoyment, traditional and customary Native Hawaiian rights practices, and other recreational, scientific, cultural, educational and religious activities.
Maui Meadows Homeowners Association is an association of homeowners from the Maui Meadows subdivision in Kihei. The association's filing of a July 2001 petition resulted in the designation of the `Iao aquifer in July of 2003. Maui Meadows has been active in water and land use issues on Maui for many years and its members rely on the `Iao aquifer to satisfy their water needs. Additionally, the association's members have been working to ensure appropriate management of the ground water resources in the `Iao and Waihe`e aquifers.

Members of both the Hui and Maui Meadows have property interests (own and reside on property) in the hydrologic unit at issue, which are directly and immediately affected by MDWS's WUPA. The Hui's and Maui Meadow's members also rely on MDWS to supply them with municipal water from the Central Maui Service Area, which will be provided by the subject WUPA. The Hui's and Maui Meadows' interests are substantial and distinct from that of the general public for myriad reasons, including: (1) their organizations are specifically dedicated to protecting and appropriately managing the ground and surface water resources at issue; (2) the organizations as well as individual members have been actively involved in the designation process, petitioning for and testifying in favor of designation of this ground water management area since at least 2001; (3) Maui Meadows and the Hui are committed to ensuring that all WUPA and resulting permits for this aquifer comply with the letter and spirit of Hawai'i's State Constitution and Water Code (especially Haw. Rev. Stat. §§ 174C-49, 50); (4) members of the Hui include Native Hawaiians with traditional and customary rights who continue to exercise cultural practices in, among, and around the hydrologic unit at issue, including the use of springs, seeps, and other ground water resources for traditional gathering, religious, and other cultural purposes including kalo cultivation; and (5) both organizations have competing rights and uses of water from the `Iao aquifer, which have been and continue to be affected by ground water withdrawals from the aquifer, including the WUPA at issue here. As just one example, a spring named Waiola which is located on what is now the Sevilla family property (TMK #3-3-01-(054), (041)), was renowned for its healing and other powers. Native Hawaiians traditionally used this spring to purify themselves before entering heiau. Waiola is now dry as a result of ground water withdrawals in the hydrologic unit, and runs only after unusually heavy rains. Cultural practitioners from the area, including Hui members, previously used and would like to once again use this spring on a regular basis for traditional, cultural, and spiritual purposes.

If this Commission determines that the information provided is insufficient to confer standing upon either Maui Meadows or the Hui, more information can be provided further detailing the nature and extent of the organizations' interests in these proceedings.

14. WHAT IS THE DISAGREEMENT, DENIAL, OR GRIEVANCE WHICH YOU ARE CONTESTING?

The Hui and Maui Meadows have detailed their concerns, objections, and other disagreement with the WUPA referenced in item 5, via numerous objections and oral and written testimony provided to this Commission over the past year. We will not rehash them
again here, except to state that the WUPA fail to satisfy the requirements of the law (including Haw. Rev. Stat. §§ 174C-49, 50), and this Commission has failed to hold the applicant to its burden. One of the Hui’s and Maui Meadows’ primary concerns is the applicant’s failure to establish that its uses are reasonable-beneficial and consistent with the public interest by demonstrating: (1) actual water need; (2) the absence of practicable alternatives; and (3) the impacts on public trust purposes, including Native Hawaiian rights and practices such as the use of Waiola Spring. The Hui and Maui Meadows hereby incorporate prior objections, as well as oral and written testimony by reference, which further details the grievance at issue, including:

July 14, 2004 objections re: Waihe’e Wells 1 & 2 (Well Nos. 5431-02 & 03), Waiehu Heights Wells 1 & 2 (Well Nos. 5430-01 & 02), and Mokuhau Wells 1 & 3 (Well Nos. 5330-09 & 11)
September 2, 2004 objections re: Waihe’e Well No. 3 (Well No. 5431-04)
September 22, 2004 oral testimony
October 28, 2004 oral and written testimony
April 22, 2005 oral testimony
June 20, 2005 objections re: Shaft 33 (Well 5330-05)
September 7, 2005 oral testimony

The Hui and Maui Meadows can provide further information detailing their disagreement and other issues upon request.

15. WHAT ARE THE BASIC FACTS AND ISSUES?

The Hui and Maui Meadows have detailed the basic facts and issues regarding their objections and other issues with the WUPA referenced in item 5, via objections and oral and written testimony provided to this Commission. We will not restate them again here. The Hui and Maui Meadows instead incorporate these communications by reference, including:

July 14, 2004 objections re: Waihe’e Wells 1 & 2 (Well Nos. 5431-02 & 03), Waiehu Heights Wells 1 & 2 (Well Nos. 5430-01 & 02), Mokuhau Wells 1 & 3 (Well Nos. 5330-09 & 11)
September 2, 2004 objections re: Waihe’e Well No. 3 (Well No. 5431-04)
September 22, 2004 oral testimony
October 28, 2004 oral and written testimony
April 22, 2005 oral testimony
June 20, 2005 objections re: Shaft 33 (Well 5330-05)
September 7, 2005 oral testimony

The Hui and Maui Meadows can provide further information regarding the basic facts or issues upon request.
16. WHAT IS THE RELIEF THAT YOU SEEK OR THAT YOU DEEM YOURSELF ENTITLED?

The Hui and Maui Meadows have detailed their requested relief regarding the water use permit applications referenced in item 5, via numerous written and oral correspondence already on file with this Commission. We will not reiterate our requested relief again here, except to state that the Hui and Maui Meadows, as beneficiaries of the public trust, are entitled to have their rights and interests protected by this Commission’s holding all applicants to their burden of establishing that their applications satisfy the requirements of the State Constitution and Water Code and ratified by the Hawai‘i Supreme Court. The Hui and Maui Meadows hereby incorporate earlier communications by reference, including:

- July 14, 2004 objections re: Waihe‘e Wells 1 & 2 (Well Nos. 5431-02 & 03), Waiehu Heights Wells 1 & 2 (Well Nos. 5430-01 & 02), Mokuhau Wells 1 & 3 (Well Nos. 5330-09 & 11)
- September 2, 2004 objections re: Waihe‘e Well No. 3 (Well No. 5431-04)
- September 22, 2004 oral testimony
- October 28, 2004 oral and written testimony
- April 22, 2005 oral testimony
- June 20, 2005 objections re: Shaft 33 (Well 5330-05)
- September 7, 2005 oral testimony

The Hui and Maui Meadows can provide further information regarding the relief that they seek upon request.

17. IDENTIFY ANY AND ALL OTHER PERSONS WHO MAY OR WILL BE AFFECTED BY THE RELIEF WHICH YOU SEEK:

The relief sought herein will impact all beneficiaries of the water resources trust, especially the people of Maui, individuals who live within the hydrologic unit or rely on water from the ʻIao aquifer, as well as those who rely on MDWS to supply them with water from the Central Maui Service Area.

The above-named person hereby requests and petitions the Commission on Water Resource Management for a Contested Case Hearing in the matter described above.

D. Kapua Sproat
Name (Print)

September 19, 2005
Date
PETITION REQUESTING A CONTESTED CASE HEARING BEFORE THE COMMISSION ON WATER RESOURCE MANAGEMENT

NOTE: THIS PETITION IS TO BE FILED IN PERSON OR MAILED AND POSTMARKED WITHIN 10 DAYS OF THE PUBLIC HEARING OR COMMISSION MEETING AT WHICH THE REQUEST FOR A CONTESTED CASE HEARING WAS MADE.

(Please submit an original and 3 copies, pursuant to HAR 13-167-25(c)).

IF MAILED, SEND TO: Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809
Phone: (808) 587-0225 Fax: (808) 587-0219

IF DELIVERED: Commission on Water Resource Management
1151 Punchbowl St., Rm. 227, Kalanimoku Bldg.
Honolulu, HI 96813

Please provide the following information:
(If there is not sufficient space to fully answer any of the items noted below, please use additional sheets of paper)

1. NAME: Clyde W. Nāmu‘o, Office of Hawaiian Affairs (OHA)
   (If you are representing an organization, please attach the resolution, meeting minutes, or other evidence that provides your authority.)

2. ADDRESS: 711 Kapi‘olani Blvd. Suite 500 Honolulu, HI 96813
   PHONE: (808) 594-1835 FAX: (808) 594-1865

3. ATTORNEY OR CONTACT PERSON: Attorney To Be Determined
   Contact Person: Dr. Jonathan Likeke Scheuer

4. ADDRESS: 711 Kapi‘olani Blvd. Suite 500 Honolulu, HI 96813
   PHONE: (808) 594-1946 FAX: (808) 594-1765

5. SUBJECT MATTER:
The following Water Use Permit Applications (WUPA) for existing groundwater use in the ‘Īao Ground Water Management Area, Submitted by Maui County / Maui Department of Water Supply (MDWS) to the Commission on Water Resource Management (CWRM):

<table>
<thead>
<tr>
<th>Name</th>
<th>Well No.</th>
<th>WUPA No.</th>
<th>Source TMK</th>
<th>Amount (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mokuha W 1</td>
<td>5330-09</td>
<td>700</td>
<td>3-3-2:24</td>
<td>1.994</td>
</tr>
<tr>
<td>Mokuua W 3</td>
<td>5330-11</td>
<td>701</td>
<td>3-3-2:24</td>
<td>2.221</td>
</tr>
<tr>
<td>Waiehu H W 1</td>
<td>5430-01</td>
<td>697</td>
<td>3-3-2:28</td>
<td>0.165</td>
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<tr>
<td>Waiehu H W 2</td>
<td>5430-02</td>
<td>698</td>
<td>3-3-2:28</td>
<td>1.415</td>
</tr>
<tr>
<td>Waihee W 1</td>
<td>5431-02</td>
<td>695</td>
<td>3-3-17:31</td>
<td>1.480</td>
</tr>
</tbody>
</table>
PETITION REQUESTING A CONTESTED CASE HEARING BEFORE
THE COMMISSION ON WATER RESOURCE MANAGEMENT

| Waihee Well 2 | 5431-03 | 696 | 3-3-17:31 | 2.439 |
| Waihee Well 3 | 5431-04 | 703 | 3-3-17:31 | 1.513 |

And the following WUPA for existing groundwater use in the 'Iao Ground Water Management Area, submitted by MDWS to CWRM that CWRM has classified as a new use:

<table>
<thead>
<tr>
<th>Name</th>
<th>Well No.</th>
<th>WUPA No.</th>
<th>Source TMK</th>
<th>Amount (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wailuku Shaft 33</td>
<td>5330-05</td>
<td>702</td>
<td>3-5-1:1</td>
<td>5.771</td>
</tr>
</tbody>
</table>

6. DATE OF PUBLIC HEARING/COMMISSION MEETING:
CWRM at its regular meeting on September 22, 2004, approved a public hearing that commenced on October 28, 2004, was continued on April 22, 2005, and closed on September 7, 2005. OHA’s representative made an oral request for a contested case prior to the close of the September 7, 2005 hearing.

7. WHAT IS THE LEGAL AUTHORITY UNDER WHICH THE PROCEEDING, HEARING OR ACTION IS TO BE HELD OR MADE (CITE APPLICABLE SECTION OF CONSTITUTION, STATUTES, OR ADMINISTRATIVE RULES):
HRS § 91-9 (Contested cases; notice; hearings; records.), HRS Chapter 174C (Water Code), HAR Title 13 (Department Of Land And Natural Resources) Subtitle 7 (Water Resources), Chapter 167 (Rules Of Practice And Procedure for the Commission on Water Resource Management) Subchapter 4 (Contested Case Proceedings), Hawai‘i Const. Art. XI, §§ 1 & 7, Art. XII, §7, and other statutory provisions.

8. ARE YOU HAWAIIAN?
The beneficiaries of the Office of Hawaiian Affairs are Hawaiian. We are the state agency formed to protect the interests of Hawaiians.

9. WHAT IS THE TAX MAP KEY OF THE PROPERTY ON WHICH YOU RESIDE?
The Office of Hawaiian Affairs does not reside in any particular area, though we do have an place of business that is in the 'Iao Ground Water Management Area. OHA serves beneficiaries who reside in this area, and OHA and our beneficiaries have interests in any ceded lands in this area.

10. WHAT IS THE TAX MAP KEY OF THE PROPERTY CONSIDERED IN THIS ISSUE?
The source of water TMKs are listed in response to question 5, above. MDWS areas of use TMKs have been unspecified and multiple.

11. WHAT IS THE TAX MAP KEY OF THE PROPERTY OR PROPERTIES WHICH YOU OWN IN THE VICINITY OF THE PROPERTY CONSIDERED IN THIS ISSUE?
The Office of Hawaiian Affairs does not directly hold title to property in this area, though we do have an place of business that is in the 'Iao Ground Water Management Area. OHA serves beneficiaries who reside in this area and hold title to property in this area, and OHA and our beneficiaries have interests in any ceded lands in this area.
PETITION REQUESTING A CONTESTED CASE HEARING BEFORE
THE COMMISSION ON WATER RESOURCE MANAGEMENT

12. WHAT, IF ANY, ACTIVITIES HAVE YOU ENGAGED IN ON THE PROPERTY
CONSIDERED IN THIS ISSUE?

OHA's beneficiaries exercise traditional and customary native Hawaiian practices in, among, and around the 'Iao Groundwater Management Area. They include, but are not limited to, use of springs and seeps; gathering in, among, and around streams and estuaries in the affected areas; taro cultivation; and the exercise of other rights for religious, cultural, and subsistence purposes.

13. WHAT IS NATURE AND EXTENT OF YOUR INTEREST THAT MAY BE AFFECTED?

OHA and OHA's beneficiaries have legal interests in this matter as follows:

A. OHA and OHA's beneficiaries have a specific interest regarding rights under various constitutional provisions and laws including those at HRS § 1-1, HRS § 7-1, Hawai‘i Const. Art. XI, §§ 1 & 7, Art. XII, sec. 7, HRS §§ 174C-63 & 71, Hawaiian Homes Commission Act §§ 213(i) and 221, HRS § 10-13.5, Section 5(f) of the Hawai‘i Admission Act, 42USC § 1983.

B. Some of Petitioner's beneficiaries are native Hawaiian residents with rights to exercise traditional and customary native Hawaiian practices in, among, and around the 'Iao Groundwater Management Area. These rights are guaranteed by Hawai‘i Const. Art. XI, §§ 1 & 7, and HRS §§ 1-1 and 7-1. They include, but are not limited to, use of springs and seeps; gathering in, among, and around streams and estuaries in the affected areas; taro cultivation; and the exercise of other rights for religious, cultural, and subsistence purposes. Haw. Const. Article XI, §§ 1 and 7 recognize the application of the public trust doctrine to all water resources without exception or distinction and require that the State protect all water resources for the benefit of its people.

C. Article XII, section 7 of the Hawai‘i Constitution recognizes the importance of such rights by placing an affirmative duty on the State and its agencies to preserve and protect traditional and customary native Hawaiian rights including appurtenant rights (HRS §§ 174C-63 and 101) protect appurtenant rights and the State and its agencies have the power to protect these rights and prevent any interference with the exercise of these rights. The exercise of such rights is a public trust purpose. The exercise of these rights by Petitioners beneficiaries is threatened by the proposed issuance of permits. OHA has a legal authority and duty under HRS Chapter 10 to protect these interests.

D. Certain beneficiaries of Petitioner are also beneficiaries of the trust created by the Hawaiian Homes Commission Act ("Act"). As beneficiaries of that trust, they have a right to expect, pursuant to Section 221 of the Act, sufficient water to support homesteading.

E. OHA has a presumptive specific interest in this matter presumed to government agencies.

F. OHA has fiduciary and other interests in there being water available for use on ceded lands on Maui, especially ceded lands which are currently served by the Maui Department of Water Supply's Central Maui Service Area.
**PETITION REQUESTING A CONTESTED CASE HEARING BEFORE THE COMMISSION ON WATER RESOURCE MANAGEMENT**

Additional information will be provided on request further detailing the nature of these interests.

If CWRM is inclined to deny OHA’s petition on the basis of standing, we request a hearing on standing as a part of this process.

### 14. WHAT IS THE DISAGREEMENT, DENIAL, OR GRIEVANCE WHICH YOU ARE CONTESTING?

OHA’s specific grievances have been extensively detailed in written and oral testimony delivered over the course of the public hearing, and in our original objections to these WUPA. OHA includes these by reference.

The proposed awarding of Water Use Permits in response to these applications abridges and denies of constitutionally protected rights outlined at paragraph 8 and held by OHA’s beneficiaries. These rights must be identified and protected before CWRM issues any permit or other authority.

### 15. WHAT ARE THE BASIC FACTS AND ISSUES?

Certain of Petitioner’s beneficiaries are Hawaiian residents of Maui. These members reside and/or exercise, have exercised, or desire to exercise their traditional and customary Native Hawaiian rights within the affected area. These members are also entitled to exercise constitutionally protected traditional and customary Native Hawaiian rights in the affected area. These rights have been, are, and will continue to be violated by the proposed action.

In addition, OHA has fiduciary and other duties to ensure water is available for current and future use on ceded lands.

### 16. WHAT IS THE RELIEF THAT YOU SEEK OR THAT YOU DEEM YOURSELF ENTITLED?

Identification and protection of superior rights to the water sought to be allocated.

Systematic study and monitoring of the impacts of any allowed diversion on groundwater, streams, and estuarine habitats.

OHA has detailed its requested relief in numerous written and oral correspondence already on file with CWRM, and incorporates earlier communications by reference.

Other relief that may be determined.

### 17. IDENTIFY ANY AND ALL OTHER PERSONS WHO MAY OR WILL BE AFFECTED BY THE RELIEF WHICH YOU SEEK:

The relief sought herein will impact all beneficiaries of the water resources trust, especially the people of Maui, individuals who live in or rely on water from the ‘Īao aquifer, as well as those who rely on the Maui Department of Water Supply to supply them with water from the Central Maui Service Area.

We reserve the right to amend this petition.
We have set July 11, 2005, a Monday, from 1:00 - 5:00 pm, for our meeting at Cameron Center. All who responded indicated that was an agreeable date. We hope it works for the others. We may not need that much time, but hope to sort things out comprehensively within that time. This will be your only notice. We will still conduct another full session of the public hearing, yet to be determined, which we anticipate would be the last.
May 25, 2005

Mr. George Tengan  
County of Maui  
Department of Water Supply  
200 South High Street  
Wailuku, HI 96793

Dear Mr. Tengan:

Information on Reasonable and Beneficial Use

The hearing officers sent questions to all applicants and additional questions to individual objecting parties, dated August 25, November 15, and November 18, 2004. Without evaluating the adequacy of the responses, we have tabulated the response results (enclosed). Some of the questions have not been addressed at all by various applicants.

The interested public at the public hearing has expressed confidence that we are making progress in receiving better information to address their objections, and we are tentatively scheduling an informal meeting on June 8, 2005 at the Cameron Center in Kahului to offer the public the opportunity to review the latest responses before moving to a final session of the public hearing (public notice to be sent when confirmed).

The accompanying table for the applicants show three columns on the right-hand side that indicate (Yes or No) whether issues have been directly addressed, without evaluating the quality or adequacy of the response. These three issues were raised by the Supreme Court June 21, 2004 remand of the Waiahole case: whether alternatives have been explored, whether amounts per unit of use ("duties") are prescribed, and whether there are valued cultural, historical, or natural resources that are related to the water source for which you have a water use permit application.

If there are such resources, there are public trust presumptions in favor of maintenance of the water source in its natural state and for the practice of traditional and customary native Hawaiian rights related to those resources. Applicants must identify the extent to which those resources will be affected or impaired by their water uses, and the feasible actions, if any, to be taken to reasonably protect native Hawaiian rights if they are found to exist. The hearing officers have opined that it is the responsibility of individuals who claim such rights to provide evidence of their claims.

There is a higher level of scrutiny for private commercial uses in the balancing between public and private purposes. As for municipal uses, at least part of those uses—domestic use—is also a public trust purpose.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.

Sincerely,

DEAN A. NAKANO  
Acting Deputy Director

Cc: Ellen Kraftsow, County of Maui, Department of Water Supply  
Garret Hew, Hawaiian Commercial & Sugar Co.  
Linnel T. Nishioka, Ishikawa Morihara Lau & Fong LLP  
Clayton Suzuki, Wailuku Agribusiness Company, Inc.  
Randy Gentry, County of Maui, Department of Parks and Recreation  
Megan Wells, Living Waters Land Foundation, LLC
June 1, 2005

Mr. George Tengan
County of Maui
Department of Water Supply
200 South High Street
Wailuku, HI 96793

Dear Mr. Tengan:

Meeting Confirmation
Information on Reasonable and Beneficial Use

Our public meeting to discuss information requested regarding water use permits in the Iao Ground Water Management Area is confirmed for the J. Walter Cameron Center, Room 1, in Kahului on June 8, 2005, from 2:30 to 6:30 p.m.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400 (Maui), extension 70251.

Sincerely,

DEAN A. NAKANO
Acting Deputy Director

CC:ss
PUBLIC HEARING NOTICE

Applications for Water Use Permits
lao Ground Water Management Area, Maui.

The following applications for water use permits to continue uses existing as of July 21, 2003, and applications for new uses have received objections and are subject to public hearing. The Commission on Water Resource Management, at its regular meeting on September 22, 2004, approved a public hearing originally commenced on October 28, 2004. This public hearing will be the second session and continuation of the original October 28, 2004 hearing and will be held:

April 22, 2005, 5:00-9:00 p.m.
J. Walter Cameron Center
95 Mahalani Street, Wailuku, Hawaii 96793

The Hearing Officers will gather further testimony and information on basal aquifer and caprock wells. Testimony on the high-level dike sources will also be received, but these sources affect stream flow and will be combined with a pending petition to amend the interim instream flow standard of four Wailuku District streams: Waihe'e, Waiehu, lao, and Waikapū. Testimony should focus on practicable alternatives, water duties, Hawaiian rights, and definitions of public trust uses.

- **Basal Sources:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Well No.</th>
<th>Applicant</th>
<th>WUPA No.</th>
<th>TMK</th>
<th>Amount (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Uses</strong> as of July 21, 2003 and completed applications submitted by the July 21, 2004 deadline</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mokuhaugh Well 1</td>
<td>5330-09</td>
<td>MDWS</td>
<td>700</td>
<td>3-3-2:24</td>
<td>1.994</td>
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<tr>
<td>Mokuhaugh Well 3</td>
<td>5330-11</td>
<td>MDWS</td>
<td>701</td>
<td>3-3-2:24</td>
<td>2.221</td>
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<tr>
<td>Waiehu Heights Well 1</td>
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<td>697</td>
<td>3-3-2:28</td>
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<td>Waiehu Heights Well 2</td>
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<td>Waihee Well 1</td>
<td>5431-02</td>
<td>MDWS</td>
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<td>3-3-17:31</td>
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<tr>
<td>Waihee Well 2</td>
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<td>3-3-17:31</td>
<td>2.439</td>
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<tr>
<td>Waihee Well 3</td>
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<td>MDWS</td>
<td>703</td>
<td>3-3-17:31</td>
<td>1.513</td>
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<td><strong>New Uses</strong> arising after July 21, 2003, or completed applications submitted after the July 21, 2004 deadline</td>
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<tr>
<td>Wailuku Shaft 33</td>
<td>5330-05</td>
<td>Kehalani</td>
<td>707</td>
<td>3-5-1:1</td>
<td>5.771</td>
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<tr>
<td>Wailuku Shaft 33</td>
<td>5330-05</td>
<td>MDWS</td>
<td>702</td>
<td>(3-5-1:1)</td>
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<td>Living Waters #1</td>
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<td>LWLF</td>
<td>704</td>
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</table>

- **Caprock Sources:**

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<tr>
<th>Name</th>
<th>Well No.</th>
<th>Applicant</th>
<th>WUPA No.</th>
<th>TMK</th>
<th>Amount (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Uses</strong> as of July 21, 2003 and accepted as completed applications submitted by the July 21, 2004 deadline</td>
<td></td>
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<td>War Memorial Stadium</td>
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<td>5529-02</td>
<td>MP&amp;R</td>
<td>711</td>
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<td>0.039</td>
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<td>5530-03</td>
<td>MP&amp;R</td>
<td>708</td>
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<td>0.324?</td>
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<td>714</td>
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<td>0.324?</td>
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<td><strong>New Uses</strong> arising after July 21, 2003 or completed applications submitted after the July 21, 2004 deadline</td>
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• **High-level Dike Sources** (impacting stream flows, to be later combined with the IIFS petition proceedings)

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<th>Name</th>
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<th>Amount (mgd)</th>
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<td>5333-02</td>
<td>WACI</td>
<td>686</td>
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</table>

**New Uses** arising after July 21, 2003, or applications submitted by or after July 21, 2004

None

**Applicants:**
- County of Maui, Department of Water Supply (MDWS)
- County of Maui, Department of Parks & Recreation (MP&R)
- Kehalani Mauka, LLC (Kehalani)
- Living Waters Land Foundation (LWLFL)
- Hawaiian Commercial and Sugar (HC&S)
- Wailuku Agribusiness Company, Inc., (WACI)

Materials related to the noticed items are available for review at the Kahului Library, 90 School St., Kahului, Maui and at the Commission office located at 1151 Punchbowl St., Rm 227, Honolulu and will also be available at this public hearing.

The Hearing Officers will close the public hearing at the end of this session. Commission staff recommendations on these applications will be forwarded to the Commission at a later date based on the available information.

Any person may testify or present additional information on the public hearing subject matter. If you have a legal interest that may be adversely affected by a proposed application, you have a right to request an administrative contested case hearing (Hawaii Administrative Rules (HAR) §13-167-52(a)). However, you must make the request for such a hearing either orally or in writing by the close of public hearing and file (or mail and postmark) a written petition for a contested case with the Commission within ten (10) days after the close of the public hearing. Petition forms are available from the Commission.

If you do not make a request or fail to file a timely written petition for contested case hearing on a particular application noticed herein with the Commission, the consequence is that you will be precluded from later obtaining a contested case hearing and seeking judicial review of any adverse decision (HAR Chapter 13-167).

Disabled individuals planning to attend the public hearing are asked to contact the Commission at the above address or phone (Kauai) 274-3141 ext. 70214, (Maui) 984-2400 ext. 70214, (Hawaii) 974-4000 ext. 70214, (Molokai or Lanai) 1-800-GOV-INHI ext. 70214 or 587-0214 at least three days in advance of the public hearing to indicate if they have special needs that require accommodation.

**COMMISSION ON WATER RESOURCE MANAGEMENT**

[Signature]

DEAN A. NAKANO, Acting Deputy Director for PETER T. YOUNG, Chairperson

Dated: March 28, 2005

Publish in: Maui News issue of April 1, 2005
TO: Ellen Kraftoon  Date: 12 Apr 05
FROM: Charley Tice

TIME VALUE

Transmitting 18 Nov 04 11R to follow up on public hearing on Iko WUPAs, w/ questions from hearing officers. Requesting your response.
April 12, 2005

Honorable Dean Nakano, Acting Deputy Director  
State of Hawaii  
Department of Land and Natural Resources  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96809

Re: Water Use Application Information: Waihee Wells (5431-02 to 04); Waiehu Heights Wells (5430-01 & 02); Mokuau Wells (5330-09 & 11); Kepaniwai Well (5332-05) and Iao Tunnel (5332-02)

Dear Mr. Nakano,

Thank you for your inquiry dated November 18, 2004, pertaining to the subject Water Use Application Information. We answer your questions in the order in which they were posed. To facilitate understanding, we have repeated your questions in bold.

**Accommodating Need with Available Resource**

One objection to your water use permit applications is the lack of an estimate of the effectiveness of conservation or alternative source development would have on reducing demand from the aquifer.

As part of the evaluation of the reasonable and beneficial criteria, we request the following:

1) Has your department evaluated the impact of its conservation program on individual and overall demand?  
The Department implements various conservation measures. Our preliminary estimate of savings is about 1/2 MGD. Conservation measures include the following:

**Supply Side**
- Flow & Pressure monitoring
- Leak Detection
- Automated Meters
- Preventive and Predictive Maintenance
- Backup Sources
- Reclaimed Water Use

**Demand Side**
- Fixture Distribution
- Conservation Pricing / Rate Structure
- Regulations Prohibiting Water Waste,
- Retrofit Pilots
- Education and Marketing
  - Media and Handouts
  - Permit Review
  - Activities and Events
  - Demonstration Gardens
  - Participatory Learning
The graph below shows our current estimate of the effect of conservation programs of the Department. Additional empirical data will be gathered and estimates will be re-visited during the WUDP process.

As part of the preparatory work for the Water Use & Development Plan process, our consultant has been gathering data and compiling a model for evaluation of costs and benefits of potential conservation programs. Enhanced conservation funding was requested in the FY06 budget proposal in anticipation of some of this work.

Other measures undertaken to help prepare for escalated conservation efforts include development of improved consumption history and forecasts by use class, efforts to better tie consumption to locations, and pressure and flow measurements within the system to enable establishment of diurnal curves and peaking factor information. These measures are not quantified in terms of effectiveness, but they lay the necessary groundwork for development of a more effective conservation program.

2) Does your department have a budget schedule of identified alternative (non-lao groundwater) source development that shows a probable meeting of projected demand - (which currently exceeds projected supply) by a given date?

Yes. Our Central Maui Source schedule is attached as Attachment A. A graph indicating how this source schedule compares to anticipated demand is attached as Attachment B.

The Commission is aware that the designation process has unfolded in large part due to the concentration of pumpage in a limited area rather than to exceedence of the sustainable yield, and that a current study being conducted by the USGS is intended to improve understanding of the aquifer to the benefit of optimal pumping operations management.

Public Trust for Domestic Use
On a related subject, the definition of "domestic use" as used by the Supreme Court is subject to clarification. It could conceivably mean general public use of potable water for drinking and sanitation, which could extend beyond household use to municipal activities at parks and schools, as well as sanitation throughout the panoply of municipal uses. Have your analyses achieved any insight on what proportion might represent basic potable requirements versus...
irrigation or industrial requirements?

Aside from the breakdown of estimated and projected use by customer class provided in Attachment C, probable domestic use portions can be estimated by looking at demand curves. While not 100% attributable to outdoor use, still the lion’s share of seasonal peaks tend to represent the difference between indoor domestic and outdoor use. Another way to get at this can be to compare Water Supply demands versus wastewater system demands where these can be evaluated in comparable periods. Historical reviews of this type indicate that the answer varies with location. Kahului tends to use 70% of its water indoors, whereas South Maui uses 40%-60% of its water outdoors.

Public Trust Purposes and Hawaiian Rights

Commissioner Miike asked for opinions from various parties concerning who may bear the burden of proof concerning public trust purposes, such as the traditional and customary and other Native Hawaiian water rights. These fall within what may be generally called the public interest, defined by the Water Code to include additional purposes. Your initial application addressed the public interest by identifying the public utility service area, a municipal system that includes probably most, if not all of the public interests in the water code. It does not address Native Hawaiian rights per se, but you have commented to OHA that OHA was in a better position to assess this issue. Does the County feel it bears no responsibility for addressing potential Native Hawaiian water rights that may be affected by the County’s use of ground water supplying its service system?

As stated, DWS serves most if not all of the public interest uses identified in the State Water Code, including those of Hawaiian Homelands and other Hawaiians.

With regard to Native Hawaiian Water Rights, the Department is prepared to make a fair and good faith effort to identify and address Native Hawaiian rights. Toward that effect, staff made an effort to identify all LCAW (land commission awards) and Kuleana parcels using existing GIS data. This was followed by research at the Bailey House Museum & Bureau of Conveyances to gather information and acquire copies of the Hawaiian language documents pertaining to these historical awards. The Department has negotiated a proposal with a Hawaiian language expert to translate these. The proposal to translate and provide additional evaluation of some of this data is provided as Attachment D. However, the fact remains that a means or mechanism to address these rights has never been spelled out in the Code. OHA has better access to the relevant information, and better understanding of how to properly research Hawaiian rights and traditional uses than the Department does. That is why we proposed in our response to OHA to work with them in this regard.

DHHL Reservations

We understand that your Department not only serves existing Department of Hawaiian Home Lands residential projects but has also issued water meter reservations for projects not yet served by the County system. The DHHL request for a groundwater reservation from the lao aquifer does not distinguish between project already served, projects with meter reservations and other projects yet to receive discretionary approvals. Your reply to the notice of the reservation request notes the meter reservations and indicates that future needs will be given priority. While the Commission has not yet acted on the request for groundwater reservations from lao, we would be inclined to recommend that such reservations would apply only to projects not yet served. Our question is whether the County’s commitment to issue meters is revocable or otherwise subject to further decision making.

The Department places a high priority on Hawaiian Homes. We are also making a good faith effort to limit withdrawals from the lao & Waihee aquifers. We were not expressing a lack of willingness to serve the existing DHHL projects, but rather a reluctance to specify the source from which future projects would draw water, given other water development efforts.
Water commitments are valid for a period of two years. They are revocable in the limited sense that *Any event, occurrence or condition not caused by the Department which prevents the Department from performing its obligations excuses the Department from those obligations except to refund the fee.*

The Water System Development Fee rule §16-8-9 (b) **Applicant not ready for water service**

Upon payment of the fee by an applicant who, to the Director's satisfaction is unable to accept water service immediately, the Department may reserve an allocation of service capacity available at that time. The duration of any such reservation shall not exceed one year plus two six-month extensions, each for good cause shown and approved by the Department if water service is available. The Department and the applicant shall agree in writing on the amount of any allocation. If within one year, or longer with extensions, the applicant is not able to accept installation of water service, unless for good cause shown and approved by the Department, the application and the reservation of the allocation shall expire and the fee paid shall be deemed a penalty and forfeited, to be applied to the Department's operating fund with no credit of any kind toward any future application. *Any event, occurrence or condition not caused by the Department which prevents the Department from performing its obligations excuses the Department from those obligations except to refund the fee.* (emphasis added)

Please feel free to contact our Water Resources & Planning Division at (808) 270-7199, should you have any questions.

Sincerely,

George Y. Tengan, Director

Attachments:
A Central Maui Source Schedule (tentative pending WUDP process)
B Central Maui Demand vs. Source Schedule Graph
C Demand Projections by Customer Class
D Proposal for translation of Hawaiian Documents

c: Ed Kushi, Corporation Counsel
   Jane Lovell, Corporation Counsel
<table>
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<th>On Line</th>
<th>Antic Yld</th>
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<tr>
<td>design</td>
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<tr>
<td>permits &amp; approvals</td>
<td>done</td>
<td></td>
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<td>construct</td>
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<tr>
<td>construction</td>
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<tr>
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<td>2008</td>
<td>2008</td>
<td>6</td>
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<td>assumes all of this is to be done by private developers and re-imbursed upon acceptance.</td>
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<tr>
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<td>2013</td>
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Metered Consumption: Historical and Econometric Projection with Class Share by Class Share Trend Projection
Millions of Gallons per Day

Calendar Year

Consumption based on projections in "Hist and Econ FY CY Proj 18.qpw"

DISTRICT NAME
Central

AREA NAME
East Central

CLASSI

10
20
30
40
50
60
70
80
90

East CentralTotal

North Central

North CentralTotal
South Central

10
20
30
40
50
60
70
80
90
10
20
30
40
50
60
70
80
90

1994
0.336

1995
0.373

1996
0.387

1997
0.372

1998
0.393

1999
0.435

2000
0.451

2001
0.485

2002
0.493

2003
0.502

2004
0.496

2005
0.512

2006
0.525

2007
0.538

2008
0.551

2009
0.563

2010
0.576

2015
0.641

2020
0.705

2025
0.769

2030
0.832

0.012
0.034
0.006

0.013
0.038
0.008

0.Q18
0.041
0.008

0.016
0.036
0.008

0.021
0.044
0.012

0.Q19
0.039
0.021

0.018
0.029
0.024

0.Q16
0.038
0.027

0.012
0.031
0.024

0.014
0.036
0.022

0,016
0.031
0.031

0.016
0.031
0.034

0,016
0.030
0.036

0.Q16
0.029
0.039

0.016
0.028
0.041

0.Q16
0.028
0.043

0.016
0.027
0.046

0.017
0.024
0.057

0.017
0.021
0.068

0.018
0.Q18
0.079

0.Q18
0.015
0.089

0.013

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Luana L. Kawa’a
Hālau Hula Ka Makani Kili’o’opu
The Hawaiian Learning Center
2087 Hewahewa Drive * Wailuku, HI 96793
(808) 357-9503
Email: luanakawaa@earthlink.net

Contract:

Project: Translation of Hawaiian Language Documents
- Project Assessment
Company: County of Maui - Water Department

Below are my recommendations. Mahalo.

Immediate Project Needs:
Below is a list of my assessment of immediate project needs, to begin as soon as possible.
- Translation of documents (300 total) to clearly identify kuleana water rights; original location of streams; traditional place names
- Site Visits to determine exact boundaries and location of streams
  o Include photos and maps
- Establishment of an Advisory Board/Team, thus promoting community involvement, input and support.

Cultural Assessment of Ahupua’a:
Purpose: to assess the current status of the Nā Wai ‘Ehā Ahupua’a and further research the traditional functions within this Ahupua’a; to establish water resources that will support the traditional functions of the Ahupua’a; provide water resources that will support and maintain a healthy, functioning, traditional Ahupua’a.

Goals:
- Determine cultural sites & significance
- Record original Place Names
- Research traditional agriculture
- Identify location and remnants of lo‘i and other Native Hawaiian agricultural crops
- Determine original stream flows leading back to the ocean

Work Timeline:
Phase I: Document Translation
300 documents @ $10 per page
Total: $3,000.00
Proposed start date: immediate
Completion date: May 31st, 2005

Payment Schedule: (please make checks payable to Luana Kawa’a)
- Retainer fee of $500
  - Due and payable now
- $1000 due April 30th, 2005
- $1500 due May 31st, 2005

**Phase I Total: $3,000.00**

**Phase II: Site Visits & Establishment of Board/Team**
- upon completion of translations, schedule site visits
- (2) site visits 3-4 hrs each
- 2 board/team meetings (2 hrs. each)
- take photos of area and record

Proposed Start Date: June 1, 2005
Completion Date: August 1, 2005

Payment Schedule:
- $200 per site visit (2 minimum)
- $100 facilitation fee per board/team meeting (2 minimum)
- $100 data compilation fee

**Phase II Total: $700.00**

**Phase III: Cultural Assessment**
- Identification of cultural sites
- Identification of traditional agricultural sites
- Periodic site visits
- Research

Proposed Start Date: on going during duration of project
Completion Date: to be determined

Payment Schedule:
- to be determined

Contact me @ 357-9503
e-mail: luanakawaa@earthlink.net
Please make checks payable to Luana L. Kawa’a.
TO: Ellen Kraft Date: 17 March 05
FROM: Charlotte Ice

Transmitting the letter accepting WUPAs for eight sources. A similar letter went out August 9, 2004 accepting Waihee 3 WUPA as complete, making nine in all.

The only one I believe is not officially accepted is Wailuku Shaft, although it is essentially complete. Because we are at the public hearing stage already, because the application may be competing with Kehalani Mauka's, and because the present state of affairs is such that the hearing officer is treating both of them as “new uses”, we have not officially accepted it as existing or new – not that it has significant bearing on the continued use, as that is statutorily accepted until a decision on the application is reached. We understand that Kehalani and MDWS are in negotiation to resolve the issues involved with having separate applications, and we await any resolution that may be forthcoming, as the presumption is that any resolution will include amendment of the applications. Meanwhile, barring resolution, the hearing officers will recommend action in due time – hopefully at the next opportunity following closing of the hearing April 22 (announcement to follow) – unless it ends up being contested.

Maui Lani Wells Reliance

You’ll be interested to know that the communications to the effect that the owners should not place reliance on these wells because of limitations on the source are not documented. They have been phone conversations with Tom Nance.

The document review I was speaking of was for a Maui Lani development project, which had identified the County system for its source, and we issued the standard comment about the lao situation. Subsequently, we are told that the source will be either Maui Lani Wells or surface water treatment, and we have had conversations with Office of Planning on this, as the result of being asked for assistance in their review. However, a revised comment was developed but not sent, as it determined that the request for assistance was to provide backup at some point in the process at the Land Use Commission. We have that information available for comment at that time.

In general, our view is that the water to be tapped by the Maui Lani Wells is coming primarily from irrigation return flows, which are completely dependent on continued sugar cultivation, and from the unlined Waiale Reservoirs, which are subject to available flows from stream sources under petition to have flows restored/diversions restricted and a separate petition alleging waste of stream diversion, in some part due to system losses such as the unknown amount of reservoir loss through leakage/recharge.

Tom Nance has stated he believes that underflow from Makawao Aquifer through Paia Aquifer, or alternatively from lao, would sustain the flows from Maui Lani Wells (pump data at 1&2 show low chlorides). We are unofficially doubtful without better information, such as silica monitoring.

The potential for surface water treatment is subject to the same petition to amend interim instream flow standards (to restore stream flows). We cannot predict the outcome of these processes, but long-term reliance is not a sure thing at all.

Return Fax: 587-0219
Return Post: P.O.Box 621, Honolulu 96809
December 17, 2004

BY U.S. MAIL & FACSIMILE TRANSMITTAL

Fax: (808) 587-0219

Yvonne Y. Izu, Deputy Director
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawai‘i 96809

Re: Burdens Of Proof And Legal Standards Regarding: (1) Traditional And Customary Native Hawaiian Rights And Practices; And (2) Municipal Uses

Dear Deputy Director Izu:

Mahalo for this opportunity to respond to the Commission’s November 15, 2004 letter requesting comments on Commissioner Miike’s questions and analyses on the burdens of proof and legal standards regarding: (1) traditional and customary Native Hawaiian rights and practices; and (2) municipal uses. We have addressed the issues in detail and are hopeful that our comments will assist the Commission in its water use permitting for the ‘lao aquifer.

I. Traditional & Customary Native Hawaiian Rights & Practices.


Pursuant to Hawai‘i’s constitution, statutes, and case law, this Water Commission is “obligated to protect the reasonable exercise of customarily and traditionally exercised rights of Hawaiians[].” Ka Pa‘akai o ka ‘Aina v. Land Use Comm’n, 94 Haw. 31, 45 (2000) (“Ka Pa‘akai”); see also Haw. Const. Art. XII § 7. These rights include, but are not limited to: (1) traditional and customarily exercised rights and practices (e.g., gathering rights for limu, fish, crustaceans, and shellfish in springs, streams, and nearshore marine waters, use of springs and streams for religious and spiritual purposes, water for kalo cultivation); and (2) entitlements to water pursuant to the Hawaiian Homes Commission Act of 1920. See, e.g., Haw. Const. Art. XI § 7; Haw. Rev. Stat. §§ 1-1, 7-1, 174C-63, 174C-101.

Native Hawaiians may also possess appurtenant, riparian, or correlative rights, which may be used for traditional and customary purposes, such as the appurtenant, riparian, or correlative right to water for kalo cultivation on one’s own kuleana. See generally Lawrence H. Miike, M.D., J.D. Water and the Law in Hawai‘i 118 (University of Hawai‘i Press 2004).
Moreover, as trustee of the state’s water resources trust established under the state constitution, this Commission bears the ultimate burden of identifying and protecting Native Hawaiians’ traditionally and customarily exercised rights and practices in the context of water use permit applications for the ʻIao Aquifer. See generally In re Waiāhole Combined Contested Case, 94 Haw. 97, 141 (2000) (“Waiāhole I”) (“The state also bears an ‘affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses.”); id. at 137 (“uphold[ing] the exercise of Native Hawaiian and traditional and customary rights as a public trust purpose”).

In addition to the constitutional mandates above, the state Water Code includes independent requirements for this Commission, working in partnership with affected Native Hawaiian practitioners, to identify traditional and customary rights and practices supported by ground water and related surface water in ʻIao. In fact, the Code contemplated completion of this process many years ago through the declaration of water uses and issuance of certificates for such uses. Haw. Rev. Stat. §§ 174C-26, 27.

The Code required any person using water in any area of the state, including uses of water for traditional and customary practices, to file a declaration of use by April 1989. Id. § 174C-26(a). Once those declarations were filed, the Code required the Commission to scrutinize identified uses to determine if they were reasonable and beneficial. Id. § 174C-27(a). The Code further required this Commission to “act upon a declaration within six months after its filing.” Id. § 174C-26(e). Unfortunately, the Commission never completed this process, and it is our understanding that no certificates of water use were ever issued. This is particularly regrettable because the Code contemplated use of these certificates to “resolv[e] claims related to existing water rights and uses including appurtenant rights, riparian and correlative uses[,]” which is precisely the dilemma faced by this Commission in permitting water uses in the ʻIao aquifer. Id. § 174C-27(a).

Other sections of the Water Code also mandated this Commission to inventory the scope and existence of traditional and customary Native Hawaiian rights and practices throughout Hawai‘i, including ʻIao. As part of the Hawai‘i Water Plan, this Commission was charged with developing a water resources protection plan, including: (1) “study[ing] and inventory[ing] the existing water resources of the state and the means and methods of conserving and augmenting such water resources”; and (2) “study[ing] the quantity and quality of water needed for existing and contemplated uses.” Id. §174C-31(c) (emphasis added). Other requirements of the Hawai‘i Water Plan mandate the Commission to “describe and inventory: (1) all water resources and systems in each hydrologic unit; (2) all presently exercised uses; (3) the quantity of water not presently used within that hydrologic unit; and (4) potential threats to water...
resources, both current and future.” Id. §174C-31(h) (emphasis added). If the Commission had completed meaningful inventories and established (1) an instream use and protection program and (2) sustainable yields based on numerical or other models lacking the shortcomings of the Robust Analytical Model, the Commission, together with affected practitioners, would have identified many of the traditional and customary rights and practices historically and currently exercised in the areas affected by the ‘Iaʻo permit applications. Id. § 174C-31(i).

The Hawai‘i Supreme Court confirmed the Commission’s planning mandate:

The Code planning provisions mandate the Commission to ‘study and inventory the existing water resources of the state and the means and methods of conserving and augmenting such water resources,’ in formulating a ‘water resources protection and quality plan,’ which must include, among other information, ‘requirements for beneficial instream uses and environmental protection’. The Code also obligates the Commission to ensure that it does not ‘abridge or deny’ traditional and customary rights of Native Hawaiians.

Waiahole I, 94 Haw. at 153 (citations omitted). If these requirements had been implemented, the work necessitated by the Commission’s and the water use permit applicants’ burden would have been significantly reduced. This ongoing failure to comply with the letter and spirit of the Code, however, does not justify improperly shifting this burden to practitioners of Native Hawaiian customs and traditions.

"[A]n applicant for a water use permit bears the burden of establishing that the proposed use will not interfere with any public trust purposes; likewise, the Commission is duty bound to hold an applicant to its burden."]” In re Wai‘ola o Moloka‘i, Inc., 103 Haw. 401, 441 (2004) (“Wai‘ola”). Wai‘ola presented nearly identical issues: this Commission was tasked with considering the impact of a water use permit application for ground water withdrawals for municipal and other purposes on traditional and customary rights and practices. The Hawai‘i Supreme Court vacated this Commission’s order because the Commission “failed adequately to discharge its public trust obligation to protect native Hawaiians’ traditional and customary gathering rights.” Id. at 443. In so doing, the Court placed “the burden of proving, inter alia, that the proposed water use would not abridge or deny traditional and customary native Hawaiian rights” squarely on the applicant’s and the Commission’s shoulders. Id. at 442. The Court also admonished the Commission for “erroneously plac[ing] the burden on the [practitioners] to establish that the proposed use would abridge or deny their traditional and customary gathering rights.” Id. In no uncertain terms the Court
held that the applicant “was obligated to demonstrate affirmatively that the proposed well would not affect native Hawaiians’ rights; in other words, the absence of evidence that the proposed use would affect native Hawaiians’ rights was insufficient to meet the burden imposed upon [the applicant] by the public trust doctrine, the Hawai‘i Constitution, and the Code.” Id. (emphases in original).

In light of the Code’s mandates and Wai‘ola’s clear language, the burden of establishing that traditional and customary Native Hawaiian rights exist in the first instance rests with this Commission as trustee of Hawai‘i’s water resources trust and with any permit applicant who covets public trust resources. “[T]he Commission must not relegate itself to the role of a mere ‘umpire, passively calling balls and strikes for adversaries appearing before it,’ but instead must take the initiative in considering, protecting, and advancing public rights in the resource at every stage of the planning and decisionmaking process.” Waiāhole I, 94 Haw. at 143. Again, the Code devised the Hawai‘i Water Plan (especially the Water Resources Protection Plan) as the framework for managing one of Hawai‘i’s most precious resources. See Miike, supra, at 234-35. The challenges and burdens that continue to arise from the failure to adequately fund and implement this framework should not and indeed cannot be laid at the feet of practitioners of Native Hawaiian customs and traditions.

B. Assertions Of Traditional & Customary Rights & Practices Are Sufficient.

Hawai‘i case law is unambiguous that even an assertion of traditional and customary rights and practices, without a conclusive showing that specified individuals have such rights, requires private commercial users and this Commission to gather information necessary to analyze potential impacts and ensure that any traditional and customary rights and practices are not abridged or denied. See Ka Pa‘akai, 94 Haw. at 51 n.35 (noting that “neither the boundaries of the Resource Zones ... nor the specific [traditional and customary] uses in each zone have been established”); id. at 37 (acknowledging general testimony regarding cultural practices including fishing, picking limu, and gathering ‘opihi and other resources); Public Access Shoreline Hawai‘i v. Hawai‘i Cty. Planning Comm’n, 79 Haw. 425, 450 (1995) (“the right of each ahupua‘a tenant to exercise traditional and customary practices remains intact, notwithstanding arguable abandonment of a particular site”).

The Hawai‘i Supreme Court further ruled that state agencies, such as this Commission, “may not act without independently considering the effect of their actions on Hawaiian traditions and practices.” Ka Pa‘akai, 94 Haw. at 46 (emphasis added). The Court went on to specifically detail an “analytic framework in an effort to effectuate the state’s obligation to protect native Hawaiian customary and traditional practices while reasonably accommodating competing private interests[.]” Id. at 46-47. “Indeed,
the promise of preserving and protecting customary and traditional rights would be illusory absent findings on the extent of their exercise, their impairment, and the feasibility of their protection.” Id. at 50.

Pursuant to Ka Pa`akai, given the information already provided to this Commission in objections to water use permit applications for `Iao, at the October 28, 2004 public hearing on Maui, and in the petition to restore stream flow in Waihe`e, North and South Waiehu, `Iao and Waikapū streams and their tributaries (“Nā Wai `Ehā”) filed by Earthjustice on June 25, 2004, this Commission is tasked with investigating and making specific findings regarding: (1) the identity and scope of cultural, historical and natural resources in the area affected by the permit applications for `Iao, including the extent to which traditional and customary rights and practices are exercised in that area; (2) the extent to which those resources, rights, and practices will be affected by the proposed action; and (3) feasible action, if any, to reasonably protect Native Hawaiian rights and practices. 94 Haw. at 52. In particular, we note that the IIIFS petition detailed some cultural practices supported by ground and surface water in the Nā Wai `Ehā area. If the Commission determines that such rights exist, all water use permit applicants must overcome the presumption in favor of such protected public trust purposes.

Given the limitations of the outdated declarations of water use and Hawai‘i Water Plan, we understand the enormity of the task facing this Commission and the applicants seeking water use permits for `Iao. Although the Hawai‘i Supreme Court has made clear that this burden lies with the Commission and permit applicants, not the practitioners, several workable avenues are available to help provide the necessary information. The Commission, in partnership with the permit applicants, could, for example: (1) review declarations of water use for all TMKs and uses within the affected area; (2) request from plantation interests including Wailuku Agribusiness and HC&S, a list of all individuals who receive kuleana water; (3) publish notices in local papers and broadcast on local TV (Akaku) and radio stations requests for information from practitioners from the affected area; (4) locally notify and hold public meetings in Central Maui for practitioners who may be affected by the pending applications; (5) contact Hawaiian agencies with offices or representatives in the affected area, including the Office of Hawaiian Affairs, Queen Lili‘uokalani Children’s Center, and Alu Like for lists of local practitioners or contacts; (6) contact elected representatives at the county, state, and federal levels for recommended contacts; (7) contact cultural consultants or experts from the area, including those listed in state Office of Environmental Quality Control’s list of cultural consultants and others potentially available through the Bailey House for contact information for local practitioners or other resources; (8) contact culturally-based groups from the area including hula halau, Hawaiian Civic Clubs, `Onipa’a Nā Hui Kalo, Maui Cultural Lands, Maui Cultural Resources Commission and
Letter to Yvonne Izu Re: Burdens Of Proof And Legal Standards Regarding: (1) Traditional & Customary Native Hawaiian Rights & Practices; & (2) Municipal Uses

December 17, 2004
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the like for information and recommendations; (9) contact state agencies, including the historic preservation division and Island Burial Councils for lists of local practitioners or contacts; and (10) contact schools and organizations of higher learning, including the University of Hawai‘i and Maui Community College for lists of Hawaiian organizations, clubs, local practitioners, and other contacts from the area. These are just a sampling of potential sources of information; many more are available to this Commission and the permit applicants.

C. This Commission Has The Authority And Duty To Recognize And Uphold Traditional & Customary Rights & Practices.

Finally, this Commission has both the authority and the duty to recognize traditional and customary Native Hawaiian rights in the context of water use permitting, contested case hearings, and other matters under its jurisdiction. The Hawai‘i Supreme Court has never imposed any requirement for those asserting such rights to obtain a court ruling before the Commission or any other agency could consider them. Rather, as detailed above, state agencies including this Commission “may not act without independently considering the effect of their actions on Hawaiian traditions and practices.” Ka Pa‘akai, 94 Haw. at 46. In Ka Pa‘akai, the Hawai‘i Supreme Court specifically detailed an “analytical framework in order to effectuate the state’s obligation to protect native Hawaiian customary and traditional practices[.]” Id. at 46-47. The Court placed this burden squarely on agencies such as this Commission, going on to rule that “[t]he power and responsibility to determine the effects on customary and traditional native Hawaiian practices and the means to protect such practices may not validly be delegated[.]” Id. at 52.

We again note that in Wai‘ola, the Court vacated this Commission’s issuance of water use permits for proposed ground water uses not unlike those at issue in ‘Iao because the Commission “failed adequately to discharge its public trust obligation to protect native Hawaiians’ traditional and customary gathering rights[.]” 103 Haw. at 443. More specifically, the Court ruled that “an applicant for a water use permit bears the burden of establishing that the proposed use will not interfere with any public trust purposes; likewise, the Commission is duty bound to hold an applicant to its burden during a contested-case hearing.” Id. at 441-42 (emphasis added).

II. Municipal Uses.

A. “Municipal” Use Is Not A Public Trust Use.

At the October 28, 2004 public hearing, Commissioner Miike stated that “municipal” use was not a “domestic” use recognized under Waiāhole I as a public
trust purpose, citing the Water Code's definition of "domestic use" as support. Commissioner Miike later modified this position in correspondence dated November 3 and 15, 2004, opining that Waiahole I suggested domestic uses could extend to municipal uses. We respectfully submit that the Commissioner's first inclination was correct. In sum, although municipal use may serve the general public interest and partially (but not exclusively) includes many aggregate domestic uses, it constitutes a large-scale, consumptive, and diversionary use that differs, both qualitatively and quantitatively, from the uses that the public trust, both in Hawai'i and elsewhere, has traditionally protected. Thus, notwithstanding the "important public benefits" of municipal uses, long-established public trust precedent "stops short" of including such use as a public trust purpose. Waiahole I, 94 Haw. at 138.

"Domestic" and "municipal" are legal terms of art in water law that have carried distinct meanings under the common law for ages. As the plain meaning suggests, "domestic" use denotes individual water use "for household purposes, i.e., for drinking, washing, cooking, and watering domestic animals." Carter v. Territory, 24 Haw. 47, 66 (1917). Historically, in Hawai'i and elsewhere, the priority for domestic use has arisen in connection with riparian principles, such that the use cannot "materially diminish the supply of water or render useless its application by others." Peck v. Bailey, 8 Haw. 658, 662 (1867). See also id. (recognizing the "sound distinction" under riparian law between "the right to enjoy water in its natural state, and that which is created by artificial means"); Carter, 24 Haw. at 66 (affirming the riparian distinction between "natural" and "artificial" uses and stating, "we have no doubt that such is the law in [Hawai'i]").

"Municipal" use, in contrast, denotes bulk water uses of large population entities. This may include the aggregate domestic uses of the population, but also includes many other kinds of uses, including commercial, agricultural, and industrial purposes. Maui Department of Water Supply's ("MDWS's") applications, for example, concede that single-family use comprises about only 16% of the total use in Central Maui. See, e.g., MDWS's Water Use Permit Application for Mokuhaul. MDWS has also admitted that it transports potable water from 'Iao to Central and South Maui and Pā'ia for both potable and non-potable needs. MDWS, however, is unable to provide calculations or even estimates of its non-domestic uses, including water for commercial, agricultural, industrial and other purposes. As MDWS's applications establish, municipal uses, by nature, are large-scale and consumptive, and involve diversions

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2 This Commission determined that while potable water is delivered through the Central Maui system to provide for both potable and non-potable needs, the County was unable to "differentiate between these major categories of use." State Commission on Water Resource Management, 'Iao and Waihe'e Aquifer Systems State Aquifer Codes 60102 and 60103 Ground-Water Management Area Designation Findings of Fact (Nov. 14, 2002) at 66.
away from the water source. Moreover, although municipal use is not “commercial” per se, it does involve the sale of water or water services by a utility (in some places, a private entity), as opposed to a domestic user who takes water for his or her own personal use.

The Code incorporates these common law distinctions between domestic and municipal uses. As Commissioner Miike noted, § 174C-3 assigns separate meanings to each. Domestic use “means any use of water for individual personal needs and for household purposes such as drinking, bathing, heating, cooking, noncommercial gardening, and sanitation.” Municipal use “means the domestic, industrial, and commercial use of water through public services available to persons of a county for the promotion and protection of their health, comfort, and safety, for the protection of property from fire, and for the purposes listed under the term ‘domestic use.’”

Lumping domestic and municipal together contradicts this well-settled distinction. Courts have consistently declined to make such a leap. Thus, as the eminent treatise on water law (cited repeatedly in Waiahole I) observes, “[c]ities generally cannot invoke the domestic preference [under riparian law] to acquire land and water rights to supply their inhabitants and to claim an immunity from liability by injured riparians.” A. Dan Tarlock, Law of Water Rights & Resources § 3:59 at 3-97 (2004 rev. ed.) (footnote omitted) (citing cases); see also Union Water Supply Corp. v. Vaughn, 355 F. Supp. 211, 214 (S.D. Tex 1972) (seeing a “clear distinction between general municipal use and domestic and livestock use” and rejecting collective appropriation on behalf of individual domestic users as “domestic” use). Similarly, the seminal treatise on eminent domain explains that “[t]he doctrine that a riparian town

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3 The Code underscores the distinction between domestic and municipal uses by exempting only domestic uses from water use permitting requirements. “No person shall make any withdrawal, diversion, impoundment, or consumptive use of water in any designated water management area without first obtaining a permit from the commission. However, no permit shall be required for domestic consumption of water by individual users, and no permit shall be required for the use of a catchment system to gather water.” Haw. Rev. Stat. § 174C-48(a) (emphasis added). In areas such as the Taö aquifer where municipal systems comprise the vast majority of existing uses, exempting municipal uses from water use permitting requirements would nullify this Commission’s primary tool for managing water resources. Clearly, domestic and municipal uses were never meant to be one in the same.

4 We note that, although this case involves ground water, similar principles apply, and the Commission should avoid any artificial distinctions between ground and surface water. See Waiahole I, 94 Haw. at 177 n.90 (analogizing correlative rights to ground water to riparian rights in surface water); id. at 172-73 (rejecting artificial ground-surface distinction). See also id. at 180 n.95 (citing ground water statues from other states preserving the right of landowners to withdraw water for “domestic” uses, which would not extend to municipal uses).
may take from a private stream all the water it needs for the domestic use of its inhabitants is not generally accepted and is expressly denied in a number of cases." 2 J. Sackman, Nichols on Eminent Domain § 5.05[2][a][vii], at 5-247 (rev. 3d ed.) (citing cases). "A private riparian proprietor has no right at common law to divert water... for purposes of sale, and it would seem that a municipal or a public service corporation should stand in no better position." Id.

The reason for this differential treatment of domestic and municipal uses is not hard to discern. As the renowned jurist Roscoe Pound explained:

The law does not regard the needs and desires of the person taking the water solely to the exclusion of all riparian proprietors, but looks rather to the natural effect of his use of water upon the stream and the equal rights of others therein. The true distinction appears to lie between those modes of use which ordinarily involve the taking of small quantities, and but little interference with the stream, such as drinking and other household purposes, and those which necessarily involve the taking or diversion of large quantities and a considerable interference with its ordinary course and flow, such as manufacturing purposes.


The Commission's November 15 letter focuses on several points in the Waiāhole I decision as potential support for the idea of municipal uses being a public trust purpose. The letter emphasizes Waiāhole I's recognition of the "vital domestic uses of the general public." Id. at 2 (citing 94 Haw. at 137) (emphasis in letter). This excerpt, however, cannot be removed from its context. The Court used this phrase in the context of extending the trust's purpose from its "original intent" of preserving Native Hawaiian traditional and customary uses to its "broader sense" of protecting analogous uses of the public at large, i.e., non-Hawaiians and non-traditional users. 94 Haw. at 137. This does not establish that the Court meant to expand domestic uses to include municipal uses. On the contrary, the Court's actual holding simply states, in unmodified terms: "we recognize domestic water use as a purpose of the state water resources trust." Id. (emphasis added). We again note that Wai'ola involved municipal-type uses, yet the Supreme Court did not treat them as domestic, public trust uses.

The November 15 letter also examines the Court's citations, but again, these should not be read out of context and proportion. The Court cited this authority for general examples, not definitive rules. See 94 Haw. at 137 (citing the California and Minnesota statues with "see, e.g.," for the general proposition of domestic preference,
and using “cf.” (compare) in citing the Clifton case. The imagined implications of these generalized references do not control. Far more telling, and ultimately controlling, are the Court’s citations to Haw. Rev. Stat. § 7-1, the McBryde case, which the Court described as “comparing [§ 7-1] with authority in other jurisdictions recognizing riparian rights to water for domestic purposes,” and the Carter case, which the Court described as “granting priority to domestic use based on riparian principles and [§ 7-1].” Id. (emphasis added).

Analysis of Waiahole I must not lose sight of the forest for the trees. A larger view of the public trust purposes recognized in Hawai’i and other jurisdictions makes clear that these uses all involve maintaining the water source either in its natural state or without substantial impairment. See, e.g., 94 Haw. at 136-37. As explained above, the common definition of domestic use conforms to this unifying principle. Municipal uses, such as those proposed by MDWS for ‘Iao, may include aggregate domestic uses, but are otherwise qualitatively and quantitatively different because of their large-scale, consumptive, and diversionary nature. Inclusion of such uses (which include many other uses besides domestic, including commercial uses, and in most cases would drain a water source dry) as a public trust purpose would constitute an unprecedented, fundamental deviation from long-standing public trust principles.

Moreover, equating domestic and municipal uses would essentially resurrect the argument rejected by the California Supreme Court “Mono Lake” case that the public trust encompassed “all public uses,” including the municipal uses of the City of Los Angeles (termed “domestic” under California statute and in that case). See National Audubon Soc’y v. Superior Ct. of Alpine Cty., 658 P.2d 709, 723-24 (Cal. 1983) (cited in Waiahole I, 94 Haw. at 138). The National Audubon court declined to adopt such a “broad concept of trust uses,” maintaining that the “public trust is more than an affirmation of state power to use public property for public purposes. It is an affirmation of the duty of the state to protect the people’s common heritage of streams, lakes, marshlands, and tidelands[.]” Id. The Waiahole I decision adopted this reasoning without qualification. 94 Haw. at 138. Indeed, Waiahole I specifically acknowledged that “National Audubon involved diversions for a public purpose, the domestic uses of the City of Los Angeles.” Id. at 140. Yet, these “domestic”/municipal uses in National Audubon did not lead the Court to limit its embrace of that case in any

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5 The substance of the Clifton court’s holding was that the state held potable drinking water reserves in trust, 539 A.2d at 765; in other words, the court focused on the “scope” of the trust, and not the “uses” it protects. Cf. Waiahole I, 94 Haw. 133-35 (analogous section holding that the public trust doctrine applies to “all water resources,” including ground water). Clifton in no way suggested that a state could drain a stream, lake, or aquifer dry to serve municipal purposes.
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way. Notably, the court described these municipal uses as a “public purpose,” not a “public trust purpose.”

In short, Waiahole I came no closer than National Audubon to acknowledging municipal uses as a public trust purpose. Such a ruling would, indeed, eviscerate the public trust doctrine, reducing it to a generalized “public use” doctrine with no more meaning and effect than the clause of the Fifth Amendment of the same name. There is simply “no authority [that] supports this view of the public trust.” Id. at 138 (quoting National Audubon).

The ultimate point of all the foregoing is that, notwithstanding any general “public purpose” served by municipal uses, Waiahole I and other public trust precedent do not support including municipal uses as a “public trust purpose.” The reasoning of the Hawai‘i Supreme Court in Waiahole I applies with equal force here: “while the state water resources trust acknowledges that [public] use for [municipal purposes] may produce important public benefits and that such benefits must figure into any balancing of competing interests in water, it stops short of embracing [such] use as a protected ‘trust purpose.’” 94 Haw. at 138.

B. Waiahole I States The Standard For Municipal Use Applicants Under The Public Trust And Code.

The November 15 letter also points out that municipal uses are not “private commercial uses” discussed in Waiahole I. Of course, the only uses at issue in Waiahole I were private commercial uses,” so claiming that Waiahole I’s rulings refer only to those kinds of uses says little. Rather, the relevant categories that the Court identified were: (1) public trust uses; and (2) other uses, whether public or private. This dichotomy is fundamental to public trust law. See Waiahole I, 94 Haw. at 139 (“As commonly understood, the trust protects public waters ... against ... substantial impairment, whether for private or public purposes.” (citation and internal quotation marks omitted) (emphasis added)). As discussed above, municipal use is a public use, but not a public trust use. “Thus, insofar as the public trust, by nature and definition, establishes use consistent with trust purposes as the norm, or ‘default’ condition,” municipal uses, just as with any other publicly beneficial non-public trust uses like the agricultural uses in Waiahole I, are subject to a “higher level of scrutiny.” Id. at 142 (emphasis added). “In practical terms, this means that the burden lies with those seeking or approving such uses to justify them in light of the purposes protected by the trust.” Id.; see also Wai‘ōla, 103 Haw. at 441 (“An applicant for a water use permit bears the burden of establishing that the proposed use will not interfere with any public trust purposes; likewise, the Commission is duty bound to hold an applicant to its burden[].”).
The November 15 letter suggests that, although the Court declined to
differentiate among public trust uses, it would differentiate between non-public trust
uses, i.e., between private commercial and public uses. Nothing in the Court’s case law
supports this notion, and Waiahole I effectively disposes of it. 94 Haw. at 142
(maintaining that “the Commission inevitably must weigh competing public and
private water uses on a case-by-case basis”).

This does not mean, of course, that the Commission cannot consider the “definite
interest” of the public in uses for municipal, agricultural, or any other publicly
beneficial purposes and give such uses their due weight in decisionmaking. Id. at 141-
42, 138. It does mean applicants for municipal use such as MDWS must show that their
use will not interfere with any public trust purposes, and the Commission must hold
such applicants to their burden. Waiʻola, 103 Haw. at 441.

This understanding, it may be noted, comports with the underlying policies of
the public trust doctrine. Scholarship on the doctrine has recognized that the public
trust serves to protect uses of the “diffuse public” against the immediate desires of
“tightly organized groups with clear and immediate goals.” J. Sax, The Public Trust
556 (1970); cf. Waiahole I, 94 Haw. at 190 n.108 (recognizing the Code’s instream flow
provisions as a protection of “the inchoate public, including generations unborn”).
Municipal users have dedicated agencies to account and advocate for their needs. The
efforts of a handful of volunteer community members and public interest groups
notwithstanding, the same cannot be said for public trust resources and uses. Holding
municipal uses to the same requirements as other non-public trust uses thus makes
imminent sense.

Even if municipal uses could be differentiated from other non-public trust uses,
or municipal uses could be deemed a public trust use, nothing would effectively
change. The Commission would still bear an “affirmative duty to take the public trust
into account . . . and to protect public trust uses whenever feasible.” Waiahole I, 94
Haw. at 141. Even between public trust uses, it “must still ensure that all trust purposes
are protected to the extent feasible.” Id. at 142 n.43 (emphasis added). Thus, however
municipal uses were categorized, it would have to “consider the cumulative impact of
existing and proposed diversions on trust purposes and to implement reasonable
measures to mitigate this impact, including the use of alternative sources.” Id. at 143.

It must be emphasized that the foregoing addresses only the requirements of the
constitutional public trust. Apart from these requirements, the Code imposes a burden
on applicants for municipal uses such as MDWS. The Code does not grant municipal
uses any allocation priority, but requires municipal users to apply for water use permits like any other user. See also footnote 3, supra. Permit applicants “have the burden of justifying their proposed uses in light of protected public rights in the resource.” Id. at 160. Moreover, the Commission “is duty bound to hold [applicants] to its burden under the Code.” Wai`ola, 104 Haw. at 426. The standards for a permit under Haw. Rev. Stat. § 174C-49(a), particularly the requirement of “reasonable-beneficial use,” requires applicants, first, “to prove their own actual water needs.” Waiahole 1, 94 Haw. at 161. “Furthermore, besides advocating the social and economic utility of their proposed uses, permit applicants must also demonstrate the absence of any practicable mitigating measures, including the use of alternative water sources” -- a requirement that the Court deemed “intrinic to ... the definition of ‘reasonable-beneficial use’” and “an essential part of any balancing between competing interests.” Id.; see also In re Waiahole Combined Contested Case, 105 Haw. 1, 16 (2004) (reiterating these standards). These requirements essentially parallel those of the public trust and would likewise apply however “municipal” uses were categorized under the public trust.

Again, mahalo for this opportunity to share our mana`o on these important issues. Please don’t hesitate to contact us if you have any questions or require additional information.

Me ke aloha,

cc: Dr. Jonathan Likeke Scheuer
    Office of Hawaiian Affairs
    (via U.S. Mail)

Mr. Jim Williamson,
Maui Meadows Homeowners Association
(via U.S. Mail)

Mr. John V. Duey,
Hui o Na Wai `Ehā
(via U.S. Mail)
Yvonne Izu, Deputy Director  
Commission on Water Resource Management  
Department of Land and Natural Resources  
P.O. Box 621  
Honolulu, Hawai‘i 96809

RE: Questions raised regarding objections to Water Use Permit Applications in the ‘Iao Ground Water Management Area, Maui.¹

Dear Ms. Izu,

The Office of Hawaiian Affairs appreciates the opportunity to reply to your letter regarding issues raised at the hearing for the above referenced permits. We are also grateful to you for allowing us additional time beyond your requested response date to contemplate and react to your provocative questions. The issues raised are of significance to all the people of Hawai‘i, and to our beneficiaries and the people of Maui in particular. We are encouraged that the Commission wishes to engage in a thoughtful discussion of how each of us should shoulder our particular kuleana to protect the resources on which we all depend.

¹ Applications by:  
Hawaiian Commercial and Sugar Company for:  
‘Iao Tunnel (Well No. 5330-02, WUP No. 691, source TMKs 3-4-033:029 and 3-4-34, location of use TMKs 3-8-5,6,7: various);  
Maui County for:  
Waihee Wells 1 & 2 (Well Nos. 5431-02 & 03, WUP Nos. 695 & 696, source TMK 3-3-17:31, location of use TMKs unspecified and multiple);  
Waiehu Heights Wells 1 & 2 (Well Nos. 5430-011 & 002, WUP Nos. 697 & 698, source TMK 3-3-2:28, location of use TMKs unspecified and multiple);  
Kepaniwai Well (Well No. 5332-05, WUP No. 699, source TMK 3-3-3:5, location of use TMKs unspecified and multiple);  
Mokuhau Wells 1 & 3 (Wells Nos. 5330-09 & 11, WUP Nos. 700 & 701 source TMK 3-3-2:24, location of use TMKs unspecified and multiple);  
‘Iao Tunnel (Well No. 5332-02, WUP No. 680, source TMK 3-3-3:3, location of use TMKs unspecified and multiple);  
Waiehu Well 3 (Well No. 5431-04, WUP 703, source TMK No. 3-2-17:018, location of use TMKs unspecified and multiple); and  
Kehalani Mauka LLC for:  
Wailuku Shaft 33 (Well No. 5330-05, WUP 707, source TMK No. 3-5-1-1, location of use TMK Nos. 2-3-04-07, Parcel 2; 2-3-5-01, Parcels 1, 17, 60, 61, 63, and 66.
We have styled our analysis as responses to the assertions made and questions posed. For each issue, we first give the quote we are responding to, and then offer our analyses and answers as applicable.

1. Hawaiian Water Rights

A. “At the public hearing, Commissioner Miike opined that, while such rights are public trust purposes, they accrue to individuals.”

We begin our responses by noting that a key underlying assumption of Commissioner Miike’s line is correct, but only partially so. We are referring to the idea that traditional and customary rights solely “accrue to individuals.” This opinion of Commissioner Miike is key because it supports an implied line of reasoning that an individual holder of these rights must come forward, bear the burden of showing that they have these rights, and only then would a private commercial user and the Commission have the need to (or even be empowered to) consider these rights. The assumption is only partially correct, and therefore the line of reasoning is false in assuming that an individual must demonstrate their rights for the Commission to consider the issue. This is the case for the following reasons.

i. In Hawaiian tradition and custom, individual rights are integral with the rights of larger groups of Hawaiians; individuals do not hold rights solely or separately from the larger group. We first note that, self-evidently, traditional and customary rights exist in these islands because kanaka maoli developed these traditions and practices prior to the coming of any other group of people in the islands. Thus to meaningfully understand the basis for which later guarantees of traditional and customary rights were made, one must have an understanding of how these rights originated, were held, and were exercised prior to outside influence in the islands.

We do not here have the space or time to offer a full explanation of the background that supports such an understanding. What we will note is the fundamental point that individual and group traditional and customary rights are integral to each other. While it is unarguable that individual Hawaiians in ancient times exercised traditional and customary rights, most if not all practices, including practices around water such as building and maintaining ‘auwai, depended upon exercising the practices as part of a group. Indeed those practices could not be undertaken or the resource effectively managed without group effort. 2 It would be meaningless to consider one individual’s right to a practice without examining the rights of that person’s extended family and community.

ii. The Hawai‘i State Constitution does not guarantee or assign traditional and customary rights solely to individuals. The state constitutional provision that provides a guarantee of these rights implies in its wording that these rights are possessed by a whole group as well as individuals. Namely, the rights are possessed by at least the groups of ahupua’a tenants who are the descendants of native Hawaiians:

Section 7. The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua'a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights.

We first note that the wording of this section does not explicitly mention individuals and emphasizes the groups’ status. Compare it, for instance, to the specific heading of Article I, Section ii: “Rights of individuals.” Secondly and more importantly, we point out that these rights could not logically be held solely by individuals for the purposes said rights are exercised. The language acknowledges that the exercise of such rights are not only for subsistence purposes, but for cultural purposes. By definition, cultural purposes are related to the entire group of native Hawaiians.

iii. The Kuleana Act does not guarantee these rights solely to individuals. It is our observation that the most relevant law to our understanding of the guarantee of traditional and customary rights does not state that these rights only accrue solely to individuals. The language from the Kuleana Act of 1850, as it is incorporated into the Hawai‘i Revised Statutes (HRS 7-1), is key:

Where the landlords have obtained, or may hereafter obtain, allodial titles to their lands, the people on each of their lands shall not be deprived of the right to take firewood, house-timber, alo cord, thatch, or ki leaf, from the land on which they live, for their own private use, but they shall not have a right to take such articles to sell for profit. The people shall also have a right to drinking water, and running water, and the right of way. The springs of water, running water, and roads shall be free to all, on all lands granted in fee simple; provided that this shall not be applicable to wells and watercourses, which individuals have made for their own use.

We note that the translation of the Kuleana Act chosen by the legislature for incorporation into the HRS does not say, for instance, “...each individual person on their own land shall not be deprived of the right...,” but rather says “the people on each of their lands.” Later in the section the word “individuals” is used in reference to wells and watercourses, where they could have again used the word “the landlords” or “the people” if they meant to discuss wells or watercourses developed by a group. If traditional and customary rights were solely held by individuals, the language in this law would not make sense.

If these rights, however, are best understood as belonging both to individuals and the people, the language in the Kuleana Act makes sense. Individuals may exercise such rights, but the guarantee is in the Act so that the practices and the group of people who perpetuate those practices could continue into the future. Flowing from that intent is the need to guarantee these rights to individuals as part of the larger group.

This view is, of course, consistent with the overall purpose behind the passages of the acts collectively known as the Māhele, which was to benefit the commoner class as a group and the Nation as a whole, as well as give all citizens, including the King, clear title to land.3

Because traditional and customary rights are not solely held by individuals, the Commission or any other administrative agency can not and should not require a showing that any such rights

accrue to individuals. Referring to our discussion above when necessary, we now continue with our response.

B. "He believes it is clear that, when such rights exist, private commercial uses must overcome the presumption in favor of trust purposes. But who has the burden of showing that such rights exist in the first place? And does only an assertion that such rights exist, without a showing that specified individuals have such rights, require private commercial uses to overcome a presumption in favor of such asserted rights?"

i. Traditional and customary rights to water must be assumed to exist throughout 'Iao and everywhere in the islands as a matter of fact and law. To begin our examination of this section of your letter, we need to highlight the phrase "when such rights exist." Not only do such rights accrue to more than individuals, but such rights as a matter of law and fact, clearly exist throughout the 'Iao Ground Water Management Area. In the recent petition by Earthjustice on behalf of Hui o Nā Wai 'Eha seeking amendment of the interim instream flow standards for streams including those that fall in this area, information has already been provided to the Commission that details the cultural and historical significance of water in this area, including information on population, heiau, and springs. Beyond that evidence, the fact that thousands of Hawaiians lived in this area for hundreds of years developing and practicing custom and tradition is generally known and does not need citation.

Beyond the specific area considered with these WUPA, we must note that the proper question when the Commission considers a WUPA is not to ask whether these rights exist. These rights exist across the islands as a matter of tradition and custom. They were later guaranteed by the state constitution (Article XII, Section 7) and law (HRS 1-1, HRS 7-1, and in specific relation to water, in HRS 174C-101). Indeed, because of the obligation placed on state agencies by this constitutional provision and statutes cited, there is a burden on agencies to demonstrate in any area that these rights do not exist if that is the position they desire to pursue.

ii. Not even assertion is necessary. Because traditional and customary rights must be assumed to exist in all areas of the island as a matter of fact and law, the idea that specific rights need to be "asserted" in order to be considered in the water use permitting process is, to us, nonsensical. While we at OHA are compelled by our kuleana to remind the Commission and applicants of their duties, we or any individual or group need not "assert" rights which clearly exist as a matter of law.

iii. An individual showing of rights is not necessary. As noted above, traditional and customary rights do not accrue solely to individuals or exist only in places where proven. Therefore, while showing that "specified individuals have such rights" can be useful understand some interests involved, it is not a required trigger for having the Commission and applicant(s) assume their burden. However, if an individual who also possesses such rights appeared before the Commission on a WUPA, they would have standing to do so.

iv. The Commission and the Applicant have an affirmative duty to determine the extent of these rights. Given the above points, we feel there are other questions which would better guide all of us to understanding our own particular kuleana in protecting rights and the resource during the WUPA process. Some of these questions are: Who has the burden of inventorying the traditional and customary Hawaiian rights in an area? How would having an updated Hawai'i Water Plan
aid applicants in undertaking the work they have to meet their burden? What kind of efforts and evidence should the Commission consider as adequate when an applicant submits required information?

In response to these questions, two recent Hawai‘i Supreme Court cases rule.

In Wai‘ola (re Wai‘ola o Moloka‘i, Inc. 103 Haw. 401 (2004)), which addressed an issue quite similar to that in ‘lao, the court bound the Commission and the applicant to actively search for information regarding the impact of the proposed use on traditional and customary rights. The court ruled (442) that "the absence of evidence that its [the applicant’s] proposed use would affect native Hawaiians’ rights was insufficient to meet the burden imposed by the public trust doctrine, the Hawai‘i Constitution, and the Code."

As to what specific findings would prove sufficient, the Hawai‘i Supreme Court offers binding guidance in Ka Pa‘akai. There they addressed the need of the Land Use Commission (LUC) to protect the reasonable exercise of customarily and traditionally exercised rights of native Hawaiians to the extent feasible. The court noted (Ka Pa‘akai o ka ‘Aina et al. v. Land Use Commission et al., 94 Haw. 47-49 (2000) (footnotes omitted)):

Article XII, section 7 of the Hawai‘i Constitution obligates the LUC to protect the reasonable exercise of customarily and traditionally exercised rights of native Hawaiians to the extent feasible when granting a petition for reclassification of district boundaries. See PASH, 79 Haw. at 450 n.43, 903 P.2d at 1271 n.43 (emphasis added). In order for the rights of native Hawaiians to be meaningfully preserved and protected, they must be enforceable. In order for native Hawaiian rights to be enforceable, an appropriate analytical framework for enforcement is needed. Such an analytical framework must endeavor to accommodate the competing interests of protecting native Hawaiian culture and rights, on the one hand, and economic development and security, on the other...

We therefore provide this analytical framework in an effort to effectuate the State’s obligation to protect native Hawaiian customary and traditional practices while reasonably accommodating competing private interests: In order to fulfill its duty to preserve and protect customary and traditional native Hawaiian rights to the extent feasible, the LUC, in its review of a petition for reclassification of district boundaries, must -- at a minimum -- make specific findings and conclusions as to the following: (1) the identity and scope of “valued cultural, historical, or natural resources” in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area; (2) the extent to which those resources -- including traditional and customary native Hawaiian rights -- will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken by the LUC to reasonably protect native Hawaiian rights if they are found to exist.

We have no reason to conclude that the constitutional burden on CWRM to consider these rights is any less than that held by the LUC, or that the analytical framework offered is inapplicable.

So what might be adequate in this case as a response to the requirements set forth in Ka Pa‘akai and Wai‘ola? Here we note that in Earthjustice’s response to these same questions we address here in this letter, they point out that the work of the applicant would be greatly reduced if the Commission had by this point fully completed the duties assigned to them by the Code. They also suggest a number of ways the applicant and the Commission could undertake such a study. We agree with the points they raise and will not restate them here.
C. "Does the Commission have the authority to recognize traditional and customary and Native Hawaiian rights in a water use permit application or in a contested case hearing, or do those asserting such rights have to obtain a ruling from the state courts before the Commission can consider them in the water permitting process?"

Because of all of the reasons we mention above, drawing special attention to the language cited in Ka Pa‘akai and Wai‘ola, we feel it is clear that the Commission has the authority and duty to examine the extent to which these rights exist and are practiced in the ‘Iao Ground Water Management Area. We hope that the Commission begins to affirmatively do so; it will be of great assistance not only to us but to all WUP Applicants who desire a greater level of certainty in the process.

2. "Domestic Use", "Public Trust"

Commissioner Miike also asked whether uses by the MDWS are public trust purposes? If so, then there is no presumption in favor of other trust purposes. If it is not a public trust purpose (or only partly so; i.e., drinking water) it is also not a private commercial use. Then what level of scrutiny should its water use permit applications be subject to?"

While we appreciate that our objections to these permits has raised the general issue of municipal v. domestic use, we believe in general the issue has already been asked and answered in Hawai‘i law. We here again join in the discussions of this issue raised by Earthjustice in their response to these same questions. We also offer the following observations.

i. Maui County’s Department of Water Supply does not and apparently can not separate out domestic and non-domestic uses, but they should be required by the Commission to do so. We are unaware of any means the MDWS currently has to distinguish in detail and amount the kinds of uses encompassed by their municipal applications. Because this is the case, it would be illogical to let their industrial and commercial uses “piggyback” on their provision of domestic supplies when considering their WUPA. Carried to its logical extent, such an argument would allow any private commercial user avoid their evidentiary burdens simply by providing a little domestic water as part of their development.

What would be more appropriate in this case would be to require MDWS to provide some estimate of the different uses in their system. They also would then need to show how, in the case of shortage, they would protect domestic, public trust uses before serving their non-public trust uses. Indeed, in their letters to us and in their WUPA, they seem to indicate they desire to understand better their different system uses. We however must note that over 120 years ago, absent of an ability to separately meter domestic and non-domestic use, the city of Honolulu was able to create a legally acceptable management and regulatory scheme to protect domestic uses in its system while curtailing non-domestic uses and respecting other water claimants in their source area. We consider this example below.

ii. A municipal purveyor has the authority and duty to restrict its non-public trust uses when its supplies are restricted due the competing and superior demands of other uses. We believe Hawaii’s courts have already distinguished between the different kinds of uses in municipal systems, discussed how they weigh against competing demands of others outside the municipal
system, and the affirmed duty and authority of municipal purveyors to manage in this kind of environment. We draw your attention to Riemensneider v. Wilson 6 Haw. 375 (1882).

In this case the plaintiff, Riemensneider, was a Honolulu municipal water user. A scarcity of water in Honolulu had led the government to restrict the times when individual households could irrigate landscaping. The plaintiff continued to irrigate in a manner afool of the restrictions, and his service was suspended. Riemensneider subsequently filed a writ of mandamus to the Hawai‘i Supreme Court to order the city to turn his water on again.

The plaintiff lost, and the court’s ruling and reasoning is particularly applicable to the situation in ʻIao. The court found the city had a legitimate need and a right to restrict water usage and could restrict the non-domestic uses of the plaintiff (379):

I have indicated that the Government has a right to make reasonable rules and regulations in respect to the water works and the supply of water to the inhabitants. The exercise of this authority is necessary for the public benefit, and in order to enable the Government properly to fulfil its obligations in distributing the water as fairly as may be possible. In times of water famine all [municipal users] must suffer reduction alike, and the Government then has the right to restrict the use of water by ratepayers, commencing the reduction with the least necessary use of water, i.e. irrigation [of residential landscaping].

Part of the court’s reasoning that justified this decision was that other protected uses outside of the City’s control restricted the City’s municipal water supply. Referring to the lower and upper Nu‘uanu reservoirs that supplied the system and the superintendent (Wilson) who controlled the City’s system, the court noted (378):

Moreover, he [Wilson] could not fill the lower reservoir nights because it interfered with the gas machines run by the water from the upper reservoir, and he had further difficulty in drawing off the water from the upper reservoir, as certain persons having kalo patches and lands between the two reservoirs, which had the privilege of riparian proprietors from the stream which supplies both reservoirs, would become short of water, unless the overflow from the upper reservoir was allowed to pass back into the stream for their benefit.

In other words, the municipal system in this case did not respond to the competing demands for use within its own system and the outside, superior claims to water itself competed with, by claiming it had a protected right and ignoring those with superior claims. Rather (and uncontested by the court), the purveyor properly restricted its own diversion and subsequently restricted the non-domestic, non public trust uses of its ratepayers. Furthermore, the court upheld the enforcement of these restrictions, even when that enforcement resulted in the cutting off of domestic water use by the plaintiff, because the system was not set up to cut off only irrigation.

Today, of course, we understand that kalo would be entitled to water as a traditional and customary use protected by the public trust, in addition to having riparian and appurtenant rights. We see this case as illustrative of what the County needs to do in this instance: understand the protected uses it is affecting and restrict its deliveries if necessary, prioritizing the public trust uses over non-public trust uses. The Commission should order it to do so.
Once again, we appreciate the creation of an open discussion on these issues and thank you for the opportunity to offer these comments. If you have further questions, please contact Dr. Jonathan Scheuer at 594-1946 or email him at jonathans@oha.org.

Sincerely,

Clyde W. Nāmuʻo
Administrator

Cc: Kapua Sproat Esq.
Earthjustice
223 South King Street, Suite 400
Honolulu, Hawaiʻi 96813
Ms. Jane E. Lovell, Esq.
County of Maui
Department of the Corporation Counsel
200 South High Street
Wailuku, HI 96793

Dear Ms. Lovell:

Transmission of Water Use Permit Files
Iao Water Management Area, Maui

Thank you for your help in providing the Commission with public access to our files concerning water use permit documentation for existing users in the Iao ground water management area.

The copying of the captioned files has been completed, and is up-to-date as of November 30, 2004. There are 11 folders weighing about 12 pounds, which would be expensive to ship, so we are arranging for a department staff person to convey them to Wailuku Public Library as soon as possible.

Items of the record from December 1, 2004 will be separated in our files, and may be compiled by interested parties, or may be arranged for shipment as may be convenient.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.

Sincerely,

YVONNE Y. IZU
Deputy Director

CI:ss
Mr. George Tengan, Director  
County of Maui  
Department of Water Supply  
200 South High Street  
Wailuku, HI 96793  

Dear Mr. Tengan:

Water Use Application Information  
Waihee Wells (5431-02 to 04), Waiehu Heights Wells (5430-01 & 02),  
Mokuhau Wells (5330-09 & 11), Kepaniwai Well (5332-05), Iao Tunnel (5332-02)

Following adjournment of the still-open public hearing convened on October 28, 2004,  
the Commissioners appointed to conduct the hearing are requesting additional information from all applicants.

Accommodating Need with Available Resource  

One objection to your water use permit applications is the lack of an estimate of the effectiveness of conservation or alternative source development would have on reducing demand from the aquifer.

As part of the evaluation of the reasonable and beneficial criteria, we request the following:

1) Has your department evaluated the impact of its conservation program on individual and overall demand?  

2) Does your department have a budget schedule of identified alternative (non-Iao ground water) source development that shows a probable meeting of projected demand (which currently exceeds projected supply) by a given date?

The Commission is aware that the designation process has unfolded in large part due to the concentration of pumpage in a limited area rather than to exceedence of the sustainable yield, and that a current study being conducted by the U.S. Geological Survey (USGS) is intended to improve understanding of the aquifer to the benefit of optimal pumping operations management.
Public Trust for Domestic Use

On a related subject, the definition of "domestic use," as used by the Supreme Court, is subject to clarification. It could conceivably mean general public use of potable water for drinking and sanitation, which could extend beyond household use to municipal activities at parks and schools, as well as sanitation throughout the panoply of municipal uses. Have your analyses achieved any insight on what proportion might represent basic potable requirements versus irrigation or industrial requirements?

Public Trust Purposes and Hawaiian Rights

Commissioner Miike asked for opinions from various parties concerning who may bear the burden of proof concerning public trust purposes, such as the traditional and customary and other Native Hawaiian water rights. These fall within what may be generally called the public interest, defined by the Water Code to include additional purposes. Your initial application addressed the public interest by identifying the public utility service area, a municipal system that includes probably most, if not all the public interests mentioned by the Water Code. It does not address Native Hawaiian water rights per se, but you have commented to OHA that OHA was in a better position to assess this issue. Does the County feel it bears no responsibility for addressing potential Native Hawaiian water rights that may be affected by the County's use of ground water supplying its service system?

DHHL Reservations

We understand that your Department not only serves existing Department of Hawaiian Home Lands (DHHL) residential projects but has also issued water meter reservations for projects not yet served by the County system. The DHHL request for a ground-water reservation from lao Aquifer does not distinguish between projects already served, projects with meter reservations, and other projects yet to receive discretionary approvals. Your reply to the notice of the reservation request notes the meter reservations and indicates that future needs will be given priority. While the Commission has not yet acted on the request for ground-water reservations from lao, we would be inclined to recommend that such reservations would apply only to projects not yet served. Our question is whether the County's commitment to issue meters is revocable or otherwise subject to further decision-making.

Sincerely,

[Signature]

[VONNE Y. IZU]
Deputy Director

Cl:ss
November 18, 2004

Mr. George Y. Tengan, Director  
County of Maui  
Department of Water Supply  
200 South High Street  
Wailuku, HI 96793  

Dear Mr. Tengan:

Central Maui Ground Water Production – Summary of Recent Findings

Thank you for your letter dated October 7, alerting the Commission to inaccuracies in water use reporting from the Central Maui Service Area from around January 2001, with a maximum discrepancy in November 2003 overstating the total production for the Central System at about 1.3 mgd.

We appreciate your efforts to correct the pumpage data. At this point, the Commission does not wish to separately examine the evidence of inaccuracies, but to rely upon your professional judgment in correcting them. We will look forward to a timeline of receiving corrected information.

We are deeply concerned that this proceeds in a timely way, as significant resources have been invested in developing a ground water model for this area by yourselves and the U.S. Geological Survey. The study absolutely depends on accurate information. Furthermore, your applications for water use permits are absolutely dependent upon accurate information. Finally, requests for use of surface water are also dependent upon accurate ground water information, either from potential interactions (from a source development perspective) or combinations (from an end use perspective) with ground water.

Please call on us if we can assist in any way. If you have any questions, please call Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.

Sincerely,

Yvonne Y. Izu  
Deputy Director
November 15, 2004

Ms. Kapua Sproat  
Earthjustice  
223 South King St., Ste. 400  
Honolulu, HI 96813

Dear Ms. Sproat:

Water Use Permit Applications, Iao Aquifer, Maui  
Public Trust Burden

Following adjournment of the still-open public hearing convened on October 28, 2004, the Commissioners appointed to conduct the hearing are requesting additional information from objectors as well as applicants.

Hawaiian Water Rights

Your objections to water use permit applications for ground water from Iao Aquifer on Maui raised the issue of addressing traditional and customary and Native Hawaiian water rights, specifically saying that the applications had failed to provide information sufficient to evaluate the requirements of the Supreme Court’s ruling in Waiahole concerning these matters.

At the public hearing, Commissioner Miike asked the various parties for their opinion on who has the burden of proof as to whether or not traditional and customary and Native Hawaiian rights exist. Commissioner Miike opined that, while such rights are public trust purposes, they accrue to individuals. He believes it is clear that, when such rights exist, private commercial uses must overcome the presumption in favor of trust purposes. But who has the burden of showing that such rights exist in the first place? And does only an assertion that such rights exist, without a showing that specified individuals have such rights, require private commercial uses to overcome a presumption in favor of such asserted rights? Does the Commission have the authority to recognize traditional and customary and Native Hawaiian rights in a water use permit application or in a contested case hearing, or do those asserting such rights have to obtain such a ruling from the state courts before the Commission can consider them in the water permitting process?
“Domestic Use”, “Public Trust”

Commissioner Miike also asked whether uses by the MDWS are public trust purposes? If so, then there is no presumption in favor of other trust purposes. If it is not a public trust purpose (or only partly so; i.e., drinking water), it is also not a private commercial use. Then what level of scrutiny should its water use permit applications be subject to?

The Code defines “municipal use” as “the domestic, industrial, and commercial use of water through public services available to persons of a county for the promotion and protection of their health, comfort, and safety, for the protection of property from fire, and for the purposes listed under the term ‘domestic use.’”

At the public hearing, Commissioner Miike commented that “domestic use” was personal use, relying on the definition in the Water Code ("any use of water for individual personal needs and for household purposes such as drinking, bathing, heating, cooking, noncommercial gardening, and sanitation").

However, in reviewing the Court’s Waiāhole I decision, he noted that the Court refers to “the vital domestic uses of the general public (emphasis added)” (94 Haw. 97, 137) as a public trust purpose of the use of the state’s freshwater resources. The Court cited the California and Minnesota water codes, as well as Clifton v Passaic Valley Water Comm’n, 539 A.2d 760,765 (1987). The California code states that “domestic use is the highest use,” while the Minnesota code states that “first priority (is) domestic water supply, excluding industrial and commercial uses of municipal water supply.” Neither code defines “domestic use.” Clifton states: “Potable water, then, is an essential commodity which every individual requires in order to sustain human existence...residents in urban and suburban areas are dependent upon the agency or institution which supplies potable water...the public trust doctrine applies with equal impact upon the control of our drinking water reserves.” The Court in Waiāhole I “prescribes a ‘higher level of scrutiny’ for private commercial uses (emphasis added)” (94 Haw. 97, 142).

We look forward to your comments to the above analyses and responses to the questions posed. We would appreciate receiving a response by December 10, 2004.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251.

Sincerely,

[Signature]

YVONNE Y. IZU
Deputy Director

CI:ss

c: Clyde Namuo, Office of Hawaiian Affairs
November 15, 2004

Mr. Clyde Namuo, Administrator
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Ste. 500
Honolulu, HI 96813

Dear Mr. Namuo:

Water Use Permit Applications, Iao Aquifer, Maui
Public Trust Burden

Following adjournment of the still-open public hearing convened on October 28, 2004, the Commissioners appointed to conduct the hearing are requesting additional information from objectors as well as applicants.

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At the public hearing, Commissioner Miike asked the various parties for their opinion on who has the burden of proof as to whether or not traditional and customary and Native Hawaiian rights exist. Commissioner Miike opined that, while such rights are public trust purposes, they accrue to individuals. He believes it is clear that, when such rights exist, private commercial uses must overcome the presumption in favor of trust purposes. But who has the burden of showing that such rights exist in the first place? And does only an assertion that such rights exist, without a showing that specified individuals have such rights, require private commercial uses to overcome a presumption in favor of such asserted rights? Does the Commission have the authority to recognize traditional and customary and Native Hawaiian rights in a water use permit application or in a contested case hearing, or do those asserting such rights have to obtain such a ruling from the state courts before the Commission can consider them in the water permitting process?
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We look forward to your comments to the above analyses and responses to the questions posed. We would appreciate receiving a response by December 10, 2004.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251.

Sincerely,

YVONNE Y. IZU
Deputy Director

Cl: ss

c: Kapua Sproat, Earthjustice
November 4, 2004

To: Attendees of October 28, 2004 Public Hearing on Water Use Permits in the Iao Ground Water Management Area

Dear Attendee:

Clarification of by Hearing Officer Lawrence Miike Regarding Domestic Use

Attached for your perusal is a memo from the hearing officer to those parties in attendance at the public hearing.

If you have any questions, please do not hesitate to call Roy Hardy at 587-0274 or toll-free at 984-2400, extension 70274.

Sincerely,

YVONNE Y. IZU
Deputy Director

RH: ss
Attachments
November 3, 2004

Roy/Charlie:

Could you send this on to the parties as a correction of what I said about the definition of “domestic use” at the public hearing?

At the public hearing, I made a comment that “domestic use” was personal use, relying on the definition in the Water Code (“any use of water for individual personal needs and for household purposes such as drinking, bathing, heating, cooking, noncommercial gardening, and sanitation”).

However, in reviewing the Court’s Waiahole I decision, it refers to “the vital domestic uses of the general public (my emphasis)” as a public trust purpose of the use of the state’s freshwater resources.

The Code defines “municipal use” as “the domestic, industrial, and commercial use of water through public services available to persons of a county for the promotion and protection of their health, comfort, and safety, for the protection of property from fire, and for the purposes listed under the term ‘domestic use.’”

So it could be argued that a municipal water system is a public trust purpose, or at the least, that municipal uses include a public trust purpose or that they collectively have higher priority than other uses because they are being provided “through public services available to persons of a county.”

As for remedies, in Reppun v Board of Water Supply, the Court concluded that “the public use of water, once that use has clearly attached, should be continued in order to avoid the harsh consequences of interruption.” There can be remedies if the water was improperly diverted, but they would not include stopping the diversion (e.g., if the diversion was improper, perhaps monetary damages would be relevant).

Larry Miike

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1 94 Hawai‘i 97, 137; 9 P.3d 409, 449.
2 65 Hawai‘i 531, 560; 656 P.2d 57 (1982).
public trust uses of waters in their natural state, courts have recognized the distinct public interest in resource protection. As explained by the California Supreme Court:

[O]ne of the most important public uses of the tidelands -- a use encompassed within the tidelands trust -- is the preservation of those lands in their natural state, so that they may serve as ecological units for scientific study, as open space, and as environments which provide food and habitat for birds and marine life, and which favorably affect the scenery and climate of the area.

National Audubon, 658 P.2d at 719 (quoting Marks v. Whitney, 491 P.2d 374, 380 (Cal. 1971)) (emphasis added). Thus, with respect to the lake ecosystem involved in that case, the court held that the public trust protected values described as "recreational and ecological -- the scenic views of the lake and its shore, the purity of the air, and the use of the lake for nesting and feeding by birds." Id.

This court has likewise acknowledged resource protection, with its numerous deriviative public uses, benefits, and values, as an important underlying purpose of the reserved water resources trust. See Robinson, 65 Haw. at 674-76, 658 P.2d at 310-11 (upholding the public interest in the "purity and flow," "continued existence," and "preservation" of the waters of the state). The people of our state have validated resource "protection" by express constitutional decree. See Haw. Const. art. XI, §§ 1 & 7. We thus hold that the maintenance of waters in their natural state constitutes a distinct "use" under the water resources trust. This disposes of any portrayal of retention of waters in their natural state as "waste." See Reppun, 65 Haw. at 560 n.20, 656 P.2d at 76 n.20 (citing article XI, section 1 as an acknowledgment of the public interest in "a free-flowing stream for its own sake").

Whether under riparian or prior appropriation systems, common law or statute, states have uniformly recognized domestic uses, particularly drinking, as among the highest uses of water resources. See, e.g., Restatement (Second) of Torts § 850A cmt.
c (1979) [hereinafter Restatement (Second)] (preference for domestic, or "natural," uses under riparian law); Cal. Water Code § 1254 (West 1971) ("domestic use is the highest use"); Minn. Stat. Ann. § 103G.261(a)(1) (West 1997) (domestic use given first priority). This jurisdiction presents no exception. In granting individuals fee simple title to land in the Kuleana Act, the kingdom expressly guaranteed: "The people shall . . . have a right to drinking water, and running water . . . ." Enactment of Further Principles of 1850 § 7, Laws of 1850 at 202 (codified at HRS § 7-1 (1993)). See also McBryde, 54 Haw. at 191-98, 504 P.2d at 1341-44 (comparing section 7 of the Kuleana act with authority in other jurisdictions recognizing riparian rights to water for domestic uses); Carter v. Territory, 24 Haw. 47, 66 (1917) (granting priority to domestic use based on riparian principles and section 7 of the Kuleana Act). And although this provision and others, including the reservation of sovereign prerogatives, evidently originated out of concern for the rights of native tenants in particular, we have no doubt that they apply today, in a broader sense, to the vital domestic uses of the general public. Accordingly, we recognize domestic water use as a purpose of the state water resources trust. Cf. Clifton v. Passaic Valley Water Comm'n, 539 A.2d 760, 765 (N.J. Super. Ct. Law Div. 1987) (holding that the public trust "applies with equal impact upon the control of drinking water reserves").

In acknowledging the general public's need for water, however, we do not lose sight of the trust's "original intent." As noted above, review of the early law of the kingdom reveals the specific objective of preserving the rights of native tenants during the transition to a western system of private property. Before the Māhele, the law "Respecting Water for Irrigation" assured native tenants "their equal proportion" of water. See Laws of 1942, in Fundamental Laws of Hawaii 29 (1904). Subsequently, the aforementioned Kuleana Act provision ensured
PUBLISHING AREA
Applications for Water Use Permits
Iao Ground Water Management Area, Maui

The following applications for water use permits to continue uses existing as of July 21, 2003 have received objections and are subject to public hearing. The Commission on Water Resource Management, at its regular meeting on September 22, 2004, approved a hearing now scheduled to begin:

October 28, 2004, 10:00 a.m.
J. Walter Cameron Center
95 Mahalani Street, Wailuku, Hawaii 96793

The hearing will be conducted in two parts: first, applications accepted as complete by the July 21, 2004 one-year filing deadline.

<table>
<thead>
<tr>
<th>Well Name</th>
<th>Well No.</th>
<th>Applicant</th>
<th>WUPA No.</th>
<th>TMK</th>
<th>Requested amount (mgd)</th>
</tr>
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<tbody>
<tr>
<td>Wailuku Shaft 33</td>
<td>5330-05</td>
<td>Kehalani*</td>
<td>707</td>
<td>3-5-1:1</td>
<td>5.771</td>
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<td>MDWS</td>
<td>701</td>
<td>3-3-2:24</td>
<td>2.221</td>
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<td>3-3-2:28</td>
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<td>Waiehu Well 3</td>
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<td>MDWS</td>
<td>703</td>
<td>3-3-17:31</td>
<td>1.513</td>
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<td>Iao Tunnel</td>
<td>5332-02</td>
<td>DWS</td>
<td>680</td>
<td>3-3-3:3</td>
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<td>Kehalani Mauka, LLC (Kehalani)</td>
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<td>MDWS</td>
<td>599</td>
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<tr>
<td>Iao Tunnel</td>
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<td>HC&amp;S</td>
<td>691</td>
<td>3-4-34:34</td>
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<td><strong>Total from all sources</strong></td>
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Second, the hearing will entertain applications to continue known existing uses that were filed incomplete by the July 21, 2004 one-year filing deadline, and an application for a new use that was completed by the July 21, 2004 deadline for existing uses:

<table>
<thead>
<tr>
<th>Well Name</th>
<th>Well No.</th>
<th>Applicant</th>
<th>WUPA No.</th>
<th>TMK</th>
<th>Requested amount (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wailuku Shaft 33</td>
<td>5330-05</td>
<td>MDWS**</td>
<td>702</td>
<td>3-5-1:1</td>
<td>5.771</td>
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<tr>
<td>War Memorial Stadium</td>
<td>5329-04</td>
<td>MP&amp;R</td>
<td>709</td>
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<td>MP&amp;R</td>
<td>713</td>
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<tr>
<td>Waiehu Golf 1</td>
<td>5530-03</td>
<td>MP&amp;R</td>
<td>708</td>
<td>3-2-13:29</td>
<td>0.324</td>
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<tr>
<td>Waiehu Golf 2</td>
<td>5530-04</td>
<td>MP&amp;R</td>
<td>714</td>
<td>3-2-13:29</td>
<td>0.324</td>
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<tr>
<td>Black George Tunnel</td>
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<td>HC&amp;S</td>
<td>685</td>
<td>3-3-3:3</td>
<td>0.020</td>
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<tr>
<td>Iao Needle Tunnel 1</td>
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<td>HC&amp;S</td>
<td>684</td>
<td>3-3-3:3</td>
<td>0.020</td>
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<tr>
<td>Iao Needle Tunnel 2</td>
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<td>HC&amp;S</td>
<td>686</td>
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<td>LWLF</td>
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<td></td>
<td>&gt;6.890</td>
</tr>
</tbody>
</table>

**Competing applications – do not double count.

Applicants:

- Maui County Department of Water Supply (MDWS)
- Maui Department of Parks & Recreation (MP&R)
- Hawaiian Commercial & Sugar (HC&S)
- Kehalani Mauka, LLC (Kehalani)
- Living Waters Land Foundation (LWLF)

The hearing may be left open to allow for additional information as may be requested by Commissioners. If, during the course of the hearing, a contested case hearing is requested, the requester will be required to complete a written request, identifying HRS §174C-50(b) for existing uses or §174C-49(a) for new uses as the authority under which the action is to be made. The following may be admitted as a party to a contested case hearing: persons within the Iao Water Management Area with a property interest, who reside on the land, or can otherwise demonstrate that they will be so directly and immediately affected by the proposed water uses that their interest is clearly distinguishable from that of the general public; others who can show a substantial interest in the matter and can substantially assist the Commission in its decision making; agencies whose jurisdiction includes the land or water in question.

COMMISSION ON WATER RESOURCE MANAGEMENT

Dated: October 7, 2004

Publish in: Maui News issue of October 12, 2004
STAFF SUBMITTAL

for the meeting of the

COMMISSION ON WATER RESOURCE MANAGEMENT

September 22, 2004
Honolulu, Hawaii

Maui Departments of Water Supply and Parks & Recreation
Hawaiian Commercial & Sugar Company
Kehalani Mauka, LLC

APPLICATIONS FOR WATER USE PERMITS
Iao Tunnel, Waihee Wells 1-3, Waiehu Heights Wells 1 & 2, Kepaniwai Well,
Mokuhau Wells 1 & 3, Wailuku Shaft 33
Existing Uses Only
Iao Ground Water Management Area, Maui

APPLICANT 1:
Maui Department of Water Supply
200 South High Street
Wailuku, HI 96793

APPLICANT 2:
Hawaiian Commercial & Sugar Company
P.O. Box 791628
Paia, HI 96779

APPLICANT 3:
Maui Department of Parks & Recreation
700 Hali’a Nakoa Street, Unit 2
Wailuku, HI 96793

APPLICANT 4:
Kehalani Mauka, LLC
1100 Alakea Street, 27th Floor
Honolulu, HI 96813

SUMMARY OF REQUEST:

Authorize a subcommittee of Commissioners to convene and take testimony at a public hearing on
Maui concerning water use permits for existing use only for reasonable-beneficial use of ground water
from the Iao Aquifer.

LOCATION MAP: See Exhibit 1

BACKGROUND:

July 16, 2003 The Commission designated the Iao Aquifer as a ground-water management area,
effective July 21, 2003, coincident with a public notice announcing it.

July 21, 2003 Public notice was issued, requiring all existing uses to be continued only upon
application for a water use permit. A one-year deadline was given, until July 21,
2004, to file applications.
<table>
<thead>
<tr>
<th>Well No.</th>
<th>Well Name</th>
<th>Owner</th>
<th>Yr</th>
<th>Case Dia.</th>
<th>Depth (msl)</th>
<th>Initial W.L.</th>
<th>Initial Cl-</th>
<th>Use</th>
<th>WUPA Submitted</th>
<th>Complete WUPA</th>
<th>Amount Request</th>
<th>Aquifer Type</th>
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<td>5330-02</td>
<td>Iao Tunnel</td>
<td>HC &amp; S Co</td>
<td>1900</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>IRR</td>
<td>2/27/04</td>
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<td>1967</td>
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<td>16</td>
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<td>*</td>
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<td>*</td>
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<td>676.5</td>
<td>25</td>
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<td>Maui DWS</td>
<td>1975</td>
<td>14</td>
<td>-338</td>
<td>18</td>
<td>52</td>
<td>MUN</td>
<td>5/20/04</td>
<td>5/20/2004</td>
<td>0.165</td>
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Totals: 16.998 basal
2.501 dike
1.48 caprock
1.513 surface discharge

DHHL Reservation Request

existg 0.305
new   1.812
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<tr>
<th>Code</th>
<th>Location</th>
<th>Company/Owner</th>
<th>Year</th>
<th>Zone</th>
<th>Discharge (m³/day)</th>
<th>Type</th>
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<td>State Dowald</td>
<td>1975</td>
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<td>5430-05</td>
<td>Waiehu Deep</td>
<td>State Gwm</td>
<td>1982</td>
<td>10</td>
<td>-1020</td>
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<td>5431-01</td>
<td>Waiehu TH-B</td>
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<td>2</td>
<td>-66</td>
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<td>5529-01</td>
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<td>U.S.G.S.</td>
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<td>-8</td>
<td>2</td>
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<td>5530-01</td>
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<td>1942</td>
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<td>OBS</td>
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<td>5530-02</td>
<td>Waiehu TH</td>
<td>Wailuku Agribusiness Co., In</td>
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<td>16.64</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>surface discharge</td>
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</table>
"Main flows SF use 31% lower than av. Kīhei, 70% than Waikapū." (1)

Lawyers duel!!

- Seepage runs in stream - when did this come about? Ed know about this? No. It's good RBI breakdown pg 4 looks like part of the USGS - DWS study.
- They keep amening 19ka applies - both applicants to object. 164
September 17, 2004

Peter T. Young, Chairperson
Yvonne Y. Izu, Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Re: Objection to application for Water Use Permit for Maui Department of Water Supply for the Waihee Well 3 (Well No. 5431-04, source TMK 3-2-17:018)

Dear Chairperson Young and Deputy Director Izu:

This is in response to Earthjustice’s objection of September 2, 2004 to the above-mentioned Water Use Permit Application. We received the objection on September 7, 2004. We request that we be allowed to supplement our response as needed within ten days of receipt. We will make our best efforts to finalize our response by September 21, 2004.

Earthjustice Objection 1. The applications fail to establish that the proposed uses are consistent with the public interest and will not interfere with existing legal uses of water, pursuant to HRS §§ 174C-49(a)(3) and 174C-49(a)(4)

Water served to the public for domestic uses has long been recognized as being not only consistent with, but the highest and best use of public resources. See In re Water Use Permit Applications (“Waiahole I”), 94 Hawa. 97, 137, citing, inter alia, Restatement (Second) of Torts § 850A cmt. c (1970); McBryde Sugar Co. v. Robinson, 54 Haw. 174, 191-198 (1973); Carter v Territory, 24 Haw. 47, 66 (1917). There is not much danger that the Department of Water Supply’s (DWS’s) proposed uses will interfere with existing legal uses of the water, as DWS is by far the major user. Moreover, other proposed legal users include public parks and schools. Existing legal users of groundwater, public and private wells and tunnels developed within lao aquifer, according to CWRM data, are listed below.

<table>
<thead>
<tr>
<th>Well Name</th>
<th>Well No.</th>
<th>Owner/User</th>
<th>Use Type</th>
<th>Drilled</th>
<th>12 MAV FOI DWS</th>
<th>12 MAV FOI NON-DWS</th>
<th>Est Draft In CWRM DB</th>
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<tr>
<td>Waikapu 1</td>
<td>5130-01</td>
<td>DOWALD</td>
<td>unused</td>
<td>1961</td>
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<td>Waikapu 2</td>
<td>5130-02</td>
<td>DOWALD</td>
<td>unused</td>
<td>1974</td>
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<td>0.000</td>
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<tr>
<td>Waikapu Mauka</td>
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<td>Maui DWS</td>
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<tr>
<td>Waiale Prototype</td>
<td>5229-01</td>
<td>A&amp;B Maui Lani</td>
<td>lost</td>
<td>1978</td>
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<tr>
<td>Ka Hale A Ke Ola</td>
<td>5230-01</td>
<td>Maui Econ Con</td>
<td>irrigation</td>
<td>1997</td>
<td>0.006</td>
<td>0.331</td>
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<tr>
<td>Memorial Gym</td>
<td>5329-04</td>
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<td>irrigation</td>
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<td>Baldwin High School</td>
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<td>irrigation</td>
<td>&lt;1971</td>
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<td>Maui Stadium</td>
<td>5329-14</td>
<td>Maui Dept Pub Wks</td>
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<td>1969</td>
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### Table: Water Use and Withdrawals

<table>
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<th>Location</th>
<th>Agency</th>
<th>Description</th>
<th>Date</th>
<th>Amount (cfs)</th>
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<tbody>
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<td>Keponawai TH</td>
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<td>Iao Needle Tunnel</td>
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<tr>
<td>Iao Needle Tunnel</td>
<td>Waiheu Sugar</td>
<td>irrigation</td>
<td>&lt;1942</td>
<td>0.000</td>
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<td>De Lana 1</td>
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<td>Papohaku Park</td>
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<tr>
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<td>Waiheu Sugar</td>
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<td>1975</td>
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<tr>
<td>Waiehu Deep Monitor</td>
<td>State CWRM</td>
<td>observation</td>
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<td>1974</td>
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</tbody>
</table>

### A. Maui County Department of Water Supply (MDWS) Failed to Address Any Impacts of Its Proposed Uses on Resource Protection.

The Department of Water Supply (DWS) recognizes that the maintenance of water in their natural state constitutes a distinct use. We also recognize that public and private uses of surface water within the lao aquifer area include all the purposes and activities listed in the objection on behalf of Hui o Na Wai Eha (the Hui) and Maui Meadows Homeowners Association (MMHA). To identify uses dependent on surface water, including the maintenance of surface water in their natural state, the impact (if any) from groundwater withdrawals on surface water in the area would first have to be scientifically established. The potential for discharge from the lao basal aquifer to streams has not been extensively studied using modern technology and methodology. Studies by United States Geological Service under contract with DWS are ongoing to quantify any discharge from the lao basal and dike-impounded aquifer to streams. Seepage runs performed at five gaging stations of Waihee stream on June 16, 2004 showed an insignificant gain to the stream from groundwater in the study area. USGS plans to perform seepage runs for the lao and Waikapu streams within the next six months.

DWS has documented resource protection measures in the application, including distribution of withdrawals within the lao aquifer, relocation of withdrawals outside of the aquifer, development of alternative sources, conservation and resource protection programs. DWS manages and contributes to a number of resource protection programs: DWS funds and participates in four watershed partnership programs throughout Maui County. The programs provide shared expertise and resources, leverage outside funds and provide for...
early awareness and action. DWS initiated and manages a Wellhead Protection Program for Maui County designed to protect the wells and groundwater from contamination.

CWRM designated lao aquifer after pumpage from the aquifer on a 12 month moving average (MAV) exceeded 18 MGD. Pumpage may exceed 18 MGD for individual months due to low precipitation and high demand. The 12 month MAV pumpage exceeded 18 MGD once since designation: In December 2003 the 12 month MAV pumpage was 18.028 MGD. The 12 month MAV for August 2004 was 17.093 MGD.

DWS would be happy to assist MMHA in implementing a water conservation program to reduce demand in the Maui Meadows area and thereby alleviate peak demand stress on the lao aquifer. Average water use for single-family services in Maui Meadows is about 31% higher than Kihei single-family services, and about 70% higher than single-family services in Waikapu. The Department provides free material on appropriate climate-adapted native plant landscaping, water conserving irrigation techniques and other in- and out-door conservation measures.

b. MDWS failed to address traditional and customary Native Hawaiian rights & practices.

As discussed under objection 1(a), determining impact on uses dependent on surface water requires scientific study of whether pumpage from particular wells impacts flow in particular streams, and if so, to what extent. While Earthjustice’s letter alleges that Waiola spring is now dry as a result of ground and surface water conditions in the aquifer, it does not cite to any scientific studies supporting this claim. DWS concurs that an inventory and assessment of traditional and customary Native Hawaiian rights dependent on surface water, including kalo cultivation and traditional use of springs, would be useful. However, DWS notes that CWRM has not designated the lao as a surface water management area. Many of these surface water issues, including the issues specifically relating to the spring named Waiola, have been raised in the Petition to Amend Interim Instream Flow Standards for Waihe’e, North & South Waiehu, lao, and Waikapu Streams and Their Tributaries recently filed by Hui O Na Wai Eha and Maui Tomorrow Foundation, Inc., and will no doubt be addressed in that proceeding.

Earthjustice Objection 2. MDWS’ applications fail to establish that its proposed uses of water are “reasonable-beneficial”, pursuant to HRS § 174C-49(a)(2).

“Reasonable-beneficial use” is defined in § 174C3 of the Water Code 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.” As stated above, Hawaii law, as well as the law in other jurisdictions, has consistently placed the highest priority on domestic use, which DWS serves in the Central Maui area from the lao aquifer. DWS’s use of this water will not interfere with public trust uses because it is a public trust use. Indeed, members of the MMHA receive their domestic water supply from this source.

Estimated cumulative demand for Waihee 3 well is based on the requested amount of water as a fraction of the 12-month MAV for the Central system at the time of designation. The demand exceeding the requested amount of water for this source is expected to be met by sources outside the lao aquifer, including Waihee aquifer and surface water sources. Thus, there is no conflict with state and county land use plans and the public interest.

The requested amount for Waihee 3 well differs from June and July 2004 MAV pumpage since requested amounts reflect MAV at the time of designation. June 2004 pumpage may have been significantly lower than June 2003 for several reasons, including demand effects from rainfall and redistribution of pumpage. July is typically a dry month with high demand and pumpage. Precipitation for the year 2003 was well below the mean with the exception of two wet months (January and February).

An analysis of water usage by customer classification and district, including irrigation use, will be addressed in the update to the Central Maui Water Use and Development Plan. Preliminary use class breakdown of consumption data indicate that single-family use consumption is about 43% of total use in Central Maui, not
DWS has also set specific criteria to prevent overdraft and exceeding critical chloride levels in the Iao Groundwater Management Rule. (Board of Water Supply Rules and Regulations Title 16 Chapter 9).
rule specifies caution, alert and critical stages when chlorides at two well fields exceed given set points, or pumpage exceeds 95%, 98% and 100% of sustainable yields, respectively. The rule further specifies that if and when MAV pumpage equals or exceeds 95% and pumpage plus outstanding commitments equal or exceed 98%, no new meter applications will be accepted, and a waiting list will be maintained.

In addition to development of new sources, distribution of withdrawals within the aquifer, conservation measures, watershed and groundwater protection programs and monitoring and modeling of aquifer status, DWS proposed eight additional suggestions for protecting the long-term viability and sustainability of the aquifer:

1. Approval of well permits at County level: Benefits could include setting an allocation based on proposed use and reporting requirements and would better enable the county to track and monitor resource use, as to pace the growth of demand.

2. Community agreements regarding resource availability and development of an availability policy: The Water Use and Development Plan process could be utilized to establish availability policies that could help assure aquifer stability over the long term.

3. County permit conditions: Requiring private water uses to submit regular reports to DWS would improve tracking resource use.

4. Improved enforcement of reporting and monitoring requirements: Improved enforcement by CWRM would help address outstanding questions.

5. Expedite inspection of existing wells of unknown status: Identifying status would ensure proper reporting and unused wells that need to be properly sealed.


7. Inclusion of operational guidelines and policies in the Water Use and Development Plan: In depth investigation could result in a program or rule.

8. CWRM support for DWS published plans: Reserving water or setting conditions on proposals conflicting with municipal needs.

Earthjustice Objection 4. Although MDWS’ applications indicate that the proposed uses are in accordance with State and Maui County general plans, land use designations, and policies, this is insufficient for the Commission to determine whether the proposed uses are reasonable-beneficial, pursuant to HRS §§ 174C-49(a)(5) & 174C-49(a)(6).

HRS § 174C-49(5) requires a permit applicant to establish that the proposed use of water “[is] consistent with state and county general plans and land use designation.” DWS has done so in its application. DWS further notes that entities other than the applicant, such as the Maui Planning Commission, the Maui County Council, and the State Land Use Commission, have ultimate authority over land use decisions and priorities on the island of Maui. As clarified above in DWS’s response to Objection 3, no commitment of water is granted or implied as a result of any DWS approval other than a water meter or water meter reservation. DWS intends to meet additional demand from sources outside of the Iao aquifer.

Earthjustice Objection 5. MDWS failed to establish that its proposed uses will not interfere with the rights and needs of the Department of Hawaiian Home Lands, pursuant to HRS § 174C-49(a)(7).

DWS agrees that applications should consider whether the proposed use of water might interfere with the rights of the Department of Hawaiian Home Lands ("DHHL"). Unlike the situation in In re Wai'ola o
However, there are no wells owned or operated by DHHL that potentially could be affected by the applicant's wells. Water service to DHHL properties is provided by DWS. Demand for proposed DHHL project Waiehu Kou Phase IV from the Central system is 57,600 gallons per day, according to DHHL. DWS approved meter reservations for the Waiehu Kou Phase III development totaling 97,000 gallons per day in estimated demand. According to DHHL, no other outstanding demand is anticipated. We therefore conclude that the proposed withdrawals would not interfere with the rights of DHHL. The objection to Kehalani Mauka's application for Shaft 33 stated that any additional withdrawal requested by Kehalani Mauka from Shaft 33 would potentially impact DHHL demand to be served by the DWS Central system.

Earthjustice Objection 6. MDWS integrated water management plan should be completed prior to issuance of any water use permits.

DWS recognizes that the Water Use and Development Plan process is crucial in planning effectively for future water use. DWS pledges its willingness to work cooperatively with the Hui and MMHA to resolve issues of mutual concern in this process. However, the public interest will not be served by holding up the permit process while awaiting a final Water Use and Development Plan.

DWS thanks Earthjustice for its comment on behalf of the Hui and MMHA. However, the concluding request that DWS's applications be denied is neither practical nor helpful. Disrupting the ability of the County of Maui to deliver domestic water to its customers to such a degree would not serve any public trust purpose, and would lead to a public health calamity. DWS notes that members of the Hui and MMHA, along with thousands of other Central and South Maui residents and businesses, would be left without a supply of domestic water if this request were granted. DWS respectfully requests that the Hui and MMHA withdraw this demand.

Should you have further questions or comments regarding any of these matters, please do not hesitate to contact me at (808) 270-7816 or Ellen Kraftsow of my staff at (808) 270-7199.

Sincerely,

George Y. Tengan
Director

enclosures:
DWS letter of November 4, 2002

cc.
Kapua Sproat, Esq.
Mayor Alan M. Arakawa, County of Maui
Jane Lovell, Esq., County of Maui
Edward Kushi, Esq., County of Maui
Dain Kane, Council Chair, County of Maui
Danny Mateo, WRC Chair, County of Maui
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May need to tabulate data with subject in note.

May need this table for submission.
September 17, 2004

Peter T. Young, Chairperson
Yvonne Y. Izu, Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Re: Objection by Aha ku moku o Na Wai Eha to application for Water Use Permit for Maui Department of Water Supply for the Waihee Well 3 (Well No. 5431-04, source TMK 3-2-17:018)

Dear Chairperson Young and Deputy Director Izu:

This is in response to the objection filed by Ms. Mahealani Ventura-Oliver on behalf of Aha ku moku o Na Wai Eha on September 2, 2004. We received the objection on September 7, 2004. We request that we be allowed to supplement our response as needed within ten days of receipt. We will make our best efforts to finalize our response by September 21, 2004.

Aha ku moku o Na Wai Eha Objection 1: No lawful transfer of title to properties (that include the water) being proposed for development.
The property, TMK No. 3-2-17:018, where the Department Waihee 3 well is situated, is not owned by the Department. Mr. David Singer signed the water use permit application on July 21, 2004 on behalf of the landowners registered on the deed. Waihee 3 well was developed by the Central Maui Joint Venture and dedicated to the County.

Aha ku moku o Na Wai Eha Objection 2: We, as a community vehemently deny any more illegal development of our moku based on the above. This includes the taking of water and displacement of our due process.
The water use permit application for Waihee 3 well is for the purpose of continued service to the Central Maui communities. The application is not for new development of the Na Wai Eha area.

Aha ku moku o Na Wai Eha Objection 3: Living Waters LLC is taking water, at present in 2 - 3 foot pipes set in old awai’s on the property they are illegally occupying; filing in suit against the state for instream flow; filing tro’s against the Kanuha family an easement on the Kanuha property; applying for a well from you and the property itself is in litigation.
This objection does not apply to the Department water use application.

Aha ku moku o Na Wai Eha Objection 4: David Singer's Q/D did not include our interests
Since the Department is not the current owner of the subject property, we are not aware of the history of acquisition.

Aha ku moku o Na Wai Eha Objection 5: Valerie Deva & Don Harris Q/D from Avery Chumbley did not include our interests.

"By Water All Things Find Life"

Printed on recycled paper
This objection does not apply to the Department water use application.

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We thank Aha ku moku o Na Wai Eha for their comments. If any issues pertaining to the Department water use permit for Waihee 3 well remain unresolved by this letter, we pledge our willingness to work cooperatively with Aha ku moku o Na Wai Eha to resolve any issues of mutual concern.

Sincerely,

George Y. Tengan
Director

cc:

Mahealani Ventura-Oliver
Jane Lovell, Esq.
Edward Kushi, Esq.
Alan M. Arakawa
Dain Kane
Danny Mateo
DATE: 9/17/2004
FAX TO: Commission on Water Resource Management (808) 587-0219
ATTENTION: Yvonne Izu, Deputy Director
FROM: Maui County Department of Water Supply (808) 270-7833
SUBJECT: Response letters to objections to water use permit application for Waihee 3, Well No. 5431-04
PAGES: 9, including coversheet

Please find attached our response letter to Aha ku moku o Na Wai Eha's objection to the subject permit. Hardcopy to follow in the mail.
September 17, 2004

Peter T. Young, Chairperson
Yvonne Y. Izu, Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

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We thank Aha ku moku o Na Wai Eha for their comments. If any issues pertaining to the Department water use permit for Waihee 3 well remain unresolved by this letter, we pledge our willingness to work cooperatively with Aha ku moku o Na Wai Eha to resolve any issues of mutual concern.

Sincerely,

[Signature]

George Y. Tengan
Director

cc:

Mahealani Ventura-Oliver
Jane Lovell, Esq.
Edward Kushi, Esq.
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September 15, 2004

Peter Young, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Re: Objection to application for Water Use Permit for Maui Department of Water Supply for the Waihee Well 3 (Well No. 5431-04, source TMK 3-2-17:018)

Dear Chairperson Young and Commissioners:

This is in response to the Office of Hawaiian Affairs’ (OHA) objection of September 1, 2004 to the above-mentioned Water Use Permit Application.

OHA Objection 1. The applicant has failed to consider the impacts of continuing these withdrawals on Native Hawaiian Water Rights, as is required by law.

The Department of Water Supply ("DWS") agrees that it should consider whether the proposed use of water might interfere with the rights of the Department of Hawaiian Home Lands ("DHHL"). Unlike the situation in In re Wai‘ola o Moloka‘i, Inc., 103 Haw. 401 (2004), however, there are no wells owned or used by DHHL that potentially could be affected by the applicant's wells. DHHL filed on July 21, 2004 water use permit application and request for water reservations from lao aquifer for a total of 844,504 gpd within the four year planning timeframe. DWS is providing water service to existing DHHL projects. DWS approved meter reservations for the Waiehu Kou Phase III development totaling 97,000 gallons per day in estimated demand. Demand for proposed DHHL project Waiehu Kou Phase IV from the Central system is 57,600 gallons per day, according to DHHL. Since the filing of the DWS water use permits, DHHL added requests of 481,204 gpd for new uses in Puunene and Wailuku. DWS will work with DHHL to meet this future demand through source development outside of the lao aquifer. Additional requests from DHHL to serve future projects beyond the four year planning timeframe should likewise be met through source development outside of lao aquifer. We therefore conclude that the proposed withdrawals would not interfere with the rights of DHHL.

To identify uses dependent on surface water, including Native Hawaiian water rights, the impact (if any) from groundwater withdrawals on surface water in the area must be established. Studies of dike...
impounded water discharge to streams conducted in 1942 and 1970 suggested that development tunnel flow would have discharged naturally into stream channels below the diversions had it not been intercepted by the tunnels. (Stearns, H.T., and Macdonald, G.A., 1942, Geology and water resources of the island of Maui, Hawaii: Hawaii Division of Hydrography; George, and Huxel, C.J., 1970, Preliminary report on the water resources of the island of Maui, Hawaii: Hawaii Division of Hydrography; Stearns, H.T., and Macdonald, G.A., 1942, Geology and water resources of the island of Maui, Hawaii: Hawaii Division of Hydrography; George, and Huxel, C.J., 1970, Preliminary report on the water resources of the island of Maui, Hawaii: Hawaii Division of Hydrography; Department of Land and Natural Resources, Division of Development, Circular C61). The Department addressed this assumption for Iao Tunnel, Well No. 5332-02. There, we noted that the high-level tunnel pumpage from the Iao aquifer, according to the Commission on Water Resources Management Area Designation Findings of Fact, dated November 14, 2002, any potential for the high level tunnel to impact streams should not be an issue for management area proceeding.

Moreover, the potential for discharge from the Iao basal aquifer to streams has not been extensively studied using modern technology and methodology. Studies by United States Geological Service (USGS) under contract with the Department are ongoing to quantify any discharge from the Iao basal and dike-impounded aquifer to streams. Seepage runs performed at five gaging stations of Waihe'e stream on June 16, 2004 showed an insignificant gain to the stream from groundwater in the study area. USGS plans to perform seepage runs for the Iao and Waiakpu streams within the next six months.

While DWS concurs that an inventory and assessment of traditional and customary Native Hawaiian rights dependent on surface water, including kalo cultivation, would be useful, DWS notes that CWRM has not designated the Iao as a surface water management area. DWS believes that many of these issues will be addressed in connection with the Petition to Amend Interim Instream Flow Standards for Waihe'e, North & South Waiehu, Iao, and Waiakpu Streams and Their Tributaries recently filed by Hui O Na Wai Eha and Maui Tomorrow Foundation, Inc. Moreover, DWS believes that OHA is in a better position to identify any traditional and customary Native Hawaiian rights than DWS is. DWS seeks OHA's assistance and cooperation in this regard.

OHA Objection 2. The applicant has not meaningfully addressed the question of how the proposed continuing withdrawals may threaten the sustainability of the aquifer.

In response to the Commission staff finding that in 2002 "...authorized planned uses exceed the sustainable yields", the Department has clarified to the CWRM in a letter dated November 4, 2002, that actual authorized planned use should be adjusted to reflect water commitments only. No commitment of water is granted or implied as a result of any DWS approval other than a water meter or water meter reservation. DWS has not been utilizing the Iao aquifer to provide for additional demands. Instead, it has been serving new demands from the Waihe'e wells, and has been advising new developments of the need to develop additional source.

To further quantify the impact of development of alternate sources and conservation measures, we provide updated and additional information below. The effectiveness of conservation programs is often difficult to evaluate since the interaction between such programs and use patterns of consumers often cannot be determined with any precision. For instance, automated meter replacement and low flow fixture installation occur simultaneously, and may have the effect of increasing registered water use per service, at the same time that the fixtures may have actually caused a decrease. Drier weather, changes to irrigation or landscaping, or the installation of the new meters can completely mask savings even when they have been achieved.

By Water All Things Find Life


3. Reclaimed water use at commercial properties within 100 ft of R-1 distribution systems and for dust control saves approximately 2 MGD in the summer months.

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5. Other non-quantified conservation measures currently implemented include leak detection, in-house repairs; automated radio-read meters to replace old, under-registering meters; outdoor conservation, public education, conservation rules, conservation pricing and rate structures, monitoring and modeling of aquifer status and resource protection. Additional conservation programs and their potential savings are being considered during the Water Use and Development Plan process.

**OHA Objection 3. The permit application should be considered simultaneously with other permit applications for existing uses with this groundwater management area.**

This objection refers to the CWRM's procedures; accordingly, any response to this objection should come from CWRM.

DWS thanks OHA for its comments, and pledges its willingness to work cooperatively with OHA to resolve any issues of mutual concern.

Should you have further questions, please contact me at (808) 270-7816 or Ellen Kraftsow of my staff at (808) 270-7199.

Sincerely,

[Signature]

George Y. Pangelinan
Director

enclosures:
DWS letter of November 4, 2002

*By Water All Things Find Life*
cc.
Clyde W. Namu'o, State of Hawaii Office of Hawaiian Affairs
Mayor Alan M. Arakawa, County of Maui
Jane Lovell, Esq., County of Maui
Edward Kushi, Esq., County of Maui
Dain Kane, Council Chair, County of Maui
Danny Mateo, WRC Chair, County of Maui
DEPARTMENT OF WATER SUPPLY  
COUNTY OF MAUl

DATE: 9/15/2004  
FAX TO: Commission on Water Resource Management (808) 587-0219  
ATTENTION: Yvonne Izu, Deputy Director  
FROM: Maui County Department of Water Supply (808) 270-7833  
SUBJECT: Response letter to objection to water use permit application for Waiheee 3, Well No. 5431-04  
PAGES: 5, including coversheet

Please find attached our response to Office of Hawaiian Affairs' objection to the subject permit. Hardcopy to follow in the mail.

Transmitter: Eva Blumenstein
September 15, 2004

Peter Young, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

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Moreover, the potential for discharge from the lao basal aquifer to streams has not been extensively studied using modern technology and methodology. Studies by United States Geological Service (USGS) under contract with the Department are ongoing to quantify any discharge from the lao basal and dike-impounded aquifer to streams. Seepage runs performed at five gaging stations of Waihe'e stream on June 16, 2004 showed an insignificant gain to the stream from groundwater in the study area. USGS plans to perform seepage runs for the lao and Waiakpu streams within the next six months.

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2. Development of new sources outside Iao aquifer: Camp Maluhia well: Acquisition of well site. Production estimated at 798,000 GPD. Kupaa 1: Anticipated on-line end 2005. Production estimated at 768,000 GPD. The full pump capacity of Kupaa well may not be utilized, but rather as needed to redistribute withdrawals within Waihe'e aquifer as well. Iao Surface Water Treatment Plant expansion: Anticipated on-line end 2004. Production capacity: 2.4 - 3.2 MGD. New Central Maui Surface Water Treatment Plant and raw storage: Anticipated study by end 2005. Estimated production capacity: 2 MGD, subject to change. East Maui source development, temporary use of existing well. Anticipated on-line by March 2005. Production capacity 640,000 GPD

3. Reclaimed water use at commercial properties within 100 ft of R-1 distribution systems and for dust control saves approximately 2 MGD in the summer months.

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George Y. Fabian
Director
emb

enclosures:
DWS letter of November 4, 2002

Key Water All Things Find Life
cc.
Clyde W. Namu'o, State of Hawaii Office of Hawaiian Affairs
Mayor Alan M. Arakawa, County of Maui
Jane Lovell, Esq., County of Maui
Edward Kushi, Esq., County of Maui
Dain Kane, Council Chair, County of Maui
Danny Mateo, WRC Chair, County of Maui

By Water All Things Find Life
SUBJECT: Chapter 6E-42 Historic Preservation Review – Request for Comments
[Determination] for the Water Use Permit Application for the Iao Ground Water Management Area (Well No. 5431-04) [State/COWRM]

Ahupua’a: Waiehu
District, Island: Wailuku, Maui
TMK: (2) 3-2-017:018

1. We believe there are no historic properties present, because:

   _ a) intensive cultivation has altered the land
   _ b) residential development/urbanization has altered the land
   _ c) previous grubbing/grading has altered the land
   _ d) an acceptable archaeological assessment or inventory survey found no historic properties
   _ e) other: The subject permit application involves an existing well and no ground altering activities are involved.

2. This project has already gone through the historic preservation review process, and mitigation has been completed _.

   ✔ Thus, we believe that “no historic properties will be affected” by this undertaking

In the event that historic sites (human skeletal remains, etc.) are identified during the construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be
protected from additional disturbance, and the State Historic Preservation Office needs to be contacted immediately at 243-5169, on Maui, or at (808) 692-8023, on O'ahu.

Staff: Cathleen A. Dagher, Assistant Maui/Lana'i Island Archaeologist, (808) 692-8023

Date: September 6, 2014
September 8, 2004

TO: Yvonne Y. Izu, Deputy Director  
Commission on Water Resource Management

FROM: Skippy Hau, Aquatic Biologist

SUBJECT: County of Maui, Department of Water Supply,  
LLC for Well No. 5431-04 Water Use Permit Application

The application request is for 1.513 million gallons from Waihee 3 well.

This amount is the moving average withdrawals from Waihee 3 well. It does not tell me anything about the "condition of the aquifer(s)." Will the amount taken from the lao aquifer be increased to 19.576 million gallons per day which exceeds the 90% sustainable amount?

Although the withdrawals from wells in the lao aquifer appears stable according to the USGS. After reviewing several monitoring wells, there appears to be an "increasing trend" for chloride amounts with lower withdrawals in 2000s. It does not appear the aquifer will be sustainable for increased withdrawals. The increasing chlorides will not be immediate, will likely take decades, and likely be irreversible unless aquifers are rested and recharged.

I am not clear about the amount of increasing water demands. The population of residents is increasing. The amounts attributed to the Central water system should be clarified. How much of that water is being transported to South Maui how much is being used in Central Maui?

The amount of water reservations while accounted for with an added amount for Department of Hawaiian Homelands does not include a reserve for drought conditions which could last over seven years (personal observation).

Water continues to be removed from their originating watershed. Development, land use and the diversion of streams have disrupted the normal water cycle for an island. Little attention is being paid to water recharge amounts that are needed to maintain the aquifer.

The movement and building of subdivisions on the leeward side of the island also results in increased runoff and groundwater entering nearshore waters. These areas have not had to deal with water, nutrient or sediment problems until the areas were recently developed. We are now monitoring a change of nearshore reef areas where algae biomass has increased and the establishment of exotic species may also become problems in the future. There has been a decrease in natural productivity and decreases in fisheries populations.
August 9, 2004

TO: Aquatic Resources
   Forestry and Wildlife/Natural Area Reserve System
   Historic Preservation
   State Parks

FROM: Yvonne Y. Izu, Deputy Director
      Commission on Water Resource Management

SUBJECT: Request for Comments
         Water Use Permit Application
         Iao Ground Water Management Area, Maui

Transmitted for your review and comment is a copy of a water use permit application for County of Maui, Department of Water Supply for Well No. 5431-04. Public notice of this application will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please respond by returning this cover memo form by September 2, 2004. If we do not receive your comments by this date, we will assume you have no comments.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Charley Ice at 587-0251.

Response:

( ) We have no objections or comments
( ) Objections attached
(✓) Only comments attached

Contact person: Skippy Hau

Signed: Skippy Hau

Phone: 243-5834
Date: 9/8/04

Signed: Skippy Hau
TO: Other Interested Parties
FROM: Yvonne Y. Izu, Deputy Director
Commission on Water Resource Management

SUBJECT: Request for Comments
Water Use Permit Application
Iao Ground Water Management Area, Maui

August 9, 2004

In addition to serving you notice as required by 174C-52 (a), HRS, we transmit for your review and comment a copy of a water use permit application for County of Maui, Department of Water Supply for Well No. 5431-04. Public notice of this application will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

We would appreciate your review of the attached application for any conflicts or interferences with the programs, plans, and objectives of the organization or agency that you represent. Written objections should be made in accordance with Section 13-171-18 of our Administrative Rules and must be filed by the September 2, 2004 deadline. If we do not receive your comments by this date, we will assume you have no comments.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Charley Ice at 587-0251.

Contact person: D. Kapua Sproat
Signed: [Signature]

Response:

( ) We have no objections or comments
( ) Objections attached
( ) Only comments attached

Phone: 599-2436, ext. 16
Date: September 2, 2004
September 2, 2004

BY U.S. MAIL & FACSIMILE TRANSMITTAL
Fax: (808) 587-0219

Peter T. Young, Chair
Yvonne Y. Izu, Deputy Director
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawai‘i 96809

Re: Objection to Maui County Department of Water Supply’s Water Use Permit Application for Waihe‘e Well No. 3 (Well No. 5431-04), Ta‘o Ground Water Management Area, Maui, Hawai‘i

Dear Chair Young and Deputy Director Izu:

On behalf of Hui o Nā Wai ‘Ehā and Maui Meadows Homeowners Association, Earthjustice submits the following comments regarding Maui County Department of Water Supply’s (‘MDWS”) water use permit application for Waihe‘e Well No. 3 (Well No. 5431-04). This application seeks a permit to withdraw water from the Ta‘o Ground Water Management Area for both potable and nonpotable municipal uses. For all of the reasons detailed herein, this application fails to establish that the proposed use complies with all of the requirements of the law. We urge this Commission to require MDWS to supplement its application before holding a public hearing on this issue. We also request that you hold that public hearing on Maui so that our clients and other affected stakeholders can provide more detailed testimony on this important issue.

Maui Meadows Homeowners Association is an association of homeowners from the Maui Meadows subdivision in Kihei. The association’s filing of a July 2001 petition resulted in the designation of the Ta‘o aquifer in July of 2003. Maui Meadows has been active in water and land use issues on Maui for many years and its members rely on the Ta‘o aquifer to satisfy their water needs. Additionally, the association’s members have been working to ensure appropriate management of the ground water resources in the Ta‘o and Waihe‘e aquifers.

Hui o Nā Wai ‘Ehā is a community-based organization that was formed to promote the conservation and appropriate management of Hawai‘i’s natural and cultural resources and the practices that depend on them. The Hui strives to protect and restore streams, oceans, estuaries, native flora and fauna, and the activities that rely on these resources, especially the perpetuation of traditional and customary Native Hawaiian practices. Hui members live, work, and play in the Ta‘o ground water management area. They rely on and routinely use ground water from the aquifer as well as surface water from Ta‘o, Waihe‘e, Waiehu, and Waikapu streams and their nearshore marine waters for fishing.
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swimming, agriculture, aquaculture, research, photography, educational programs, aesthetic enjoyment, traditional and customary Native Hawaiian practices, and other recreational, scientific, cultural, educational and religious activities.

This Commission bears an affirmative burden to analyze and account for the impacts of its decisions on public trust resources. See In re Wa‘i‘ola o Moloka‘i, Inc. ("Wa‘i‘ola"), 103 Haw. 401, 430 (2004); In re Water Use Permit Applications ("Wa‘i‘ahole I"), 94 Haw. 97, 141 (2000). When allocating water, the Commission must consider the impact of all proposed uses on: (1) the maintenance of waters in their natural state, (2) resource protection, (3) water for domestic purposes, and (4) the protection of traditional and customary Native Hawaiian rights and practices. Wa‘i‘ola, 103 Haw. at 429 (citing Wa‘i‘ahole I, 94 Haw. at 136-138, 142). The law mandates that this Commission "take the initiative in considering, protecting, and advancing public rights in the resource at every stage of the planning and decisionmaking process.” Wa‘i‘ahole I, 94 Haw. at 143.

The Hawai‘i Supreme Court recently affirmed that this Commission is "duty-bound to place the burden on the applicant to justify the proposed water use in light of the trust purposes and weigh competing public and private water uses on a case-by-case basis.” In re Wa‘i‘ahole Ditch Combined Contested Case Hearing ("Wa‘i‘ahole II"), No. 24873, slip. op. at 26 (Haw. June 21, 2004). The Court delineated a water use permit applicant’s burden:

Under the public trust [doctrine] and the Code, permit applicants have the burden of justifying their proposed uses in light of protected public rights in the resource. The Water Code requires, inter alia, that the applicant prove that the proposed use of water is a reasonable-beneficial use and is consistent with public interest. . . . In addition, applicants must still demonstrate their actual needs and, within the constraints of available knowledge, the propriety of draining water from public [resources] to satisfy those needs.

Id. (citations and quotations omitted). If the Commission issues a water use permit without findings that “reasonably explain and justify its conclusions and rulings,” that permit is vulnerable to being vacated. Id. at 26, 37-38, 45, 52-53 (remand with instructions for the Commission to make findings that demonstrate whether permit applicant met its burden; to articulate factors relied on in deciding whether a permit applicant has practicable alternative water sources; to establish factual basis for applicant’s actual need for water). See also Wa‘i‘ola, 103 Haw. at 432, 439. The Supreme Court has made clear that it will not rubber stamp water use permitting decisions where the Commission has not conducted adequate fact-finding and analysis. See id.

MDWS’ permit application fails to provide the factual basis necessary for this Commission to complete the analysis and make the findings required by the State Constitution and Water Code, and ratified by the Hawai‘i Supreme Court. The application is insufficient for the following reasons:


1. The application failed to establish that the proposed use is consistent with the public interest and will not interfere with existing legal uses of water, pursuant to HRS §§174C-49(a)(3) and 174C-49(a)(4).

The consistent with the public interest and reasonable-beneficial use requirements for water use permit applications “demand examination of the proposed use not only standing alone, but also in relation to other public and private uses and the particular water source in question.” Waiahole I, 94 Haw. at 161. MDWS attempts to justify its proposed municipal use as consistent with the public interest because it services customers of the Central Maui System. Haw. Rev. Stat. § 174C-49(a)(4). More information is needed because MDWS' claims neglect to address the relative importance of MDWS' proposed use in light of other public trust purposes, or establish that it will not interfere with existing legal uses of water, including public trust uses. Id. at § 174C-49(a)(3).

a. MDWS failed to address any impacts of its proposed use on resource protection.

“[T]he maintenance of waters in their natural state constitutes a distinct ‘use’ under the water resources trust.” Waiahole I, 94 Haw. at 136. MDWS must therefore address the potential impact of its municipal use on the maintenance of water in its natural state, especially resource protection. This is especially important in ‘Iao, where the condition of the aquifer has long been in question and the true sustainable yield hotly debated. In fact, this Commission designated ‘Iao as a ground water management area after MDWS' pumpage exceeded 18 million gallons per day ("mgd"), a level that this Commission determined should not be exceeded. Over the last month, monthly pumpage in the ‘Iao aquifer has again exceeded 18 mgd. MDWS' application failed to examine its proposed municipal use in relation to existing public trust uses such as resource protection in this aquifer. This information must be provided before the Commission can make any determination on MDWS' application.

b. MDWS failed to address traditional and customary Native Hawaiian rights & practices.

MDWS must affirmatively demonstrate that its proposed use will not harm existing and potential traditional and customary Native Hawaiian rights and practices. See Waiaela, 103 Haw. at 442 (“the absence of evidence that its proposed use would affect native Hawaiians' rights was insufficient to meet the burden imposed . . . by the public trust doctrine, the Hawai'i Constitution, and the Code.”). In determining whether MDWS has met its burden, the Commission must consider the constitutional minimum delineated by the Hawai'i Supreme Court. Specifically, the Commission has an affirmative duty to determine and must make specific findings regarding: (1) the identity and scope of cultural resources, including the extent to which traditional and customary practices are exercised, in the affected area, (2) the extent to which cultural resources, including traditional and customary practices, will be affected, and (3) where traditional and customary practices are found to exist, feasible action that the Commission can take to protect affected practices. See Ka Pa’akai o Ka ‘Aina v. Land Use Comm’n, 94 Haw. 31, 47 (2000). MDWS has neglected to provide any information regarding these issues.

At a minimum, the law requires and we request that MDWS provide the information necessary for the public to scrutinize and this Commission to make the above-described
Earthjustice’s Objection to MDWS’ Water Use Permit Application  
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Determinations. As just one example, oral history from what is now the ‘Iao ground water management area identifies springs which were renowned for healing and purifying powers, including one named Waiola (on what is now the Sevilla family property). Native Hawaiians from this area traditionally used these springs to purify themselves before entering heiau. Waiola and other springs in the area are now dry as a result of ground and surface water conditions in the aquifer. MDWS’ application fails even to mention Waiola or other cultural resources in the ‘Iao aquifer (such as springs or spring-fed lo‘i) that may be affected by MDWS’ and other uses of ground water.

In addition, the 1990 Hawai‘i Stream Assessment ("HSA") determined that streams in the vicinity of MDWS’ proposed municipal use host a substantial population of native species, including varieties of ‘o‘opu. In particular, Waiehu Stream, which is in close proximity to the subject water source, was one of only nine streams on Maui worthy of designation as a candidate stream for protection. Waiehu was designated a Blue Ribbon Resource, meaning that it was selected as one of Hawai‘i’s very best cultural resources, due to its historical significance and extensive wetland kalo cultivation. Like Waiehu, Waiola was one of only six streams from the entire island chain known to have more than 50 acres in wetland kalo cultivation. Without due consideration of the impacts of MDWS’ proposed use on these resources, the application cannot be approved.

MDWS’ failure to provide information demonstrating that its proposed use is consistent with these important public interests and existing legal uses of water is a serious flaw in its application and Maui Meadows and Hui o Na Wai ‘Ehā respectfully urge this Commission to deny the permit application in its present form. In the alternative, we ask that this Commission order MDWS to provide necessary information within four weeks of the date of this objection, so that the community and the Commission can review and analyze this information before any public hearing and the Commission may, if necessary, request supplemental information.

2. MDWS’ application failed to establish that its proposed use of water is “reasonably-beneficial,” pursuant to HRS §174C-49(a)(2).

MDWS’ application also failed to demonstrate that its proposed use is reasonable and beneficial by detailing actual water needs. The law requires that permit applicants demonstrate, at a minimum, that the requested amount of water reflects actual need. See Wai‘ahole I, 94 Haw. at 162 (“Notwithstanding the present and uncertain nature of the permitting process, therefore, permit applicants must still demonstrate their actual needs”); Haw. Rev. Stat. §174C-50(f) (“A permit to continue an existing use shall be for a quantity of water not exceeding that quantity being consumed under the existing use.”) (emphasis added).

MDWS’ application quantifies total water needs over the next four years as: 25.703 mgd in 2004, 26.204 mgd in 2005, 26.705 mgd in 2006, and 27.207 mgd in 2007. This application, however, requests only 1.513 mgd and, even if this application is combined with MDWS’ other applications for water use permits, the total amount requested is significantly less than MDWS’ total water needs. MDWS must address this discrepancy between the amount requested and their claimed water needs. We also note that the amount that MDWS has requested differs significantly from MDWS’ monthly averages of pumpage for June and July 2004. This
discrepancy must also be addressed by MDWS before this Commission can consider its application.

MDWS’ application also fails to account for a large portion of its actual use. In fact, the application notes only that single-family use comprises about 16% of the proposed use. As MDWS has admitted in the past, potable water delivered to the Central Maui Service Area serves both potable and non-potable needs. MDWS, however, is unable to provide calculations or even estimates of other uses. This lack of information is particularly disconcerting because MDWS is the biggest water user in the ‘Iao aquifer and has requested a large quantity of potable water that will ultimately serve non-potable needs. See CWRM ‘Iao-Waie‘e Final FOF & COL at 66. Such information does not pass legal muster and MDWS must provide additional information before its application can be considered.

Assuming, arguendo, that MDWS’ application can satisfy the actual needs requirement, the application fails to adequately analyze alternative sources and more information is needed. This alternatives analysis is necessary to evaluate whether the applicant has adequately established that its requested allocation would support a reasonable-beneficial use. The Supreme Court carefully defined the burden of proof for all water use applicants:

[B]esides advocating the social and economic utility of their proposed uses, permit applicants must also demonstrate the absence of practicable mitigating measures, including the use of alternative water sources. Such a requirement is intrinsic to the public interest, the statutory instream use protection scheme, and the definition of ‘reasonable-beneficial’ use and is an essential part of any balancing between competing interests.

Waiahe I, 94 Haw. at 161.

MDWS’ attempt to identify alternatives is commendable but requires additional information, including, among other things, details regarding concept, size, and timing. For example, the Commission must take a hard look at the use of potable water for non-potable needs in light of the demand for potable water and MDWS’ alternatives. Since alternatives are available, MDWS cannot simply assert that the proposed use of potable water for non-potable needs is reasonable and beneficial, especially when existing public trust uses such as resource protection and Native Hawaiian practices are at issue. More information is also needed regarding the extent to which the Waie‘e aquifer is a practicable alternative given this Commission’s 4.0 mgd limit on pumping from that aquifer and Ko‘olau Cattle Company’s new well. We urge the Commission to require a more detailed alternatives analysis that will address specifically the extent to which non-potable needs may be met via alternative sources. This Commission cannot issue a permit to MDWS absent additional information demonstrating that the requested amount constitutes a reasonable beneficial use of potable water.

1 This Commission determined that while potable water is delivered through the Central Maui system to provide for both potable and nonpotable needs, the County was unable to “differentiate between these major categories of use.” CWRM ‘Iao-Waie‘e Final FOF & COL at 66.
Earthjustice’s Objection to MDWS’ Water Use Permit Application
September 2, 2004
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3. MDWS failed to establish that the water source will accommodate its proposed use, pursuant to HRS §174C-49(a)(1).

The Code requires each applicant to establish that a water source can accommodate a proposed use. HRS §174C-49(a)(1). MDWS has failed to satisfy this condition and more information is needed, especially given the “[s]erious dispute between the interested public and the MDWS . . . related to the integrity of the aquifer and land use decisions that affect demand on the aquifer.” COWRM ‘Iao-Waihe’e Final FOF & COL at ix. In fact, this Commission recommended designating both the ‘Iao and Waihe’e aquifers as ground water management areas because authorized planned use back in 2002 was 29.2 mgd, which “exceed[ed] the sustainable yields (‘Iao 20 mgd and Waihe’e 8 mgd = 28) available to the [Central Maui Service Area].” Id. This issue is even more critical now since this Commission has limited pumping in Waihe’e to 4.0 mgd, yet it continues to receive requests for new ground water wells (such as Ko‘olau Castle Company’s application) as well as applications for additional withdrawals from existing ground water sources (such as Kehalani Mauka, LLC). We also highlight the fact that better information on the sustainable yields of the ‘Iao and Waihe’e aquifers will not be available for several more years, when USGS completes its Central Maui model.

As this Commission is well aware, authorized planned use has increased since 2002. Even if 29.2 mgd is used as a conservative figure, authorized planned use far exceeds the 24 mgd (‘Iao 20 mgd and Waihe’e 4 mgd = 24) available to supply the Central Maui Service Area. MDWS’ current pumpage already exceeds 26 mgd (calculated on a monthly average). Moreover, MDWS recently announced that applications for roughly 880,000 gpd had already been signed, even though MDWS believed that it had about only 800,000 gpd in unused capacity with which to issue new water meters. See Harry Eager, Council may block new C. Maui water meters, Maui News, Aug. 20, 2004.

4. Although MDWS’ application indicates that its proposed use is in accordance with State and Maui County general plans, land use designations, and policies, this is insufficient for the Commission to determine whether the proposed use is reasonable-beneficial, pursuant to HRS §§ 174C-49(a)(5) & 174C-49(a)(6).

MDWS claims that its proposed use will meet the demands outlined in state and county general plans, land use designations, and general policies. Where, as here, authorized land use outstrips the available water supply, this Commission ruled and the Hawai‘i Supreme Court affirmed that consistency with county plans and land use designations does not end the inquiry into whether a proposed water use may be permitted. In a situation similar to this one, this Commission concluded:

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2 Maui Meadows and Hui o Na Wai ‘Eha also note that the Commission has, thus far, failed to enter into a Memorandum of Agreement (“MOA”) with MDWS to limit pumping to 4.0 mgd. Since this was a condition of rescinding the triggers for automatic designation of the Waihe’e aquifer, the aquifer should be designated if MDWS refuses to sign the MOA.
Earthjustice’s Objection to MDWS’ Water Use Permit Application
September 2, 2004
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As competition for water resources increases, the analysis of both the public interest and of reasonableness must become both more rigorous and affirmative. The counties will be required to articulate their land use priorities with greater specificity. For example, even at the present time, there is more land zoned for various uses than available water to supply those proposed uses. Thus, it is not sufficient to merely conclude that a particular parcel of land is properly zoned and that the use is “beneficial.” That minimal conclusion may be inadequate to resolve situations in which competitive demand exceeds supply.


The situation on Maui is analogous, if not worse, than the situation in Honolulu addressed by this Commission in Waiāhole I & II. Again, authorized planned use in the Central Maui Service Area exceeds both the 28 mgd sustainable yield of the aquifers supplying the Central Maui Service Area, as well as the 24 mgd that this Commission has established as the maximum available now. COWRM ‘Iao-Waiehu Final POP & COL at ix. Be that as it may, the fact that MDWS’ proposed use is consistent with county land use designations “only provides a minimal standard by which to judge applications.” Waiāhole I, 94 Haw. at 188. Additional information is needed.

5. MDWS failed to establish that its proposed use will not interfere with the rights and needs of the Department of Hawaiian Home Lands, pursuant to HRS § 174C-49(a)(7).

MDWS’ claim that its proposed use will not interfere with the rights of the Department of Hawaiian Home Lands (“DHHL”) because there are no DHHL wells withdrawing water from the ‘Iao aquifer is wholly insufficient. By its own admission, MDWS services DHHL projects in the Central Maui Service Area and, therefore, MDWS must examine the impact of its proposed use on DHHL’s present and future needs. In fact, MDWS objected to Kehalani Mauka, LLC’s water use permit application because that application failed to demonstrate that its proposed use will not interfere with DHHL’s rights and interests. MDWS cannot have its cake and eat it too. MDWS must provide additional information regarding both existing and future DHHL projects within the Central Maui Service Area and how MDWS’ use will impact those rights and needs. See Waiāole, 103 Haw. 401.

Conclusion

Since MDWS is the largest water user in the ‘Iao aquifer, the legal and factual sufficiency of its applications are critical. MDWS must affirmatively demonstrate compliance with the state constitution, Water Code, and public trust principles. Absent all of the required components, MDWS’ application cannot be approved. Maui Meadows and Hui o Na Wai ‘Eha respectfully urge this Commission to deny this application or defer action until MDWS provides all of the information detailed in this objection. Such information is no more and no less than is required by law to adequately review and analyze all proposed water uses and to protect the public interest in our public trust resources.
Earthjustice's Objection to MDWS' Water Use Permit Application
September 2, 2004
Page 8 of 8

Mahalo for this opportunity to comment. If you have any questions or require additional information, please don't hesitate to contact me.

Me ke aloha,

D. Kama Sprat

cc: George Tengan, Maui County Department of Water
Via First-Class U.S. Mail

Jane Lovell, Esq., Maui County Deputy Corporation Counsel
Via First-Class U.S. Mail
TO: Other Interested Parties
FROM: Yvonne Y. Izu, Deputy Director
Commission on Water Resource Management

SUBJECT: Request for Comments
Water Use Permit Application
Iao Ground Water Management Area, Maui

In addition to serving you notice as required by 174C-52 (a), HRS, we transmit for your review and comment a copy of a water use permit application for County of Maui, Department of Water Supply for Well No. 5431-04. Public notice of this application will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

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( ) We have no objections or comments
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Contact person: D. Kapua Sproat
Signed: 

Phone: 599-2436, ext. 16
Date: September 2, 2004
September 2, 2004

BY U.S. MAIL & FACSIMILE TRANSMITTAL
Fax: (808) 587-0219

Peter T. Young, Chair
Yvonne Y. Izu, Deputy Director
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawai`i 96809

Re: Objection to Maui County Department of Water Supply’s Water Use Permit Application for Waihe`e Well No. 3 (Well No. 5431-04), ʻĪao Ground Water Management Area, Maui, Hawai`i

Dear Chair Young and Deputy Director Izu:

On behalf of Hui ʻo Nā Wai ʻEhā and Maui Meadows Homeowners Association, Earthjustice submits the following comments regarding Maui County Department of Water Supply’s (‘MDWS’”) water use permit application for Waihe`e Well No. 3 (Well No. 5431-04). This application seeks a permit to withdraw water from the ʻĪao Ground Water Management Area for both potable and nonpotable municipal uses. For all of the reasons detailed herein, this application fails to establish that the proposed use complies with all of the requirements of the law. We urge this Commission to require MDWS to supplement its application before holding a public hearing on this issue. We also request that you hold that public hearing on Maui so that our clients and other affected stakeholders can provide more detailed testimony on this important issue.

Maui Meadows Homeowners Association is an association of homeowners from the Maui Meadows subdivision in Kihei. The association’s filing of a July 2001 petition resulted in the designation of the ʻĪao aquifer in July of 2003. Maui Meadows has been active in water and land use issues on Maui for many years and its members rely on the ʻĪao aquifer to satisfy their water needs. Additionally, the association’s members have been working to ensure appropriate management of the ground water resources in the ʻĪao and Waihe`e aquifers.

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swimming, agriculture, aquaculture, research, photography, educational programs, aesthetic enjoyment, traditional and customary Native Hawaiian practices, and other recreational, scientific, cultural, educational and religious activities.

This Commission bears an affirmative burden to analyze and account for the impacts of its decisions on public trust resources. See In re Wai`ola o Moloka`i, Inc. ("Wai`ola"), 103 Haw. 401, 430 (2004); In re Water Use Permit Applications ("Waiahole I"), 94 Haw. 97, 141 (2000). When allocating water, the Commission must consider the impact of all proposed uses on: (1) the maintenance of waters in their natural state, (2) resource protection, (3) water for domestic purposes, and (4) the protection of traditional and customary Native Hawaiian rights and practices. Wai`ola, 103 Haw. at 429 (citing Waiahole I, 94 Haw. at 136-138, 142). The law mandates that this Commission "take the initiative in considering, protecting, and advancing public rights in the resource at every stage of the planning and decisionmaking process." Waiahole I, 94 Haw. at 143.

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Id. (citations and quotations omitted). If the Commission issues a water use permit without findings that "reasonably explain and justify its conclusions and rulings," that permit is vulnerable to being vacated. Id. at 26, 37-38, 45, 52-53 (remand with instructions for the Commission to make findings that demonstrate whether permit applicant met its burden; to articulate factors relied on in deciding whether a permit applicant has practicable alternative water sources; to establish factual basis for applicant's actual need for water). See also Wai`ola, 103 Haw. at 432, 439. The Supreme Court has made clear that it will not rubber stamp water use permitting decisions where the Commission has not conducted adequate fact-finding and analysis. See id.

MDWS' permit application fails to provide the factual basis necessary for this Commission to complete the analysis and make the findings required by the State Constitution and Water Code, and ratified by the Hawai`i Supreme Court. The application is insufficient for the following reasons:
1. The application failed to establish that the proposed use is consistent with the public interest and will not interfere with existing legal uses of water, pursuant to HRS §§174C-49(a)(3) and 174C-49(a)(4).

The consistent with the public interest and reasonable-beneficial use requirements for water use permit applications "demand examination of the proposed use not only standing alone, but also in relation to other public and private uses and the particular water source in question." Waiahole 1, 94 Haw. at 161. MDWS attempts to justify its proposed municipal use as consistent with the public interest because it services customers of the Central Maui System. Haw. Rev. Stat. § 174C-49(a)(4). More information is needed because MDWS' claims neglect to address the relative importance of MDWS' proposed use in light of other public trust purposes, or establish that it will not interfere with existing legal uses of water, including public trust uses. Id. at § 174C-49(a)(3).

a. MDWS failed to address any impacts of its proposed use on resource protection.

"[T]he maintenance of waters in their natural state constitutes a distinct `use' under the water resources trust." Waiahole I, 94 Haw. at 136. MDWS must therefore address the potential impact of its municipal use on the maintenance of water in its natural state, especially resource protection. This is especially important in 'Iao, where the condition of the aquifer has long been in question and the true sustainable yield hotly debated. In fact, this Commission designated 'Iao as a ground water management area after MDWS' pumpage exceeded 18 million gallons per day ("mgd"), a level that this Commission determined should not be exceeded. Over the last month, monthly pumpage in the 'Iao aquifer has again exceeded 18 mgd. MDWS' application failed to examine its proposed municipal use in relation to existing public trust uses such as resource protection in this aquifer. This information must be provided before the Commission can make any determination on MDWS' application.

b. MDWS failed to address traditional and customary Native Hawaiian rights & practices.

MDWS must affirmatively demonstrate that its proposed use will not harm existing and potential traditional and customary Native Hawaiian rights and practices. See Wai`ola, 103 Haw. at 442 ("the absence of evidence that its proposed use would affect native Hawaiians' rights was insufficient to meet the burden imposed ... by the public trust doctrine, the Hawai`i Constitution, and the Code."). In determining whether MDWS has met its burden, the Commission must consider the constitutional minimum delineated by the Hawai`i Supreme Court. Specifically, the Commission has an affirmative duty to determine and must make specific findings regarding: (1) the identity and scope of cultural resources, including the extent to which traditional and customary practices are exercised, in the affected area, (2) the extent to which cultural resources, including traditional and customary practices, will be affected, and (3) where traditional and customary practices are found to exist, feasible action that the Commission can take to protect affected practices. See Ka Pa`akai o Ka `Aina v. Land Use Comm'n, 94 Haw. 31, 47 (2000). MDWS has neglected to provide any information regarding these issues.

At a minimum, the law requires and we request that MDWS provide the information necessary for the public to scrutinize and this Commission to make the above-described
Earthjustice’s Objection to MDWS’ Water Use Permit Application
September 2, 2004
Page 4 of 8

determinations. As just one example, oral history from what is now the ‘Iao ground water
management area identifies springs which were renowned for healing and purifying powers,
including one named Waiola (on what is now the Sevilla family property). Native Hawaiians
from this area traditionally used these springs to purify themselves before entering heiau.
Waiola and other springs in the area are now dry as a result of ground and surface water
conditions in the aquifer. MDWS’ application fails even to mention Waiola or other cultural
resources in the ‘Iao aquifer (such as springs or spring-fed lo‘i) that may be affected by MDWS’
and other uses of ground water.

In addition, the 1990 Hawai‘i Stream Assessment (“HSA”) determined that streams in the
vicinity of MDWS’ proposed municipal use host a substantial population of native species,
including varieties of ‘o‘opu. In particular, Waiehu Stream, which is in close proximity to the
subject water source, was one of only nine streams on Maui worthy of designation as a candidate
stream for protection. Waiehu was designated a Blue Ribbon Resource, meaning that it was
selected as one of Hawai‘i’s very best cultural resources, due to its historical significance and
extensive wetland kalo cultivation. Like Waihe‘e, Waiehu was one of only six streams from the
entire island chain known to have more than 50 acres in wetland kalo cultivation. Without due
consideration of the impacts of MDWS’ proposed use on these resources, the application cannot
be approved.

MDWS’ failure to provide information demonstrating that its proposed use is consistent
with these important public interests and existing legal uses of water is a serious flaw in its
application and Maui Meadows and Hui o Nā Wai ‘Ehā respectfully urge this Commission to
deny the permit application in its present form. In the alternative, we ask that this Commission
order MDWS to provide necessary information within four weeks of the date of this objection, so
that the community and the Commission can review and analyze this information before any
public hearing and the Commission may, if necessary, request supplemental information.

2. MDWS’ application failed to establish that its proposed use of water is “reasonable-
beneficial,” pursuant to HRS §174C-49(a)(2).

MDWS’ application also failed to demonstrate that its proposed use is reasonable and
beneficial by detailing actual water needs. The law requires that permit applicants demonstrate,
at a minimum, that the requested amount of water reflects actual need. See Waiahole I, 94 Haw.
at 162 (“Notwithstanding the present and uncertain nature of the permitting process, therefore,
permit applicants must still demonstrate their actual needs”); Haw. Rev. Stat. §174C-50(f) (“A
permit to continue an existing use shall be for a quantity of water not exceeding that quantity
being consumed under the existing use.”) (emphasis added).

MDWS’ application quantifies total water needs over the next four years as: 25.703 mgd
in 2004, 26.204 mgd in 2005, 26.705 mgd in 2006, and 27.207 mgd in 2007. This application,
however, requests only 1.513 mgd and, even if this application is combined with MDWS’ other
applications for water use permits, the total amount requested is significantly less than MDWS’
total water needs. MDWS must address this discrepancy between the amount requested and their
claimed water needs. We also note that the amount that MDWS has requested differs
significantly from MDWS’ monthly averages of pumpage for June and July 2004. This
discrepancy must also be addressed by MDWS before this Commission can consider its application.

MDWS’ application also fails to account for a large portion of its actual use. In fact, the application notes only that single-family use comprises about 16% of the proposed use. As MDWS has admitted in the past, potable water delivered to the Central Maui Service Area serves both potable and non-potable needs. MDWS, however, is unable to provide calculations or even estimates of other uses. This lack of information is particularly disconcerting because MDWS is the biggest water user in the ‘Iao aquifer and has requested a large quantity of potable water that will ultimately serve non-potable needs. See COWRM ‘Iao-Waihe’e Final FOF & COL at 66. Such information does not pass legal muster and MDWS must provide additional information before its application can be considered.

Assuming, arguendo, that MDWS’ application can satisfy the actual needs requirement, the application fails to adequately analyze alternative sources and more information is needed. This alternatives analysis is necessary to evaluate whether the applicant has adequately established that its requested allocation would support a reasonable-beneficial use. The Supreme Court carefully defined the burden of proof for all water use applicants:

[B]esides advocating the social and economic utility of their proposed uses, permit applicants must also demonstrate the absence of practicable mitigating measures, including the use of alternative water sources. Such a requirement is intrinsic to the public interest, the statutory instream use protection scheme, and the definition of ‘reasonable-beneficial’ use and is an essential part of any balancing between competing interests.

Waiahole I, 94 Haw. at 161.

MDWS’ attempt to identify alternatives is commendable but requires additional information, including, among other things, details regarding concept, size, and timing. For example, the Commission must take a hard look at the use of potable water for non-potable needs in light of the demand for potable water and MDWS’ alternatives. Since alternatives are available, MDWS cannot simply assert that the proposed use of potable water for non-potable needs is reasonable and beneficial, especially when existing public trust uses such as resource protection and Native Hawaiian practices are at issue. More information is also needed regarding the extent to which the Waihe’e aquifer is a practicable alternative given this Commission’s 4.0 mgd limit on pumping from that aquifer and Ko‘olau Cattle Company’s new well. We urge the Commission to require a more detailed alternatives analysis that will address specifically the extent to which non-potable needs may be met via alternative sources. This Commission cannot issue a permit to MDWS absent additional information demonstrating that the requested amount constitutes a reasonable beneficial use of potable water.

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1 This Commission determined that while potable water is delivered through the Central Maui system to provide for both potable and nonpotable needs, the County was unable to “differentiate between these major categories of use.” COWRM ‘Iao-Waihe’e Final FOF & COL at 66.
3. MDWS failed to establish that the water source will accommodate its proposed use, pursuant to HRS §174C-49(a)(1).

The Code requires each applicant to establish that a water source can accommodate a proposed use. HRS §174C-49(a)(1). MDWS has failed to satisfy this condition and more information is needed, especially given the "serious dispute between the interested public and the MDWS . . . related to the integrity of the aquifer and land use decisions that affect demand on the aquifer." COWRM 'Iao-Waihe‘e Final FOF & COL at ix. In fact, this Commission recommended designating both the `Iao and Waihe‘e aquifers as ground water management areas because authorized planned use back in 2002 was 29.2 mgd, which "exceed[ed] the sustainable yields (Iao 20 mgd and Waihee 8 mgd = 28) available to the [Central Maui Service Area]." Id. This issue is even more critical now since this Commission has limited pumpage in Waihe‘e to 4.0 mgd, yet it continues to receive requests for new ground water wells (such as Ko‘olau Cattle Company's application) as well as applications for additional withdrawals from existing ground water sources (such as Kehalani Mauka, LLC). We also highlight the fact that better information on the sustainable yields of the `Iao and Waihe‘e aquifers will not be available for several more years, when USGS completes its Central Maui model.

As this Commission is well aware, authorized planned use has increased since 2002. Even if 29.2 mgd is used as a conservative figure, authorized planned use far exceeds the 24 mgd (‘Iao 20 mgd and Waihe‘e 4 mgd = 24) available to supply the Central Maui Service Area. MDWS' current pumpage already exceeds 26 mgd (calculated on a monthly average). Moreover, MDWS recently announced that applications for roughly 880,000 gpd had already been signed, even though MDWS believed that it had about only 800,000 gpd in unused capacity with which to issue new water meters. See Harry Eager, Council may block new C. Maui water meters, Maui News, Aug. 20, 2004.

4. Although MDWS’ application indicates that its proposed use is in accordance with State and Maui County general plans, land use designations, and policies, this is insufficient for the Commission to determine whether the proposed use is reasonable-beneficial, pursuant to HRS §§ 174C-49(a)(5) & 174C-49(a)(6).

MDWS claims that its proposed use will meet the demands outlined in state and county general plans, land use designations, and general policies. Where, as here, authorized land use outstrips the available water supply, this Commission ruled and the Hawai‘i Supreme Court affirmed that consistency with county plans and land use designations does not end the inquiry into whether a proposed water use may be permitted. In a situation similar to this one, this Commission concluded:

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2 Maui Meadows and Hui o Nā Wai `Ehā also note that the Commission has, thus far, failed to enter into a Memorandum of Agreement ("MOA") with MDWS to limit pumping to 4.0 mgd. Since this was a condition of rescinding the triggers for automatic designation of the Waihe‘e aquifer, the aquifer should be designated if MDWS refuses to sign the MOA.
As competition for water resources increases, the analysis of both the public interest and of reasonableness must become both more rigorous and affirmative. The counties will be required to articulate their land use priorities with greater specificity. For example, even at the present time, there is more land zoned for various uses than available water to supply those proposed uses. Thus, it is not sufficient to merely conclude that a particular parcel of land is properly zoned and that the use is "beneficial." That minimal conclusion may be inadequate to resolve situations in which competitive demand exceeds supply.


The situation on Maui is analogous, if not worse, than the situation in Honolulu addressed by this Commission in Waiahole I & II. Again, authorized planned use in the Central Maui Service Area exceeds both the 28 mgd sustainable yield of the aquifers supplying the Central Maui Service Area, as well as the 24 mgd that this Commission has established as the maximum available now. COWRM ʻĪao-Waieʻe Final FOF & COL at ix. Be that as it may, the fact that MDWS’ proposed use is consistent with county land use designations “only provides a minimal standard by which to judge applications.” Waiahole I, 94 Haw. at 188. Additional information is needed.

5. MDWS failed to establish that its proposed use will not interfere with the rights and needs of the Department of Hawaiian Home Lands, pursuant to HRS § 174C-49(a)(7).

MDWS’ claim that its proposed use will not interfere with the rights of the Department of Hawaiian Home Lands ("DHHL") because there are no DHHL wells withdrawing water from the ʻĪao aquifer is wholly insufficient. By its own admission, MDWS services DHHL projects in the Central Maui Service Area and, therefore, MDWS must examine the impact of its proposed use on DHHL’s present and future needs. In fact, MDWS objected to Kehalani Mauka, LLC’s water use permit application because that application failed to demonstrate that its proposed use will not interfere with DHHL’s rights and interests. MDWS cannot have its cake and eat it too. MDWS must provide additional information regarding both existing and future DHHL projects within the Central Maui Service Area and how MDWS’ use will impact those rights and needs. See Wai’ola, 103 Haw. 401.

Conclusion

Since MDWS is the largest water user in the ʻĪao aquifer, the legal and factual sufficiency of its applications are critical. MDWS must affirmatively demonstrate compliance with the state constitution, Water Code, and public trust principles. Absent all of the required components, MDWS’ application cannot be approved. Maui Meadows and Hui o Nā Wai ʻEhā respectfully urge this Commission to deny this application or defer action until MDWS provides all of the information detailed in this objection. Such information is no more and no less than is required by law to adequately review and analyze all proposed water uses and to protect the public interest in our public trust resources.
Earthjustice’s Objection to MDWS’ Water Use Permit Application
September 2, 2004
Page 8 of 8

Mahalo for this opportunity to comment. If you have any questions or require additional information, please don’t hesitate to contact me.

Me ke aloha,

D. Kapua Sproat

cc: George Tengan, Maui County Department of Water
Via First-Class U.S. Mail

Jane Lovell, Esq., Maui County Deputy Corporation Counsel
Via First-Class U.S. Mail
September 1, 2004

Peter Young, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
P.O. Box 621
Honolulu, HI 96809

RE: Objection to the application for Water Use Permit for Well 5431-04 ("Waihe'e 3") by Maui County, source TMK No. 3-2-17:018, Place of water use at various tax map keys, in the Iao Ground Water Management Area, Maui.

Mr. Young and Commissioners,

The Office of Hawaiian Affairs (OHA) appreciates the opportunity to comment on this Water Use Permit Application (WUPA).

OHA has responded and objected to other recent WUPA in Iao by Maui County in letters and testimony. We repeat the objections stated in our letter of July 13, 2004.¹

We have received and appreciate a letter from Maui County dated August 11th, responding to our objections referenced above. While we are still reviewing that letter, we wish to reiterate that we do seek to cooperate with Maui County, especially in regards to evaluating the impact of these withdrawals on Native Hawaiian Water Rights. However we also note and reiterate that the applicant alone bears the burden of establishing that their proposed use of water shall not harm, diminish, abridge, or deny Native Hawaiian Water Rights.

Thank you for the opportunity to comment. If you have further questions, please contact Dr. Jonathan Likeke Scheuer at 594-1946 or email him at jonathans@oha.org.

¹ (RE: Objection to applications for Water Use Permits for Maui Department of Water Supply for the Waihee Wells 1 & 2 (Well Nos. 5431-02 & 03, WUP Nos. 695 & 696, source TMK 3-3-27:31, location of use TMKs unspecified and multiple), Waiehu Heights Wells 1 & 2 (Well Nos. 5430-01¹ & 002, WUP Nos. 697 & 698, source TMK 3-3-2:28, location of use TMKs unspecified and multiple), Ke'apaniwell (Well No. 5332-05, WUP No. 699, source TMK 3-3-3:5, location of use TMKs unspecified and multiple), Mokuha Wells 1 & 3 (Wells Nos. 5330-09 & 11, WUP Nos. 700 & 701 source TMK 3-3-2:24, location of use TMKs unspecified and multiple), and Iao Tunnel (Well No. 5332-02, WUP No. 680, source TMK 3-3-3:3, location of use TMKs unspecified and multiple), all in the Iao Ground Water Management Area, Maui.)
Sincerely,

[Signature]

Clyde W. Namu'o
Administrator

CC: County of Maui
Department of Water Supply
200 South High Street
Wailuku, HI 96793
TO: Honorable Micah Kane, Director  
Department of Hawaiian Home Lands  
Honorable Chiyome L. Fukino, M.D., Director  
Department of Health  
Mr. Clyde W. Namu'o, Administrator  
Office of Hawaiian Affairs  
Attn: Mr. Jonathan Scheuer  
Honorable Dain P. Kane, Chairperson  
County Council  
County of Maui  
Mr. Michael W. Foley, Director  
Planning Department  
County of Maui

FROM: Peter T. Young, Chairperson  
Commission on Water Resource Management

SUBJECT: Water Use Permit Application  
Iao Ground Water Management Area, Maui

August 9, 2004

Transmitted for your review and comment is a copy of a water use permit application for County of Maui, Department of Water Supply for Well No. 5431-04. Public notice of this application will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

We would appreciate your review of the proposed use that is described in the attached application (i.e. line item 6 or Table 1) for any conflicts or inconsistencies with the land use designations, programs, plans, or objectives specific to your organization or department only. Please respond by returning this cover memo form by September 2, 2004. If we do not receive your comments by this date, we will assume you have no comments.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Charley Ice at 587-0251.

CI:ss  
Attachment(s)

Response:  
( ) We have no objections or comments  
( ) Objections attached  
( ) Only comments attached

Contact person: Jonathan Li'ike Scheuer  
Phone: (808) 728-4625

Signed:  
Date: 7/2/04
Please file and forward to applicants.

ALOHA,
This may be a second time you get this, kala mai no ku'u hemahema, Ano Ai:

PLEASE TAKE NOTICE OF THIS OBJECTION:
IN RE: WELL APPLICATIONS FOR WELL # 25531-01 AND # 5431-04 AND 5330-05.

WE, THE "AHA KU MOKU OF NA WAI EHA ("THE ASSEMBLAGE IN WHOM THE MOKU BELONGS" UNDER ADJUDICATED TITLE)

WE HEREBY OBJECT TO THE TAKING OF WATER FOR DEVELOPMENT PURPOSES; ON THE FOLLOWING GROUNDS:
1) NO LAWFUL TRANSFER OF TITLE TO PROPERTIES (THAT INCLUDE THE WATER) BEING PROPOSED FOR DEVELOPMENT.
2) WE, AS A COMMUNITY VEHEMENTLY DENY ANY MORE ILLEGAL DEVELOPMENT OF OUR MOKU BASED ON THE ABOVE. This includes the taking of water and displacement of our DUE PROCESS.
3) LIVING WATERS LLC IS TAKING WATER, AT PRESENT IN 2-3 FOOT PIPES SET IN OLD AUWAI'S ON THE PROPERTY THEY ARE ILLEGALLY OCCUPYING; FILING IN SUIT AGAINST THE STATE FOR INSTREAM FLOW; FILING TRO'S AGAINST THE KANUHA FAMILY FOR AN EASEMENT ON THE KANUHA PROPERTY; APPLYING FOR A WELL FROM YOU AND THE PROPERTY ITSELF IS IN LITIGATION.
4) DAVID SINGER'S Q/D DID NOT INCLUDE OUR INTERESTS
5) VALERIE DEVA & DON HARRIS Q/D FROM AVERY CHUMBLEY DID NOT INCLUDE OUR INTERESTS.
6) WE DO NOT WANT OUR ROADS CLOSED AND CHANGED INTO PRIVATE ROADS THAT SHUT US OFF FROM OUR MAUKA MAKAI RIGHTS AS IS GOING ON -- ON OUR ISLAND RIGHT NOW.
7) WE REPRESENT ALL OF OUR COLLECTIVE OHANA AT PRESENT, LINEAL AND CULTURAL DESCENDANTS OF MOKU O NA WAI EHA.

WE ARE THE PO'E AHA KU MOKU composed OF PO'O REPRESENTING APPROXIMATELY 200-300 PEOPLE. WE ARE APPOINTED UNDER THE KANAWAI HO'ILINA TO OBJECT ON ALL OF OUR FAMILIES BEHALF AND TO PROTECT THEIR ROYAL PATENTS AND LAND COMMISSION AWARDS THAT INCLUDE A BUNDLE OF RIGHTS, PROTECTED BY THE 1839 CONSTITUTION. OUR KUPUNA HAVE SET THIS FORTH AND WE HAVE COME TOGETHER TO OBJECT ON THIS DATE: SEPTEMBER 1, 2004 AS A COMMUNITY OF KANAKA MAOLI HAWAII.
THE PO'O HO'ILINA ARE:
MAHEALANI VENTURA-OLIVER FOR: KALILI, KALEOHANO, NAHUINA, KUANE, KAMAMALU,
NAMAHANA, MOIHEA AND KAME'EIAMOKU, BIRCH, KAMAKEA, PEPEIAO AND KEALOHAPAU'OLE,
KAWA'AKAUAKAHI, LUNALILO, A KOE NA KULEANA O NA KANAKA, ET AL.
KEEAUMOKU KAPU FOR: KEEAUMOKU NUI, NAMAHANA, KAMAMALU, KEKAI, KALEO, KAIALI'I'I,
KALEOPU'UPU'U, KEAHI, HEWAHEWANUI, LUNALILO, A KOE NA KULEANA O NA KANAKA, ET AL.
FOSTER AMPONG: KALEOHANO, TIMOTEO, KEKAHUNA, KANUHA, LUNALILO, KAMAMALU A KOE
NA KULEANA O NA KANAKA, ET AL.
SUSAN KA'AWA, FOR KA'AWA, HEWAHEWA NUI, KAMAMALU, KAUHI LUNALILO A KOE NA
KULEANA O NA KANAKA, ET AL.
OLIVER DUKELOW FOR PEPEHU, MAULE, AWANA, LUNALILO, KAMAMALU, A KOE NA KULEANA O
NA KANAKA, ET AL.
MAGARET HOOPII FOR NA HOOPII, KAMAMALU, KANU ANA, LUNALILO A KOE NA KULEANA O NA
KANAKA, ET AL.
NELSON ARMITAGE FOR LUNALILO, KAMAMALU A KOE NA KULEANA O NA KANAKA, ET AL AND
THE CONSTITUENTS OF THE ORGANIZATION OF THE REINSTATED GOVERNMENT
RESPECTIVELY; NUMBERING ANOTHER 200 PERSONS.

INCLUDE TO THIS LIST OF FAMILIES; THE OIHANA OF OTHERS FROM OUTER ISLANDS WHO
COME TO OUR PU'HONUUA, HEIAU, KU'AHU, AHU, TRAILS, KU'ULA, PAILINA, KANU ANA, ETC. TO
PRACTICE CULTURAL BELIEFS, TO FISH, DIVE, COLLECT AND GATHER LIMU DEPENDENT
UPON THE MULIWAI - FRESH WATER, SPECIES THAT ARE GATHERED IN THE IUKA, AND WE EACH
HAVE THAT EXACT INALIENABLE FREEDOM THAT THIS IS TO BE PROTECTED BY LAW.
ADD TO THIS OBJECTION: LEGAL SPECIES THAT ARE THREATENED BY THE LOSS OF STREAM
FLOW, DEGRADATION OF THE WATER SCOPE AREA TO REPLENISH THE NATURAL FLOW AND
RETURN OF OUR FRESH WATER, RUN OFF ACCIDENTS, STORM DRAIN POLLUTION, LOSS OF
ENVIRONMENT AND GENOCIDE OF OUR PEOPLE. LET US LIVE.

DO NOT INFRINGE UPON THE POPULACE TO SATISFY A FEW WHO WANT TO CONTROL THE
WATER FOR THEIR PERSONAL BENEFITS THAT DO NOT HELP THE COMMUNITY AT ALL,
ESPECIALLY THAT WHICH IS BASED ON QUITCLAIM DEEDS AND FRAUDULENT TRANSFERS
FROM A PLANTATION.

BY YOUR COMMISSION APROVING THESE APPLICATIONS, WE ARE THEREBY DISPLACED FROM
OUR CONSTITUTIONAL RIGHTS, SUBJECT TO DEPRIVATION OF OUR PROPERTIES AND
ADVERSELY AFFECTED BY YOUR DECISION.

"KOE NA KULEANA O NA KANAKA" IS A RESERVATION OF OUR PROPERTY RIGHTS
INCLUDING EVERY RIGHT THERETO, WITHIN EVERY ALI'I LAND COMMISSION AWARD AND
ROYAL PATENT THAT REPRESENTS NO LESS THAT A 33 1/3 PERCENT OF THAT TITLE.

E OLA I KA WAI HA HAWAI'I MAOLI.

Mahea/ani Ventura-Oliver
Po'e ho'ollina a 'Aha ku moku o Na Wai Eha
Aloha Title Co.
584 Haiki Pl.
Waiehu, HI 96793
808-249-0113 or 808-870-0422
Fax: 808-244-0469
TO: Peter T. Young, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources

FROM: Anthony J. H. Ching, Executive Officer

SUBJECT: Water Use Permit Applications
Iao Groundwater Management Area, Maui

We have reviewed the subject applications forwarded by your transmittals dated August 9, 2004, and find that Waihee 3 Well (No. 5431-04) and Waihee Mauka Living Waters #1 (No. 5531-01), as generally represented on the USGS maps, are designated within the boundary of the State Land Use Agricultural District. Wailuku Shaft 33 (No. 5330-05), as generally represented on the USGS map, is designated within the boundary of the State Land Use Urban District.

With respect to your request as to whether the current designation is appropriate for the proposed project, please be advised that although sections 205-2(d) and 205-4.5(a), Hawaii Revised Statutes (HRS), do not explicitly list wells as permissible activities or uses within the Agricultural District, we have in the past noted that when the requested water was directly accessory to the uses specified in the aforementioned sections, the activities appeared to be appropriate uses within the Agricultural District. To the extent that the water requested from the Waihee 3 Well would be used for municipal use, we would defer to the County zoning designation of the respective parcel, which we understand permits water wells as minor utility facilities.

With respect to the Waihee Mauka Living Waters #1 Well, to the extent that the water will be used for the irrigation of macadamia nut orchards and various other crops, as well as for individual domestic use, these activities would appear to be appropriate uses within the Agricultural District.
With respect to Wailuku Shaft 33, please be advised that pursuant to section 205-2(b), HRS, activities or uses within the Urban District are the jurisdiction of the respective counties as provided by their ordinances or regulations. As such, we suggest that you contact the County of Maui Department of Planning directly for their comments on this matter.

Thank you for the opportunity to comment on the subject applications. As requested, we are returning the cover memos for the subject applications.

Please feel free to contact Bert Saruwatari of my office at 587-3822 should you require clarification or any further assistance.

Enclosures
TO: Mr. Anthony Ching, Executive Officer
Land Use Commission

FROM: Peter T. Young, Chairperson
Commission on Water Resource Management

SUBJECT: WATER USE PERMIT APPLICATION
Iao Ground Water Management Area, Maui

Transmitted for your review and comment is a copy of a water use permit application for County of Maui, Department of Water Supply for Well No. 5431-04. Public notice of this application will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

We would appreciate your review of the proposed use that is described in the attached application (i.e. line item 6 or Table 1). Specifically, we request that you inform us of the current state land use designation for the TMK parcel, or portion thereof, for the proposed use area(s) and, secondly, whether the current state land use designation is appropriate for the proposed project.

We have attached a TMK map(s) that covers the proposed use area(s). Where water is proposed for use on only a portion of a TMK parcel, or on parcels with multiple zoning, the proposed use area(s) has been clearly delineated on the attached map. Please respond by returning this cover memo along with your review comments by September 2, 2004. If we do not receive your comments by this date, we will assume you have no comments.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Charley Ice at 587-0251.

Response:

( ) We have no objections or comments
( ) Objections attached
( ) Only comments attached

Contact person: Beat Saruwatari
Signed: Beat Saruwatari
Phone: 587-3822
Date: 8/18/04
TO:  Dede Mamiya, Administrator  
     Land Division

FROM:  Yvonne Y. Izu, Deputy Director  
     Commission on Water Resource Management

SUBJECT:  Request for Comments  
         Water Use Permit Application  
         Iao Ground Water Management Area, Maui

Transmitted for your review and comment is a copy of a water use permit application for County of Maui, Department of Water Supply for Well No. 5431-04. Public notice of this application will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please respond by returning this cover memo form by September 2, 2004. If we do not receive your comments by this date, we will assume you have no comments.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Charley Ice at 587-0251.

CI: ss  
Attachment(s)

Response:

( ) A water lease/permit is required of this applicant and an application for such will be requested by our division.

( ) A water lease/permit is not required of this applicant.

( ) A water lease/permit has been obtained by the applicant through leasing.

( ) This well project ( ) requires (X) does not require a CDUP. If a CDUP is required it ( ) has ( ) has not been approved and ( ) is ( ) is not currently active.

( ) Other relevant Land Division rules/regulations, information, or recommendations are attached.

( ) No objections

( ) Other comments: Original source of private title is LC Award 678 issued between 1845 and 1855.

Contact person: Gary Martin  
Phone: 587-0427  
Signed: Gary Martin  
Date: SEP - 1 2004
August 9, 2004

TO: Aquatic Resources
   Forestry and Wildlife/Natural Area Reserve System
   Historic Preservation
   State Parks

FROM: Yvonne Y. Izu, Deputy Director
      Commission on Water Resource Management

SUBJECT: Request for Comments
          Water Use Permit Application
          Iao Ground Water Management Area, Maui

Transmitted for your review and comment is a copy of a water use permit application for County of Maui, Department of Water Supply for Well No. 5431-04. Public notice of this application will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please respond by returning this cover memo form by September 2, 2004. If we do not receive your comments by this date, we will assume you have no comments.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Charley Ice at 587-0251.

Response:

(✓) We have no objections or comments
( ) Objections attached
( ) Only comments attached

Contact person: David S. Quinn
Phone: 8/31/04 587-0290

Signed: Date: 8/31/04
TO: Honorable Micah Kane, Director  
Department of Hawaiian Home Lands  
Honorable Chiyome L. Fukino, M.D., Director  
Department of Health  
Mr. Clyde W. Namu'o, Administrator  
Office of Hawaiian Affairs  
Attn: Mr. Jonathan Schreurer  
Honorable Dain P. Kane, Chairperson  
County Council  
County of Maui  
Mr. Michael W. Foley, Director  
Planning Department  
County of Maui

FROM: Peter T. Young, Chairperson  
Commission on Water Resource Management

SUBJECT: Water Use Permit Application  
Iao Ground Water Management Area, Maui

August 9, 2004

Transmitted for your review and comment is a copy of a water use permit application for County of Maui, Department of Water Supply for Well No. 5431-04. Public notice of this application will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

We would appreciate your review of the proposed use that is described in the attached application (i.e. line item 6 or Table 1) for any conflicts or inconsistencies with the land use designations, programs, plans, or objectives specific to your organization or department only. Please respond by returning this cover memo form by September 2, 2004. If we do not receive your comments by this date, we will assume you have no comments.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Charley Ice at 587-0251.

CL:as
Attachment(s)

Response: We have no objections or comments

( ) Objections attached  
( ) Only comments attached

Contact person:  
Signed:  
Phone: 586-4258

Date: AUG 23 2004
August 25, 2004

Mr. George Tengan, Director
County of Maui
Department of Water Supply
200 South High Street
Wailuku, HI 96793

Dear Mr. Tengan:

Supreme Court Directions for Water Use Permit Applications

Thank you for completing your applications to the best of your abilities and the directions provided by staff. We have been advised to alert you to directions of the Supreme Court in adjudicating the Waiahole Contested Case on remand, as they pose additional information requirements for water use permit applications, namely discussion of practicable alternatives and the calculation of per-unit amounts of water ("duties").

As we have received objections to the applications submitted to-date for continuing the existing use of ground water from the Iao Aquifer, please be informed that additional information is advised for the hearing on Maui that is being scheduled tentatively for late October.

The Supreme Court’s opinion is summarized as follows:

1. Practicable Alternatives

"Under the public trust doctrine and the Code, permit applicants have the burden of justifying their proposed uses in light of protected public rights in the resource" (Waiahole 1, 94 Hawai‘i at 160, 9 P.3d at 472). The Water Code requires, inter alia, that the applicant prove that the proposed use of water is a "reasonable-beneficial use" and is consistent with the public interest (HRS § 174C-49(a)(2 & 4). "Reasonable-beneficial use" is defined as "the use of water in such a quantity as is necessary for economic and efficient use (sic) for a purpose and in a manner both reasonable and consistent with state and county plans and the public interest" (HRS § 174C-3, emphasis added).

"Furthermore, besides advocating the social and economic utility of their proposed uses, permit applicants must also demonstrate the absence of practicable mitigating measures, including the use of alternative water sources. Such a requirement is ... an essential part of any balancing between competing interests." (Waiahole 1 94 Hawai‘i at 161, 9 P.3d at 473, emphasis added)
2. Calculating per-unit amounts of water ("duties")

The Court found that some calculations done for the Waiahole case were not clearly erroneous while others were erroneous. It is typical for planners to project reasonable ballpark numbers to be used by each household, each business, or each acre of crop, based on experience. The Court has opined that such ballpark numbers are inadequate when public resources are being contested, and that more careful, detailed examination of factors must be specified when projecting need. The court made distinctions between type of crop, location, and other factors, and we surmise the same may be applied to different businesses and households.

We urge you to review the Hawaii Supreme Court's Waiahole I and Waiahole II decisions in formulating your response to this request for additional information.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.

Sincerely,

YVONNE Y. IZU
Deputy Director

Cl:ss
COMMISSION ON WATER RESOURCE MANAGEMENT
(05/04)

FROM: ROY

DATE: AUG 23 2004

TO: BAUER, G.  INIT.  TO: MATHIAS, T.

TO: CHING, F.  INIT.  TO: NAKANO, D.

TO: DANBARA, S.  INIT.  TO: OHYE, M.

TO: FUJII, N.  INIT.  TO: SAKODA, E.

TO: GOODING, K.  INIT.  TO: STAHL, K.

TO: HARDY, R.  INIT.  TO: SUBIA, S.

TO: HIGA, D.  INIT.  TO: SWANSON, S.

TO: ICE, C.  INIT.  TO: UYENO, D.

TO: IMATA, R.  INIT.  TO: YODA, K.

TO: IZU, Y.  INIT.  TO: YOSHINAGA, M.

TO: KUNIMURA, I.

DATE: AUG 23 2004

SUSPENSE DATE: ____________________________

PLEASE:

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<thead>
<tr>
<th>Approval</th>
<th>Signature</th>
<th>Information</th>
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<td>See Me</td>
<td>Review &amp; Comment</td>
<td>Take Action</td>
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1. applied 7/2/04 < 7/1/04
2. our letter will clarify.
To: Peter T. Young, Chairman
Commission on Water Resource Management

From: Micah A. Kane, Chairman
Department of Hawaiian Home Lands

Subject: Water Use Permit Application, Maui County Board of Water Supply and Waiehu Aina, LLC, Well No. 5431-04, Iao Groundwater Management Area, Maui

August 19, 2004

Thank you for the opportunity to provide comments on the subject water use permit application. The applicant, Maui County Board of Water Supply (BWS), requests 1.513 mgd for unstated uses on multiple TMK’s.

The Department of Hawaiian Home Lands (DHHL) has significant landholdings in the area as stated in our memo to you dated July 13, 2004. New uses in this aquifer may limit our ability to provide water for our future projects. According to Ch. 174C-49, HRS, new use applicants must meet a number of criteria in order to get water use approval. As such, DHHL has concerns regarding the subject application as follows.

1. The Applicant submitted the Water Use Permit Application (WUPA) after the one-year deadline had passed for existing use permit consideration. Therefore, the Commission on Water Resource Management (CWRM) must consider the request a new, rather than an existing, use application.

2. The Applicant requests 1.5 mgd of water to be used at full buildout on multiple TMK’s in four years. The application also lists 25.7 mgd of existing uses on various TMK’s. DHHL respectfully requests that the BWS separate the existing uses from new uses on the subject WUPA and provide clarity as to the type of uses and the service area of the request.
DHHL respectfully requests that the CWRM carefully review new applications for clarity with respect to consumption figures that are consistent with the request and provide other information required under the Water Code as part of the review process.

Thank you for your consideration. If you have questions, please call Rebecca Alakai at 587-6423.
August 9, 2004

TO:
Honorable Micah Kane, Director
Department of Hawaiian Home Lands

Honorable Chiyome L. Fukino, M.D., Director
Department of Health

Mr. Clyde W. Namu'o, Administrator
Office of Hawaiian Affairs
Attn: Mr. Jonathon Scheurer

Honorable Dain P. Kane, Chairperson
County Council
County of Maui

Mr. Michael W. Foley, Director
Planning Department
County of Maui

FROM:
Peter T. Young, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Application
Iao Ground Water Management Area, Maui

Transmitted for your review and comment is a copy of a water use permit application for County of Maui, Department of Water Supply for Well No. 5431-04. Public notice of this application will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

We would appreciate your review of the proposed use that is described in the attached application (i.e. line item 6 or Table 1) for any conflicts or inconsistencies with the land use designations, programs, plans, or objectives specific to your organization or department only. Please respond by returning this cover memo form by September 2, 2004. If we do not receive your comments by this date, we will assume you have no comments.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Charley Ice at 587-0251.

Response:
( ) We have no objections or comments
( ) Objections attached
( ) Only comments attached

Contact person: Rebecca Alakai
Signed: R. Alakai
Phone: 587-6412
Date: 8/17/04

Signed: P. Young
Phone: 587-0251
Date: 8/23/04
August 9, 2004

Mr. George Tengan, Director
Department of Water Supply
County of Maui
200 S. High Street
Wailuku, HI 96793

Dear Mr. Tengan:

We acknowledge receipt, on July 21, 2004, of your completed water use permit application for the Waihee 3 Well (Well No. 5431-04). You can expect your application to be processed within ninety (90) days from the date of receipt unless there are objections to your application.

Enclosed is a copy of the public notice for your water use permit application which will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

Please be aware that there may be objections to your application. If objections are made, the objector is required to file such objections with the Commission and is also required to send you a copy of the objections.

You, or any other party, may respond to objections by filing a brief in support of your application with the Commission within ten (10) days of the filing of an objection. You, or the other party, must also send a copy of the response to the objector.

If you have any questions, please contact Charley Ice at 587-0251.

Sincerely,

YVONNE Y. IZU
Deputy Director

Cl:ss
Enclosure
TO: Dede Mamiya, Administrator
   Land Division

FROM: Yvonne Y. Izu, Deputy Director
       Commission on Water Resource Management

SUBJECT: Request for Comments
         Water Use Permit Application
         Iao Ground Water Management Area, Maui

Transmitted for your review and comment is a copy of a water use permit application for County of Maui, Department of Water Supply for Well No. 5431-04. Public notice of this application will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please respond by returning this cover memo form by September 2, 2004. If we do not receive your comments by this date, we will assume you have no comments.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Charley Ice at 587-0251.

Class
Attachment(s)

Response:

( ) A water lease/permit is required of this applicant and an application for such will be requested by our division.
( ) A water lease/permit is not required of this applicant.
( ) A water lease/permit has been obtained by the applicant through lease no.
( ) This well project ( ) requires ( ) does not require a CDUP. If a CDUP is required it ( ) has ( ) has not been approved and ( ) is ( ) is not currently active.
( ) Other relevant Land Division rules/regulations, information, or recommendations are attached.
( ) No objections
( ) Other comments:

Contact person: ____________________________ Phone: ____________________________

Signed: ____________________________ Date: ____________________________
August 9, 2004

TO: Aquatic Resources  
Forestry and Wildlife/Natural Area Reserve System  
Historic Preservation  
State Parks  

FROM: Yvonne Y. Izu, Deputy Director  
Commission on Water Resource Management  

SUBJECT: Request for Comments  
Water Use Permit Application  
Iao Ground Water Management Area, Maui  

Transmitted for your review and comment is a copy of a water use permit application for County of Maui, Department of Water Supply for Well No. 5431-04. Public notice of this application will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please respond by returning this cover memo form by September 2, 2004. If we do not receive your comments by this date, we will assume you have no comments.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Charley Ice at 587-0251.

CI:ss  
Attachment(s)  
Response:  
( ) We have no objections or comments  
( ) Objections attached  
( ) Only comments attached  

Contact person: __________________________________________ Phone: ______________________  
Signed: _________________________________________________ Date: ______________________
TO: Honorable Micah Kane, Director
Department of Hawaiian Home Lands

Honorable Chiyome L. Fukino, M.D., Director
Department of Health

Mr. Clyde W. Namu'o, Administrator
Office of Hawaiian Affairs
Attn: Mr. Jonathon Scheurer

Honorable Dain P. Kane, Chairperson
County Council
County of Maui

Mr. Michael W. Foley, Director
Planning Department
County of Maui

FROM: Peter T. Young, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Application
Iao Ground Water Management Area, Maui

Transmitted for your review and comment is a copy of a water use permit application for County of Maui, Department of Water Supply for Well No. 5431-04. Public notice of this application will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

We would appreciate your review of the proposed use that is described in the attached application (i.e. line item 6 or Table 1) for any conflicts or inconsistencies with the land use designations, programs, plans, or objectives specific to your organization or department only. Please respond by returning this cover memo form by September 2, 2004. If we do not receive your comments by this date, we will assume you have no comments.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Charley Ice at 587-0251.

Response:

( ) We have no objections or comments
( ) Objections attached
( ) Only comments attached

Contact person: ____________________________________________________________________
Phone: ________________

Signed: __________________________________________________________________________
Date: ________________
TO: Mr. Anthony Ching, Executive Officer  
Land Use Commission  
FROM: Peter T. Young, Chairperson  
Commission on Water Resource Management  
SUBJECT: WATER USE PERMIT APPLICATION  
Iao Ground Water Management Area, Maui  

Transmitted for your review and comment is a copy of a water use permit application for County of Maui, Department of Water Supply for Well No. 5431-04. Public notice of this application will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

We would appreciate your review of the proposed use that is described in the attached application (i.e. line item 6 or Table 1). Specifically, we request that you inform us of the current state land use designation for the TMK parcel, or portion thereof, for the proposed use area(s) and, secondly, whether the current state land use designation is appropriate for the proposed project.

We have attached a TMK map(s) that covers the proposed use area(s). Where water is proposed for use on only a portion of a TMK parcel, or on parcels with multiple zoning, the proposed use area(s) has been clearly delineated on the attached map. Please respond by returning this cover memo along with your review comments by September 2, 2004. If we do not receive your comments by this date, we will assume you have no comments.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Charley Ice at 587-0251.

Cl:ss
Attachment(s)

Response:  
( ) We have no objections or comments  
( ) Objections attached  
( ) Only comments attached  

Contact person: ___________________________ Phone: ___________________________  
Signed: ___________________________ Date: ___________________________
August 9, 2004

Honorable Alan M. Arakawa, Mayor
County of Maui
200 South High Street
Wailuku, HI 96793

Dear Mayor Arakawa:

Notice of an Application for a Water Use Permit
Iao Ground Water Management Area, Maui

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-171-17(a), we are sending you a copy of the public notice for the water use permit application for the County of Maui, Department of Water Supply for Well No. 5431-04, which will be published in the Maui News.

In addition, Section 13-171-13(b) of our Administrative Rules states:

"Within sixty days after receipt of notice of a permit application, the county shall inform the commission if the proposed use is inconsistent with the county land use plans and policies."

We have attached a copy of the application for your review and would appreciate receiving your comments, within the next sixty (60) days, on whether this water use is consistent with county plans and policies.

Sincerely,

Peter T. Young
Chairperson

Cl: ss
Enclosures
TO: Other Interested Parties

FROM: Yvonne Y. Izu, Deputy Director
Commission on Water Resource Management

SUBJECT: Request for Comments
Water Use Permit Application
Iao Ground Water Management Area, Maui

August 9, 2004

In addition to serving you notice as required by 174C-52 (a), HRS, we transmit for your review and comment a copy of a water use permit application for County of Maui, Department of Water Supply for Well No. 5431-04. Public notice of this application will be published in the Maui News issues of August 11, 2004 and August 18, 2004.

We would appreciate your review of the attached application for any conflicts or interferences with the programs, plans, and objectives of the organization or agency that you represent. Written objections should be made in accordance with Section 13-171-18 of our Administrative Rules and must be filed by the September 2, 2004 deadline. If we do not receive your comments by this date, we will assume you have no comments.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Charley Ice at 587-0251.

Response:

( ) We have no objections or comments
( ) Objections attached
( ) Only comments attached

Contact person: __________________________  Phone: ______________
Signed: __________________________________  Date: ______________
INTERESTED OTHERS LIST

ADDITIONAL STANDARD CORRESPONDENCE

Kapua Sproat
EarthJustice
223 South King Street 4 F1
Honolulu, HI 96813

James Williamson, Vice-President
Maui Meadows Homeowners Association
PO Box 1935
Kihei, HI 96753
PUBLIC NOTICE

Applications for Water Use Permit
Iao Ground Water Management Area, Maui

The following application for water use permit has been received and is hereby made public in accordance with Department of Land and Natural Resources Administrative Rules 13-171, "Designation and Regulation of Water Management Areas."

Waiheeh Mauka Living Waters #1 (Well No. 5531-01)
Applicant: Living Waters Land Foundation LLC
P.O. Box 2667
Wailuku, HI 96793
Date Completed Application Received: July 15, 2004
Aquifer: Iao System, Wailuku Sector, Maui
Water Source: Waiheeh Mauka Living Waters #1 (Well No. 5531-01) at Kope Gulch, makai of Spreckels Ditch, Maui, Tax Map Key 3-2-13:15
Quantity Requested: .020 million gallons per day.
New Water Use: Irrigation of 553.62 acres currently supplied by Wailuku Agribusiness, Inc. and applicant is asking for a new groundwater source to backup this existing surface water use.
Place of Water Use: Same description as source at Tax Map Key: 3-2-13:15

Waiheeh 3 (Well No. 5431-04)
Applicant: County of Maui
Department of Water Supply
200 S. High Street
Wailuku, HI 96793
Date Completed Application Received: July 21, 2004
Aquifer: Iao System, Wailuku Sector, Maui
Water Source: Waiheeh 3 (Well No. 5431-04) at Waiheeh, Maui, Tax Map Key 3-2-17:018
Quantity Requested: 1.513 million gallons per day.
Existing Water Use: Municipal
Place of Water Use: Central Maui Service System at Various Tax Map Keys

Wailuku Shaft 33 (Well No. 5330-05)
Applicant: Kehalani Mauka, LLC
1100 Alakea St., 27th Floor
Honolulu, HI 96813
Date Completed Application Received: July 23, 2004
Aquifer: Iao System, Wailuku Sector, Maui
Water Source: Wailuku Shaft 33 (Well No. 5330-05), Maui, Tax Map Key 3-5-1:67
Quantity Requested: 5.771 million gallons per day.
Existing & New Water Use: Municipal
Place of Water Use: Kehalani Project at Tax Map Key: 3-4-07:2; 3-5-01:1,17,60,61,63,64,66,67

Written objections or comments on the above application may be filed by any person who has property interest in any land within the hydrologic unit of the source of water supply, any person who will be directly and immediately affected by the proposed water use, or any other interested person. Written objections shall: (1) state property or other interest in the matter (provide TMK information); (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; and (3) state all grounds for objections to the proposed permit. Written objections must be received by September 2, 2004. Objections must be sent to 1) the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809 and 2) the applicant at the above address.

COMMISSION ON WATER RESOURCE MANAGEMENT

PETER T. YOUNG
Chairperson

Dated: AUG - 3 2004

Publish in: Maui News issues of August 11 and 18, 2004
PERMITTEE INFORMATION

1. (a) APPLICANT
   Firm/Name: MAUI COUNTY DEPT OF WATER
   Contact Person: GEORGE TENGAN, DIRECTOR
   Address: 200 S. HIGH ST, WAILUKU HI (808)270-7814, (808)270-7833
gorge.tengan@co.mauhi.us

2. SOURCE INFORMATION
   WATER MANAGEMENT AREA: IAO AQUIFER
   ISLAND: MAUI

3. (a) EXISTING WELL/STREAM DIVERSION NAME AND STATE NUMBER:
   See attached map
   (c) LOCATION: Address _______ Tax Map Key: 3. 2 . 17 . 018
     (Attach and show source location on a USGS map, scale 1"=2000', and a property tax map)

4. SOURCE TYPE (check one): ☐ Stream ☐ Groundwater ☐ Well/Stream
   ☒ Basalt ☐ Dike-confined ☐ Perched ☐ Caprock

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

USE INFORMATION

6. LOCATION OF PROPOSED WATER USE: (If possible, show on same maps as source location. Otherwise, attach similar maps)
   (a) PUC-Regulated Private System ☐ Dedications 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.

7. QUANTITY OF WATER REQUESTED: ☐ 1,513 million gallons per day (averaged over 1 year)

8. METHOD OF MEASUREMENT: ☐ Flowmeter ☐ Orifice ☐ Other (explain)

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

10. PROPOSED USE: ☐ Municipal (including hotels, stores, etc.) ☐ Industrial ☐ Irrigation
    ☐ Military ☐ Other (explain)

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

12. 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.

13. REMARKS, EXPLANATIONS:

________________________________________________

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) GEORGE TENGAN
Signature __ signature __
Date __ 8/17/04 __

Landowner (print) DAVID SINGER
Signature __ signature __
Date __ 7/15/04 __

WUPAFORM (4/29/03)
July 21, 2004

Ms. Yvonne Y. Izu, Deputy Director
Commission on Water Resource Management
State of Hawaii Department of Land and Natural Resources
PO BOX 621
Honolulu, Hawaii 96809

Re: Waihee 3 - Well No. 5431-04 Water Use Permit Application

Dear Ms. Izu:

Please substitute the first page of previously filed Application for Water Use Permit for Waihee 3 - Well No. 5431-04 for attached original signed by the landowner. Fifteen copies of the form is attached. A copy of signed application was submitted by fax to your office today.

Thank you for your consideration.

Should you have any questions, please contact me or Ellen Kraftsow of my staff at: (808) 270-7199.

Sincerely,

George Y. Tengan
Director
emb

enclosure

c: engineering division

C:\WPdocs\WUPAs\Substitute Waihee 3 WUPA.wpd

By Water All Things Find Life
DATE: 7/21/2004

FAX TO: Commission on Water Resource Management (808) 567-0219

ATTENTION: Charlie Ice

FROM: Maui County Department of Water Supply (808) 270-7833

SUBJECT: Water Use Permit Application for Waihee 3 Well # 5431-04

PAGES: 2, including coversheet

Please substitute the first page of the Application for Water Use Permit for Waihee 3, Well # 5431-04 for attached form, signed by the landowner. The signed original and 15 copies was mailed to your office today.

Thank you

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

PERMITTE INFORMATION
1. (a) APPLICANT
   NAME: MAUI COUNTY DEPT OF WATER
   CONTACT PERSON: GEORGE TEGAN, DIRECTOR
   ADDRESS: 200 S. HIGH ST, WAILUKU HI
   PHONE: (808) 270-7816, (808) 270-7833
   E-MAIL: george.tegan@co.mauai.hi.us

2. SOURCE INFORMATION
   WATER MANAGEMENT AREA: IAO AQUIFER
   ISLAND: MAUI

3. (a) EXISTING WELL/STREAM DIVERSION NAME AND STATE NUMBER:
   DIVERSION NAME AND STATE NUMBER: WAILUKU 3 5431-04

(b) PROPOSED (NEW) WELL/STREAM DIVERSION NAME:
   Tax Map Key: 9 2.17.018
   (Attach and show source location on a U.S.GS map, scale 1:24,000, and a property tax map)

4. SOURCE TYPE (check one):
   Groundwater [ ]
   Surface water [ ]

5. METHOD OF TAKING WATER (check one):
  文艺 [ ]
   Divert [ ]
   Pump [ ]
   Other (please specify) [ ]

6. LOCATION OF PROPOSED WATER USE:
   (If possible, show on same maps as source location. Otherwise, attach similar maps)
   (a) PUC-Regulated Private System: [ ]
   (b) Non-PUC-Regulated Private System: [ ]
   (c) Tax Map Key: Please complete Table 1 on back of application and state applicable portion of property tax map.

7. QUANTITY OF WATER REQUESTED: 1,513 million gallons per day (averaged over 1 year)

8. METHOD OF MEASUREMENT:
   [ ] Flowmeter
   [ ] Open Pipe
   [ ] Wellhead
   [ ] Other (please specify) [ ]

9. QUALITY OF WATER REQUESTED:
   [ ] Fresh
   [ ] Brackish
   [ ] Salt
   [ ] Potable [ ]
   [ ] Non-Potable [ ]

10. PROPOSED USE:
    [ ] Municipal (including hotels, stores, etc.) [ ]
    [ ] Individual Domestic [ ]
    [ ] Irrigation [ ]
    [ ] Industrial [ ]
    [ ] Military [ ]
    [ ] Other (please specify) [ ]

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

12. 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) Consistent with the public interest.
    (e) 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 Hawaiian Home Lands.

* Section 13-171-2, Hawaii Revised Statutes -
  "Reasonable-beneficial use" means the use of water is 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 plan and the public interest.

13. REMARKS, EXPLANATIONS:

NOTE: Signing below indicates that the signatories understand and agree that: 1) the information provided on this application is accurate and true to the best of their knowledge; 2) they are in the position of the applicant prior to Commission approval; 3) if necessary, further information may be required before the application is conditionally complete; 4) if a permit is granted, the permit is subject to permit modifying conditions; 5) a permit is subject to permit modifying conditions; 6) all prior permit applications; a water supplies plan must be submitted by the applicant should the Commission require use.

Applicant (print): GEORGE TEGAN
Signature: [ ]
Date: 1/27/04

LANDOWNER (print): DAVID SINGER
Signature: [ ]
Date: 7/15/04

TOTAL P. 02
DATE: 7/21/2004
FAX TO: Commission on Water Resource Management (808) 587-0219
ATTENTION: Charlie Ice
FROM: Maui County Department of Water Supply (808) 270-7833
SUBJECT: Water Use Permit Application for Waihee 3 Well # 5431-04
PAGES: 2, including coversheet

Please substitute the first page of the Application for Water Use Permit for Waihee 3, Well # 5431-04 for attached form, signed by the landowner. The signed original and 15 copies was mailed to your office today.

Thank you

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

1. (a) APPLICANT
   MAUI COUNTY DEPT OF WATER
   Contact Person: GEORGE TENGAN, DIRECTOR
   Address: 200 S. HIGH ST, WAILUKU HI
   Phone: (808) 270-7833

   (b) LANDOWNER OF SOURCE
   WATER-AINA, LLC
   Contact Person: DAVID SINGER
   Address: PO BOX 3017
   Phone: (808) 298-1739

   (c) SOURCE INFORMATION
   WATER MANAGEMENT AREA: IAO AQUIFER
   ISLAND: MAUI

   (d) EXISTING WELLSTREAM DIVERSION NAME AND STATE NUMBER: WAIHEE 3 5431-04

   (e) PROPOSED (NEW) WELLSTREAM DIVERSION NAME:

   (f) LOCATION: See attached map

   (g) SOURCE TYPE:

   (h) METHOD OF TAKING WATER:

   (i) LOCATION OF PROPOSED WATER USE:

   (j) METHOD OF MEASUREMENT:

   (k) QUALITY OF WATER REQUESTED:

   (l) PROPOSED USE:

   (m) PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION:

   (n) APPLICANT MUST ESTABLISH THAT THE PROPOSED USE OF WATER:

   (o) REMARKS, EXPLANATIONS:

   (p) NOTE: Significant explanation 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.
July 19, 2004

Mr. George Tengan, Director
Department of Water Supply
County of Maui
200 South High Street
Wailuku, HI 96793

Dear Mr. Tengan:

We acknowledge receipt, on July 2, 2004, of your water use permit applications for the Wailuku Shaft 33 (Well No. 5330-05) and Waihee Well 3 (Well No. 5431-04). However, please be aware that we cannot accept the application as complete for processing without the landowner’s signature.

Your failure to submit a completed application by July 21, 2004 may raise the issue of whether your application can be treated as a continuing existing use. Nonetheless, we highly encourage that you acquire the landowner signature as soon as possible to avoid any appearance of a willful violation on either your or the landowner’s part.

If you have any questions, please contact Charley Ice at 587-0251.

Sincerely,

YVONNE Y. IZU
Deputy Director

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

PERMIT INFORMATION

1. (a) APPLICANT: GEORGE TENGAN, DIRECTOR
   Maui County Dept of Water
   PO Box 3017
   Wailuku, HI 96793
   Phone: (808) 270-7814, (808) 270-7833
   Email: george.tengan@co.mauifi.us

   (b) LANDOWNER OF SOURCE: DAVID SINGER
   WAIANAI WATER, LLC
   Address: 200 S. HIGH ST, WAILUKU HI
   Phone: (808) 298-1739
   Email: 

SOURCE INFORMATION

2. WATER MANAGEMENT AREA: LAK AQUIFER
   ISLAND: MAUI
   LOCATION: WALHEE 3 WAILUKU HI

3. (a) EXISTING WELL/STREAM DIVERSION NAME AND STATE NUMBER:
   (b) PROPOSED WATER DIVERSION NAME:
   (c) LOCATION: See attached map

4. SOURCE TYPE (check one):
   □ Spring □ Well □ Diverted Surface □ Other
   □ Groundwater □ Surface Water □ Other

5. METHOD OF TAKING WATER: (check one):
   □ Ansean □ Well Pump □ Agricultural Use

USE INFORMATION

6. LOCATION OF PROPOSED WATER USE: (If possible, show on same map as source location. Otherwise, attach similar maps)
   □ Public □ Regulated Private System □ Unregulated Private System
   Water Supply
   □ Non-Regulated Private System

7. QUANTITY OF WATER REQUESTED:
   1,513 million gallons per year (averaged over 1 year)

8. METHOD OF MEASUREMENT:
   □ Flowmeter □ Open-Flow □ Water Flow □ Other

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

10. PROPOSED USE:
    □ Municipal (including hotels, stores, etc.) □ Individual Domestic □ Irrigation
        □ Industrial □ Military □ Other (explain)

11. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION:
    24 hours (daytime hours of operation; example: 7 am to 5 pm)

12. APPLICANT MUST ESTABLISH THAT THE PROPOSED USE OF WATER:
    (a) Can be accommodated with the available water source.
    (b) Is a reasonable and 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.

13. REMARKS, EXPLANATIONS:

NOTE: Signing below indicates that the signatures are authentic and swear that: 1) the information provided on this application is accurate and true to the best of my knowledge; 2) I was 14 in 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, the permit is subject to prior existing permitted use, changes in salinity and stream flow standards, reserved uses as defined by the Commission, and Hawaiian Home Lands future uses; and 5) Upon permit approval, a water storage plan must be submitted by the applicant should the Commission require one.

Applicant (print) GEORGE TENGAN
Landowner (print) DAVID SINGER

Signature 01/04/03
Date 07/15/03

TOTAL P.02
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR WATER USE PERMIT

PERMITTEE INFORMATION

1. (a) APPLICANT
   Name: GEORGE TENGAN, DIRECTOR
   Address: 200 S. HIGH ST, WAILUKU HI 96793
   Phone: (808) 270-7816, (808) 270-7833
   E-mail: george.tengan@co.mau_hi.us
   Tax Map Key: Please attach similar maps)

2. WATER MANAGEMENT AREA:
   Source: IAO AQUIFER
   Island: MAUI
   See attached map:

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.)
   Tax Map Key: Please complete Table 1 on back of application and shade applicable portion of property tax map.
   Location:

4. SOURCE TYPE (check one): □ Stream □ Groundwater
   □ Open-pipe □ Weir □ Orifice □ Other (explain)
   □ Dye-confined □ Perched □ Caprock
   □ Artesian □ Wet & Pump □ Diverted Surface □ Other (explain)

5. METHOD OF TAKING WATER (check one):
   □ Artisanal □ Open-pipe □ Weir □ Orifice
   □ Dye-confined □ Perched □ Caprock
   □ Artesian □ Wet & Pump □ Diverted Surface □ Other (explain)

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

7. QUANTITY OF WATER REQUESTED:
   Gallons per day (averaged over 1 year)
   1,513 million

8. METHOD OF MEASUREMENT:
   □ Streammeter □ Open-pipe □ Weir □ Orifice □ Other (explain)
   □ Dye-confined □ Perched □ Caprock
   □ Artesian □ Wet & Pump □ Diverted Surface □ Other (explain)

9. QUALITY OF WATER REQUESTED:
   □ Fresh □ Brackish □ Salt □ Potable □ Non-Potable
   □ Irrigation □ Industrial □ Military
   □ Other Explain

10. PROPOSED USE:
    □ Municipal (including hotels, stores, etc.) □ Individual Domestic □ Agriculture
        □ Industrial □ Military □ Other Explain

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

12. 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 designsations.
    (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.

13. REMARKS, EXPLANATIONS:

NOTE: Signing below indicates that the signatures 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 increase 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) GEORGE TENGAN
Signature ____________________________
Date 8/1/03

Landowner (print) DAVID SINGER
Signature ____________________________
Date ____________________________

WUPAFORM (4/29/03)
TABLE 1. TMKs TO USE REQUESTED WATER

<table>
<thead>
<tr>
<th>PROJECT NAME &amp; PHASES</th>
<th>POTABLE (\times) NONPOTABLE</th>
<th>TMK</th>
<th>STATE COUNTY ZONING CODE</th>
<th>UNITS OF NET ACRE</th>
<th>AMOUNT OF SERVICES</th>
<th>4-YEAR CUMULATIVE PROJECTS DEMAND</th>
<th>ULTIMATE DEMAND (EXPECTED TO BUILD OUT)</th>
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<td>Existent NEW USE (Existing: Re in date of final use)</td>
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<td>1. N/A</td>
<td>yes</td>
<td>potable multiple various</td>
<td>17,391</td>
<td>25.703</td>
<td>26.204</td>
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TOTAL GDP

DEPARTMENT OF PLANNING AND PERMITTING SIGNATURE ________________________ DATE ________________

Instructions for completing Table 1: Individual projects and phases must be listed separately and numbered sequentially on Table 1. Copy Table 1 and attach additional sheets if necessary. Please indicate individual projects and phases on TMK maps by clearly delineating project areas and indicating sequential number within delineated areas to coincide with Table 1. Please attach a separate sheet giving the address and a brief description of each project and phase listed above. In addition, if the proposed use is existing, please provide the WUP No. or indicate when the existing use was initiated. Also, the Department of Planning and Permitting (DPP) must sign before application is acceptably complete. Please consult with DPP at 650 South King Street, 7th Floor, Honolulu, HI 96813 Attn: Arthur D. Chellecombe.
APPLICATION FOR WATER USE PERMIT –
Use Information

12(a) The proposed use of water can be accommodated with the available water source:
Proposed water use of 1.513 million gallons per day (MGD) is the moving average withdrawals (MAV) from Waihee 3 well as of June 30 2003. Installed pump capacity is 4.97 MGD, according to the CWRM database.

Waihee 3 well along with lao and Waihee aquifer sources and surface water treated by the lao Treatment Plant serve the Central Maui System. These sources are mixed so that Waihee 3 well is not the single source serving any specific area. MAV from these sources combined were from July 1, 2002 to June 30, 2003 was 24.447 MGD, broken down as follows:
lao aquifer 18.063 MGD
Waihee aquifer 4.536 MGD
lao Tunnel 1.359 MGD
lao Treatment Plant 0.489 MGD

Water meter reservations as of July 2003 was 565,150 gallons per day (GPD), with an additional 97,000 GPD for Department of Hawaiian Homelands. Withdrawals and reserved meters total 25.109 MGD. Average yearly consumption for Central Maui during the period July 1, 2002 to June 30, 2003 was 20.955 MGD. System losses and unaccounted-for water makes up the difference.

12(b) The proposed use of water is a reasonable-beneficial use
Consumption for single-family use, which represents 16% of total use in Central Maui, average 543 GPD, compared to the system standard of 600 GPD. Acreage breakdown for the entire Central system is not available to compare use calculations for other classes.

Planning steps to protect the aquifer and utilize the source in a reasonable and beneficial manner:
a. Distribute the withdrawals within lao aquifer; development of new sources:
   lao well. Currently in design. Development anticipated by end 2005
   Waikapu Mauka – developed and pump installed. On hold until foreclosure of additional land required resolved
b. Relocate withdrawals outside of the aquifer; development of new sources within Waihee aquifer:
   Well planned by private developer to be dedicated to the County.
   Kupaa 1: On-line by end 2004
c. Provide additional surface water sources:
   lao Treatment Plant – increase capacity to 2.4 MGD. Anticipated on-line by end 2004
d. Alternative sources: East Maui source development, temporary use of existing well
e. Conservation:
   Leak detection, in-house repairs
   Automated radio-read meters replace old, under-registering meters
   Reclaimed water use at commercial properties within 100 ft of R-1 distribution systems.
   Reclaimed water use encouraged for dust control

Conservation pricing and rate structures
Outdoor conservation
Public education: targeted conservation checklists, media, activities and events, demonstration gardens, participatory learning.
Additional conservation programs to be reviewed during the Water Use and Development Plan process.

f. Conservation rules: forestall water shortage, negligent or wasteful use

g. Resource protection: watershed, surface water and wellhead protection programs

h. Monitoring and modeling of aquifer status. Agreement with USGS to study groundwater availability in Central Maui

12(c) The proposed use of water will not interfere with any existing legal use
The well is owned by Maui County Department of Water Supply. The parcel is owned by Wailuku Agribusiness and is zoned Agriculture and Rural, with the section where Waihee Well 3 is located being Agriculture. The zoning allows for water wells defined as minor utility facilities.

12(d) The proposed use of water is consistent with the public interest
The Waihee 3 source is mixed with lao and Waihee aquifer sources to serve the Central Maui System. This public system serves 17,070 customers in the communities extending from Waiehu, through Wailuku, Kahului, Puunene, Sprecklesville, Paia and Kuau on the North, and from Maalaea through Kihei to Makena on the South.

12(e) The proposed use of water is consistent with state and county general plans and land use designations
Proposed water use and withdrawals from the Central Maui sources will meet current demand as built-out in accordance with the Wailuku, Paia-Haiku and Kihei-Makena Community Plan designations and consistent with land use designations. The Water Use and Development Plan (WUDP) is being updated in consistence with the 1990 Maui County General Plan, the County Community Plans, the State Water Resources Protection Plan, the State Water Quality Plan, the State Water Projects Plan, and the State Agricultural WUDP.

12(f) The proposed use of water is consistent with county general plans and general policies
During the WUDP update process, the Department's ongoing source development and capital improvement programs support the General Plan objectives “to provide an adequate supply of potable and irrigation water to meet the needs of Maui County's residents” and “to make more efficient use of our ground, surface and recycled water sources”.

12(g) The proposed use of water will not interfere with the rights of the Department of Hawaiian Home Lands
There are no DHHL wells withdrawing from the lao aquifer. However, the Central Maui System services DHHL projects.
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR WATER USE PERMIT

PERMITTER INFORMATION

1. (a) APPLICANT
   Firm/Name: MAUI COUNTY DEPT OF WATER
   Contact Person: GEORGE TENGAN, DIRECTOR
   Address: 200 S. HIGH ST, WAILUKU HI
   Phone: (808) 270-7816 (808) 270-7833
   E-mail: george.tengan@co.mauhi.us

(b) LANDOWNER OF SOURCE
   Firm/Name: WAIEHU AINA, LLC
   Contact Person: DAVID SINGER
   Address: PO BOX 3017
   Phone: (808) 298-1730
   E-mail: 

SOURCE INFORMATION

2. WATER MANAGEMENT AREA: IAO AQUIFER
   ISLAND: MAUI

3. (a) EXISTING WELL/STREAM DIVERSION NAME AND STATE NUMBER:
   (If resource 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 2 17 018
   (Attach and show source location on a USGS map, scale 1” = 2000”, and a property tax map)

4. SOURCE TYPE (check one): 0 Stream
   - Basal
   - Dike-confined
   - Perched
   - Caprock

5. METHOD OF TAKING WATER (check one):
   - A) Arian
   - Well & Pump
   - Diverted Surface
   - Other

USE INFORMATION

6. LOCATION OF PROPOSED WATER USE: (If possible, show on same maps as source location. Otherwise, attach similar maps)
   (a) 0-PUC-Regulated Private System
   (b) Tax Map Key: Please complete Table 1 on back of application and shade applicable portion of property tax map

7. QUANTITY OF WATER REQUESTED:
   1,513 million gallons per day (averaged over 1 year)

8. METHOD OF MEASUREMENT:
   - Flowmeter
   - Open-pipe
   - weir
   - Orifice
   - Other

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

10. PROPOSED USE:
    - Municipal (including hotels, stores, etc.)
    - Individual Domestic
    - Industrial
    - Military
    - Other

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

12. 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.

13. REMARKS, EXPLANATIONS:

   ________________________________
   __________________________________
   __________________________________

   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): GEORGE TENGAN
Landowner (print): DAVID SINGER

Signature __________________________________
Date 1/1/06

WUPA FORM (4/29/03)

WUPA No. 703
### Table 1. TMKs To Use Requested Water

| 1. | N/A | potable multiple various | 17,391 | 25.703 | 26.204 | 26.705 | 27.207 | 27.207 |
| 2. | | services | MGD | MGD | MGD | MGD | MGD |
| 3. | Waihee Well 3 (543-04) | (por.) | 1.513 | - | - | - | 1.513 |

*Instructions for completing Table 1: Individual projects and phases must be listed separately and numbered sequentially on Table 1. Copy Table 1 and attach additional sheets if necessary. Please indicate individual projects and phases on TMK maps by clearly delineating project areas and indicating sequential number within delineated areas to coincide with Table 1. Please attach a separate sheet giving the address and a brief description of each project and phase listed above. In addition, if the proposed use is existing, please provide the WU2 No. or indicate when the existing use was initiated. Also, the Department of Planning and Permitting (DPP) must sign before application is acceptably complete. Please consult with DPP at 650 South King Street, 7th Floor, Honolulu, HI 96813 Attn: Arthur D. Challacombe.*
APPLICATION FOR WATER USE PERMIT – Use Information

12(a) The proposed use of water can be accommodated with the available water source:

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- Iao aquifer: 18.063 MGD
- Waihee aquifer: 4.536 MGD
- Iao Tunnel: 1.359 MGD
- Iao Treatment Plant: 0.489 MGD

Water meter reservations as of July 2003 was 565,150 gallons per day (GPD), with an additional 97,000 GPD for Department of Hawaiian Homelands. Withdrawals and reserved meters total 25.109 MGD. Average yearly consumption for Central Maui during the period July 1, 2002 to June 30, 2003 was 20.955 MGD. System losses and unaccounted-for water makes up the difference.

12(b) The proposed use of water is a reasonable-beneficial use

Consumption for single-family use, which represents 16% of total use in Central Maui, average 543 GPD, compared to the system standard of 600 GPD. Acreage breakdown for the entire Central system is not available to compare use calculations for other classes.

Planning steps to protect the aquifer and utilize the source in a reasonable and beneficial manner:

a. Distribute the withdrawals within Iao aquifer; development of new sources:
   - Iao well. Currently in design. Development anticipated by end 2005
   - Waikapu Mauka – developed and pump installed. On hold until foreclosure of additional land required resolved
b. Relocate withdrawals outside of the aquifer; development of new sources within Waihee aquifer:
   - Well planned by private developer to be dedicated to the County.
   - Kupaa 1: On-line by end 2004

c. Provide additional surface water sources:
   - Iao Treatment Plant – increase capacity to 2.4 MGD. Anticipated on-line by end 2004
d. Alternative sources: East Maui source development, temporary use of existing well
e. Conservation:
   - Leak detection, in-house repairs
   - Automated radio-read meters replace old, under-registering meters
   - Reclaimed water use at commercial properties within 100 ft of R-1 distribution systems.
   - Reclaimed water use encouraged for dust control

Conservation pricing and rate structures

Outdoor conservation

Public education: targeted conservation checklists, media, activities and events, demonstration gardens, participatory learning.

Additional conservation programs to be reviewed during the Water Use and Development Plan process.

f. Conservation rules: forestall water shortage, negligent or wasteful use

g. Resource protection: watershed, surface water and wellhead protection programs

h. Monitoring and modeling of aquifer status. Agreement with USGS to study groundwater availability in Central Maui

12(c) The proposed use of water will not interfere with any existing legal use

The well is owned by Maui County Department of Water Supply. The parcel is owned by Wailuku Agribusiness and is zoned Agriculture and Rural, with the section where Waihee Well 3 is located being Agriculture. The zoning allows for water wells defined as minor utility facilities.

12(d) The proposed use of water is consistent with the public interest

The Waihee 3 source is mixed with Iao and Waihee aquifer sources to serve the Central Maui System. This public system serves 17,070 customers in the communities extending from Waiehu, through Wailuku, Kahului, Puunene, Sprecklesville, Paia and Kuau on the North, and from Maalaea through Kihei to Makena on the South.

12(e) The proposed use of water is consistent with state and county general plans and land use designations

Proposed water use and withdrawals from the Central Maui sources will meet current demand as built-out in accordance with the Wailuku, Paia-Haiku and Kihei-Makena Community Plan designations and consistent with land use designations. The Water Use and Development Plan (WUDP) is being updated in consistence with the 1990 Maui County General Plan, the County Community Plans, the State Water Resources Protection Plan, the State Water Quality Plan, the State Water Projects Plan, and the State Agricultural WUDP.

12(f) The proposed use of water is consistent with county general plans and general policies

During the WUDP update process, the Department's ongoing source development and capital improvement programs support the General Plan objectives "to provide an adequate supply of potable and irrigation water to meet the needs of Maui County's residents" and "to make more efficient use of our ground, surface and recycled water sources".

12(g) The proposed use of water will not interfere with the rights of the Department of Hawaiian Home Lands

There are no DHHL wells withdrawing from the Iao aquifer. However, the Central Maui System services DHHL projects.
Central Maui Sources Service Area "B"
Mr. Jeffrey Eng, Director  
Department of Water Supply  
County of Maui  
200 South High Street  
Wailuku, HI 96793

Dear Mr. Eng:

Water Shortage Plan for the Iao Ground Water Management Area

Thank you for your transmittal of the Iao Water Management Rule as your water shortage plan for Iao wells, dated January 14, 2008. It is accepted and meets condition #16 of your water use permits.

Please be aware that as the Commission on Water Resource Management moves closer to creating its own water shortage plan for the Iao Ground Water Management Area, as required in the Code, it will be considering actual pumpage volume reductions for each ground water source and appropriate enforceability provisions, which may be in conjunction with similar surface water diversion reductions pending the Na Wai Eha contested case hearing and surface water management area designation proceedings. Be assured that we would be consulting with you prior to adopting a plan to meet the needs of that shortage.

If you have any questions, please contact Charley Ice of our staff at 587-0251 or toll-free at 984-2400 (Maui), extension 70251.

Sincerely,

KEN C. KAWAHARA, P.E.  
Deputy Director

Cl: ss
January 14, 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

Dear Mr. Kawahara:

Subject: Water Shortage Plan for Existing Water Use Permits in the Iao Ground-Water Management Area

Pursuant to Section 13-171-42(c) of your administrative rules, please find attached the water shortage plan for our permitted wells in the Iao Ground-Water Management Area.

Should you have any questions, please contact our Water Resources and Planning Division at (808) 244-8350.

Sincerely,

Jeffrey K. Eng
Director

emb

cc: Engineering Division
    Ed Kushi, Jr. Deputy Corporation Counsel
    Jane Lovell, Deputy Corporation Counsel

enclosure

By Water All Things Find Life
Maui County Administrative Rule
Title 16, Chapter
IAO WATER MANAGEMENT RULE

16-9-1 Purpose.
16-9-2 Definitions.
16-9-3 Caution low groundwater condition.
16-9-4 Alert low groundwater condition.
16-9-5 Critical low groundwater condition.
16-9-6 Mandatory restrictions related to Alert low groundwater condition.
16-9-7 Mandatory restrictions related to Critical low groundwater condition.
16-9-8 Surcharge Penalties for Alert and Critical low groundwater condition
16-9-9 Penalties.
16-9-10 Procedures for control of water use during Alert or Critical low groundwater level conditions.
16-9-11 Termination of Caution, Alert or Critical low groundwater level conditions
16-9-12 Exemption of private wells within designated groundwater control areas.
16-9-13 Effective date.

16-9-1 Purpose. The purpose of the rule is to prevent overdraft of Iao aquifer.
[Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

16-9-2 Definitions. The definitions as set forth herein, and in Board of Water Supply Rules and Regulations Rule Sections 1-2, 16-8-2, and 16-7-3 shall apply in these rules unless another meaning is plainly evident from the context. If there is any conflict between definitions it is intended that the broader or more inclusive definition apply. If a word or phrase is not defined the commonly accepted definition of that word or phrase shall apply.

"Base period water use" or "base period" means the monthly average water use based on water usage for the immediately preceding full twenty-four (24) month billing cycle at the time of the caution low groundwater declaration. Partial billing cycles are not to be included in the determination of the monthly average.

"Sustainable yield" means the maximum rate at which water may be withdrawn from a water source without impairing the utility or quality of the water source as determined by the Commission on Water Resources Management. [Eff. 03/15/99] (Auth: HRS 54-33) (Imp: HRS 54-33)

16-9-3 Caution low groundwater condition.
(a) A caution low groundwater condition exists:
(1) At any time the 12 month moving average pumpage of gallons of water from the Iao Aquifer exceeds 95% of the sustainable yield of the Iao Aquifer; or
(2) Whenever chloride content reaches the absolute limit in ppm chloride Schedule 1 in more than one area based on a 3 month moving average.
(b) The board shall at any time during the period in which a caution low groundwater condition is declared give the public that a caution low groundwater condition exists. Thereafter the director shall:
(1) Conduct an intensive public appeal for water conservation through the mass media;
(2) Institute voluntary irrigation and other water use schedules to reduce water consumption;
(3) Send letters to large consumers and other private well operators asking them to cut back their usage; and
(4) Notify the Mayor, Maui County Council, and the State Commission on Water Resources Management.
(c) The goal for draft reduction is 5% of Iao Aquifer sustainable yield as determined by the Commission on Water Resources Management.
(d) Consumers shall be given a target of a 10% reduction of their base period water use as the goal for
send Makahau 3?

Still confused about Waiehu 3. Ellen Krafton will follow up.

Makahau 3

also 5330-11 was I.D'd as Sanger as Singer's under.

no record of Sanger in 5330-11.

5330-11
December 12, 2007

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

Dear Mr. Eng:

DEC-ADM97-A1 Modification of Water Use Permit (WUP No. 703 to WUP No. 821) for Well No. 5431-04 
Iao Ground-Water Management Area, Maui

This is in response to your September 7, 2007 letter, requesting modification of water use permits for various municipal sources in the Iao Ground-Water Management Area. This letter transmits your water use permit for Waihee Well 3 (Well No. 5431-04) for use of 3.400 million gallons per day (mgd) of water on a 12-month moving average basis that was administratively modified per Declaratory Ruling DEC-ADM97-A1 and supercedes the previous Water Use Permit Number listed above. As part of the Commission's approval, the following special conditions were added and are part of your permit under Standard Permit Condition 19:

Special Conditions

1. The Commission shall delegate to the Maui Department of Water Supply the authority to allocate the use of water for municipal purposes, in accordance with §174C-48(b) HRS.

2. The Maui Department of Water Supply shall be exempt from the requirements of permit modifications as provided in §174C-57.

3. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

Enclosed with this letter of approval are the following:

1. Your water use permit
2. Your official monthly water use report form

Please be sure to read the conditions of your approved permit.
We draw your attention to two key conditions of your permit that require your response. First, you are required to keep a record of your monthly total pumpage, water level, salinity, and water temperature. This information must be submitted to the Commission on a regular monthly basis using the enclosed water use report form. You should make copies of the enclosed report form as needed.

Second, you are required to submit a water shortage plan to the Commission within thirty (30) days of the issuance date of this permit. Your water shortage plan simply identifies what you are willing to do should the Commission declare a water shortage situation in the Iao Ground-Water Management Area and can be as short as a one page letter. In a water shortage situation, the Commission may require temporary reductions in pumpage from all sources. The Commission is required, by law, to formulate a plan to implement such area-wide reductions, which should accommodate, include, and be consistent with your plans. Therefore, your help, by submitting your water shortage plan, is greatly needed in formulating the Commission's overall Water Shortage Plan.

If you have any questions, please call Charley Ice of the Commission staff at 587-0251.

Sincerely,

LAURA H. THIELEN
Chairperson
GROUND-WATER USE PERMIT
WUP NO. 821

PERMITTEE

<table>
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<tr>
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<tbody>
<tr>
<td>Address</td>
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<tr>
<td>Maui Department of Water Supply</td>
<td>Waiehu Aina, LLC</td>
</tr>
<tr>
<td>200 South High Street</td>
<td>P.O. Box 3017</td>
</tr>
<tr>
<td>Wailuku, HI 96793</td>
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</tr>
</tbody>
</table>

PERMITTED SOURCE INFORMATION

| Island                  | Maui |
| Water Management Area   | Wailuku |
| Aquifer Sector          | Wailuku |
| Aquifer System          | Iao   |
| System Sustainable Yield| 20    |
| Well Name               | Waihec 3 |
| State Well No.          | 5431-04 |

PERMITTED USE INFORMATION

| Reasonable beneficial use | Municipal |
| Withdrawal (12 month moving ave.) | 3.400 mgd |
| Location of water use      |          |
| TMK #                      | 3-4-5: 0324 |
| State land use classification | various |
| County zoning classification | various |

Pursuant to Hawaii's State Constitution, Article XI, Section 7, Hawaii Revised Statutes, Chapter 174C; Hawaii Administrative Rules, Chapters 13-167 through 13-171; and Hawaii decisional law and custom, the permittee is hereby authorized to use ground water from the sources and in the amount and from and upon the locations described above; subject however, to the requirements of law including but not limited to the following 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 15, 2006 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 including other correlative rights;
   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 monthly basis (attached).
This permit shall be subject to the Commission's periodic review of the Iao 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 Iao Aquifer System, or relevant modified aquifer(s), is reduced.

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.

The use(s) authorized by law and by this permit do not constitute ownership rights.

The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances that will affect the permittee's water use.

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.

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.

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.

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.

Special conditions in the attached cover transmittal letter are incorporated herein by reference.

LAURA H. THIELEN, Chairperson
Commission on Water Resource Management

Attachment

c: Waiehu Aina, LLC
COMMISSION ON WATER RESOURCE MANAGEMENT
22Feb06

FROM: Charley

DATE: ________________

TO: GOODING, K
    FUJII, N.
    OHYE, M
    YOSHINAGA, M
    SWANSON, S.
    KUNIMURA, I.
    IMATA, R.
    NAKAMA, L.
    UYENO, D

INIT. TO: HARDY, R.
         SAKODA, E.
         NAKANO, D.
         DANBARRA, S
         HOAGBIN, S.
         YODA, K.
         CHING, F.

FOR: Approval
     ______
     ______
     ______
     ______
     ______
     ______

PLEASE: Review & Comment
        ______
        ______
        ______

ML8 page won't give history. Singer may have been owner at application
Liu et al purchased 8/4/04
WUP issued '06
Reissue w/ new owner?
no address for Liu et al

Waialua 3 (5431-04) is located on
(2) 3-2-17:18, now owned by the
following owners. MSWS cannot tell us
whether an easement or subdivided parcel is in the works.

When did we issue
will (date). So David Singer is wrong land owners?
Click on the parcel id in the left column for details.

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<td>320170180000</td>
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Total Parcel Area: 277.399 acres/40 ft
**COMMISSION ON WATER RESOURCE MANAGEMENT**

**FROM:** Charley  
**DATE:** 05 May 06

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<td>___ HARDY, R.</td>
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<td>___ Review &amp; Comment</td>
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<td></td>
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<tr>
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<td>___ CHING, F.</td>
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<td>___ Please See Me</td>
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Wailua 3 appears to be on MDWS property, not Singer’s nor Wailuku Water

Note: the maps are still not totally consistent so TML is not 0187.
Search Results

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<th>Liv area</th>
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This information has been supplied by third parties and has not been independently verified by Hawaii Information Service and is, therefore, not guaranteed.
Oahu Assessed Values reflect tax year 2006. All other Assessed Values reflect tax year 2005.

Search criteria: TMK Owner SINGER, DAVID OR SINGER, DAVID & DONNALEE OR SINGER, DAVID W REVOC TR

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</table>

This information has been supplied by third parties and has not been independently verified by Hawaii Information Service and is therefore, not guaranteed.
### General Parcel Information

- **Parcel Data**
  - **Address**: MALAHI RD
  - **Tax**: 320170000000
- **Ownership**
  - **Owner**: HELLER STEVEN H
  - **Address**: C/O DAVID SINGER
  - **City**: WAILUKU
  - **State**: HI
  - **Zip Code**: 96793
  - **Owner Type**: Fee Owner

- **Total Parcel Area**: 277,300 square feet
- **Total Building Area**:
  - **Floor 1**: 2,222 square feet
  - **Floor 2**: 3,399 square feet

### Additional Information
- **Map**: Data Last Modified: 5/15/2006
<table>
<thead>
<tr>
<th>cheinl</th>
<th>320170180000</th>
<th>MALAKI RD</th>
<th>DUARTE BARBARA J K TR</th>
</tr>
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<tbody>
<tr>
<td>Permis</td>
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<td>MALAKI RD</td>
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<tr>
<td>Agricul. Asset</td>
<td>General Parcel Information</td>
<td>320170180000</td>
<td>277.369 sq ft</td>
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<tr>
<td>Sales</td>
<td>Site Address</td>
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<tr>
<td>Residential</td>
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<td>Commercial</td>
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<td>Other Buildings</td>
<td>Ownership</td>
<td>LEE,ROBERT F</td>
<td>3 of 22</td>
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<td>Sketch</td>
<td>Address</td>
<td>LEE,ROBERT JUHANNE F</td>
<td>YES Owner</td>
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<td>Tax Bill</td>
<td>Contractor</td>
<td>2819 FONU PL</td>
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<td>Tax Details 2005</td>
<td>City</td>
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<td>Tax Details 2004</td>
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<td>Tax Details 2003</td>
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<td>Tax Details 2002</td>
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<td>Tax Details 2001</td>
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Data Last Modified: 5/15/2006
**General Parcel Information**

- **TMK**: 320170180000
- **Site Address**: MALAIHI RD
- **Ownership**: DUARTE BARBARA J K TR
- **General Parcel Information**: DUARTE BARBARA J K TR
- **Site Address**: MALAIHI RD
- **Residential Total Parcel Area**: 277.360 acres

**Tax Details**

- **Tax Details 2004**: City: SEASIDE, State: CA, Tax Details: 2001
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Data Last Modified: 5/15/2006
### General Parcel Information

**Address:** 3201701800000

**Description:** MALAIHI RD

**Ownership:**

- **Name:** DUARTE BARBARA J K TR
- **Percent:** 100%

**Tax Details 2006:**
- **City:** N/A
- **State:** N/A
- **County:** N/A
- **Zip Code:** N/A

**Ownership:**

- **Name:** KIRBY PAUL JAMES
- **Percent:** 100%

**Tax Details 2005:**
- **City:** N/A
- **State:** N/A
- **County:** N/A
- **Zip Code:** N/A

**Ownership:**

- **Name:** DUARTE BARBARA J K TR
- **Percent:** 100%

**Tax Details 2004:**
- **City:** N/A
- **State:** N/A
- **County:** N/A
- **Zip Code:** N/A

**Ownership:**

- **Name:** KIRBY PAUL JAMES
- **Percent:** 100%

**Tax Details 2003:**
- **City:** N/A
- **State:** N/A
- **County:** N/A
- **Zip Code:** N/A

**Ownership:**

- **Name:** DUARTE BARBARA J K TR
- **Percent:** 100%

**Tax Details 2002:**
- **City:** N/A
- **State:** N/A
- **County:** N/A
- **Zip Code:** N/A

**Ownership:**

- **Name:** KIRBY PAUL JAMES
- **Percent:** 100%

**Tax Details 2001:**
- **City:** N/A
- **State:** N/A
- **County:** N/A
- **Zip Code:** N/A

Data Last Modified: 5/15/2006
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<td>KULA</td>
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Data Last Modified: 5/15/2006
## Tax Details:

- **Year:**
  - 2005
  - 2004
  - 2003
  - 2002
  - 2001

## Details for 2005:

- **Assessor:**
  - General Assessment:
  - Residential
  - Commercial

- **Owner:**
  - FREDERICK ORLENNORD CLIFFORD JOSPH JR

- **Address:**
  - MALAKI RD

- **City:**
  - DUARTE

- **State:**
  - CA

- **Zip Code:**
  - 91011

## Details for 2004:

- **Assessor:**
  - General Assessment:
  - Residential
  - Commercial

- **Owner:**
  - FREDERICK ORLENNORD CLIFFORD JOSPH JR

- **Address:**
  - MALAKI RD

- **City:**
  - DUARTE

- **State:**
  - CA

- **Zip Code:**
  - 91011

## Details for 2003:

- **Assessor:**
  - General Assessment:
  - Residential
  - Commercial

- **Owner:**
  - FREDERICK ORLENNORD CLIFFORD JOSPH JR

- **Address:**
  - MALAKI RD

- **City:**
  - DUARTE

- **State:**
  - CA

- **Zip Code:**
  - 91011

## Details for 2002:

- **Owner:**
  - FREDERICK ORLENNORD CLIFFORD JOSPH JR

- **Address:**
  - MALAKI RD

- **City:**
  - DUARTE

- **State:**
  - CA

- **Zip Code:**
  - 91011

## Details for 2001:

- **Owner:**
  - FREDERICK ORLENNORD CLIFFORD JOSPH JR

- **Address:**
  - MALAKI RD

- **City:**
  - DUARTE

- **State:**
  - CA

- **Zip Code:**
  - 91011

---

### Map

- **Data Last Modified:** 5/15/2006

---

### Sketch

- **Address:**
  - P O BOX 1871

- **City:**
  - MALAKI RD

- **State:**
  - CA

- **Zip Code:**
  - 91011
## General Parcel Information

**County:** COUNTY OF MAUI

**Site Address:** WAIHEU

### Ownership

**Owner:** COUNTY OF MAUI

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<td>Total Parcel Area</td>
<td>833 acres / sqft</td>
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### Other Buildings

- **Address:**

### Sketch

### Tax Bill

- **City:**
- **State:**
- **Zip Code:** 00000

### Tax Details

- **2005:**
- **2004:**
- **2003:**
- **2002:**
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<td>Noboru Kaneshiro</td>
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<td>Edwin Sakoda</td>
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- See Me
- Take action by
- Route to your branch
- Review & comment
- Draft reply by
- For Information
- Xerox distributed
- Acknowledge receipt
- File

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<td>Doris Hamada</td>
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<td>Lorraine Nanbu</td>
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<td>Jean Starot</td>
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<td>Elsie Yonamine</td>
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State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

WELL COMPLETION REPORT - PART II
Pump Installation

Instructions: Please print in ink or type and send completed report (with attachments, if applicable) to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete reports. This form shall be submitted within 60 days of the completion of work.

For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 587-0223. For updates to this form or additional information, please visit our website at http://www.state.hi.us/ldlnr/.

1. State Well No.: 9431-09 Well Name: Waihee Deepwell Island: Maui

2. Address: Waihee, Maui, Hi. Tax Map Key: 3-2-17-18


4. Date Pump Installed: 06/02/2001

5. PERMANENT PUMP INFORMATION

   Pump Type, Make, Serial No.: Type: 16 DKH; Make: Floway; Serial No.: 39613
   Rated Capacity: 3480 gpm at head of: 540 ft.
   Motor Type, H.P., Voltage, rpm: GE, 600 HP, 440 VOLT 1775 RPM
   Type of flow meter: Turbine which measures in 1000 GPM

   Pump type (check one):
   □ Deep Well Turbine □ Rotary □ Propeller
   □ Submersible □ Rotary-Displacement □ Reciprocating
   □ Centrifugal □ Rotary-Gear □ Impulse

6. Method of flow measurement:
   □ Flowmeter Manufacturer WATER SPECIALTIES Make Propeller Size 36”
   □ Weir □ Open Pipe □ Orifice* □ Other*, explain below
   *attach schematic

7. Fill in the as-built section on the other side of this sheet.

8. Other remarks/comments:

   Water Resources Pump Installation Contractor (print) C-57/C-57a/A Lic. No. AC 5058
   International, Inc. Signature Date June 26, 2001
   DAVID CRAIGIE
   Permittee (print) Signature Date 7/1/01
1. **Pump Tests Check** (special condition of PIP? Yes/No)
   - **Yes**
   - **No**
   - If no, describe deficiency
   - Glenn Bauer (initial if yes)

   **Step-Drawdown Test:**
   - followed WCPI Stds
   - analysis attached
   - proposed pump cap o.k.

   **Aquifer Pump Test:**
   - followed WCPI Stds
   - T & S analysis attached

   **Well Interference:**
   - estimated Steady-State
   - drawdown at 1-mile radius is ___ ft.
   - analysis attached

   **Stream Surface Water Impacted:**
   - If yes, identify most probable stream

2. **Pump Installation Check**
   - Mitch Ohye (initial)
   - data complete
   - followed WCPI Stds
   - well database updated

3. Charley/Lenore/Ryan (initial) take action based on above analysis

4. Roy (initial) check

5. Susan Subia (initial) finalize

6. Linnel (initial) signature

7. Charley/Lenore/Ryan File
July 18, 2001

Mr. David Craddick
Manager and Chief Engineer
County of Maui
Department of Water Supply
P.O. Box 1109
Wailuku, HI 96793-6109

Dear Mr. Craddick:

Well Completion Report for Well No. 5431-04

We received your Well Completion Report Part II for the Waihee Deepwell (Well No. 5431-04) on July 17, 2001 and acknowledge that it is complete. Thank you for your attention to this matter.

If you have any questions, please contact Charley Ice of the Commission staff at 587-0251 or toll-free at 984-2400, extension 70251.

Sincerely,

LINNEL T. NISHIOKA
Deputy Director

LN:ky
State of Hawaii
Commission on Water Resource Management
Department of Land and Natural Resources
WELL COMPLETION REPORT - PART II
Pump Installation

Instructions: Please print in ink or type and send completed report with attachments, if applicable to the Commission on Water Resource Management, P.O. Box 521, Honolua, Hawaii 96723. The Commission may not accept incomplete reports. This form shall be submitted within 90 days of the completion of work.

For assistance, please consult the Hawaii Well Construction and Pump Installation Standards or call the Regulation Branch at 808-584-6130. For updates to the form or additional information, please visit our website at http://www.state.hi.us/wrm/wr2/

1. State Well No.: 9781-04 Well Name: Waiehu Deepwell Island: Maui
2. Address: Waiehu, Maui, HI Tax Map Key: 3-2-1718
4. Date Pump Installed: 06/02/2001

5. PERMANENT PUMP INFORMATION

- Pump Type, Make, Serial No.: Type: 16 DKH; Make: Floway; Serial No.: 39513
- Rated Capacity: 3480 gpm at head of 540 ft
- Motor Type, H.P., Voltage, rpm: GE, 600 HP, 480 VOLT 1775 RPM
- Type of flow meter: The bore which measures in 1000 GPM

Pump type (check one):
- Deep Well Turbine
- Submersible
- Centrifugal

6. Method of flow measurement:
- Flowmeter Manufacturer: WATER SPECIALTIES Make: Size: 36
- [Flowmeter Manufacturer: WATER SPECIALTIES Make: Size: 36]

- Type Flowmeter: [Flowmeter Manufacturer: WATER SPECIALTIES Make: Size: 36]

7. Fill in the as-built section on the other side of this sheet.
8. Other remarks/comments:


Signature: [Signature]

Date: 6/12/2001

Permittee (print): DAVID CARAGACIS

Signature: [Signature]

Date: 7/11/01

Pump Replacement

TOTAL P. 02
9. AS-BUILT PUMP SECTION (Please attach as-built if different from diagram provided below)

Bench mark elevation surveyed to nearest 0.01 ft. = 494 ft. mean sea level.

Elevation of top of chase tube = ft. mean sea level.

Pump intake depth = 515.25 ft. (referenced to bench mark).

Chase tube depth = 5'15" ft. (referenced to bench mark).

If airline installed, bottom of airline elevation = 493 ft. mean sea level.
SPECIAL FEATURES:
1. Steel castellated impeller.
2. Statically balanced impeller.
3. Thrust bearing with three (3) stages.
5. Column and bearing sections shall be a maximum of 10 ft.
6. Nozzles and bearing journals on drawstall.
7. Combination coupling bearing journals.
8. Column and bearing sections shall include 3/4" NPT connection for weep and probe condensate and air relief line.

COATING:
For assembly exterior to be painted per EEPS-SP-I & 2. "Enamel #00 Super Paint.
Coating will be applied in 1 coat 1 mil (DFT), Color = Black

This steel exterior to be painted per EEPS-SP-I & 2. "Enamel #40" motor reduction metal primer will be applied in 1 coat 1 mil DFT followed by 1 final coat of "Enamel #40" (1 mil DFT per coat). Color = Blue. Please refer to the coating specification in this submittal package.

The column is to be painted and coated per EEPS-SP-96. "Enamel #40" Chemical Resistant Epoxy will be applied in 2 coats, each coat being 3 mils DFT. Color = White. Please refer to the coating specification in this submittal package.

Column pipe OD and G.O. must be shown as is.

NOTES:
Engineer and contractor to verify all dimensions.

TESTING:
Dynamometer Performance Testing
Pump self-assembly will be tested with a calibrated test driver in accordance with Hydraulics Institute standards.

MAXIMUM ALLOWABLE FLANGE FORCES AND MOMENTS
FOR VERTICAL PUMP SHAFTS

DISCH. FLANGE

PUMP

FLUID WORK

SPEC GRAVITY

VISCOITY @ 75° F

LOCATION INDEX

NOTES:
1. All dimensions in inches
2. Drawing Scale = Norm
3. Do NOT scale Unknown Dimensions
4. NOT TO BE USED FOR CONSTRUCTION UNLESS CERTIFIED

OUTLINE DRAWING

DRAWN BY TCA
DATE: 04/25/00
DRAWING NUMBER
To: Mitch Ohye
Water Commission
Phone: 587-0219
Fax: 587-0219
cc: 

From: Howard Akagi
Phone: (808) 531-8422
Fax: (808) 531-7181

REMARKS: □ Urgent  X For your review □ Reply ASAP □ Please comment

RE: Pump Installation Report
State Well No. 5431-04
Well Name: Waihee Deepwell
TMK: 3-2-17:18
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER RESOURCE MANAGEMENT

REGISTRATION OF WELL AND DECLARATION OF WATER USE

INSTRUCTIONS: Please type or print. If information is not available or not applicable, indicate as N/A. Fill out as completely as possible, sign, and file form with the Division of Water Resource Management, P.O. Box 373, Honolulu, Hawaii 96809. Phone 548-3948 or 549-7543 for assistance.

BATTERY OF WELLS: For a battery of wells, on the surface, in a tunnel, or in a shaft, submit a registration form for each well together with a single map or plot plan showing layout of wells.

STATE WELL NO.: 5431-04
WELL NAME OR DESIGNATION: Waihee #3
ISLAND: Maui

A. WELL OPERATOR
Firm name: Dept. of Water Supply
Contact person:
Address: P. O. Box 1109
Wailea, Maui, Hawaii
Zip: 96793 Phone: 243-7730

B. OWNER OF WELL SITE
Firm name: County of Maui
Contact person:
Address: 200 S. High Street
Wailea, Maui, Hawaii
Zip: 96793 Phone:

C. WELL LOCATION
Tax Map Key: 3-2-17:18 & 31 Town, Place, District: Wailea
Attach USGS "Quad" map (scale 1:24,000), tax map, or other map showing the well location.

D. WELL DATA
For Drilled Wells, submit "as-built" drawing, driller's log, and pump test results, and complete items below. For Tunnels and Shafts, submit construction drawings, plot plan, or sketch map.

Ground elevation (mean sea level): ______ ft.
Reference point (used to measure depth to water):
Elevation: ______ ft.
Description: ____________________________

Depth to water (Below reference point): ______ ft.
Maximum recorded chloride: 35 ppm
Minimum recorded chloride: 11 ppm
Maximum chloride in 1987: 35 ppm

Casing diameter: 20 in.
Solid casing depth (below ground): 495 ft.
Perforated casing depth (below ground): 530 ft.
Total depth of well: 650 ft.
Minimum chloride in 1987: 14 ppm

E. INSTALLED PUMP DATA
Pump type: [x] Vertical shaft [ ] Submersible [ ] Centrifugal [ ] Other (specify): ______
Power: [ ] Diesel, HP [ ] Gas, HP [x] Electric, HP [ ] Other (specify): ______
Pump capacity: 3,580 gallons per minute
Pump installation contractor: ____________________________

... (continued over)
F. DECLARATION OF WATER USE

NOTE: The purpose of the Declaration of Water Use is to obtain information necessary for the management of the State's water resources. The Declaration does not confer a legal right to water or its use.

Water use data are recorded: ☐ Daily ☐ Weekly ☐ Monthly
☐ Other (describe):

Method of measurement: ☐ Flow Meter ☐ Orifice
☐ Other (describe):

Quantity of Use (Report metered or estimated monthly water use from the well described on the reverse side of this form, for the calendar years 1983 through 1987. For a battery of wells which are not individually metered, but which are connected to a single meter or other measuring device, report total use from the battery):

WATER USE, IN GALLONS x 1000

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<td></td>
<td></td>
</tr>
</tbody>
</table>

Minimum day's use: _______ gallons Maximum day's use: _______ gallons
Typical times of usage: ____________________________________________

Type of Use (check all category boxes that apply and provide additional information as indicated):

Category
☐ Municipal (including resorts, hotels, businesses)
☐ Domestic (systems serving 25 people or less)
☐ Irrigation
☐ Industrial
☐ Military
☐ Other

Additional Information
Number of service connections: ____________________________
Acres irrigated: ____________________________
Crop(s): ☐ Sugar ☐ Pineapple
☐ Other (specify): ____________________________
Non-Crop: ☐ Landscape ☐ Golf Course
☐ Other (specify): ____________________________
Method: ☐ Drip ☐ Furrow ☐ Sprinkler
☐ Cooling ☐ Manufacturing ☐ Mill
☐ Other (specify): ____________________________
Specify (livestock, aquaculture, etc.): ____________________________

I declare that the contents of the above Declaration of Water Use are, to the best of my knowledge and belief, true, correct, and complete.

Water User's Signature: ____________________________ Date: ____________
Printed Name: ____________________________
Firm or Title (Well Operator, etc.): Director of Department of Water Supply
County of Maui

[Signature]
[Date]
May 18, 1982

Mr. William Haines
Director
Department of Water Supply
County of Maui
Wailuku, Maui 96793

Dear Mr. Haines:

Waiehu Well No. 3

Thank you for sending us the pumping test data and as-built section for Well No. 3 located at Waiehu and requesting our opinion regarding pump setting and pump capacity.

The pumping test data does not permit determination of the safe yield of the aquifer nor the determination of the recommended pump capacity. Salinity and water level data from the pumping test record do not indicate what the long-term effects of pumping will be on salinity of the aquifer. It is probable that local up-coning due to pumping will cause a gradual increase in the salinity of the well, similar to the Mokuauau well field; and will be the limiting factor of the sustainable yield of the Waiehu well field.

Because the depth of Well No. 3 is -150 ft. (msl), we feel that the aquifer cannot be drawn down, ultimately to +6 ft., msl. The aquifer would theoretically shrink to 240+ ft. and, if so, local up-coning would certainly cause salinity levels in excess of the potable water limit. A 5 mgd capacity pump could be installed from a yield/drawdown standpoint, but a 4 mgd capacity pump would be more conservative and acceptable.

With regard to the pump setting, we recommend that the top of the pump bowls be set at mean sea level elevation (or lower, to meet minimum net positive suction head), based on a reported static water level of 15 ft., a drawdown of 8.8 ft. at a pumping rate of 3,200 gpm, and top of perforated casing at +5 ft., msl.

If you have any questions, please call us.

Very truly yours,

ROBERT T. CHUCK
Manager-Chief Engineer
May 18, 1982

Mr. William Haines
Director
Department of Water Supply
County of Maui
Wailuku, Maui 96793

Dear Mr. Haines:

Wailuku Well No. 3

Thank you for sending us the pumping test data and as-built section for Well No. 3 located at Wailuku and requesting our opinion regarding pump setting and pump capacity.

The pumping test data does not permit determination of the safe yield of the aquifer nor the determination of the recommended pump capacity. Salinity and water level data from the pumping test record do not indicate what the long-term effects of pumping will be on salinity of the aquifer. It is probable that local up-coning due to pumping will cause a gradual increase in the salinity of the well, similar to the Mokuhau well field; and will be the limiting factor of the sustainable yield of the Wailehu well field.

Because the depth of Well No. 3 is -150+ (msl), we feel that the aquifer cannot be drawn down, ultimately to +6 ft., msl. The aquifer would theoretically shrink to 240+ ft. and, if so, local up-coning would certainly cause salinity levels in excess of the potable water limit. A 5 mgd capacity pump could be installed from a yield/drawdown standpoint, but a 4 mgd capacity pump would be more conservative and acceptable.

With regard to the pump setting, we recommend that the top of the pump bowls be set at mean sea level elevation (or lower, to meet minimum net positive suction head,), based on a reported static water level of 15 ft., a drawdown of 8.8 ft. at a pumping rate of 3,200 gpm, and top of perforated casing at +5 ft., msl.

If you have any questions, please call us.

Very truly yours,

ROBERT T. CHUCK
Manager-Chief Engineer
4-9-82
Rev 11/25 Test # 3 # 1 # 2
Date: By Norman Smith

# 2 W.C. Pumping # 1
Draw down 0.3 ft

# 2 W.C. Pumping # 2, # 1, # 3
Draw down addtl 0.2 ft after 30 min

# 2 W.C. " " " 0.2 ft " " 2 more hours

Mon 11:30 am - 7:00 pm Step Test 5.6 ft Total
Mon 7:00 pm - Wed. 3:00 pm 13200 ppm (Equivalent to 10 hrs)
approx 44 hours

Lack of monitoring salinity also directly
29 hours after step test 188 → 200 ppm

# 2 W.C. recovered 0.5 ft, shutting off # 1
# 2 W.C. recovered 4.7 ft, shutting it 20 yrs off
April 1, 1982

Mr. Robert T. Chuck  
Dept. of Land & Natural Resources  
State of Hawaii  
P. O. Box 373  
Honolulu, HI 96809  

Attn: Mr. Dan Lum  

Subject: WAIHEE WELL NO. 3  

Gentlemen:  

Enclosed, please find a copy of the well test data for Waihee Well No. 3, the construction drawings for the project, and a letter from Mr. Harold Stearns recommending that a 5 MGD pump be installed.

We request your opinion with regard to pump setting and pump capacity.

Your assistance and expertise in this project and others in the past is very much appreciated.

Sincerely,

[Signature]
William S. Haines, Director  

CK/DV/tm  

Enclosures
February 3 1981

Mr. Melvin K. Koizumi
Deputy Director for
   Environmental Health
Department of Health
State of Hawaii
Honolulu, Hawaii

Dear Mr. Koizumi:

Preliminary Engineering Report for Waihee Well No. 3

Our comments on the preliminary engineering report for Waihee Well No. 3, Maui, are as follows:

- The subject report is presumed to be for a well located at Waiehu, Maui, and its title should be corrected from "Waihee Well No. 3" to "Waiehu Well No. 3".

- The proposed well No. 3 is shown in two different locations (in Figure 1 at the end of Chapter 6 and in the Attachment 1 entitled "Preliminary Location Waiehu Well No. 3" at the end of the report). We believe that the well location shown in Figure 1 is correct. Its location is farther from the existing two 4 mgd wells than originally planned.

- The cased portion of the well should be grouted from the ground surface to elevation +50 ft., mean sea level, instead of to a depth of 60 feet from the surface.

- The proposed well should be pump tested for yield, drawdown, and chlorides after reaching a depth of -100 feet, mean sea level, instead of -150 feet, msl, in order to assure that the well is not drilled unnecessarily deep. Additional drilling and testing may be performed, but the maximum depth of the well should remain -150 ft., msl.

Very truly yours,

SUSUMU ONO
Chairman of the Board

RTC: DL: dh
This letter is in reply to your carefully documented data of the pump test on Waihee 3. Please excuse the delay in my reply.

I believe that the Waiehu wells should have a separate and distinct numbering system because Waihee is a long way north from the Waiehu well field. I am sure that, sometime in the future, a battery of wells will be developed at Waihee. In fact I believe that Wailuku Sugar has already developed a well at Waihee. To avoid any confusion we should designate the wells at Waiehu as 1, 2, and 3, not Waihee.

The pump test (your well 3) has demonstrated again the marvelous permeability of the Waiehu aquifer. I recommend that you install a 5 mgd pump. Future water development depends upon the extent to which the static head is lowered. The basin must now be discharging a large, but unknown, quantity of water into the caprock and ocean. The maximum recovery of the basin will not be reached until the static water level is drawn down to about six feet above sea level. At that level we will know what the capacity of the basin is.

Yours truly,

Harold T. Stearns
Date of report: November 10, 1981
Person filing report: D. Craddock

A. OWNER: Central Maui Development
WELL NAME: CMSD III
ISLAND: Maui

B. GENERAL LOCATION: Waiehu

C. DRILLING COMPANY: Water Resources International, Inc.

D. TYPE OF RIG: Spencer Harris

E. ELEVATION, msl: Top of drilling platform ft. Bench mark and method used to determine ft. elevation: 

F. HOLE SIZE: 23 in. dia. to 525 ft. below drilling platform ground. 25 in. dia. to 650 ft. below drilling platform ground. 

G. CASING INSTALLED: 20 in. I.D. x 3/8 in. wall solid section to 495 ft. below drilling platform. 
20 in. I.D. x 5/16 in. wall perforated section to 530 ft. below drilling platform. 

H. ANNULUS: Grouted ft. to 460 ft. below drilling platform. 
Gravel packed ft. to ft. below drilling platform. 

I. PERMANENT PUMP INSTALLATION: 
- Pump type, make, serial no. Capacity g.p.m. Motor type, H.P., voltage, r.p.m. Depth of pump intake setting ft. below which elevation is ft. below which elevation is 

HYDROLOGY

J. INITIAL WATER LEVEL ft. below drilling platform. Date of measurement. 
K. INITIAL CHLORIDE: 189 ppm total depth of well ft. below drilling platform Sampling Date 

L. PUMPING TESTS:
Date: November 9, 1981 Reference point (R.P.) used: which elevation is ft. below R. 
Start water level: 12 PSI ft. below R. 
End-water level: 8.2 PSI ft. below R. 
Depth of well: 650 ft. below R. 
Elapsed Time (hours) Rate (gpm) Draw-down (ft.) Temp. (°F) 

M. DRILLER’S LOG:

N. REMARKS:

INSTRUCTIONS: Send three (3) copies to: Manager-Chief Engineer, Division of Water and Land Development, P. O. Box 373, Honolulu, Hawaii 96809.

Date of report: November 10, 1981  
Person filing report: D. R. Craddick

**JOB NAME**

**DESCRIPTION**

- **OWNER**: Central Maui Source  
- **Development NAME**: CMSD III  
- **ISLAND**: Maui  
- **DRILLING COMPANY**: Water Resources International, Inc.
- **TYPE OF RIG**: Spencer Harris  
- **DRILLING COMPLETED**: Sept. 1981  
- **DRILLER**: D. R. Craddick

**ELEVATION, msl**: Top of drilling platform ft.  
**Height of drilling platform above ground surface ft.**:  
**Elevation:** ft.

**HOLES SIZE**:  
- 25 inch dia. to 525 ft. below drilling platform  
- 25 inch dia. to 650 ft. below drilling platform  
- 25 inch dia. to 8.0 ft. below drilling platform

**CASING INSTALLED**:  
- 20 in. I.D. x 3/8 in. wall solid section to 495 ft. below drilling platform  
- 20 in. I.D. x 5/16 in. wall perforated section to 530 ft. below drilling platform

**ANNULUS**: Grouted 0 ft. to 460 ft. below drilling platform.

**PERMANENT PUMP INSTALLATION**

- Pump type, make, serial no.  
- Motor type, H.P., voltage, r.p.m.
- **Depth of pump intake setting ft. below which elevation is**: ft.
- **Depth of bottom of airline ft. below which elevation is**: ft.

**HYDROLOGY**

- **INITIAL WATER LEVEL ft. below drilling platform**: Date of measurement.
- **INITIAL CHLORIDE**: 189 ppm, total depth of well ft. below drilling platform

**PUMPING TESTS**:  
- Reference point (R.P.) used:  
- Start water level ft. below R. P.  
- End water level ft. below R. P.
- Depth of well ft. below R. P.

**Elapsed Time (hours)**

- Start water level Rate (gpm) Draw-down (ft.) Cr- Temp. F
- 53 Hours 3200 8.8 190 71

**SUBSURFACE FORMATION**

<table>
<thead>
<tr>
<th>Depth, ft.</th>
<th>Water Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 80</td>
<td>Clay</td>
</tr>
<tr>
<td>80 to 200</td>
<td>Weathered Rock</td>
</tr>
<tr>
<td>200 to 500</td>
<td>Basalt-Med. Hard</td>
</tr>
<tr>
<td>500 to 650</td>
<td>Soft</td>
</tr>
</tbody>
</table>

**REMARKS**

**FOR DRILLER’S USE**

**FOR OFFICIAL USE**

- **Job Name**: CMSD III  
- **Job No.**: 253  
- **Latitude**: 20° 54’ 44”  
- **Longitude**: 156° 31’ 04”  
- **Well No.**: 5431-04
December 18, 1981

Department of Land
& Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, HI  96809

Attention: Mr. Susumu Ono, Chairman

Subject: Waihee Well No. 3
State Well No. 5431-04, Waiehu, Maui, Hawaii

Dear Mr. Ono:

The following response is in reference to conditions set forth in your letter dated October 14, 1981 for the above mentioned project:

Item No. 1 - The Driller's Report as completed by Mr. David Craddick of Water Resources International, Inc. is enclosed.

The other items were addressed in previous correspondence dated December 10, 1981.

If there are any questions, please contact us.

Very truly yours,

NORMAN SAITO ENGINEERING CONSULTANTS, INC.

Ralph M. Nagamine
Project Inspector

Enclosure
December 10, 1981

Department of Land & Natural Resources  
State of Hawaii  
P.O. Box 621  
Honolulu, Hawaii 96809

ATTENTION: Mr. Susumu Ono, Chairman

SUBJECT: WAIHEE WELL NO. 3  
STATE WELL NO. 5431-04  WAIEHU, MAUI, HAWAII

Dear Mr. Ono:

The following response is in reference to conditions set forth in your letter dated October 14, 1981 for the above mentioned project:

Item No. 1 - The drilling contractor, Water Resources International, Inc., has been given the Driller's Report form. Mr. David Craddock will complete the report and will submit it directly to the State. If you have not received the Driller's Report, you may call us or call Mr. David Craddock directly at 839-7727.

Item No. 2 - The testing procedure included a step pump test (discharge rates ranging from 1,000 gpm to 3,500 gpm) immediately followed by the continuous pump test (sustained at a specified discharge rate). Measurements of discharge rate, specific conductance, static pressure, and water temperature were recorded during the pump testing.

The discharge rate was determined by measuring the volume passing through two Sparling meters in parallel and dividing by the lapse period. A running account of time versus totalizer counter readings were recorded.

The specific conductance was measured by a Model 2510 Hach conductivity meter.

<table>
<thead>
<tr>
<th>TIME</th>
<th>HACH METER</th>
<th>BREWER ANALYTICAL LABORATORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample #1 11/09/81 @ 11:40 a.m.</td>
<td>187 micromhos/cm</td>
<td>12.5 mg/l Cl⁻</td>
</tr>
<tr>
<td>Sample #2 11/09/81 @ 8:30 p.m.</td>
<td>185 micromhos/cm</td>
<td>12.2 mg/l Cl⁻</td>
</tr>
<tr>
<td>Sample #3 11/11/81 @ 1:50 p.m.</td>
<td>189 micromhos/cm</td>
<td>13.0 mg/l Cl⁻</td>
</tr>
</tbody>
</table>
The static pressure was measured on a pressure gauge which was later detected to be slightly out of calibration (see enclosed 11/16/81 memorandum regarding the Pressure Gauge Test). The water level was measured by steel tape at 15.4 ft. elevation on 11/16/81 at 4:00 p.m. and at 15.8 ft. elevation on 12/02/81 at 12:00 noon.

The water temperature was 22.0° C at the beginning of the pump test and stabilized at 20.5° C after seven hours of pumping.

Copies of the tabulated and summarized step and continuous pump tests records are enclosed.

Item No. 3 - The well is to be dedicated to the County of Maui, Department of Water Supply. Monthly pumpage records will be kept by department personnel and will be available for review.

Item No. 4 - One set of "As Built" construction plans are enclosed.

If there are any questions, please contact us.

Very truly yours,

NORMAN SAITO ENGINEERING CONSULTANTS, INC.

By Ralph M. Nagamine

Ralph M. Nagamine
Project Inspector

RMN/jy
<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Meter #1 (100's gallons)</th>
<th>Meter #2 (1000's gallons)</th>
<th>Discharge rate (gpm)</th>
<th>Drawdown pressure (psi/feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 1981 (Wednesday)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:30 PM</td>
<td>506278</td>
<td>735717</td>
<td>32.14</td>
<td>82/95</td>
</tr>
<tr>
<td>Waiehu Well #1 pump on</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:40 PM</td>
<td>506436</td>
<td>735700</td>
<td>32.14</td>
<td>82/95</td>
</tr>
<tr>
<td>Waiehu Well #2 pump on</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:00 PM</td>
<td>506890</td>
<td>735474</td>
<td>32.30</td>
<td>84/97</td>
</tr>
<tr>
<td>12 November 1981 (Thursday)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:30 AM</td>
<td>507017</td>
<td>735460</td>
<td>17.0/09</td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1) The specific conductivity remained in the 185-199 micromhos/cm range throughout the continuous test period except from 8:30 PM, 10 November 1981 (Tuesday) to 6:00 AM, 11 November 1981 (Wednesday) during which Mr. O'Brian reddick recorded a rise in the specific conductivity, peaking at 200 micromhos/cm.
### VAMBOE WELL #3 CONTINUOUS TEST OBSERVATIONS

**Nov. 1, 1981**

<table>
<thead>
<tr>
<th>Time</th>
<th>Remarks</th>
<th>Well #2 Level (ft)</th>
<th>Well #3 Level (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:27</td>
<td></td>
<td>9.6</td>
<td>8.2</td>
</tr>
<tr>
<td>2:30</td>
<td></td>
<td>9.6</td>
<td>8.2</td>
</tr>
<tr>
<td>2:33</td>
<td>Pump #1 Off/Pumps #2, #3 On</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:36</td>
<td></td>
<td>10.1</td>
<td>8.35</td>
</tr>
<tr>
<td>2:39</td>
<td></td>
<td></td>
<td>8.35</td>
</tr>
<tr>
<td>2:43</td>
<td>Pump 1 #2 Off</td>
<td>14.7</td>
<td>8.35</td>
</tr>
<tr>
<td>2:45</td>
<td></td>
<td>14.75</td>
<td>8.35</td>
</tr>
<tr>
<td>2:51</td>
<td></td>
<td>14.8</td>
<td>8.35</td>
</tr>
<tr>
<td>2:55</td>
<td></td>
<td>14.8</td>
<td>8.35</td>
</tr>
<tr>
<td>3:00</td>
<td></td>
<td></td>
<td>8.35</td>
</tr>
<tr>
<td>3:06</td>
<td>Pumps 1, 2, 3 Off</td>
<td>14.85</td>
<td>9.2</td>
</tr>
<tr>
<td>3:10</td>
<td></td>
<td></td>
<td>9.2</td>
</tr>
<tr>
<td>3:12</td>
<td></td>
<td>15.0</td>
<td>11.95</td>
</tr>
<tr>
<td>3:15</td>
<td></td>
<td>15.0</td>
<td>11.95</td>
</tr>
<tr>
<td>3:20</td>
<td></td>
<td>15.1</td>
<td>12.0</td>
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<tr>
<td>3:25</td>
<td></td>
<td>15.1</td>
<td>12.0</td>
</tr>
<tr>
<td>3:35</td>
<td></td>
<td>15.2</td>
<td>12.0</td>
</tr>
<tr>
<td>Time</td>
<td>120 AM</td>
<td>1:00 PM</td>
<td>2:00 PM</td>
</tr>
<tr>
<td>------------</td>
<td>--------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>29/30 May</td>
<td>11400</td>
<td>11400</td>
<td>11400</td>
</tr>
<tr>
<td>6/0 AM</td>
<td>9300</td>
<td>9300</td>
<td>9300</td>
</tr>
<tr>
<td>6/10 AM</td>
<td>9300</td>
<td>9300</td>
<td>9300</td>
</tr>
<tr>
<td>2/30 AM</td>
<td>9300</td>
<td>9300</td>
<td>9300</td>
</tr>
<tr>
<td>2:30 AM</td>
<td>9300</td>
<td>9300</td>
<td>9300</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>9300</td>
<td>9300</td>
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<tr>
<td>2:30 PM</td>
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<td>7:30 PM</td>
<td>9300</td>
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<tr>
<td>8:30 PM</td>
<td>9300</td>
<td>9300</td>
<td>9300</td>
</tr>
<tr>
<td>9:30 PM</td>
<td>9300</td>
<td>9300</td>
<td>9300</td>
</tr>
</tbody>
</table>

Central Main Source Development, Project 2 - File #15252 (Sheet 2 of 4)
<table>
<thead>
<tr>
<th>Time/Remarks</th>
<th>Meter #1 (1000 gallons)</th>
<th>Meter #2 (1000 gallons)</th>
<th>Discharge (gpm)</th>
<th>Pressure/drawdown (psi/ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:15 A.M. Weiwhu Well #1 pump on</td>
<td>4981.65</td>
<td>2784.23</td>
<td>32.00</td>
<td>64/92</td>
</tr>
<tr>
<td>7:00 A.M.</td>
<td>4993.23</td>
<td>2790.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:00 A.M.</td>
<td>5011.29</td>
<td>2804.37</td>
<td>32.00</td>
<td>85/90</td>
</tr>
<tr>
<td>10:00 A.M.</td>
<td>5029.61</td>
<td>2811.05</td>
<td>32.10</td>
<td>85/90</td>
</tr>
<tr>
<td>11:15 A.M. Weiwhu Well #2 Water Level @ 15.2 elevation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1) Test pumping @ 3200 gpm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2) Weiwhu Well #1 pump on</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:45 A.M. Weiwhu Well #2 Water Level @ 9.6 elevation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1) Test pumping @ 3200 gpm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2) Weiwhu Well #1 and #2 pumps on</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:30 PM</td>
<td>5035.07</td>
<td>2378.68</td>
<td>32.00</td>
<td>84/92</td>
</tr>
<tr>
<td>1:40 PM</td>
<td>5036.65</td>
<td>2330.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Discharge rate (gpm)</td>
<td>Specific conductivity (micromhos/cm)</td>
<td>Static pressure (psi)</td>
<td>Water level drawdown (ft)</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------</td>
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</table>

Notes: 1) 185 micromhos/cm, specific conductivity = 53 ppm chloride ions
2) Water temperature = 71°C ± 70°F
3) Water level at 174 psi is 14.9 ft elevation
4) Air line set at 72.6 ft elevation
5) Existing Waimea Well pumps were shut down during Step Pump Test

17 November 1981 (Tuesday)
130 PM – 540 PM: 3350 136 8.6 3.8
<table>
<thead>
<tr>
<th>Time/Remarks</th>
<th>Meter #1 (100xgallons)</th>
<th>Meter #2 (100xgallons)</th>
<th>Discharge Rate (gpm)</th>
<th>Pressure/Drawdown (psl/feet)</th>
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<tbody>
<tr>
<td>2:15 a.m., 9/30 (Monday)</td>
<td>466.099</td>
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<td>Pressure/Drawdown (psi/(feet))</td>
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17 November 1981 (Thursday) 8:30 AM 12.7/0.91

Notes: 1) The specific conductivity remained in the 185 - 189 microhmhos/cm range throughout the continuous test period except from 8:30 PM, 10 November 1981 (Tuesday) to 6:00 AM, 11 November 1981 (Wednesday) during which Mr. Donal (Reddick) recorded a rise in the specific conductivity, peaking at 2007 microhmhos/cm.
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<th>Time</th>
<th>Remarks</th>
<th>Well #2 Level (ft)</th>
<th>Well #3 Level (ft)</th>
<th>Well #3 Level (psi)</th>
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</tr>
<tr>
<td>Time/Remarks</td>
<td>Meter #1 (1000 gallons)</td>
<td>Meter #2 (1000 gallons)</td>
<td>Discharge rate (gpm)</td>
<td>Pressure/drawdown (psi/ft)</td>
</tr>
<tr>
<td>------------------------------</td>
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</tr>
<tr>
<td>12 November 1981 (Tuesday)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11:00 AM</td>
<td>4,600.50</td>
<td>2,083.8</td>
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<td>8.2/174</td>
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<tr>
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<td>4,601.74</td>
<td>2,089.04</td>
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</tr>
<tr>
<td>12:30 PM Discharge Rate Increased to 8,800 gpm</td>
<td>4,601.74</td>
<td>2,089.04</td>
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<tr>
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<td>4,601.74</td>
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<tr>
<td>2:30 PM</td>
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<tr>
<td>2:40 PM</td>
<td>4,624.16</td>
<td>2,118.84</td>
<td>35.20</td>
<td>8.1/9.0</td>
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<tr>
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<td>4,624.16</td>
<td>2,118.84</td>
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</tr>
<tr>
<td>3:10 PM</td>
<td>4,627.52</td>
<td>2,111.72</td>
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<tr>
<td>3:30 PM</td>
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<td>2,111.72</td>
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<tr>
<td>7:15 P.M Weiheu Well #1 pump on</td>
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<tr>
<td>7:30 PM</td>
<td>4,681.63</td>
<td>2,171.77</td>
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<td>8.1/9.0</td>
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<tr>
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<td>4,683.14</td>
<td>2,173.41</td>
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<td></td>
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<tr>
<td>9:30 P.M</td>
<td>4,692.67</td>
<td>2,202.90</td>
<td>32.90</td>
<td>8.1/9.0</td>
</tr>
<tr>
<td>10:30 A.M</td>
<td>4,683.60</td>
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<td></td>
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</tr>
<tr>
<td>11:30 A.M</td>
<td>4,684.13</td>
<td>2,202.90</td>
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</tr>
<tr>
<td>12:30 A.M</td>
<td>4,684.13</td>
<td>2,202.90</td>
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</tr>
<tr>
<td>1:30 P.M</td>
<td>4,684.13</td>
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<tr>
<td>2:30 P.M</td>
<td>4,684.13</td>
<td>2,202.90</td>
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<td>4,684.13</td>
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<tr>
<td>4:30 P.M</td>
<td>4,684.13</td>
<td>2,202.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:00 A.M</td>
<td>4,684.13</td>
<td>2,202.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6:00 A.M</td>
<td>4,684.13</td>
<td>2,202.90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The table contains data for a specific time period, including discharge rates and pressure/drawdown measurements.
### November 1981 - Wehehu Well #3 Continuous Pump Test

<table>
<thead>
<tr>
<th>Time/Remarks</th>
<th>Meter #1</th>
<th>Meter #2</th>
<th>Discharge Rate (gpm)</th>
<th>Pressure/Drawdown (psi/ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:15 AM</td>
<td>Wehehu Well #1 pump off</td>
<td>4991.65</td>
<td>7204.23</td>
<td>32.00</td>
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<tr>
<td>7:00 AM</td>
<td></td>
<td>5012.9</td>
<td>2809.27</td>
<td>32.0</td>
</tr>
<tr>
<td>7:10 AM</td>
<td></td>
<td>5023.8</td>
<td>2804.93</td>
<td>32.10</td>
</tr>
<tr>
<td>9:00 AM</td>
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<td>5029.1</td>
<td>2814.93</td>
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<tr>
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<tr>
<td>10:10 AM</td>
<td></td>
<td>5032.4</td>
<td>2814.70</td>
<td>32.10</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Wehehu Well #2 Water Level @ 15.7 Elevation</td>
<td></td>
<td></td>
<td>8.4/92</td>
</tr>
<tr>
<td>1) Test pumping @ 3700 gpm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:30 AM</td>
<td>Wehehu Well #2 Water Level @ 14.6 Elevation</td>
<td></td>
<td></td>
<td>8.4/92</td>
</tr>
<tr>
<td>1) Test pumping @ 3700 gpm</td>
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</tr>
<tr>
<td>11:40 AM</td>
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<td>5035.01</td>
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<tr>
<td>11:50 AM</td>
<td></td>
<td>5036.68</td>
<td>2330.20</td>
<td>32.00</td>
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<tr>
<td>12:00 PM</td>
<td>Wehehu Well #2 Water Level @ 9.6 Elevation</td>
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<td></td>
<td>8.4/92</td>
</tr>
<tr>
<td>1) Test pumping @ 3700 gpm</td>
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<td></td>
</tr>
<tr>
<td>1) Test pumping @ 3700 gpm</td>
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</table>
### Central Maui Source Development Project II - File #575-2

#### Waiehu Well #3 - Step Pump Test

<table>
<thead>
<tr>
<th>Time (9 November 1981, Monday)</th>
<th>Discharge (gpm)</th>
<th>Specific Conductivity (micromhos/cm)</th>
<th>Static Pressure (psi)</th>
<th>Water Level Drawdown (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30 AM</td>
<td></td>
<td>Static</td>
<td>124</td>
<td>314.9</td>
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<tr>
<td>11:25 AM → 12:35 PM</td>
<td>1000</td>
<td>188</td>
<td>11.7</td>
<td>16</td>
</tr>
<tr>
<td>12:45 PM → 7:05 PM</td>
<td>1547</td>
<td>187</td>
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<td>21.6</td>
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<tr>
<td>7:20 PM → 3:30 PM</td>
<td>7078</td>
<td>195</td>
<td>10.7</td>
<td>3.9</td>
</tr>
<tr>
<td>3:50 PM → 6:00 PM</td>
<td>2751</td>
<td>186</td>
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<td>1.6</td>
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<tr>
<td>5:15 PM → 6:30 PM</td>
<td>3670</td>
<td>190</td>
<td>8.9</td>
<td>9.8</td>
</tr>
<tr>
<td>7:25 PM → 10:00 PM</td>
<td>3030</td>
<td>186</td>
<td>9.0</td>
<td>7.8</td>
</tr>
</tbody>
</table>

**Notes:**

1. 165 micromhos/cm specific conductivity = 58 ppm chlorine ions.
2. Water temperature = 71°F ± 70°F.
3. Water level at 124 psi is 15.9 ft elevation.
4. Air lift elevation = 17.6 ft elevation.
5. Existing Waiehu Well pumps were shut down during Step Pump Test.
<table>
<thead>
<tr>
<th>Time/Remarks</th>
<th>Meter #1 (100xgallons)</th>
<th>Meter #2 (100xgallons)</th>
<th>Discharge rate (gpm)</th>
<th>Pressure/ drawdown (psig)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 AM</td>
<td>51062</td>
<td>51282</td>
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<tr>
<td>10:00 AM</td>
<td>51415</td>
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<td>11:00 AM</td>
<td>51652</td>
<td>51873</td>
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<tr>
<td>12:00 PM</td>
<td>51891</td>
<td>52112</td>
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<tr>
<td>Weihua Well #1 pump on</td>
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<tr>
<td>1:00 PM</td>
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<td>52369</td>
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<td>Weihua Well #1 pump off</td>
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<tr>
<td>2:00 PM</td>
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<td>3:00 PM</td>
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<td>4:00 PM</td>
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<td>11:00 AM</td>
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<td>12:00 PM</td>
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<td>Noon November 1981</td>
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<tr>
<td>7:00 AM</td>
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<td>11:00 AM</td>
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<tr>
<td>Weihua Well #1 pump off</td>
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<tr>
<td>12:00 PM</td>
<td>56419</td>
<td>56630</td>
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<tr>
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<tr>
<td>11:00 AM</td>
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<td>12:00 PM</td>
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</table>
MEMORANDUM

From: R.M. Negemine
Date: 16 November 1981
To: File No. 57S-3

Re: Inspection Report Attachment

Project No. 57S-3

This test is to correlate the pressure values recorded during the step and continuous pump test with theoretical pressure values.

<table>
<thead>
<tr>
<th>Depth of Water, feet</th>
<th>Recorded Pressure, psi</th>
<th>Theoretical Pressure, psi</th>
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<td>17</td>
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<td>6.9</td>
</tr>
<tr>
<td>15</td>
<td>7.1</td>
<td>6.5</td>
</tr>
</tbody>
</table>

The pressure values recorded during the pump tests were apparently (0.5 psi or 1.4 ft) too high. Initial static pressure at the beginning of the pump test was 12.4 psi which correlates to 27.5 feet of head.
Central Maui Source Development
Joint Venture
c/o Norman Saito Engineering
Consultants, Inc.
33 Lono Avenue, Suite 350
Kahului, Maui, HI 96732

Dear Sirs:

This letter is pursuant to Department of Health review of the recent Board of Land and Natural Resources approval of your application to drill a new well (no. 5431-04) at Waiehu, Maui, TMK 3-2-17:18. It is our understanding that the new well will be used to serve domestic water. Please be advised that Chapter 49, Public Health Regulations (PHR) sets down requirements for "public water systems" as defined by that Chapter. A "public water system" as defined is one which serves a minimum of 25 persons at least sixty days per year or has 15 or more service connections.

In the event that the proposed new source is intended to serve a new water system which meets these minimum qualifications, if the source is intended to supplement an existing public water system, or if the new source will enable an existing non-public water system to expand service to qualify as a public water system, the new source will be subject to the terms and conditions of Section 29, Chapter 49, PHR. Section 29 requires that all new potable water sources serving public water systems be approved by the Director of Health prior to their use to serve domestic water. Such approval is based primarily on an engineering report which adequately addresses all concerns as set down in Section 29, Chapter 49, PHR. This report must be prepared by a licensed engineer and bear their seal upon its submission to the Department.

The above discussion of Section 29 requirements will also be applicable any time in the future should your system not presently serve the minimum numbers of persons but eventually expand to that minimum size. As mentioned earlier, the system at that time would also be subject to all applicable terms and conditions of Chapter 49, PHR. The Department of Health must be notified of the system qualification as a public water system.
Should you have any questions regarding Chapter 49, PHR, please contact the Drinking Water Program at 548-2235.

Sincerely,

THOMAS E. ARIZUMI
Supervisor
Drinking Water Program
Sanitation Branch
Environmental Protection and
Health Services Division

MJH:dnn

cc: Chief Sanitarian, Maui
DOWALD
TO: Central Maui Source Development
Joint Venture
C/o Norman Saito Engineering
Consultants, Inc.
33 Lono Ave., Suite 350
Kahului, Maui, Hawaii 96732

In accordance with Chapter 166 of Title 13, Rules for the Control of Ground Water Use in the State of Hawaii, your application to drill a well at Waiehu, Maui, Tax Map Key 3-2-17:18, is approved subject to the following conditions:

1. A Driller's Well Completion Report (enclosed) shall be submitted to the Division of Water and Land Development within 60 days after completion of the well.

2. The pumping test data shall be submitted to the Division of Water and Land Development within 60 days after testing of the well.

3. Monthly pumpage records shall be submitted after the well is put into production.

4. Upon completion, submit an "as-built" drawing of the well.

SUSUMU ONO
Chairman of the Board

October 14, 1981
Date of Issuance

Enc: Driller's Report form
USGS
Dept. of Health
Maui DWS
TO: Department of Land & Natural Resources
    P.O. Box 373
    Honolulu, Hawaii 96809

DATE: 9/2/81

ATTN: Waihee Well No. 3 5431-04

SUBJECT: Waihee Well No. 3 5431-04

FILE NO. 575-3

WE ARE TRANSMITTING:  

XXX HEREWITH

[ ] UNDER SEPARATE COVER

[ ] AS REQUESTED

NO. OF COPIES 1

THE FOLLOWING:  

[ ] PLANS

[ ] TRACINGS

[ ] SPECIFICATIONS

[ ] LETTER

[ ] PRINTS

[ ] DESCRIPTIONS

[ ] Well drilling permit

FOR:  

[ ] APPROVAL

[ ] REVIEW AND COMMENT

[ ] SIGNATURE

[ ] YOUR USE

[ ] INFORMATION

[ ] APPROPRIATE ACTION

REMARKS:  

SIGNED [Signature]

Carl K. Takumi, P.E.

COPY TO: CMSDJV members

Wailuku Sugar Company
O

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES

APPLICATION FOR (check one)

[ ] WELL DRILLING PERMIT  [ ] WELL MODIFICATION PERMIT

Instructions: Send completed application and attachments to Department of Land and Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809.

Reference: Regulation 9, Dept. of Land & Natural Resources.

1. WELL LOCATION: Island Maui  Tax Map Key  3-2-17:18. Attach a plot plan showing well location referenced to established property boundaries.

2. WATER USER: Central Maui Source Development J.V. Telephone 877-7667
   Address c/o Norman Saito Engineering Consultants, Inc. Zip Code 96732
   33 Lono Avenue Suite 350 Kahului, Maui, Hawaii


4. PROPOSED WORK: Drill new well  [ ] Deepen  [ ] Redrill  [ ] Alter  [ ] Seal
   [ ] Abandon  [ ] Install new pump  [ ] Replace pump  [ ] Modify pump
   Fill in the diagram and briefly describe the proposed work (use back of form if necessary):

5. PROPOSED SECTION OF WELL

   Elevation at top of casing 494.0 ft., msl.
   Ground Elev. 493.0 ft., msl.
   Cement Grout 302 ft.,
   Hole Dia. 26 in.
   Total Depth 521 ft.
   Rock Packing 0 ft.
   Material
   Length 489 ft.
   Diameter 20 in.
   Wall thickness 0.375 in.
   Casing: [ ] Perforated  [ ] Screen
   Material  [ ] Steel
   Length 30 ft.
   Diameter 20 in.
   Wall thickness 0.3125 in.
   Openings 130 sq. in./L.F.
   Open Hole: Length 122 ft.
   Diameter 18 in.

   *Approximate elev. at filing. Final elev. (msl) by a surveyor licensed by the State must be submitted at start of construction.

6. PROPOSED USE: [ ] Municipal  [ ] Military  [ ] Agriculture  [ ] Industrial
   [ ] Domestic  [ ] Disposal  [ ] Other (specify)__________________________

7. PROPOSED AMOUNT OF WITHDRAWAL: Check most appropriate box and fill in amount.
   [ ] Daily 5,000,000 gallons  [ ] Monthly__ gallons  [ ] Yearly__ gallons

8. PROPOSED PUMP OR FLOW CAPACITY: ____________________________gallons per minute

Signature: ____________________________  Date: ____________
Water User  Secretary - Central Maui Source Development Joint Venture

Signature: ____________________________  Date: ____________
Landowner of Well Site

For Official Use:

State Well No. 5431-04
DLNR Permit No. ____________
DLNR Application No. ____________
TO: Division of Water and Land Development  
Department of Land and Natural Resources  
State of Hawaii  
P.O. Box 373  
Honolulu, HI 96809  
ATTN: Mr. Ed Sakoda  

DATE: September 29, 1981  

SUBJECT: Waihee Well #3 5431-04  
Waiehu, Maui, Hawaii  
TMK: 3-2-17:18  
FILE NO. 575 - 3  

WE ARE TRANSMITTING:  
XX HEREWITH  
XX AS REQUESTED  

THE FOLLOWING:  
XX Construction Plans  

NO. OF COPIES 1  

REMARKS: Construction Plans with Project Location.  

SIGNED  

COPY TO:__________________________
Mr. Susumu Ono  
Chairman of the Board  
Department of Land and Natural Resources  
State of Hawaii  
P. O. Box 621  
Honolulu, Hawaii 96809  

Dear Mr. Ono:  

SUBJECT: Preliminary Engineering Report for Waihee Wells No. 3  

Transmitted herewith for your review and comments is a copy of the preliminary engineering report for the development of Waihee Well No. 3 on Maui. This report has been prepared pursuant to Section 29 of Public Health Regulations Chapter 49, Potable Water Systems.  

Your review and comments are solicited as your concerns, knowledge and expertise in this area may assist us in determining potential impacts which may result by the proposed action.  

Your early attention and reply to this matter will be greatly appreciated.  

Sincerely yours,  

Melvin K. Koizumi  
Deputy Director for Environmental Health  

Enclosure
March 20, 1980

Mr. Daniel Lum
Hydrologist & Geologist
Dept. of Land & Natural Resources
State of Hawaii
P.O. Box 373
Honolulu, Hawaii 96809

SUBJECT: LOCATION OF PROPOSED WELL #3

Dear Mr. Lum:

In light of our meeting on Maui last month regarding additional well in Waiehu, we have prepared a map showing proposed well. We would appreciate your comments especially on the location and separation.

This map is also being sent to all four geologists that were present.

If there are any questions, feel free to call us.

Very truly yours,

NORMAN SAITO ENGINEERING
CONSULTANTS, INC.

By
Norman Saito, P.E.
President & Manager

NS/jy

P.O. BOX 1887 • KAHULUI, MAUI, HAWAII 96732 • TELEPHONE 877-7667
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR WATER USE PERMIT
Groundwater or Surface Water

Inasmuch, please return one copy and send 15 copies of complete application with all necessary attache to the Commission on Water Resource Management, P.O. Box 281, Honolulu, Hawaii 96823. Application must be accompanied by a non-refundable filing fee of $250.00 payable to the Dept. of Land and Natural Resources. The Commission reserves the right to request additional information. If the applicant fail to comply within 30 days of receipt of the application, the application will be disallowed. For further information, please contact the Director of the Department of Hawaiian Home Lands.

PERMITT INFORMATION

1. (a) APPLICANT
Applicant Name: MAUI COUNTY DEPT. OF WATER
Contact Person: GEORGE TENGAN, DIRECTOR
Address: 200 S. HIGH ST, WAILUKU HI 96793
Phone: (808)270-7813, (808)270-7833
E-mail: george.tengan@co.maui.hi.us
(b) LANDOWNER OF SOURCE
Landowner Name: WATER AINA, LLC
Contact Person: DAVID SINGER
Address: PO BOX 3017, WAILUKU HI 96793
Phone: (808)270-1739
E-mail: george.tengan@co.maui.hi.us

SOURCE INFORMATION

2. WATER MANAGEMENT AREA: IAO AQUIFER
3. (a) EXISTING WELLSTREAM DIVERSION NAME AND STATE NUMBER: WAIHEE 3 5431-04
(b) PROPOSED (NEW) WELLSTREAM DIVERSION NAME:
(c) LOCATION: See attached map.

USE INFORMATION

4. SOURCE TYPE (check one): 
   — Groundwater — Stream
   — Dike-confined — Perched
   — Caprock
5. METHOD OF TAKING WATER (check one):
   — Wells & Pumps
   — Dewater Surface
   — Other (explain)
6. LOCATION OF PROPOSED WATER USE: 
   — Existing stream previously exist, please attach well construction/treatment diversion permit or application.
   — Non-Regulated Private System — Report Certification to Dept. Record of Water Supply
   — Non-Regulated Private System — Report Certification to Dept. Record of Water Supply
7. QUANTITY OF WATER REQUESTED: 1,113 million gallons per day (averaged over 1 year)
8. METHOD OF MEASUREMENT:
   — Piezometer
   — Open-pipe
   — Water
   — Criteria
   — Other (explain)
9. QUALITY OF WATER REQUESTED:
   — Fresh
   — Brackish
   — Salt
   — Non-Potable
10. PROPOSED USE:
    — Municipal (including hotels, stores, etc.)
    — Industrial
    — Other (explain)
11. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION: 24 hours

12. APPLICANT MUST ESTABLISH THAT THE PROPOSED USE OF WATER:
   (a) Can be accomplished 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 13-117-2, 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.

13. REMARKS, EXPLANATIONS:

NOTE: Signing below indicates that the applicant understands and agrees to:
1) the information provided on this application is accurate and true to the best of their knowledge; 2) the failure to comply with the requirements of the applicant prior to Commission approval; 3) if necessary, further information may be required before the application can be considered complete; 4) if a water use permit is granted by the Commission, this permit is subject to prior existing permitted use, conveyance to consecutive parties, and reserves State standards, reserved use or deed by the Commission, and Indian reservations Lands future user; and 5) upon permit approval, a water abstraction plan must be submitted by the applicant should the Commission requires use.

Applicant (print) GEORGE TENGAN
Signature: /s/ GEORGE TENGAN
Date: 7/11/04
Landowner (print) DAVID SINGER
Signature: /s/ DAVID SINGER
Date: 7/11/04

TOTAL P.02
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources
APPLICATION FOR WATER USE PERMIT

1. (a) APPLICANT
   Firm/Name: MAUI COUNTY DEPT OF WATER
   Contact Person: GEORGE TENGAN, DIRECTOR
   Address: 200 S. HIGH ST, WAILUKU HI
   Phone: (808) 270-7816, (808) 270-7833
   E-mail: george.tengan@co.mauai.hi.us

(b) LANDOWNER OF SOURCE
   Firm/Name: WAILHU AINA, LLC
   Contact Person: DAVID SINGER
   Address: PO BOX 3017
   Phone: (808) 298-1730
   E-mail: 

2. WATER MANAGEMENT AREA: IAQ AQUIFER
   ISLAND: MAUI

3. (a) EXISTING WELLSTREAM DIVERSION NAME AND STATE NUMBER:

(b) PROPOSED (NEW) WELLSTREAM DIVERSION NAME:

(c) LOCATION: Address See attached map:

4. SOURCE TYPE (check one): Stream
   (Attach and show source location on a USGS map, scale 1"=2000', and a property tax map)

5. METHOD OF TAKING WATER (check one): Anesian
   (attach well construction/stream dedication map, scale 1"=2000', and a property tax map)

6. LOCATION OF PROPOSED WATER USE: (If possible, show on same maps as source location. Otherwise, attach similar maps)
   (a) PUC-Regulated Private System
   (b) Tax Map Key: 3.2.17.018

7. QUANTITY OF WATER REQUESTED: 1.513 million gallons per day (averaged over 1 year)

8. METHOD OF MEASUREMENT:
   Flowmeter
   Open-pipe
   Weir
   Office
   Other

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

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

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

12. 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.

13. REMARKS, EXPLANATIONS:

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 upstream flow standards, reserved use 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): GEORGE TENGAN
Signature: 5/17/04
Date: 

Landowner (print): DAVID SINGER
Signature: 
Date: 

WUPAFORM (4/29/03)
### TABLE 1. TMKs TO USE REQUESTED WATER

<table>
<thead>
<tr>
<th></th>
<th>PROJECT NAME &amp; PHASES (include address if applicable)</th>
<th>POTABLE or NONPOTABLE</th>
<th>TMK</th>
<th>STATE / COUNTY ZONING CODE</th>
<th>UNITS OF NET ACRES</th>
<th>GPD/MGD</th>
<th>4-YEAR CUMULATIVE PROJECTED DEMAND</th>
<th>ULTIMATE DEMAND (GPD TO BUILD OUT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PROJ#</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>N/A</td>
<td>Potable multiple various</td>
<td>17,391</td>
<td></td>
<td></td>
<td>25.703</td>
<td>26.204 26.705 27.207</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td>Services</td>
<td></td>
<td></td>
<td></td>
<td>MGD</td>
<td>MGD MGD MGD MGD</td>
<td></td>
</tr>
</tbody>
</table>

**Total GPD**: [Table is complete]

**DEPARTMENT OF PLANNING AND PERMITTING SIGNATURE**

**DATE**

Only for verification that: 1) TMKs listed are consistent with zoning; and 2) projects listed are allowed with respect to zoning.

Instructions for completing Table 1: Individual projects and phases must be listed separately and numbered sequentially on Table 1. Copy Table 1 and attach additional sheets if necessary. Please indicate individual projects and phases on TMK maps by clearly delineating project areas and indicating sequential number within delineated areas to coincide with Table 1. Please attach a separate sheet giving the address and a brief description of each project and phase listed above. In addition, if the proposed use is existing, please provide the WUP No. or indicate when the existing use was initiated. Also, the Department of Planning and Permitting (DPP) must sign before application is acceptably complete. Please consult with DPP at 650 South King Street, 7th Floor, Honolulu, HI 96813 Attn: Arthur D. Challacombe.
APPLICATION FOR WATER USE PERMIT – Use Information

12(a) The proposed use of water can be accommodated with the available water source:

Proposed water use of 1.513 million gallons per day (MGD) is the moving average withdrawals (MAV) from Waihee 3 well as of June 30, 2003. Installed pump capacity is 4.97 MGD, according to the CWRM database.

Waihee 3 well along with lao and Waihee aquifer sources and surface water treated by the lao Treatment Plant serve the Central Maui System. These sources are mixed so that Waihee 3 well is not the single source serving any specific area. MAV from these sources combined were from July 1, 2002 to June 30, 2003 was 24.447 MGD, broken down as follows:

- lao aquifer: 18.063 MGD
- Waihee aquifer: 4.536 MGD
- lao Tunnel: 1.359 MGD
- lao Treatment Plant: 0.489 MGD

Water meter reservations as of July 2003 was 565,150 gallons per day (GPD), with an additional 97,000 GPD for Department of Hawaiian Homelands. Withdrawals and reserved meters total 25.109 MGD. Average yearly consumption for Central Maui during the period July 1, 2002 to June 30, 2003 was 20.955 MGD. System losses and unaccounted-for water makes up the difference.

12(b) The proposed use of water is a reasonable-beneficial use

Consumption for single-family use, which represents 16% of total use in Central Maui, average 543 GPD, compared to the system standard of 600 GPD. Acreage breakdown for the entire Central system is not available to compare use calculations for other classes.

Planning steps to protect the aquifer and utilize the source in a reasonable and beneficial manner:

- a. Distribute the withdrawals within lao aquifer; development of new sources:
  - lao well. Currently in design. Development anticipated by end 2005
  - Waikapu Mauka – developed and pump installed. On hold until foreclosure of additional land required resolved

- b. Relocate withdrawals outside of the aquifer; development of new sources within Waihee aquifer:
  - Well planned by private developer to be dedicated to the County.
  - Kupaa 1: On-line by end 2004

- c. Provide additional surface water sources:
  - lao Treatment Plant – increase capacity to 2.4 MGD. Anticipated on-line by end 2004

- d. Alternative sources: East Maui source development, temporary use of existing well

- e. Conservation:
  - Leak detection, in-house repairs
  - Automated radio-read meters replace old, under-registering meters
  - Reclaimed water use at commercial properties within 100 ft of R-1 distribution systems.
  - Reclaimed water use encouraged for dust control

Conservation pricing and rate structures
Low flow fixtures required in new developments. Code sets flow limits. Free fixture distribution
Outdoor conservation
Public education: targeted conservation checklists, media, activities and events, demonstration gardens, participatory learning.
Additional conservation programs to be reviewed during the Water Use and Development Plan process.

f. Conservation rules: forestall water shortage, negligent or wasteful use

g. Resource protection: watershed, surface water and wellhead protection programs

h. Monitoring and modeling of aquifer status. Agreement with USGS to study groundwater availability in Central Maui

12(c) The proposed use of water will not interfere with any existing legal use
The well is owned by Maui County Department of Water Supply. The parcel is owned by Wailuku Agribusiness and is zoned Agriculture and Rural, with the section where Waihee Well 3 is located being Agriculture. The zoning allows for water wells defined as minor utility facilities.

12(d) The proposed use of water is consistent with the public interest
The Waihee 3 source is mixed with lao and Waihee aquifer sources to serve the Central Maui System. This public system serves 17,070 customers in the communities extending from Waiehu, through Wailuku, Kahului, Puunene, Sprecklesville, Paia and Kuau on the North, and from Maalaea through Kihei to Makena on the South.

12(e) The proposed use of water is consistent with state and county general plans and land use designations
Proposed water use and withdrawals from the Central Maui sources will meet current demand as built-out in accordance with the Wailuku, Paia-Haiku and Kihei-Makena Community Plan designations and consistent with land use designations. The Water Use and Development Plan (WUDP) is being updated in consistence with the 1990 Maui County General Plan, the County Community Plans, the State Water Resources Protection Plan, the State Water Quality Plan, the State Water Projects Plan, and the State Agricultural WUDP.

12(f) The proposed use of water is consistent with county general plans and general policies
During the WUDP update process, the Department's ongoing source development and capital improvement programs support the General Plan objectives "to provide an adequate supply of potable and irrigation water to meet the needs of Maui County's residents" and "to make more efficient use of our ground, surface and recycled water sources".

12(g) The proposed use of water will not interfere with the rights of the Department of Hawaiian Home Lands
There are no DHHL wells withdrawing from the lao aquifer. However, the Central Maui System services DHHL projects.
PRELIMINARY ENGINEERING REPORT FOR WAIHEE WELLS NO. 3
PRELIMINARY
ENGINEERING REPORT
FOR
WAIHEE WELLS NO. 3

CARL K. TAKUMI
REGISTERED PROFESSIONAL ENGINEER
No. 3466-E
HAWAI'I, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

NORMAN SAI TO ENGINEERING CONSULTANTS, INC.
KAHULUI, MAUI, HAWAI'I

SEPTEMBER 1980
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11. FINANCING 1

APPENDIX A - TEST HOLE LOGS
APPENDIX B - WATER ANALYSIS
APPENDIX C - CENTRAL MAUI SOURCE DEVELOPMENT AGREEMENT
ATTACHMENT 1: "PRELIMINARY LOCATION WAIHEE WELL NO. 3"
CHAPTER 1
INTRODUCTION

1.A INTRODUCTION:
Phase I of the Central Maui Source Development consisted of 2 wells, pumps and controls, a storage reservoir and other related appurtenances. The project was completed in 1979.

The proposed project is the second phase of the Central Maui Source Development. The project consists of the development of a third well in the Waiehu-Waihee Water Source. It is anticipated that the well will produce 5 million gallons a day of potable water. Upon completion, the well, pump and appurtenances will be placed under the jurisdiction of the Department of Water Supply, County of Maui for distribution.

1.B PURPOSE AND SCOPE:

The purpose of this report is to comply with the requirements set forth in Section 29 of Chapter 49 of the Public Health Regulations.

1.C REFERENCES:

Primary sources of information used to prepare this report are:

1. Report R-38, "Water for Kihei-Makena, Island of Maui," prepared for the Department of Water Supply, County of


CHAPTER 2
GENERAL INFORMATION

2.A-1 DESCRIPTION OF PROJECT:

The proposed work consists of the construction of a pumping station and appurtenances, including the drilling, casing and testing of one well, the installation of a proposed 5.0 million gallons per day pump, related electrical work and approximately 170 linear feet of 24" waterline.

2.A-2 PROJECT LOCATION:

The project is located in Waiehu, Maui, Hawaii, at elevation 500 feet above mean sea level. The project location is shown on "Preliminary Location Waiehu Well No. 3," prepared by Norman Saito Engineering Consultants, Inc.

2.A-3 PHASING SCHEDULE:

Project studies began in the early 1970's and culminated in a report written by Norman Saito Engineering Consultants, Inc., entitled "Central Maui Water Study for Development of Sources, Transmission Lines, and Storage Reservoirs", in March 1974 in which it was determined that the Waihee-Waiehu area has the greatest possible potential of providing ground water to the area.
Construction began in 1976 with the drilling, casing and testing of two wells. Two-four MGD pumping units and necessary appurtenances were installed based upon the test data taken during well drilling. The project has been dedicated to the Department of Water Supply and is presently integrated into the Central Maui Water System.

While the wells were being drilled, two 1.8 mgd wells were put into operation approximately 2,500 feet east of the project site. These wells have been dedicated to the Department of Water Supply and are incorporated into the Central Maui Water System.

The phasing schedule is as follows:

1. Waihee wells (No. 1 and No. 2) was completed in 1979 adding approximately 8.25 MGD to the Central Maui System.

2. As per agreement to develop a total of 19 MGD, the Department of Water has requested that the Central Maui Source Development Joint Venture begin work on the next well. Construction and operation of the proposed Waihee Well No. 3 is scheduled for completion in 1981. This well will be added to the County's Central Maui Water System when completed. During this time, additional data...
will be collected to determine aquifer conditions. The location of future wells will be based on the data collected after this well is placed into operation.

3. Water Demand between 1978 to 1980 remained level due to Department of Water Supply Regulations. From the Department of Water Supply records, it is estimated that the average daily demand in 1980 will not exceed 20 MGD.

2.B NAME OF OWNER OR OFFICIAL CUSTODIAN:
The proposed project is being developed by the Central Maui Source Development Joint Venture, a joint venture of various land owners which was organized to provide potable water for the Central Maui area. The Joint Venture consists of A & B Properties, Inc., Hawaiiana Investment Company, Inc., Seibu Real Estate Co., Ltd., and Wailea Development Company.

Upon completion of this project, the Joint Venture will dedicate the pumping station to the Department of Water Supply, County of Maui.

2.C SITE PLAN WITH CONTOURS:
Site plan with contours is shown in the attached construction plans, entitled "Preliminary Location Waihee Well No. 3", prepared by Norman Saito Engineering Consultants, Inc.
CHAPTER 3

PHYSICAL & HYDROLOGICAL CHARACTERISTICS OF THE AREA

3.A LOCATION:

The project is located on the north slopes of the West Maui Mountains in Upper Waiehu, Maui, Hawaii. The site is approximately 500 feet above mean sea level and about 9,000 feet from the Pacific Ocean. It is located adjacent to cane lands cultivated by Wailuku Sugar Company.

3.B CLIMATE:

Mean annual rainfall for the site is 30 inches per year as determined by the U.S. Weather Bureau rainfall map.

3.C TOPOGRAPHY INCLUDING DETAILED STUDY OF PROJECT SITE:

See attached plan entitled "Preliminary Location Waihee Well No. 3", prepared by Norman Saito Engineering Consultants, Inc.

3.D GEOLOGY AND FOUNDATION CONDITIONS:

The surface soils of the area are alluvial soils of the Wailuku series. The soil is rated as a soil with moderately slow permeability. Results from drilled test holes indicate that hard, fairly impermeable breccia and other conglomerates occur between the surface soils and the aquifer.
Beneath all of this lies the Wailuku Volcanic Series. The olivine basalts of this series are highly permeable and constitutes the main aquifer bearing rock.

3.E EARTHQUAKE CONSIDERATIONS AND DESIGN PARAMETERS:

The area is located in seismic Zone 2.

The well and related structures will meet building code requirements including earthquake considerations.

3.F GROUNDWATER CONDITIONS:

It is generally agreed that the Waiehu-Waihee area is a large source of groundwater. Presently, the excess water seeps directly into the ocean. The Department of Water Supply has 4 wells in the area capable of pumping 11.5 MGD.

Since the wells were placed into production, no significant drawdown of the basal lens has been noted, indicating that the withdrawal rate of the wells has not equalled the basal lens seepage rate. Several geologists agree that an additional well may be constructed without adverse effect upon the aquifer.

3.G FLOOD PROBLEMS & TSUNAMI INUNDATION ZONES:

There are no known drainage problems within the proposed
project site. The area will be drained by sheet flow conforming to the present drainage conditions.

The proposed project is not within the 100 year tsunami inundation zone.

3.H. LAND USE & ZONING:

The area is primarily agricultural with urban areas located mostly along the shoreline. Urban areas located inland are the small rural communities of Puuohala Village, Waiehu Village and the town of Waihee. These communities are located below the 500 foot elevation. There are no known plans to urbanize any new inland areas.

Presently the agricultural areas consist mainly of sugar cultivation. However, these lands are gradually being converted to produce macadamia nuts.

3.I WATER RIGHTS AND FUTURE USES BY OTHERS:

The proposed well, pump and related appurtenances will be dedicated in its entirety to the Department of Water Supply. The proposed well, pump and appurtenances will be used to supply water to the County of Maui Central Maui Water System.
CHAPTER 4

EXTENT OF WATERWORKS SYSTEM

4.A  NATURE AND EXTENT OF THE EXISTING AREA AND FUTURE AREA TO BE SERVED:

The proposed project will be dedicated to the Department of Water Supply and incorporated into the Central Maui System. The Central Maui Water System services the entire Wailuku District bounded by Paia-Hookipa to the east, Waikapu-Maalaea to the west, Waihee-Kapuna to the north and Kihei-Makena to the south. The area also includes the large communities of Kahului and Wailuku.

4.B  POPULATION AND CONSUMPTION DATA:

An official Federal Census was recently taken for the County. The census report has not been finalized to date; however, preliminary indications shows that the population for the area has grown approximately 44.5% since 1970.

Information obtained from the Department of Water Supply's Annual Reports shows the following water consumption data:
<table>
<thead>
<tr>
<th>YEAR</th>
<th>WATER SERVICES</th>
<th>AVERAGE DAILY DEMAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
<td>7,512</td>
<td>6.1 MGD</td>
</tr>
<tr>
<td>1975</td>
<td>7,709</td>
<td>7.0 MGD</td>
</tr>
<tr>
<td>1976</td>
<td>8,092</td>
<td>7.5 MGD</td>
</tr>
<tr>
<td>1977</td>
<td>8,477</td>
<td>8.8 MGD</td>
</tr>
<tr>
<td>1978</td>
<td>8,759</td>
<td>8.9 MGD</td>
</tr>
<tr>
<td>1979</td>
<td>9,010</td>
<td>8.7 MGD</td>
</tr>
</tbody>
</table>

From 1974 to 1977 the demand for water has steadily increased with the demand for new services. Average Daily Demand peaked during 1977 and has remained the same since.

4.C

FUTURE REQUIREMENTS FOR SERVICE:

Presently, the Department of Water Supply uses a consumption rate of 1,200 gallons per day per unit to estimate future water demand for proposed projects. Also, there is a 1.5 MGD annual water allocation which limits the rate of development within the water system.

In mid 1979, the Department of Water Supply estimated that an average daily demand of 8.9 million gallons was being consumed. By estimating building completion dates of various projects in the process of obtaining building permit or being designed including condominiums, hotels, industrial and commercial enterprises and other water supply needs, the Department of Water Supply estimated
that the demand would exceed the available developed water supply by the end of 1981.

In accordance with the conditions of the agreement between the Central Maui Source Development Joint Venture and the Board of Water Supply, the Central Maui Source Development Joint Venture was informed by the Board of Water Supply to initiate the development of the proposed well.

4.D PROVISIONS FOR EXTENDING WATER WORKS SYSTEM TO INCLUDE CONSIDERATION OF ADDITIONAL AREA REQUIRED, EASEMENTS, AND RIGHT-OF-WAY ACQUISITION FOR FACILITIES AND UTILITIES:

A variance was obtained from the Maui County Board of Adjustments and Appeals to create an 0.833 acre lot for Water Supply purposes. The proposed lot may be expanded to include the proposed well, pipeline, and appurtenances.

The proposed project including the lot and necessary easements will be dedicated to the Department of Water Supply.

4.E REQUIRED CAPACITY TO MEET FIRE PROTECTION AND PRESSURE REQUIREMENTS:

The water from the proposed well will be used to supplement the existing system and provide for the growth of the area.
The existing system allows for fire protection thru storage reservoirs as well as its source.

The storage reservoirs are used to regulate the water pressure of the area it serves by maintaining constant water levels in the reservoirs. It is necessary to have a sufficient source of water to keep water levels in the storage reservoirs constant.

4.F ALTERNATE SOLUTIONS CONSIDERED AND SUPPORTING DATA FOR RECOMMENDED PLAN:

The proposed well system and source development are also in accordance with recommendations made in Report R-38 - "Water for Kihei-Makena, Island of Maui," prepared for the Department of Water Supply, County of Maui, by the Department of Land and Natural Resources, Division of Water and Land Management, State of Hawaii in October 1970.

Also, the proposed project has been reviewed with various geologists within the State and the Department of Water Supply and they are in agreement that the site and quantities of draw will not be detrimental to the environment.

4.G ENVIRONMENTAL AND ECONOMIC IMPACT:

An environmental impact statement for Central Maui Water Transmission System Waiehu to Makena, Maui, Hawaii was
made in June 1976. Included in the EIS were the environmental and economic impacts of the source.

The following alternatives were considered in the Environmental Impact statement for Central Maui Water Transmission System Waiehu to Makena, Maui, Hawaii.

1. Well System in the Waihee-Waiehu area.
2. Surface water from east Maui.
3. Desalination.
4. No action.

The proposed well system was then recommended.
CHAPTER 5

POTENTIAL SOURCES OF CONTAMINATION

5.A DESCRIPTION OF WELL SITE:

5.A.1 Coordinates:
Latitude: 20 degrees 54' 40" North
Longitude: 156 degrees 31' 00" West

5.A.2 Land Surface Elevation:
± 495 feet mean sea level.
A topographic map showing the well location is shown in Figure 1.

5.A.3 Size and Topography of Catchment Area, Slope of Ground Surface:
In referenced report R-38 - "Water for Kihei-Makena, Island of Maui," the estimated catchment area is 11 square miles with the general terrain sloping at a 10% grade.

5.A.4 General Summary of Soil and Substrata:
A test hole was drilled in 1976 approximately 600 feet away. A log of the test hole is attached as Appendix A. Drilling logs for Waihee Wells 1 and 2 were submitted to the State Department of Land and Natural Resources upon completion of the project.
5.A.5 Anticipated Well Depth and Depth to Groundwater:

Measurement from the Waihee Wells located approximately 170 feet away from the proposed well indicates that the basal lens is at elevation +19 feet mean sea level. Water level records from test hole "B" located 650 feet away shows the water table varying from 15 feet MSL to 20 feet MSL.

It is anticipated that the proposed well will be cased with a 20 inch diameter casing to elevation 25 feet below MSL. An 18" diameter open hole will then extend to elevation 150 feet below MSL. The proposed well will be similar to the existing Waihee Wells.

5.B DESIGN WELL DRAFT:

It is anticipated that the proposed well will produce 5 MGD; however, the final pump size will not be determined until the well has been tested for drawdown.

5.C WATER QUALITY DATA:

The result of a water analysis made in January 1977 from a water sample taken from Well No. 1 of the Waihee Wells is attached in Appendix B.

The existing Waihee Wells and the Waiehu Well are being used by the Department of Water Supply for water supply purposes. No water contamination or health hazards have
been reported since the wells were put in use.

5.D LAND USE CLASSIFICATION OF SURROUNDING AREA:

The proposed project is located in Wailuku Sugar Company's land at Waiehu, Maui, Hawaii, TMK: 3-2-17:18. The affected property is located within the State agricultural district. County zoning for the area is interim; however, the area is designated as agricultural by the County General Plan.

5.E EXISTING OR POTENTIAL SOURCES OF CONTAMINATION:

Urban Development: There is no public sewer system in the area. Nearest residence is located approximately 1,000 feet away and use cesspools for sewage disposal. There are no provisions on the General Plan for urban development above the 500 foot elevation in this area.

Agricultural Areas: The proposed well is adjacent to cultivated caneland. The area is gradually being converted to produce macadamia nuts.

Fertilizers and pesticides maybe a source of pollutants but no contamination of the groundwater supply in this area has been reported.

Pasture Lands, Feedlots, Sanitary Landfills and Subsurface Disposal Units: not applicable.
5.F APPROXIMATE GROUNDWATER CONTOURS:

Presently, the top of the basal lens is slightly above 19 MSL. A test hole located 750 feet south and another hole located 1400 feet northeast of the Waihee Wells indicate that the groundwater elevation is slightly above elevation 19.0 MSL.
CHAPTER 6
SOURCES OF WATER SUPPLY

6.A NATURE OF SOIL AND STRATUM WITHIN AND OVERLAYING THE WATER SOURCE:

As explained in Circular C61, "Preliminary Report on the Water Resources of the Wailuku Area, Maui," by the U.S.G.S. Older alluviums over the Wailuku basalts is poorly permeable and inhibits groundwater flows. It is the alluvium which also protects the source from contamination and aids in the purification process.

6.B THE PROBABILITY AND EFFECT OF SURFACE DRAINAGE OR CONTAMINATED GROUNDWATER ENTERING THE SUBJECT WATER SOURCE:

To prevent surface drainage or near surface underground water from entering the proposed well, the well will have a solid casing from the ground surface to the basal water lens. The annular space will be grouted to prevent seepage from the surface.

6.C DEPTH TO WATER TABLE, LOCATION AND LAY OF WELLS IN THE VICINITY IN USE AND/OR ABANDONED:

Records from existing Waihee Wells indicate that the water will be approximately 476 feet below the proposed ground surface elevation.
There are 4 known wells within one mile of the project. Two are at the Waihee Wells site with the nearest well approximately 170 feet northeast of the proposed project. Two other wells are the Waiehu Heights Wells located approximately 2,500 feet east of the proposed well. Ground elevation of the Waiehu Heights well is approximately 340 feet MSL. The location of the wells are shown on Figure 1.

6.D SLOPE OF WATER TABLE:

The water table slopes from the proposed well to the ocean at approximately 0.2 feet per 1,000 feet.

6.E SITE DATA RELATING TO POTENTIAL FLOODING AND EARTHQUAKE RISK:

The proposed well is located in a well drained area. The potential for flooding is minimal.

The proposed well is located in a Seismic Zone 2 area according to the existing building code. The structures for the project will be designed to meet the building code standards for Seismic loading.
6.F DATA RELATING TO QUALITY AND QUANTITY OF THE SOURCE WATERS UNDER NORMAL CONDITIONS AND DURING STRESS PERIODS OF DROUGHT OR HEAVY PRECIPITATION, AS DETERMINED BY FIELD AND LABORATORY ANALYSES AND INVESTIGATIONS OF AVAILABLE RECORDS: IF RECORDS ARE NOT AVAILABLE OR ARE INADEQUATE TO DETERMINE SOURCE QUALITY UNDER STRESS CONDITIONS, AN ESTIMATE OF EXPECTED QUALITY AND QUANTITY DURING STRESS CONDITIONS SHOULD BE ESTABLISHED AND RELATED TO THE HYDROLOGIC BUDGET TO THE AQUIFER OR ISOPiestic AREA. WATER QUALITY PARAMETERS OF CONCERN ARE THOSE SPECIFIED IN THE PRIMARY DRINKING WATER REGULATIONS.

As elaborated in Section 3F - groundwater conditions, the aquifer has not yet endured any stress condition to estimate quantity of the water. A water sample of analysis of a well location approximately 170 feet away is given in Appendix B.

The proposed well will be dedicated to the County. The County will not allow any stress to occur to the aquifer.

No groundwater contamination from the wells in this area has been reported.

6.G IDENTIFICATION OF ALL SIGNIFICANT FACTORS HAVING POTENTIAL FOR CONTAMINATING OR REDUCING THE QUALITY OF THE WATER SOURCES OR WHICH COULD CAUSE THE QUALITY OF WATER DELIVERED TO USERS
OF THE SYSTEM TO BE IN VIOLATION OF ANY STATE PRIMARY DRINKING WATER REGULATION.

A water analysis will be made during well testing and checked for conformance with the State Primary Drinking Water Regulations.

No significant factors having the potential for contaminating or reducing the quality of the water within the aquifer or the water system are anticipated.


There are no present sources of contamination observed near the proposed project. There are no future potential sources of contamination anticipated within the aquifer.

6.I SUMMARY

There are no known sources or potential sources of contamination within the area. Water from the aquifer meets the State primary
drinking water standards. The well will be dedicated to the County Department of Water Supply for public use and control.
CHAPTER 7

PROPOSED TREATMENT WORKS

As the source is ground water, the only water treatment proposed is chlorination. This is consistent with the Waihee Wells Project already in use.

Presently, a 500 lb, Wallace and Tiernan V-notch chlorinator, series V-800 is in use at the Phase I well site. The same chlorinator will be used for chlorinating the water from the proposed well and the dosage rate adjusted to meet the new demand.

Water samples will be taken during well testing. Additional treatment measures may be proposed following the results of the water analysis.
CHAPTER 8
PUMPING FACILITIES

8.A  PURPOSE OF SERVICE:

Phase I of the Waihee Wells was placed into operation in 1979 under the jurisdiction of the Department of Water Supply.

By agreement the Central Maui Source Development Joint Venture would develop for the Department of Water Supply up to a total of 19 MGD on an as needed basis. Studies made by the Department of Water Supply in 1979 showed that an additional well was needed. Therefore, the proposed project is progressing in response to the Department of Water Supply requirements.

8.B  PUMPING LAYOUT AND SIZING OF FORCE MAIN:

The preliminary layout of the pumps and force main is shown in the attached plans. The 24" diameter waterline is designed to allow pipelines from additional wells to be connected to this system.

8.C  DESIGN FLOW REQUIREMENTS:

The proposed well will allow for additional water consumption. It is anticipated that the proposed well will produce 5 MGD.
8.D LIQUID CHARACTERISTICS:

It is anticipated that the proposed well will produce clean potable water to add to the County's Department of Water Supply Central Maui Water System.

8.E ELECTRIC POWER:

Electric power is available at the site. The utility company has indicated that the transformers provided for the previous pumps is also capable of providing power to the proposed well.

8.F PUMP ARRANGEMENT:

See attached preliminary construction plan.

8.G PUMP SELECTION:

The pump will be a deep well turbine pump. Final pump selection will be made upon completion of pumpage tests for the proposed well; however, it is anticipated that the pump will be capable of pumping 5 MGD at 510 feet total head.

8.H PROPOSED BUILDING AND OTHER STRUCTURAL IMPROVEMENTS:

It will be necessary to provide a building to house the pump controls for the proposed wells. No other building
8.1 WATER HAMMER CONSIDERATION:

The water will be pumped directly from the well to the control tank. Water hammer considerations are not applicable to the system proposed.

8.2 DESCRIPTION OF ESSENTIAL FEATURES OF CONSTRUCTION AND OPERATION:

1. Drill and Case Well:
   20-inch diameter solid casing from ground surface to elevation +5.0.
   20-inch diameter screen from elevation +5.0 to elevation -25.0
   18-inch diameter open hole from elevation -25.0 to elevation -150.0

2. Well Tests To Be Performed:
   a. Drawdown
   b. Continuous

3. Fill the top 60 feet with sand-cement grout.

4. Design Pump, Piping and Controls:
   Size according to results from pump test.

5. Install Pump, Piping and Controls.

6. Dedicate to Department of Water Supply.
8.K  ELECTRICAL SYSTEM:

Electrical power was brought to the site to operate the Phase I wells. Telemetry and related controls are also available at the Phase I site for additional wells.

The proposed well will need motor control equipment, however, this will be planned after the well tests have been completed.
A one million gallon finished water storage reservoir was provided in Phase I of the project. The same facilities will be used for finished water storage.
CHAPTER 10
WATER DISTRIBUTION SYSTEMS

The proposed project will be incorporated into the existing Central
Maui Water System.

The proposed well will provide additional water to the existing water
system and provide for the normal growth of the Central Maui Area.
CHAPTER 11
FINANCING

The proposed project is being financed by the Central Maui Source Development Joint Venture and upon completion will be dedicated to the Maui County Department of Water Supply.

Estimated cost of the project is as follows:

1. Drilling, casing and testing the well  $350,000.00
2. Furnish and install pumps  $180,000.00
3. Electrical controls  $80,000.00
4. Pump control building  $20,000.00
5. Piping and miscellaneous appurtenances  $20,000.00

$650,000.00
APPENDIX A
Test hole "B" at Waiehu, Maui (USGS 5431-07)  20° 54' 37" North Latitude
Drilled for Wailuku Sugar Co. and A & B Co.  156° 31' 05" West Longitude
Elevation: 493.67 ft.
Driller: Continental Drilling Co.
Date Started: June 12, 1974
Diameter: 3 inches

Formation
(Logged by H. T. Stearns, Sept. 7, 1974)

<table>
<thead>
<tr>
<th>Depth (0-3 Ft.)</th>
<th>Length (1.0 Ft.)</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red soil.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nearly completely decomposed cobbles (older alluvium).</td>
<td>3-16</td>
<td>0.6</td>
</tr>
<tr>
<td>Diverse weathered fragments of rock probably cobbles.</td>
<td>16-24</td>
<td>1.2</td>
</tr>
<tr>
<td>Three pieces of fine grained basalt probably boulders.</td>
<td>24-34</td>
<td>0.6</td>
</tr>
<tr>
<td>Deeply weathered basalt, almost soil with white specks.</td>
<td>34-44</td>
<td>0.8</td>
</tr>
<tr>
<td>Deeply weathered basalt, almost soil with white specks.</td>
<td>44-56</td>
<td>4.9</td>
</tr>
<tr>
<td>Deeply weathered basalt, almost soil with white specks.</td>
<td>56-66</td>
<td>4.2</td>
</tr>
<tr>
<td>Deeply weathered pahoehoe, almost soil with white specks.</td>
<td>66-68</td>
<td>0.2</td>
</tr>
<tr>
<td>Deeply weathered pahoehoe, almost soil with white specks.</td>
<td>68-78</td>
<td>4.9</td>
</tr>
<tr>
<td>Deeply weathered pahoehoe beginning to core.</td>
<td>78-88</td>
<td>4.9</td>
</tr>
<tr>
<td>Deeply weathered pahoehoe beginning to core.</td>
<td>88-98</td>
<td>2.6</td>
</tr>
<tr>
<td>Deeply weathered pahoehoe, olivines recognizable.</td>
<td>98-108</td>
<td>2.2</td>
</tr>
<tr>
<td>Deeply weathered pahoehoe.</td>
<td>108-118</td>
<td>1.8</td>
</tr>
<tr>
<td>Partly weathered pahoehoe.</td>
<td>118-124</td>
<td>2.0</td>
</tr>
<tr>
<td>Slightly weathered pahoehoe, 2 1/2 ft. dense core with highly vesicular weathered basalt.</td>
<td>124-134</td>
<td>4.4</td>
</tr>
<tr>
<td>Partly weathered olivine feldspar pahoehoe.</td>
<td>134-135</td>
<td>0.5</td>
</tr>
<tr>
<td>More weathered olivine feldspar pahoehoe.</td>
<td>135-145</td>
<td>3.6</td>
</tr>
<tr>
<td>Partly weathered olivine feldspar pahoehoe with some small cores.</td>
<td>145-155</td>
<td>4.4</td>
</tr>
<tr>
<td>Partly weathered olivine feldspar pahoehoe with larger cores.</td>
<td>155-165</td>
<td>7.6</td>
</tr>
<tr>
<td>Fresher olivine pahoehoe basalt, very vesicular.</td>
<td>165-175</td>
<td>6.5</td>
</tr>
<tr>
<td>Fresher olivine pahoehoe basalt, very vesicular.</td>
<td>175-185</td>
<td>2.5</td>
</tr>
<tr>
<td>Fresher olivine pahoehoe basalt, very vesicular.</td>
<td>185-189</td>
<td>0.9</td>
</tr>
</tbody>
</table>
Fresh vesicular olivine pahoehoe with 4 ft. of long cores then fragmental spongy rock. 2" red ash bed at 194 ft. and 199 ft.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>189-199 ft.</td>
<td>8.5 ft.</td>
<td>85</td>
</tr>
<tr>
<td>199-209</td>
<td>5.9</td>
<td>59</td>
</tr>
<tr>
<td>209-219</td>
<td>7.2</td>
<td>72</td>
</tr>
<tr>
<td>219-220</td>
<td>0.2</td>
<td>20</td>
</tr>
</tbody>
</table>


Highly vesicular olivine pahoehoe with spongy streaks. Driller had trouble here, although rock looks the same as above.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>220-225</td>
<td>4.3</td>
<td>86</td>
</tr>
</tbody>
</table>

Vesicles in a dense pahoehoe that cores well.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>225-227.5</td>
<td>1.7</td>
<td>68</td>
</tr>
<tr>
<td>227.5-230.5</td>
<td>0.3</td>
<td>10</td>
</tr>
</tbody>
</table>

Partly weathered olivine basalt.

Partly weathered dense pahoehoe with tiny feldspars but no olivine.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>230.5-233</td>
<td>2.1</td>
<td>84</td>
</tr>
</tbody>
</table>

Partly weathered cemented aa clinker, few vesicles. Dense aa with scarce olivines. One piece core 18" long some thin clinker layers.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>236-243.5</td>
<td>6.6</td>
<td>88</td>
</tr>
</tbody>
</table>

Upper part cores well. Base of the aa at 245 ft.; then highly vesicular pahoehoe top of flow.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>243.5-249</td>
<td>2.5</td>
<td>46</td>
</tr>
</tbody>
</table>

Highly vesicular olivine rich pahoehoe with lower 4 ft. fairly dense with long cores.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>249-254</td>
<td>4.9</td>
<td>98</td>
</tr>
</tbody>
</table>

Same solid rock as above. Slickensides at 258 ft. possibly caused by driller.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>254-259</td>
<td>4.4</td>
<td>88</td>
</tr>
</tbody>
</table>

A little more vesicular and cores shorter. Bottom of flow.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>259-261</td>
<td>1.6</td>
<td>80</td>
</tr>
</tbody>
</table>

Top has traces of red ash indicating contact between lava flows. Olivine porphyry aa. Cores mostly long with large vesicles. Bottom 2.3 ft. is fragmental pahoehoe.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>261-279</td>
<td>13.4</td>
<td>75</td>
</tr>
</tbody>
</table>

Trace of ash at 279 ft. No olivine in pahoehoe below it. Small pieces of core.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>279-289</td>
<td>3.5</td>
<td>35</td>
</tr>
<tr>
<td>289-299</td>
<td>3.0</td>
<td>30</td>
</tr>
</tbody>
</table>

Vesicular pahoehoe without olivines. Same as above but lower 2 ft. broke into small pieces.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>299-307</td>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td>307-317.5</td>
<td>4.1</td>
<td>39</td>
</tr>
</tbody>
</table>

Same as above. Fairly massive vesicular aa with scarce large olivine crystals; some clinker zones.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>317.5-328</td>
<td>5.4</td>
<td>51</td>
</tr>
</tbody>
</table>

Same as above. 6" of aa then entered highly vesicular pahoehoe.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>328-335.5</td>
<td>4.2</td>
<td>76</td>
</tr>
</tbody>
</table>

Highly vesicular pahoehoe with small scarce olivines.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>335.5-342</td>
<td>3</td>
<td>46</td>
</tr>
</tbody>
</table>

Highly vesicular pahoehoe with no olivines.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>342-349</td>
<td>5</td>
<td>71</td>
</tr>
</tbody>
</table>

Gray vesicular hard aa with no olivine crystals with last 4 feet fairly dense rock with long cores. Bottoms at 359 ft.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>349-359</td>
<td>7.7</td>
<td>77</td>
</tr>
</tbody>
</table>

18" of very spongy pahoehoe lying on 3" on baked red ash. Then 6" of vesicular pahoehoe basalt.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>359-366</td>
<td>2.2</td>
<td>31</td>
</tr>
</tbody>
</table>

Highly vesicular pahoehoe with no olivines. Highly vesicular pahoehoe with no olivines.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>366-375</td>
<td>4.6</td>
<td>51</td>
</tr>
<tr>
<td>375-384</td>
<td>7.0</td>
<td>78</td>
</tr>
</tbody>
</table>
Vesicular pahoehoe in long cores with trace of ash and some weathering at 393 ft.
Very vesicular pahoehoe flow about 2 ft. thick. 2" ash at bottom (395 ft.)
Broken up pahoehoe with ash in the interstices in upper foot and then vesicular to very dense basalt. One core 2 ft. long. No olivines.
Very dense basalt with continuous core but lower 2 ft. is breaking up due to vesicularity.
About 6" of same and then red clinker with red ash in interstices indicating another flow. This grades into a denser flow with clinkery layers.
Same as above and in long cores.
Dense aa to 430 ft. then 1 ft. of red ash with cinders in it. Pahoehoe with large vesicles below ash.
Similar to above but last 3 ft. more vesicular. Has small clusters of feldspars and scattered large olivines.
Similar to above.
Same as above.
More vesicular and breaks up.
Hard pahoehoe with scattered large vesicles without olivines.
Same as above but vesicles are flatter.
More vesicular pahoehoe.
Same as above.
Small fragments of clinker. Water table.
Dense hard basalt, no olivines.
Dense hard aa basalt.
Dense hard aa basalt.
Dense hard aa basalt which bottoms at 483 ft. on cinder and chunks of vesicular pahoehoe with much interspersed red ash indicating top of flow and firefountains.
Upper 2 ft. same ash and vesicular chunks then clinker and blue vesicular aa. Hit water below the ashy layer and it rose to 477 ft.
Dense olivine aa
Aa clinker.
Vesicular pahoehoe some breaks up.
Vesicular pahoehoe breaks up badly.
Vesicular pahoehoe.
Vesicular pahoehoe breaks up.
Vesicular pahoehoe cores well except last foot is clinker.
Hard aa with vesicles. Cores are continuous.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>384-394 ft.</td>
<td>9.0 ft.</td>
<td>90</td>
</tr>
<tr>
<td>394-395</td>
<td>0.5</td>
<td>50</td>
</tr>
<tr>
<td>395-397</td>
<td>1.2</td>
<td>50</td>
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<tr>
<td>397-404</td>
<td>4</td>
<td>57</td>
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<tr>
<td>404-411</td>
<td>6</td>
<td>86</td>
</tr>
<tr>
<td>411-419</td>
<td>5</td>
<td>71</td>
</tr>
<tr>
<td>419-426</td>
<td>6.7</td>
<td>96</td>
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<tr>
<td>426-434</td>
<td>7.2</td>
<td>89</td>
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<tr>
<td>434-444</td>
<td>7.6</td>
<td>76</td>
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<tr>
<td>444-452</td>
<td>5</td>
<td>52</td>
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<tr>
<td>452-455</td>
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<td>87</td>
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<tr>
<td>455-457</td>
<td>0.9</td>
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<td>457-460</td>
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<td>460-465</td>
<td>4</td>
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<td>465-471</td>
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<td>43</td>
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<td>471-474.5</td>
<td>3</td>
<td>86</td>
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<tr>
<td>474.5-477.3</td>
<td>0.4</td>
<td>14</td>
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<tr>
<td>477.3-478</td>
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<tr>
<td>478-479</td>
<td>0.9</td>
<td>90</td>
</tr>
<tr>
<td>479-780</td>
<td>0.7</td>
<td>70</td>
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<tr>
<td>480-489</td>
<td>6.8</td>
<td>76</td>
</tr>
<tr>
<td>489-494.5</td>
<td>5.8</td>
<td>100</td>
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<td>494.5-502</td>
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<td>502-504</td>
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</tr>
<tr>
<td>504-514</td>
<td>6.6</td>
<td>66</td>
</tr>
<tr>
<td>514-516</td>
<td>1.3</td>
<td>65</td>
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<tr>
<td>516-518</td>
<td>1.9</td>
<td>90</td>
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<tr>
<td>518-523</td>
<td>2.2</td>
<td>44</td>
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<tr>
<td>523-528</td>
<td>5.2</td>
<td>100</td>
</tr>
<tr>
<td>528-533</td>
<td>5.2</td>
<td>100</td>
</tr>
</tbody>
</table>
Same with clinker at bottom and new flow.  
Very vesicular olivine rich pahoehoe some  
breaks up.  
Vesicular olivine pahoehoe, upper foot breaks up.  
Vesicular olivine pahoehoe.  

<table>
<thead>
<tr>
<th>Depth</th>
<th>Length</th>
<th>% Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>533-534 ft.</td>
<td>1 ft.</td>
<td></td>
</tr>
<tr>
<td>534-544</td>
<td>3.7</td>
<td>37</td>
</tr>
<tr>
<td>544-548</td>
<td>3.4</td>
<td>85</td>
</tr>
<tr>
<td>548-555</td>
<td>4.0</td>
<td>57</td>
</tr>
</tbody>
</table>

Bottom of hole at 555
APPENDIX B
LABORATORY ANALYSIS REPORT

TO: Norman Saito Engineering
ATTN: Mr. Carl Takumi
ADDRESS: P. O. Box 1887, Kahului 96732

SAMPLES OF: Well Water

SAMPLED BY: ___________________ SAMPLING DATE: ___________________ TIME: ____________
RECEIPT DATE: ___________________ TIME: ___________________

<table>
<thead>
<tr>
<th>SAMPLE TYPE</th>
<th>SAMPLE DESCRIPTION</th>
<th>UNITS</th>
<th>No. 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>mg/l</td>
<td>&lt;0.01</td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td>mg/l</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td>mg/l</td>
<td>0.003</td>
<td></td>
</tr>
<tr>
<td>Zn</td>
<td>mg/l</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Chromium</td>
<td>mg/l</td>
<td>0.009</td>
<td></td>
</tr>
<tr>
<td>Cadmium</td>
<td>mg/l</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Mercury</td>
<td>mg/l</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Turbidity</td>
<td>NTU</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Barium</td>
<td>mg/l</td>
<td>&lt;0.01</td>
<td></td>
</tr>
<tr>
<td>Nitrate Nitrogen</td>
<td>mg/LN</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>Fluoride</td>
<td>mg/l</td>
<td>&lt;0.02</td>
<td></td>
</tr>
<tr>
<td>Selenium</td>
<td>mg/l</td>
<td>&lt;0.002</td>
<td></td>
</tr>
<tr>
<td>Silver</td>
<td>mg/l</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Endrin</td>
<td>ppb</td>
<td>&lt;0.1</td>
<td></td>
</tr>
<tr>
<td>Lindane</td>
<td>ppb</td>
<td>&lt;0.1</td>
<td></td>
</tr>
<tr>
<td>Methoxychlor</td>
<td>ppb</td>
<td>&lt;0.1</td>
<td></td>
</tr>
<tr>
<td>2,4-D</td>
<td>ppb</td>
<td>&lt;0.1</td>
<td></td>
</tr>
<tr>
<td>2,4,5-TT(Silver)</td>
<td>ppb</td>
<td>&lt;0.1</td>
<td></td>
</tr>
</tbody>
</table>

LABORATORY REMARKS:

______________________________
Date 1-11-77
APPENDIX C
CENTRAL MAUI
SOURCE DEVELOPMENT AGREEMENT

THIS AGREEMENT dated this 28th day of July, 1974, by and between WAILEA DEVELOPMENT COMPANY (herein called "WDC"); SEIBU REAL ESTATE CO., LTD. (herein called "SREC"); HAWAIIANA INVESTMENT CO., INC., a subsidiary of C. Brewer & Company, Ltd., (herein called "HIC"), and A&B PROPERTIES, INC. (herein called "Properties"); all of which are collectively herein called "the venturers";

WHEREAS, WDC, SREC, HIC and Properties have or may have various projects in the Central Maui and Kihei-Makena areas which will require large amounts of potable water; and

WHEREAS, the existing water sources of the Board of Water Supply of the County of Maui (herein called "BWS") do not have the capacity to furnish all of the amounts of water required by the projects proposed by the above venturers; and

WHEREAS, the venturers voluntarily desire to proceed as expeditiously as possible to study and develop water sources in the Central Maui area from Iao Valley to Waihee Valley (herein called "the study area") in cooperation with BWS;

NOW, THEREFORE, WDC, SREC, HIC and Properties agree and covenant with each other as follows:

1. WDC, SREC, HIC and Properties agree with each other to form a joint venture and by these presents do hereby constitute a joint venture for the purpose of developing water sources in the study area to provide at least 19 million gallons a day additional water to the Central
Maui system owned by BWS. The development of water sources will be done pursuant to the "Drilled Wells" concept, as set forth in Chapters 5 and 6 of that report entitled "Central Maui Water Study for the Development of Sources, Transmission Lines and Storage Reservoirs" dated March, 1974, prepared by Norman Saito Engineering Consultants, Inc., CH2M Hill, Inc., and Dr. Harold T. Stearns (herein called the "Saito-Stearns Report"). Notwithstanding anything in the Saito-Stearns Report to the contrary, the source development program includes the installation of all appurtenances, facilities or equipment necessary or appropriate for the operation of the source located within or without the well sites or well fields, such as pumps, surge reservoir and controls but specifically excludes the installation of water transmission lines beyond the surge reservoir.

2. The joint venture will engage Norman Saito Engineering Consultants, Inc. and Dr. Harold T. Stearns as consultants for the water sources development program. The parties agree to commence upon execution of this agreement and thereafter to diligently pursue the water sources development program in the study area pursuant to recommendations made by the venturers' consultants and adopted by the executive committee of the venturers (hereinafter called the "Executive Committee") as provided herein.

3. The estimated budget for the test drilling and engineering program is $150,000. Alexander & Baldwin, Inc. and Wailuku Sugar Company have formed a joint venture and have agreed to expend the sum of $40,000 for test drilling purposes for two drill holes. The parties have
agreed with Alexander & Baldwin, Inc. and Wailuku Sugar Company to reimburse Alexander & Baldwin, Inc. and Wailuku Sugar Company for the amounts each has expended as soon as the joint venture is organized and funded and to assume and continue the efforts of their joint venture.

To implement the drilled well approach to source development, the joint venture shall consult with BWS to determine the anticipated demand for the Central Maui area, including those of the joint venturers for the next 10 years. Within the limits set forth in this agreement, the first phase of the water sources development program shall be sufficient to handle the anticipated water needs for the Central Maui area for the first five-year period. After the first phase has been developed, the Executive Committee of the joint venture shall meet at least annually thereafter with BWS to update the anticipated demand projections and determine whether the next phase development should be accelerated, delayed or maintained on schedule; provided that in case of any disagreement the decision of BWS shall be final. It is understood that all the well shafts to be drilled by the joint venture to attain 19 MGD shall be sized for its optimum practicable capability as recommended by the consultants for the joint venture and approved by the Executive Committee and BWS even though the capability to develop water sources will then exceed 19 MGD; provided that all water in excess of 19 MGD shall belong to BWS and shall be developed by BWS at its discretion.

4. The estimated cost as of December 15, 1974, of the Drilled Well approach to source development, including engineering, administration and the test drilling program to develop 19 MGD is $1,962,000 computed as follows:
**Drilled Well System**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test drilling and studies</td>
<td>$150,000</td>
</tr>
<tr>
<td>Well systems, including engineering and contingency</td>
<td>$1,692,000</td>
</tr>
<tr>
<td>Land acquisition</td>
<td>$120,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,962,000</strong></td>
</tr>
</tbody>
</table>

The actual cost of the water sources development program may be less than or more than the estimated costs. In any event each party agrees to contribute its prorata share of the cost of the water sources development program to develop 19 NGD on the basis of 7/19 on the part of WDC, 4/19 on the part of SREC, 4/19 on the part of Properties and 4/19 on the part of HIC. The contributions shall be made by the companies substantially in proportion to their respective prorata shares of the cost in the proportions aforesaid, and in such amounts and at such times as shall be established by the Executive Committee. Subject to the prior agreement of the other companies (which agreement shall include the dollar value of such contribution), a company may contribute its share or any portion thereof in property, services or materials. Any company that fails to make any capital contribution within thirty (30) days after a request by the Executive Committee shall be in default of this agreement. If, in event of such default, one or more of the other companies elects to contribute additional moneys totaling the amount in default, then the company or companies making the additional contribution shall be entitled to the water allotment of the defaulting company provided in paragraph 5 below attributable to the amount of additional contribution. The joint venture or any company may initiate an action to compel compliance with
this agreement or to seek damages for breach of this agreement or any other remedy permitted by law.

Each party agrees that the amounts contributed herein for the water sources development program shall not be reimbursable as line extensions as provided in the rules and regulations of BWS.

5. Each company, or its designees, shall share in whatever quantities of water that are developed in each phase for each company as determined by the Executive Committee and approved by BWS and when 19 MGD has been developed on the basis of 7/19 to WDC, 4/19 to SREC, 4/19 to HIC and 4/19 to Properties; subject to increase or decrease if any company fails to make its capital contribution, or any portion thereof, and another company makes up the defaulted contribution, or portion thereof, as provided herein.

Each company, or its designees, may use its proportionate share of the water as developed at any location within the Central Maui area for any use permitted by law, ordinance or regulation; provided that water transmission lines and storage facilities with sufficient capacity to adequately serve the proposed development or use are in existence or will be constructed by BWS if funds are available or by the developer. Main extension costs paid by the developer shall be subject to refund pursuant to the rules and regulations of BWS then in effect and amended from time to time thereafter.

Any member of the joint venture shall not without the prior written approval of the other venturers or BWS, which approval by the other venturers shall not be unreasonably or capriciously withheld or delayed, develop water
sources in the study area which will jeopardize or interfere with the ability to develop or the capability to produce 36 MGD from the study area.

6. The water sources development program shall be administered under the control of the Executive Committee consisting of a representative selected by each company and an independent fifth member selected by unanimous approval of each company. The independent member shall be a person who has considerable experience and knowledge in water source development and the economics thereof. The independent member shall be paid for attendance of meetings and performance of other services requested by the venturers according to a mutually agreed upon schedule. The independent member may be removed at any time with or without cause upon approval of three of the four companies. In case of death or removal of the independent member, a replacement shall be appointed to serve as the independent member as soon as possible thereafter by unanimous approval of each company.

Except as provided herein, any decision made by four members of the Executive Committee shall be binding upon all venturers. The Executive Committee is authorized to adopt rules of procedure governing its meetings and operations.

7. At the completion of construction of each phase of the water sources development program, including wells, pumps and other appurtenant equipment, the venturers agree that such phase, including land and easements as may be reasonably required by BWS for the proper operation of the facility, shall be dedicated to BWS free of any charge.
or expense. Each venturer agrees to execute appropriate documents to reflect such dedication.

8. HIC covenants that it has obtained an agreement from Wailuku Sugar Company ("Wailuku") whereby Wailuku has agreed to permit the test drilling and water sources development program to be located on its lands at sites selected by the venturers with the prior concurrence of Wailuku, and as water sources are developed, to sell at prices set forth in the agreement the lands needed for the source development together with reasonable utility, transmission and access easements to the venturers for subsequent dedication by the venturers at no cost to BWS.

9. The plans and specifications for the construction and installation of the water sources development program, including wells, pumps, controls, etc., shall be prepared pursuant to rules and regulations of BWS and subject to the approval of BWS. The location of the well field or fields shall also be subject to the approval of BWS and Wailuku Sugar Company. BWS shall not arbitrarily or unreasonably withhold or delay its approval.

10. The term of this joint venture shall be until the joint venture has completed development of water sources adding 19 MGD additional water to the BWS system in the Central Maui area from sources located in the study area and BWS has accepted the dedication of the water sources from the joint venture or December 31, 1999, whichever date occurs earlier.

11. Each company recognizes that this water sources development program to add 19 MGD to the Central Maui area will meet the projected demand for the Central
Maui area until about 1985 and that the projected demand for the Central Maui area for the year 2000 is 36 MGD.

12. As used herein, the term "water" shall be interpreted to mean potable water having, meeting or exceeding the standards adopted by the U. S. Environmental Protection Agency or the State Department of Health or BWS on a county-wide basis for potable water.

13. As used herein, the term "Central Maui area" shall be defined to include the following areas: Paia-Hookipa unto the east, Waikapu-Maalea unto the west, and Wailuku-Kahului in between, Waihee-Kapuna unto the north and Kihei-Makena unto the south.

14. This agreement inures to the benefit of and is binding upon each of the venturers and their respective successors or assigns.

15. In the event that any provision of this agreement is declared unconstitutional, or the applicability thereof to any person or circumstance is held invalid, the constitutionality or the validity of the remainder of this agreement shall not be affected.

DATED at Honolulu, Hawaii, this 21st day of July, 1975.

WAILEA DEVELOPMENT COMPANY

By WAILEA LAND CORPORATION
Its Managing Joint Venturer

By Its VICE-PRESIDENT
For and in consideration of the covenants and promises made by each company hereinabove, the Board of Water Supply of the County of Maui commits to WDC, SREC, HIC and Properties and assures each of them that upon (1) completion of construction of any phase of the water sources development program (which program when totally completed will provide at least 19 MGD additional water to the Central Maui system or such larger quantities as any of the parties hereinabove shall have developed with the prior approval of BWS, pursuant to the terms of a separate agreement, and with or without participation of BWS) and the dedication of such phase to and acceptance of such phase by BWS at no cost to BWS, except its agreed
upon participation, including land and appurtenant easements reasonably required by BWS for the proper operation of such phase, and (2) completion of construction of the water transmission lines to be constructed by the Central Maui Transmission joint venture between BWS, WDC and SREC, or such portion thereof which in the discretion of BWS will adequately serve the proposed development or use of WDC, SREC, HIC or Properties, BWS will set aside and provide upon request at any time at the standard published rates in effect as of the date of request, which rates may be modified from time to time in accordance with the rules and regulations of BWS, the following fractional portion of the quantities of water developed up to 19 MGD to the following companies or their respective designees:

1. WDC  7/19
2. SREC  4/19
3. HIC  4/19
4. Properties  4/19

PROVIDED that BWS shall have the right to reduce the allotments of water made herein (1) in the event of drought as provided in Rule No. 5 of BWS or (2) in the event of a declaration of the existence of an emergency due to a public calamity as provided by law, ordinance or the Charter of the County of Maui, or (3) in the event of a compelling public need which has been determined by the BWS as follows: upon receipt of a recommendation by the Mayor of the County of Maui that a compelling public need exists and requesting that BWS propose a plan requiring the equitable redistribution of the water allot-
ments of all users in the Central Maui area excluding the area where the compelling public need exists on a uniform basis, the BWS shall call and conduct a public hearing to explain its plan of equitable redistribution. Thereafter BWS, by an affirmative vote of a majority of its members, must find that (a) a compelling public need exists; and (b) if 19 MGD has been developed as provided in the above agreement, BWS has exerted diligent efforts to develop water sources for the Central Maui area in addition to the 19 MGD developed by WDC, SREC, HIC and Properties; and (c) the plan of equitable redistribution is not discriminatory or arbitrary and in the public interest.

PROVIDED FURTHER, that until WDC, SREC, HIC or Properties requests and uses its respective water allotment, BWS shall have the right to sell or otherwise use the portion of unused allotment of water; and

PROVIDED, FURTHER, that any connection onto the BWS system shall be made subject to and pursuant to the rules and regulations of BWS then in effect.

Further, BWS recognizes that the above water sources development program to add 19 MGD to the Central Maui area will meet the projected demand for the Central Maui area until about 1985 and that the projected demand for the Central Maui area for the year 2000 is 36 MGD.

BWS agrees that any consent or approval on its part that may be required in the above Agreement shall not be unreasonably withheld or delayed and that the benefits of the covenants and promises made by each company hereinabove and the obligations of the covenants
made by BWS herein shall inure to and be binding upon
the successors and assigns of BWS.

In the event that any provision of these cove-
nants is declared unconstitutional, or the applicability
thereof to any person or circumstance is held invalid, the
constitutionality or the validity of the remainder of these
covenants shall not be affected.

Nothing in the foregoing shall prevent BWS or the
County of Maui from commencing or instituting eminent domain
proceedings in order to effectuate the intent of the Central
Maui Source Development Agreement.

DATED at Wailuku, Maui, Hawaii, this 28th day

APPROVED AS TO FORM
AND LEGALITY.

County Attorney
County of Maui

BOARD OF WATER SUPPLY OF
THE COUNTY OF MAUI

By

Its