Ms. Donna Goth
The Estate of James Campbell

Dear Ms. Goth:

From an October 24, 1997 telephone conversation with Keola Lloyd of your staff, we understand that you are no longer seeking water use permits for Well Nos. 4257-01 & 02. As you are aware, the water use permit applications for these wells were deferred on December 8, 1993 pending a Special Management Area (SMA) determination by the Department of Land Utilization. Since you no longer have plans for use of these wells, we are returning the original water use permit applications to you (attached), copies have been made for our files.

We further understand that you are still in the process of seeking an SMA determination for Well No. 4157-10, which you do have plans to use. Our records indicate that this well was drilled without a permit. We discovered the existence of this salt water well through a field investigation in May, 1993 which was prompted by your filing of a water use permit application for the well. We have very little information for Well No. 4157-10 and request that you provide information regarding the construction and final elevations. We have enclosed a well completion report form for your convenience. If you are unable to provide additional information, we request that you disclose the name of the driller so that we may follow up.

Lastly, the water use permit for Well No. 4157-08 was approved by the Commission on October 22, 1997. The water use permit document will be sent to you under separate cover.

If you have any questions, please contact Lenore Nakama at _____.

Sincerely,

RAE M. LOUI
Deputy Director

LN:ss
Enclosures
TO: Honorable Patrick Onishi, Director
   Department of Land Utilization
FROM: Rae M. Loui, Deputy Director
   Commission on Water Resource Management
SUBJECT: Special Management Area Determination

Thank you for your letter of January 10, 1996, responding to our request for clarification on Special Management Area (SMA) permit requirements for water use.

Through telephone communication with Joan Takane of your staff on January 23, 1996, we have confirmed that the statements made in your January 10, 1996 letter applies to all four wells (Well Nos. 4157-10, 4157-11, 4257-01, & 4257-02) referenced in our September 20, 1995 letter request. We will forward your comments on this matter to the applicant for these water use permits.

If you have any questions, please contact Lenore Nakama at [redacted].

LN:ss
Ms. Donna Goth  
The Estate of James Campbell 

Dear Ms. Goth:

Special Management Area Determination  
Water Use Permit Applications for  
Well Nos. 4157-10, 4157-11, 4257-01, and 4257-02

This is in regards to your applications for water use permits for Well Nos. 4157-10, 4257-01, and 4257-02, which were deferred by the Commission on Water Resource Management (Commission) on December 8, 1993 pending a determination from the Department of Land Utilization (DLU) on Special Management Area (SMA) permit requirements.

We received a copy of the SMA determination, dated April 7, 1980, which found that the property on which the subject wells are located (TMK 5-6-02:Por. 9) were not within the SMA. Because of the inconsistent statements from the DLU, we forwarded a copy of the April 7, 1980 SMA review to DLU with a request that DLU confirm or retract the statements made in their letter of November 17, 1993. Please find attached a copy of the response from DLU. Through a telephone communication with DLU staff on January 23, 1996, we have confirmed that DLU’s January 10, 1996 response to our request for clarification applies to all four subject wells.

With regard to Well No. 4157-11, the water use permit application for this source was denied without prejudice on October 13, 1993 because there was no existing use. Please be advised that a new water use permit application must be submitted and approved by the Commission prior to any commercial use of the source.

Your water use permit application for Well No. 4157-08 was deferred on October 13, 1993 due to SMA concerns that arose because of its proximity to the other wells. However, DLU has not expressed any concerns regarding SMA permitting for this source, and this application will be submitted for Commission action, tentatively, on February 21, 1996.

The other three applications that were deferred on October 13, 1993 (for Well Nos. 4157-10, 4257-01, and 4257-02) will be rescheduled for Commission action when we receive written notification that SMA permitting requirements have been resolved with the DLU.

If you have any questions, please contact Lenore Nakama at [contact information]

Sincerely,

RAE M. LOUI
Deputy Director

LN:ss  
Attachment
TO: Lenore
DATE: 1/23 TIME: 12:13 P.M.
WHILE YOU WERE OUT
M: Jean Takane
of: Lee
Phone: [REDACTED]

| TELEPHONED | PLEASE CALL |
| Called to see you | Will call again |
| Wants to see you | URGENT |

MESSAGE: Comments in Jan.
4:19 6th call appec.
to all 4 well care.

Operator
January 10, 1996

Ms. Rae M. Loui, Deputy Director
State of Hawaii
Department of Land and Natural Resources
Commission on Water Resource Management

Dear Ms. Loui:

Special Management Area Determination
Application for Water Use Permit for
Campbell Estate’s Salt Water Well No. 4257-02
Tax Map Key: 5-6-02: por. 09

We confirm the statements made in Mayor Fasi’s letter of
November 17, 1993 (copy attached) regarding the above-referenced project.

Should you have any questions, please contact the Environmental Review Branch at [redacted].

Very truly yours,

PATRICK T. ONISHI
Director of Land Utilization

PTO:am
Attach.

g:smarwell.erb
November 17, 1993

Mr. Keith H. Ahue, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii

Dear Mr. Ahue,

Subject: Water Use Permit Applications for Campbell Estate's Salt Water Well Nos. 4157-10, 4157-11, 4257-01, and 4257-02

We have additional comments regarding the water use permit applications for Campbell Estate's Salt Water Well Nos. 4157-10, 4157-11, 4257-01, and 4257-02.

The Department of Land Utilization (DLU) has determined that all of the well sites are in the Special Management Area (SMA) and in the vicinity of the Punamano and Kii National Wildlife Refuges which are managed by the U.S. Fish and Wildlife Service. Since a major objective of the City's SMA ordinance is to protect wildlife preserves, we recommend that Campbell Estate meet with DLU as soon as possible for a determination on SMA permitting.

We also recommend that the State Commission on Water Resource Management defer action on the applications until an SMA determination is completed by DLU.

Warm personal regards.

Sincerely,

FFF:rk

cc: Jeremy Harris, Managing Director
    Donald A. Clegg, Department of Land Utilization
TO: Honorable Patrick Onishi, Director  
Department of Land Utilization

FROM: Rae M. Loui, Deputy Director  
Commission on Water Resource Management

SUBJECT: Special Management Area Determination

On September 24, 1993, the Commission on Water Resource Management (Commission) notified the Office of the Mayor of our receipt of four (4) applications for water use permits. We have attached copies of the letters and applications that were sent for review (Attachment A).

In a letter dated November 17, 1993, the City informed the Commission that a determination on Special Management Area (SMA) permitting was needed and recommended that the Commission defer action on the applications until an SMA determination could be completed by the Department of Land Utilization (Attachment B).

On August 2, 1995, the applicant transmitted a Special Management Area Review, dated April 7, 1980, for the proposed use (Attachment C). The review found that the project (shrimp aquaculture) and parcel in question were not within the Special Management Area.

The Commission staff contacted staff at DLU to clarify the inconsistency between the November 17, 1993 letter and April 7, 1980 SMA review document. We were informed that, pursuant to §25-1.3(2)(H), the proposed aquacultural use(s) are exempt from SMA permit requirements.

In light of the conflicting information, we request that you either confirm or retract the statements made in your letter of November 17, 1993.

LN:ss
Attachments
FACSIMILE TRANSMITTAL PAGE

Please deliver the following pages:

To       JIM MENDB

Company  CAMPBELL SST.

From     L. NAKAMA

Message: AS REQUESTED, I AM TRANSMITTING CORRESPONDENCE
          RELATING TO SMA CONSISTENCY FOR WELL NOS.
          4157-10, 4257-01, 02.

          IF DLW HAS RESPOND TO YOUR LETTER DATED
          APRIL 24, 1994 AND HAS RESOLVED THIS ISSUE,
          PLEASE SUBMIT DLW'S RESPONSE.

Total number of pages (including Transmittal Page) ______ 9_____

Please call back if not less than (808) 587-1030

Sending Facsimile No.: [redacted]
Receiving Facsimile No.: [redacted]

FAXED 3/1/95
Ms. Susan Swanson  
State of Hawaii  
Commission on Water  
Resource Management  
Department of Land and  
Natural Resources  
Division of Water  
Resource Management

Dear Susan:

Please be advised that Kahuku Prawn Company is now being operated by Mr. Dave Bigger. His phone number is ______.

Also, ______ is now leased to ______ operated by Mr. Bruce _______ with his phone number is _______.

Malecha is the operator at phone number 4258-09 unused.

If you have any questions, please call me at ______.

Sincerely,

James E. Menor  
Administrator,  
Natural Resources

jk:01040100K10162
April 21, 1994

Mr. Donald A. Clegg
Director of Land Utilization
Dept. of Land Utilization
City and County of Honolulu

Dear Mr. Clegg:

Special Management Area Review

The State of Hawaii, Commission on Water Resource Management, has instructed Campbell Estate to receive a determination from DLU as to the SMA permitting on the following wells (letters enclosed).

1. State Well No. 4257-01.
2. State Well No. 4257-02.

All of these wells were permitted and drilled by Marine Culture Enterprises in the early 1980s at the Kahuku Aquaculture Park. Copies of the well drilling permits are enclosed.

Would you please advise as to what action needs to be taken for these saltwater wells.

Very truly yours,

[Signature]

Dovna B. Goth
Director, Hawaii Development

Enclosures

cc: Ms. Rae M. Loui
Ms. Donna Goth
The Estate of James Campbell

Dear Ms. Goth:

Notice of Objection(s) to Your Water Use Permit Applications
Koolauloa Ground Water Management Area, Oahu

We have received the attached comments to your pending water use permit applications for the Haw Mar Ent Clam Well and the Pacific Sea 2 & 3 Wells (Well Nos. 4157-10 and 4257-01 & 02). Although not addressed by this letter, these comments should also apply to the Haw Mar Ent Ogo Well (Well No. 4157-08) as this well is in the general area.

On December 8, 1993, the Commission deferred action on these applications so that this matter may be resolved. Please inform our office in writing of the SMA determination by the Division of Land Utilization.

If you have any questions, please contact Lenore Nakama at...

Sincerely,

RAE M. LOUI
Deputy Director

LN:fc

Attach.
November 17, 1993

Mr. Keith Ahue, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii

Dear Mr. Ahue,

Subject: Water Use Permit Applications for Campbell Estate's Salt Water Well Nos. 4157-10, 4157-11, 4257-01, and 4257-02

We have additional comments regarding the water use permit applications for Campbell Estate's Salt Water Well Nos. 4157-10, 4157-11, 4257-01, and 4257-02.

The Department of Land Utilization (DLU) has determined that all of the well sites are in the Special Management Area (SMA) and in the vicinity of the Puamano and Kii National Wildlife Refuges which are managed by the U.S. Fish and Wildlife Service. Since a major objective of the City's SMA ordinance is to protect wildlife preserves, we recommend that Campbell Estate meet with DLU as soon as possible for a determination on SMA permitting.

We also recommend that the State Commission on Water Resource Management defer action on the applications until an SMA determination is completed by DLU.

Warm personal regards.

Sincerely,

[Signature]

FFF:rk
cc: Jeremy Harris, Managing Director
    Donald A. Clegg, Department of Land Utilization
WELL PERMIT

TO: Mr. O. K. Stender
The Estate of James Campbell

Your application of January 11, 1984 has been approved in accordance with Chapter III of our Rules and Regulations for the Protection, Development and Conservation of Water Resources in the City and County of Honolulu.

You are hereby granted a permit to drill two salt water wells at TMK: 5-6-02:por. 09, at the locations and in accordance with the drawings submitted with your application.

This permit is granted subject to the Rules and Regulations of the Board of Water Supply and the following conditions:

1. Mr. Chester Lao of the Board of Water Supply, telephone 548-5276, shall be notified before any work covered by this permit commences.

2. This permit will be valid upon receipt by the Board of Water Supply of a permittee bond in the amount of $5,000.00 in accordance with Chapter III, Sec. 3-305 of these Rules and Regulations.

3. The wells shall be drilled by a well driller licensed in the State of Hawaii.

4. The depth of the wells shall be limited to 135 feet or the top of the basalt, whichever is less.

5. Upon completion of the project, the following shall be submitted to the Board of Water Supply:
   a) A record of geologic formations encountered.
   b) As-built drawings of the well including well appurtenances and piping.
c) Submission of chemical analyses of water samples collected during aquifer testing.

6. The casings shall be grouted with neat cement.

7. The owner shall install a flow measuring device at such time as required by the Board of Water Supply. This meter shall be installed if chemical analysis of the water indicates a significant fresh water component.

KAZU HAYASHIDA
Manager and Chief Engineer

1/17/84
Date of Permit

cc: James R. Dybdal
    Campbell Estate

    I. G. Gentner
    Marine Culture Enterprises
Your application of December 13, 1985 has been approved in accordance with Chapter III of our Rules and Regulations for the Protection, Development and Conservation of Water Resources in the City and County of Honolulu.

You are hereby granted a permit to drill a well in accordance with the amended details shown on the plans and at the location specified at TMK:5-6-02:Por. 9.

This permit is granted subject to the Rules and Regulations of the Board of Water Supply and the following conditions:

1. Chester Lao of the Board of Water Supply shall be notified before any work covered by this permit commences.

2. This permit will be valid upon receipt by the Board of Water Supply of a permittee bond in the amount of $15,000 in accordance with Chapter III, Sec. 3-305 of these Rules and Regulations.

3. The well shall be no more than 120 feet deep.

4. A geologic log shall be submitted to the Board of Water Supply upon completion of the well.

5. A hydrologic data collected during drilling and testing of the well shall be submitted to the Board of Water Supply upon completion of the well.

KAZU HAYASHIDA
Manager and Chief Engineer
Board of Water Supply

Date: 12/26/85

cc: Marine Culture Enterprises
THE ESTATE OF JAMES CAMPBELL

TELECOPY TRANSMISSION COVER SHEET

PLEASE DELIVER THE FOLLOWING PAGES TO:

NAME: lenore

LOCATION:

FROM: Jim McC

RE:

DATE: 8/2/95

NUMBER OF PAGES (INCLUDING COVER SHEET): 2

We are transmitting from a Canon Fax L770. Fax Number: [redacted]
Hard copy to follow: Yes [redacted] No

If you do not receive all of the pages, please call JoAnn [redacted] at [redacted] as soon as possible.
Dear Sir:

Special Management Area Review

Tax Map Key: 5-6-03; Pme. 9
Type of Project: Swamp Area

The proposed project on the referenced tax map key has been reviewed. We find that it:

[ ] Is not within the Special Management Area
[ ] Is within the Special Management Area,
  [ ] but, not defined as "development" and therefore, exempt. (Exemption No. ___)
  [ ] is defined as "development" and is subject to an environmental assessment by this Department. Depending upon the results of this assessment, the development may require City Council action.

In order to further process your proposed development, the attached request for assessment form must be filed with this Department. Within 30 days of receipt of this completed form, you will be advised how to proceed further with the processing. Since the assessment of your development will depend entirely on the information you submit, the information and plans should be complete and as detailed as necessary to clearly describe the development.

Should you have any questions or require assistance in the preparation of the form, please contact the undersigned staff member at [___].

Very truly yours,

Carolyn Agate
(for) TYRONE T. KUSAKO
Director of Land Utilization

TTK:sl
Ms. Donna Goth  
Campbell Estate

Dear Ms. Goth:

Application for a Pump Installation Permit  
Koolauloa Ground Water Management Area, Oahu

We acknowledge receipt, on March 29, 1993, of your pump installation permit application for the Pacific Sea 4 Well (Well No. 4258-09). This application is being reviewed for completeness at this time.

If your need for water from this well is immediate, we request that you submit an application for a water use permit at this time. This will allow both applications to be processed concurrently, which should facilitate and expedite the process. Please provide justification for your requested allocation and a time schedule for your project development. We have attached the appropriate application form for your convenience.

We note that your water use permit application for future use of the well was denied without prejudice on October 13, 1993 pending the establishment of existing uses in the aquifer. Because of disputes over existing uses in the Laie area, this process has not been completed as yet. Also, Campbell Estates has four pending applications for continued existing uses. Action on Well Nos. 4157-08 & 10 and 4257-01 & 02 was deferred on December 12, 1993 pending a determination by the Department of Land Utilization (DLU) on SMA permitting requirements. As yet, we have received no response to our letter, dated January 21, 1994, notifying you of your need to resolve this matter. Please inform our office of the SMA determination by DLU so that we may reschedule these applications for Commission action.

If you have any questions, please contact Lenore Nakama at

Sincerely,

RAE M. LOUI  
Deputy Director
Ms. Donna Goth
The Estate of James Campbell

Dear Ms. Goth:

Applications for Water Use Permits
Koolauloa Ground Water Management Area

We have received a copy of your letter to the Department of Land Utilization (DLU), dated April 21, 1994, requesting a determination on SMA permitting for the Haw Mar Ent Clam Well (Well No. 4157-10) and the Pacific Sea 2 & 3 Wells (Well Nos. 4257-01 & 02). Please notify our office in writing once this matter has been resolved so that we may continue to process your water use permit applications for these wells.

If you have any questions, please contact Lenore Nakama at 58888.

Sincerely,

RAE M. LOUI
Deputy Director
Ms. Donna Goth
The Estate of James Campbell

Dear Ms. Goth:

Notice of Objection(s) to Your Water Use Permit Applications
Koolauloa Ground Water Management Area, Oahu

We have received the attached comments to your pending water use permit applications for the Haw Mar Ent Clam Well and the Pacific Sea 2 & 3 Wells (Well Nos. 4157-10 and 4257-01 & 02). Although not addressed by this letter, these comments should also apply to the Haw Mar Ent Ogo Well (Well No. 4157-08) as this well is in the general area.

On December 8, 1993, the Commission deferred action on these applications so that this matter may be resolved. Please inform our office in writing of the SMA determination by the Division of Land Utilization.

If you have any questions, please contact Lenore Nakama at [redacted].

Sincerely,

[Signature]

RAE M. LOUI
Deputy Director

LN:fc

Attach.
November 17, 1993

Mr. Keith Ahue, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii

Dear Mr. Ahue,

Subject: Water Use Permit Applications for Campbell Estate's Salt Water Well Nos. 4157-10, 4157-11, 4257-01, and 4257-02

We have additional comments regarding the water use permit applications for Campbell Estate's Salt Water Well Nos. 4157-10, 4157-11, 4257-01, and 4257-02.

The Department of Land Utilization (DLU) has determined that all of the well sites are in the Special Management Area (SMA) and in the vicinity of the Punamano and Kii National Wildlife Refuges which are managed by the U.S. Fish and Wildlife Service. Since a major objective of the City's SMA ordinance is to protect wildlife preserves, we recommend that Campbell Estate meet with DLU as soon as possible for a determination on SMA permitting.

We also recommend that the State Commission on Water Resource Management defer action on the applications until an SMA determination is completed by DLU.

Warm personal regards.

Sincerely,

[Signature]

FFF:rk
ce: Jeremy Harris, Managing Director
    Donald A. Clegg, Department of Land Utilization
November 17, 1993

Mr. Keith Ahue, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
96809

Dear Mr. Ahue,

Subject: Water Use Permit Applications for Campbell Estate's Salt Water Well Nos. 4157-10, 4157-11, 4257-01, and 4257-02

We have additional comments regarding the water use permit applications for Campbell Estate's Salt Water Well Nos. 4157-10, 4157-11, 4257-01, and 4257-02.

The Department of Land Utilization (DLU) has determined that all of the well sites are in the Special Management Area (SMA) and in the vicinity of the Punamano and Kii National Wildlife Refuges which are managed by the U.S. Fish and Wildlife Service. Since a major objective of the City's SMA ordinance is to protect wildlife preserves, we recommend that Campbell Estate meet with DLU as soon as possible for a determination on SMA permitting.

We also recommend that the State Commission on Water Resource Management defer action on the applications until an SMA determination is completed by DLU.

Warm personal regards.

Sincerely,

[Signature]

FFF:rk
cc: Jeremy Harris, Managing Director
Donald A. Clegg, Department of Land Utilization
Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Water Use Permit Applications
Koolauloa Ground Water Management Area, Oahu

Applicant: Campbell Estate

Landowner: Same

Amor Ilko (4157-09), Amor Pact 1 (4258-12), Amor Pact 2 (4258-13), Amor RCA 1 (4258-08), Amor RCA 2 (4258-14), Haw Mar Ent Clam (4157-10), Haw Mar Ent Ogo (4157-08), Kahuku Airbase (4158-12&13), Kawanakaoa (4056-01), Malaekahana (3956-01), Pacific Sea 1 (4257-01), Pacific Sea 2 (4257-02), Palmer Golf Course (4100-01), Pump 1 (4057-01), Pump 2 (4159-01), Pump 6 (3957-07), Pump 8 (4057-06), Pump 12 (4057-09), Pump 12-A (4057-10), Pump 15 (4157-04), Punamanao (4159-02), Sugar Mill Pump (4057-11), T. Astro (4258-05), USFW 1 (4157-05), USFW 2 (4157-06), USFW 3 (4157-07)

Honolulu Board of Water Supply
630 S. Beretania St.
Honolulu, HI 96843

Hauula (3655-01), Kahuku Battery (4057-15,16), Kaluauui (3554-04,05), Punaluu I (3553-02), Punaluu II (3553-03,04,06,07,08), Punaluu III (3453-06,07), Waialee I (4101-07), Waialee II (4101-08),

Hanohano Enterprises, Inc.
(Well No. 3553-01)

George N. Nihipali, Jr.
(Well No. 3855-12)

Jacob I. Kaio, Sr.
(Well No. 3956-07)
Chairperson and Members  
Commission on Water Resource Management  

December 8, 1993

Background

The Commission designated Windward Oahu and its corresponding aquifer systems as water management areas on May 5, 1992. All registered ground water users were notified of the official designation date of July 15, 1992, on which the Commission would begin to accept applications for existing water use permits. All water use permit applications in the Koolauloa Ground Water Management Area submitted to the Commission to date are shown in Exhibit 1. Existing water use permits in the management area are shown in Exhibit 2. Other specific information regarding the source, use, objections, and field investigation(s) are described in Attachment A and the other attached exhibits. Exhibit 5 shows well locations and reported pumpage information indexed by well number.

Analysis & Issues

Overall Koolauloa Ground Water Management Area Conditions

The major issue in the Koolauloa Ground Water Management Area is the appearance of an overallocation situation given the number of water use permit applications for existing uses (Exhibit 1). The sustainable yield of the Koolauloa Aquifer System is 35 million gallons per day (mgd) but as of November 29, 1993 Exhibit 1 shows a total demand of 67.433 mgd. However, of the total requested amount, 33.256 mgd is a more reasonable estimate of the requested existing demands on the aquifer and is calculated according to Table 1 as follows:

<table>
<thead>
<tr>
<th>Calculation for Reasonable Estimate of Existing Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantity (mgd)</strong></td>
</tr>
<tr>
<td>67.433</td>
</tr>
<tr>
<td>+0.323</td>
</tr>
<tr>
<td>-1.000</td>
</tr>
<tr>
<td>-33.500</td>
</tr>
<tr>
<td><strong>33.256</strong></td>
</tr>
</tbody>
</table>

From this analysis, the overallocation situation does not appear to be factual. The 33.256 mgd estimate is within the area's estimated sustainable yield of 35 mgd. Additionally, the majority of applicants, Campbell Estate (CE) and Honolulu Board of Water Supply (BWS), have requested pump capacities rather than the actual 12 month moving average (12-MAV). The 1992 draft of the Oahu Water Management Plan (OWMP) estimated 1990 average actual use to be 13.6 mgd which would be well within the system's sustainable yield. Staff has updated this actual use estimate with the 12-month moving average, as of September 1993, at approximately 4 mgd based on water use reports submitted to the Commission. A significant amount of pumpage is not reported at this time, much of it salt water, but staff is making efforts to have all active well owners comply.

The Native Hawaiian Advisory Council (NHAC) has requested an extended review period for all applications in this water management area and other aquifer systems (see Attachment C). Subsequent to this request, NHAC has submitted objections and declared that they represent at least thirteen (13) individuals throughout the Windward Side of Oahu (See Attachment D). The objections relate to the overall procedures of regulating water use through the existing water use permit process specified under §13-171, HAR. While staff realizes that the rules and code can be interpreted in many ways it will continue to process...
the applications in accordance with §13-171, HAR while being cognizant of general policies established through past Commission actions. NHAC has reserved the right to submit specific objections with the list of identified people NHAC represents at a later date. As such, no public hearing seems necessary at this time with regard to this objection.

Given the overall situation of the management area, staff sees no reason to delay action on the existing uses provides the following analysis for applications scheduled for action.

1. **CAMPBELL ESTATE (CE) EXISTING USES** - There are twenty-six (26) applications from CE in this management area for twenty-eight (28) wells. A number of different entities are using water but CE has come in as the applicant since they are the landowner. Wells which have been field verified as pumping salt water for various uses are listed in Table 2 as follows:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Well No.</th>
<th>Requested mgd</th>
<th>Current 12-MAV mgd</th>
<th>Recommended Action+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaiian Marine Enterprises</td>
<td>4157-08</td>
<td>3.000</td>
<td>0.433</td>
<td>Approve existing needs</td>
</tr>
<tr>
<td>Amorient Ikko</td>
<td>4157-09</td>
<td>7.000</td>
<td>No reports</td>
<td>Approve existing needs</td>
</tr>
<tr>
<td>Hawaiian Marine Enterprises</td>
<td>4157-10</td>
<td>3.000</td>
<td>0.144</td>
<td>SMA deferral</td>
</tr>
<tr>
<td>Pacific Sea Farms</td>
<td>4257-01</td>
<td>5.200</td>
<td>No reports</td>
<td>SMA deferral</td>
</tr>
<tr>
<td>Pacific Sea Farms</td>
<td>4257-02</td>
<td>3.700</td>
<td>No reports</td>
<td>SMA deferral</td>
</tr>
<tr>
<td>T. Astro</td>
<td>4258-05</td>
<td>5.000</td>
<td>No reports</td>
<td>Approve existing needs</td>
</tr>
<tr>
<td>Amorient RCA 1</td>
<td>4258-08</td>
<td>0.300</td>
<td>No reports</td>
<td>Approve existing needs</td>
</tr>
<tr>
<td>Amorient PACT 1</td>
<td>4258-12</td>
<td>3.000</td>
<td>No reports</td>
<td>Approve existing needs</td>
</tr>
<tr>
<td>Amorient PACT 2</td>
<td>4258-13</td>
<td>0.900</td>
<td>No reports</td>
<td>Approve existing needs</td>
</tr>
<tr>
<td>Amorient RCA</td>
<td>4258-14</td>
<td>0.300</td>
<td>No reports</td>
<td>Approve existing needs</td>
</tr>
</tbody>
</table>

*Note: Only 1 month of data supplied to Commission but verified through field investigation.
+Note: based on recommendations of Aquacultural Development Program

The major issue with the salt-water applications listed in Table 2 is that actual use data is effectively non-existent. The applicant has indicated that they are compiling historic pumpage information but has not submitted any to date which is understandable since none of the wells in Table 2 were found to have any flow meters. Although staff believes that the salt water wells have a very limited effect on the freshwater portions of the aquifer (otherwise they would be brackish) these uses need to be permitted. Although it may be of questionable value to measure seawater pumpage, staff feels that accurate data may prove beneficial in the future. During staff review it became evident that the standard listed in the OWMP for aquaculture (36,000 gpd/acre) would not be appropriate for the uses listed based on acreage, especially since these uses are large scale. Additionally, the concern of discharge of the effluent is under review, but is being monitored by the Department of Health (DOH). Staff has been consulting with the State Aquacultural Development Program (ADP) as they are more experienced with aquaculture of this magnitude. ADP will be making recommendations to staff prior to the Commission meeting about reasonable amounts of salt water needed for these applications and the necessary measures taken to manage effluent discharges.
Additionally, the Mayor commented that the well(s) for Hawaiian Marine Enterprises (4157-10) and Pacific Sea Farms (4257-01&02) have been determined to reside in Special Management Areas (SMA), which would require SMA permitting. The Mayor asked that these applications be deferred until a SMA determination from DLU is completed.

Field verified wells for CE pumping non-salt water for various uses are listed in Table 3 as follows:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Well No.</th>
<th>Requested mgd</th>
<th>Current 12-MAV mgd</th>
<th>Recommended Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaekahana Domestic System</td>
<td>3956-01</td>
<td>0.100</td>
<td>0.042</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>Gunstock &amp; Puu Puna Ranch</td>
<td>3957-07</td>
<td>0.100</td>
<td>0.006</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>Kawanakoa Ranch</td>
<td>4056-01</td>
<td>1.000</td>
<td>+ 0.576</td>
<td>Approve 400,000 gpd est.</td>
</tr>
<tr>
<td>Kahuku Farmers Assoc.</td>
<td>4057-01</td>
<td>1.500</td>
<td>0.307</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>Turf Farm &amp; Kahuku School</td>
<td>4057-06</td>
<td>0.500</td>
<td>0.237</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>Soukaseum &amp; Matsuda</td>
<td>4057-07</td>
<td>2.000</td>
<td>0.109</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>Kahuku Prawn Farm</td>
<td>4057-10</td>
<td>1.500</td>
<td>+ 0.000</td>
<td>Approve 500,000 gpd est.</td>
</tr>
<tr>
<td>Sugar Mill Pump</td>
<td>4057-11</td>
<td>0.500</td>
<td>0.028</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>Palmer Golf Course</td>
<td>4100-01</td>
<td>0.800</td>
<td>0.206</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>Amorient &amp; US Army</td>
<td>4157-04</td>
<td>1.530</td>
<td>+ 1.517</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>US Fish and Wildlife Serv.</td>
<td>4157-05</td>
<td>0.082</td>
<td>0.082</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>US Fish and Wildlife Serv.</td>
<td>4157-06</td>
<td>0.106</td>
<td>0.106</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>US Fish and Wildlife Serv.</td>
<td>4157-07</td>
<td>0.107</td>
<td>0.107</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>US Army, Airbase</td>
<td>4158-12 &amp; 13</td>
<td>0.500</td>
<td>0.103</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>Vietnamese Farmers</td>
<td>4159-01</td>
<td>3.000</td>
<td>0.814</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>US Army</td>
<td>4159-02</td>
<td>1.500</td>
<td>0.001</td>
<td>Approve existing 12-MAV</td>
</tr>
</tbody>
</table>

Note: unmetered estimate by staff of existing use on 5/21/93.

The non-salt water requests and their specific issues are as follows (refer to Exhibit 5 for location and use information):

a. **Malaekahana Domestic System (Well No. 3956-01)** - The well site was inspected and verified on May 21, 1993. It is designated by the DOH as "Community Water System 316" and is monitored monthly for quality by DOH. The system services approximately 100 individuals; for the Malaekahana State Park 33 homes, and potable needs of Kawanakoa's Ranch.

The first issue is that there are possibly six (6) active well users within a mile radius of this well. Only one (1) is downgradient and is also owned by the applicant, but no water use permit application has been submitted. The other five (5) have applied for water use permits and are pending in this submittal. Considering the applicant's well has been in use...
since 1975 and are so near to the ocean, any adverse impacts would already be in evidence. No downgradient user or other has filed an objection to this application. The second issue is that the applicant’s request for 0.100 mgd is more than the existing use. The source is metered and the current 12-MAV is approximately 0.042 mgd based on almost two (2) years worth of data (See Exhibit 5). Additionally, 0.042 mgd seems rather high for the domestic needs based on county standards that 33 homes would require approximately 16,500 gpd plus the need of the transient people at the park and the ranch’s potable needs. One explanation is that the transient number of people using the park varies greatly. Finally, the OWMP estimated 1990 average use at 0.50 mgd. Staff is unsure why this amount is so high compared to figures provided directly to the Commission but prefers to use the lower reported values.

b. GUNSTOCK AND PUU PA'INA RANCHES (Well No. 3957-07) - The well site was inspected and verified on May 21 and October 28, 1993. The first issue is that there are possibly three (3) active wells within a mile radius of this well. One is a privately owned source which has not come in for a water use permit and two (2) others are also owned by the applicant, both of which have water use permit applications pending in this submittal. Considering the applicant’s well has been in use since 1937 and the use is small (approximately 6,200 gpd), any adverse impacts would already be in evidence. No downgradient user has filed an objection to this application. The second issue is that the applicant’s request for 0.100 mgd is more than the existing use. The source is metered and the current 12-MAV is approximately 6,200 gpd based on a year’s worth of data (See Exhibit 5). Apparently, this is enough to satisfy the applicant’s irrigation needs for 110 acres of pasture and about 240 head of livestock. From the OWMP, 110 acres of pasture would normally require an estimate of 0.044 mgd but the area is in a wet area of the island. The OWMP did not estimate the use from this well.

c. KAWANANAKOA RANCH (Well No. 4056-01) - The well site was inspected and verified on October 8, 1990. Telephone contact on October 5, 1993 verified that the only change in use was a decrease from 80 to 64 livestock. The first issue is that there are possibly five (5) active wells users within a mile radius of this well. None of these wells are downgradient. Four (4) out of the five (5) wells have submitted water use permit applications which are pending and addressed in this submittal. The other well is a privately owned source which has not come in for a water use permit. Considering the applicant’s well is so close to the ocean, any adverse impacts would already be in evidence. No objections have been filed for this application. The second issue is that the requested amount of 1,000 mgd is in excess of verified existing use. The field investigation verified use for 30-35 acres of pasture, 64 livestock, and 1/4 acre taro and watercress. Existing 12-MAV reported at 0.576 mgd but is not metered. The OWMP did not estimate use for this well. According to the OWMP the pasture and taro together would require approximately 0.141 mgd. Livestock and watercress are not mentioned in the OWMP but assuming 100 gpd/head of livestock and 1 mgd gpd/acre of watercress, this would boost the reasonable requirement to approximately 0.400 mgd. Considering that this is a wet area of the island, this estimated need should be more than adequate. The applicant has indicated that they will be increasing pasture acreage by 15 acres (0.060 mgd). The applicant may modify their permit when these additional fields are put into production.

d. PUMP 1 (Well No. 4057-01) - The well site was inspected and verified on October 8, 1990 and again on October 15, 1993. The first issue with this application is that neither the applicant nor staff can determine if the well is a single or battery of wells connected underground. Well nos. 4057-01, 02, 08, 13 & 14 have been registered by the Kahuku Farmers Association (KFA) but staff could not find any of them except this main source. It is suspected that the other wells are below the ground surface and may connect in battery the single well head found in the field. NHAC commented that these other wells in battery should be included in the application. Staff will continue to investigate the locations of the other wells under the registration program and amend the water use permit if necessary.
The second issue is that there are possibly five (5) active wells users within a mile radius of this well. None of these wells are downgradient. Four (4) out of the five (5) wells have submitted water use permit applications which are pending and addressed in this submittal. The other is a privately owned source which has not come in for a water use permit. Considering the applicant's well is so close to the ocean and has been in use for some time, adverse impacts, if any, would already be in evidence. No objections have been filed for this application but NHAC has commented that the use affects Ki'i National Wildlife Refuge, an unnamed stream, and water rights. This would be more appropriately addressed if future increases in use are requested since these may bring about new impacts.

The third issue is that the requested amount of 1.500 mgd is in excess of verified existing use. The field investigation verified well the is used by KFA. The Association consists of 8 farmers to irrigate 215 acres of bananas, papayas, corn, etc., which is basically diversified agriculture. According to the OWMP diversified agriculture for 215 acres would require approximately 1.700 mgd. However, the metered average use over the past two years has been consistent and the current 12-MAV is 0.307 mgd as of 9/93. Also, the OWMP estimated use from the KFA at 0.32 mgd in 1990. The mayor had commented that the existing use may be overstated and the actual metered use confirms this. NHAC commented that the applicant should also show infeasibility of using non-potable water sources. Although the Commission encourages the use of non-potable water for irrigation staff's position is that this existing use is reasonable and within the area's sustainable yield. Additionally, the type of non-potable water use over the basal source may put the potable quality of the area at risk.

A fourth issue is that a new State Ag Park use is not included in this figure but is a very near future use (early 1994). The State DOA is planning to open an additional 212 acres which will use an estimated 2 mgd for diversified agriculture. Pumps from the well to this project have already been tested but are not metered. Staff recommends that this future use come in with its own water use permit application.

e. PUMP 8 (Well No. 4057-06) - The well site was inspected on May 28, 1993.

The first issue is that there are possibly six (6) active wells within a mile radius of this well. Two (2) of the wells are offset but probably downgradient of well. Five (5) out of the six (6) wells have applied for water use permit. One is owned by a private individual who has not applied for water use permit. DAR had concerns about dewatering Malaekahana Stream with future increases but no objections were filed to this application.

The second issue is that the requested amount of 0.500 mgd is in excess of verified existing use. The Mayor commented that this application may be an overstated request. The field investigation found use by Southern Turf Nurseries for approximately 12 acres of turf. The source is metered and has a current 12-MAV of 0.030 mgd. The OWMP estimated 1990 use at 0.040 mgd and the OWMP estimates the need for 12 acres of turf to be 0.048 mgd. Therefore, actual metered use is lower than projected but reasonable considering use is on the wet windward side of the island.

The third issue is that Campbell Estate has an agreement with Kahuku High School to supply 0.100 mgd for irrigation. Currently, the State Department of Accounting and General Services (DAGS) is presently undergoing negotiations with CE for a water agreement. The well source is non-potable and the Kahuku Community Assoc. is having DAGs convert the high school irrigation to this non-potable source. The school's lawns have been irrigated by BWS service up to this point. The problem is that this use will increase pumppage from the aquifer, which qualifies it as a new use from the aquifer's perspective. Given the concerns of DAR the Commission may wish to defer action on the future portion rather than deny this use at this time given the reasonableness of the new use for non-potable irrigation of a school lawn.

f. PUMP 12 (Well No. 4057-07) - The well site was inspected on March 15, 1991 and May 21, 1993.

The first issue is that there are possibly seven (7) active wells within a mile radius of this well. Five (5) out of the seven (7) have applied for a water use permit and one is a private owner who has not applied for a permit. The other is a well owned by the applicant. Four (4) of these wells are downgradient but all are owned by the applicant. No objections
Chairperson and Members  
Commission on Water Resource Management  
December 8, 1993

by other ground water users have been filed. DAR had concerns about dewatering of Malaekahana Stream but no other comments.

The second issue is that the requested amount of 2,000 mgd is in excess of verified existing use. The Mayor commented that this application may be an overstated request. The inspection found two major users: 1) a co-op under Mr. U. Soukaseum which is 210 acres of bananas, papayas, beans, etc. and 2) 65 acres for Melvin Matsuda for watermelons. Metered 12-MAV as of September 1993 is 0.109 mgd. The OWMP estimated 1990 use at 0.040 mgd. According to the OWMP the specified uses should require about 1.4 mgd if fully developed. Therefore, the applicant’s request is too high.

The third issue is that NHAC commented that the applicant should show infeasibility of non-potable sources. Use will affect unnamed spring, unnamed stream, and water rights. Although the Commission encourages the use of non-potable water for irrigation, staff’s position is that this existing use is reasonable and within the area’s sustainable yield. Additionally, the type of non-potable water use over the basal source may be put the potable quality of the area at risk.

g. PUMP 12-A (Well No. 4057-10) - The well site was inspected on May 21, 1993. This well resides in the same location as Well No. 4057-07.

The first issue is that there are possibly seven (7) active wells within a mile radius of this well. Five (5) out of the seven (7) have applied for a water use permit, one is a private owner who has not applied for a permit, and the other is owned by the applicant. Four (4) of these wells are downgradient but all are owned by the applicant. No objections by other ground water users have been filed. DAR had concerns about dewatering of Malaekahana Stream but no other comments.

The second issue is that the requested amount of 1.500 mgd may be in excess of the verified existing use. The Mayor commented that this application may be an overstated request. The field investigation found that the user, Kahuku Prawn Co., cultivates 25 acres of freshwater prawns and had recently signed a lease for an additional 23 acres. User was in the process of clearing the land for the future ponds. The well is not metered and reports are not submitted to the Commission. The applicant had indicated that they are asking the user to submit water use reports but they are not complying. The OWMP did not estimate 1990 use. According to the OWMP the existing 25 acres of aquaculture would require 0.900 mgd. DAR would like to consider the input of ADP. According to the OWMP the specified uses should require about 1.4 mgd if fully developed. Therefore, the applicant’s request is too high.

The third issue is that the user was actively doubling the existing use at the time of inspection. A total of 48 acres would require about 1.728 mgd for aquaculture. Given the facts that the user and applicant have known about the water reporting requirements, have chosen not to comply, and had actively pursued, by construction, increasing a significant portion of use during the establishment of existing uses, staff feels that this use should be considered a future use! As such, staff recommends the applicant submit another application for the 23 acres of aquaculture under future use.

h. SUGAR MILL PUMP (Well No. 4057-11) - The well site was inspected on May 21 & October 28, 1993.

The first issue with this application is that the well number assigned by the applicant is in error. There are five (5) wells within close proximity of each other and the original number assigned by the applicant was 4057-04. In staff’s judgement, the well identified by the applicant is 4057-11. Investigation verified 60 acres of truck farm use by Vietnamese tenants. Additionally, Well No. 4057-03 is used for 3 acres of turf irrigation and has not been applied for. The other three (3) wells in the area are not in use although one used to be for fire protection. NHAC commented that other wells in the sugar mill pump battery should be combined in application and put out for public notice. Staff’s field investigation shows that the applicants original application is only in well no. error and that the Well No. 4057-03 should also come in with a water use permit application separately or amend this original application.

The second issue is that there are possibly six (6) active wells users within a mile radius of this well. None of these wells are downgradient. Five (5) out of the six (6) wells have submitted water use permit applications which are pending and addressed in this submittal. The other well is a privately owned source which has not come in for a water use
permit. Considering the applicant's wells are close to the ocean, adverse impacts, if any, would already be in evidence. No objections have been filed for this application.

The third issue is that the requested amount is in excess of verified existing use. The Mayor commented that the application may be an overstated request. The current metered 12-MAV reported is 0.028 mgd. The OWMP did not estimate use for this well but the estimated demand for 60 acres of bananas would be 0.181 mgd. Actual usage is much less and may be explained by the higher rainfall on this windward area.

i. PALMER GOLF COURSE (Well No. 4100-01) - This existing source uses non-potable basal water for irrigation of 188 acres of Kuilima Golf Course. The only real issue with this application is the amount of water to be allocated. A field investigation on October 4, 1993 noted that only the front 9 holes of the 18-hole golf course is open to the public. Because of financial constraints, the other nine holes are being maintained at a minimal level. If all 18 holes were to be kept in premium condition, considerably more water than what is currently being used would be required.

The actual 12-month moving average withdrawal is 0.206 mgd as of September 1993. This is considerably less than the requested allocation of 0.800 mgd. Although monthly pumpage has varied, twelve-month moving average withdrawals have been steady at slightly over 0.200 mgd for the last ten months, although slightly declining from about 0.250 mgd as of December 1992. Because average use has been consistent for nearly a year, the current 12-month moving average withdrawal of 0.206 mgd seems to be a good estimate of the irrigation water requirement.

Although there are several other pumped wells within a mile of the well, none of these is located downgradient. After the closest stream is Kawela Stream, which is located about half a mile from the well. Aquatic Resources commented that Kawela Stream is intermittent, generally dry, and does not support native freshwater species. Continued use should not result in unacceptable adverse impacts to other local wells, streams, and the aquifer.

The Office of the Mayor and BWS has commented that the amount of water requested may be overstated and should be adjusted based on actual use. These agencies also suggest that an alternative source of lesser quality should be used.

j. PUMP 15 (Well No. 4157-04) - The well site was inspected on April 1991, May 21 & September 1, 1993.

The first issue with this well is that there are possibly three (3) active wells within a mile of the well. Two (2) out of the three have applied for a water use permit. The other is a private owner who has not filed an application.

The second issue is that the requested amount of 1.5 mgd may exceed the actual pumpage. The Mayor commented that the application may be an overstated request. The inspection found that Amorient uses the well for 31 one-acre fresh water prawn ponds continuously supplied all day. Also, the US Army has an additional pump hooked-up to withdraw water for six (6) military offices. Amorient's use is not metered nor do they report. The Army does meter and report their use and their current 12-MAV is 0.017 mgd. Originally the application came in separately, 1.5 mgd for Amorient and 0.030 mgd for the Army. Staff recommended that these applications be combined since CE is the applicant. The OWMP estimated use from this well at 1.80 mgd in 1990. The OWMP estimates a reasonable use of about 1.120 mgd although staff would like to consider comments from ADP on the reasonableness of the use. Amorient estimates they use 1.5 mgd.

A third issue is that NHAC commented that the existing use will affect Ki'il National Wildlife Refuge and water rights. Since the use has been in place for several years impacts have probably already been felt. This should be more appropriately addressed if future increases in use are requested since these may bring about new impacts. Additionally, The Office of Hawaiian Affairs warned of a potential overuse situation in the aquifer system. This has been explained to them as was done at the beginning of this submittal.

k. US FISH & WILDLIFE SERVICE (Well Nos. 4157-05 to 07) - Three separate permit applications were submitted for three existing artesian sources drilled within a 70-foot radius. The wells, which are located about half a mile inland near Kahuku, use water for habitat maintenance in a designated National Wildlife Refuge for endangered water birds.
A field investigation on August 27, 1993, verified the applicant's existing use. It was also confirmed that the acreage listed on the permit applications is incorrect; total acreage is 101,936, not 101,936.

The wells flow by artesian flow into a central sump area by opening a valve, no meters or pumps are installed. Water use is estimated using the volumetric method. Use is seasonal, with more water being used during the winter months. Water availability is dependent on the height of the water table.

The total request for the three wells is 294,773 gpd. Monthly water use reports have not been submitted, and there is no means by which to verify the applicant's estimated water needs. Another issue is that there are over thirty (30) wells within a mile of these wells, although no wells are located downgradient. However, the request is for a relatively small amount of water for a use that has been in existence for a number of years. Issuance of an interim water use permit requires that monthly water use be reported, and the allocation is subject to review and refinement based on these data. Also, because the wells are not pumped, other local wells should not be affected. Impacts to surface waters and the aquifer are not anticipated.

1. US ARMY (Well Nos. 4158-12 & 13) - The applicant submitted one permit application requesting use of 0.500 mgd of potable water from these two sources. From the field investigation on May 21, 1993, it was determined that one of these wells, Well No. 4158-13, is capped and is no longer in use. The requested quantity of 500,000 gpd is approximately the capacity of the pump installed in Well No. 4158-12.

The domestic water system, which uses water from the active source, has been in operation since 1941. The source supplies 15 service connections (mixed commercial and domestic users) and serves an estimated population of 75. Water is used for troop's drinking water during maneuvers and domestic use in Kuleana homes. Small amounts of water are used by several aquacultural facilities, and the well also provides one water trough for 65 cattle (the rest of the animals' drinking water needs is supplied by Well No. 4159-01, which has a pending permit application that includes this use).

Water use is metered and is reported on a monthly basis. Reported actual use indicates a 12-month moving average withdrawal of 0.103 mgd as of October 1993. Actual water use is therefore considerably less than the requested quantity of 0.500 mgd. Twelve-month moving average withdrawals have been steady at about 103,000 gpd for the previous five months. Therefore, an allocation of 0.103 mgd appears to be a reasonable amount to satisfy the applicant's existing needs.

Both NHAC and the Office of Hawaiian Affairs (OHA) have commented that Campbell Estate use of water appears excessive. OHA also urges the Commission to halt Campbell's water permits until rules and regulations for water permits are clearly spelled out in the upcoming State Water Code Review.

m. PUMP 2, FARMERS (Well No. 4159-01) - Field investigations conducted on May 21, 1993 and September 1, 1993 verified that non-potable water from this existing artesian source is currently being used by truck farms for drip and sprinkler irrigation of approximately 250 acres of bananas, papayas, and various vegetable crops. Some water is also used to supply drinking water for approximately 65 head of cattle and horses. The pasture in which the animals graze is not irrigated.

One issue concerning this application is the quantity of water to be allocated. The request is for 3 mgd for agricultural irrigation of 250 acres. Reported monthly water use has varied in the last 18 months from an average of 0.185 mgd to 1.269 mgd. The highest monthly water use reported during this period is less than half of the amount requested. Further, at full capacity, the pumps can only withdraw a maximum of 1.857 mgd. Therefore, it appears that the applicant's request is too high. The 12-month moving average withdrawal is estimated to be about 0.814 mgd. This appears to be a more reasonable estimate of actual existing use. The Oahu Water Requirements Forecast for 250 acres of papaya is 1,250,000 gpd, while the forecast for the same number of acres in banana is about 0.750 mgd. The twelve-month moving average withdrawal falls within this range.

A second issue is the presence of springs and other pumped wells in the vicinity of the source; some of these are located downgradient. However, pumpage has decreased from
1992 levels; for the period January 1, 1992 through September 30, 1992, withdrawals averaged 1.84 mgd. Current pumpage is less than half of this. Therefore, interim instream flow standards, effective as of May 4, 1992, should not be affected by current rates of withdrawals. Unacceptable adverse impacts to other local wells and the aquifer are not anticipated. No specific objections have been filed for this application.

US ARMY (Well No. 4159-02) - A field investigation, conducted on September 1, 1993, verified that the only existing use of potable water from this existing source is for the domestic needs of two Kuleana homes. The application states that water is requested for use by two administrative facilities at the Punamano Air Force Station and for irrigation of 75 acres of pasture; however, it has been determined that this facility has been abandoned by the Air Force (although water had been used there up until last year). The field investigation also verified that no water is currently being used for irrigation purposes.

The requested amount, 1.5 mgd, greatly exceeds verified existing use. Although water use is not metered, the Army Dept. of Public Works, which operates this source, estimates that average use is about 1,200 gpd. This estimate is in line with the County Domestic Consumption Guidelines, which indicate an average daily demand of 500 gallons per single family residential unit on Oahu. Due to the aridity of the area, actual water use may be slightly higher than that suggested by the guidelines. Therefore, the estimate of 1,200 gpd is considered reasonable. Since this use is so small the applicant can be exempted from reporting month in accordance with the Commission’s September 16, 1992 action.

There are several springs in the vicinity of the source, one of which appears to be downgradient. There are also several wells located nearby. Six (6) of these wells are currently being used. However, because the quantity of water currently being used is very small, and pumpage has decreased in the last few years due to the closing of the air force facility, impacts to surface waters, other wells, and the aquifer are not anticipated.

The Office of the Mayor and the Board of Water Supply have commented that the amount requested in this application may be overstated and should be adjusted based on actual use. NHAC has expressed their concern over the possible effects on interim instream flow standards and potential impacts on other existing legal uses of water. However, if a permit is granted for only the existing verified use, no impact is anticipated.

2. BWS EXISTING USES - The BWS has nine (9) applications for seventeen (17) wells in the Koolauloa Ground Water Management Area which have existing use. Generally, staff is recommending approval of current reported 12-MAV for each application, as summarized under Table 4. One issue regarding all BWS applications is the NHAC comments listed in Attachments C & D. The NHAC commented that all county zoning for end uses should be described and overall statistics for the windward system should be given. This would be a monumental task for both the applicant and staff to review. Instead, staff proposes that all municipal uses are reasonable and the current and existing 12-MAV for the BWS sources should cover existing municipal uses at this time. Future uses would require project information such as zoning and 4-year commitment to initiate and justify future use requests from BWS. This would be consistent with what has been done in other water management areas including the Pearl Harbor reallocation efforts.
TABLE 4.
BWS Existing Water Wells

<table>
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<th>Well No.</th>
<th>Requested mgd</th>
<th>9/93 12-MAV mgd</th>
<th>Field Checked</th>
<th>Recommended Action</th>
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<tr>
<td>3453-06 &amp; 07</td>
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<td>1.339</td>
<td>Yes</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>3553-02</td>
<td>0.350</td>
<td></td>
<td>No</td>
<td>Defer until field checked</td>
</tr>
<tr>
<td>3553-03,04 06 to 08</td>
<td>6.000</td>
<td>4.618</td>
<td>Yes</td>
<td>Approve existing 12-MAV</td>
</tr>
<tr>
<td>3554-03</td>
<td>6.000</td>
<td>*4.618</td>
<td>No</td>
<td>Defer until field checked</td>
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* In same battery of Punaluu III in row directly above.

Other issues regarding each source are as follows (refer to Exhibit 5 for location and use information):

a. PUNALUU III (Well Nos. 3453-06 & 07) - The wells sites were inspected and verified on October 19, 1993.

The first issue is that there are two (2) active wells within a mile radius of these wells. One is for domestic use only and the other was granted a water use permit on September 1, 1993. Considering the applicant's wells have been in use since 1974, adverse impacts have already been made. Neither downgradient user has filed an objection to this application.

The second issue is that the wells may have some impacts on Punaluu Stream. The Division of Aquatic Resources (DAR) did not make any comments on this application, but they did make comments on BWS’s Punaluu II well field located further away from the stream. DAR commented that the Punaluu II battery of wells is located between two of the most valuable stream habitats for native biota, Punaluu and Kaluana Streams. Since wells have been in place since 1969 then impacts have already occurred. Any applications for new wells (or pumpage) in this area should seriously address this issue. Staff is assuming that these comments would also apply to Punaluu III.

The third issue with this application is that the BWS request for 1.250 mgd seems low compared to the current actual use. The 12-MAV (See Exhibit 5) for the past two (2) years shows that the request would be for the minimum 12-MAV. The current 12-MAV as of September 1993 is 1.339 mgd. This would appear closer to the maximum 12-MAV over the past 2 years for these wells. Also, compared to the OWMP figure of 1.000 mgd, the current 12-MAV seems reasonable.

b. PUNALUU I (Well No. 3553-02) - The well was not field verified. Wrong keys obtained to access.

c. PUNALUU II (Well Nos. 3553-03,04, 06 to 08 & 3554-03) - This major source of wells was investigated and verified on October 19, 1993 with the exception of Well No. 3554-03 (wrong keys to access).

The first issue is there is one major user directly downgradient who has applied for a water use permit (Hanohano Enterprises, Inc.). Another user with an existing water use...
permit (see Exhibit 2) is within a mile of the well field. Since these BWS wells have been used since 1967 negative impacts would have been felt by these users. No objections from either user have been filed with the Commission.

The second issue is that these wells may have some impacts on Punaluu and Kaluanui Streams. DAR commented that the Punaluu II battery of wells is located between two of the most valuable stream habitats for native biota, Punaluu and Kaluanui Streams. Since wells have been in place since 1969, impacts have already occurred. Any applications for new wells (or pumpage) in this area should seriously address this issue.

The third issue is that the BWS request for 6.000 mgd for these wells seems high compared to the current actual use. The 12-MAV (See Exhibit 5) since July 1992 shows that the request would be for the maximum 12-MAV for the past 16 months. The current 12-MAV as of September 1993 is 4.618 mgd. This is also in relative agreement with the OWMP 1990 estimate of 4.51 mgd. Therefore, the current 12-MAV seems reasonable for existing use from this well.

d. KALUANUI (Well Nos. 3554-04 & 05) - The wells were not field verified. Wrong keys obtained to access.

e. HAUULA (Well No. 3655-01) - The well site was inspected and verified on October 19, 1993.

The first issue is that there are three (3) active wells within a mile radius of the well. No objections have been filed by these well owners and one, the most southern, received a water use permit in September 1993. Since the well is so close to the ocean, adverse affects to other wells and streams in the area should be minimal as aquifer leakage into the ocean is primarily affected.

The second issue is that the current 12-MAV deviates significantly from the rather constant trend prior to the summer of 1992 (see Exhibit 5). Also, the OWMP identifies this source as a producer of 0.25 mgd, which is the applicant’s request. Staff has requested reasons for this and BWS may explain reasons for this at the Commission meeting.

f. KAHUKU BATTERY (Well Nos. 4057-15 & 16) - The well site was inspected and verified on October 19, 1993.

The first issue is that there are possibly seven (7) active wells within a mile radius of the wells. Six (6) of these active wells have been filed by Campbell Estate for water use permits and one is to a private individual who has not filed for a water use permit. Since applicant’s wells have been active for over a decade, adverse impacts have already occurred. No objections to this application have been filed by the other well owners.

The second issue is that the BWS request for 1.000 mgd for these wells seems high compared to the current actual use (see Exhibit 5). The general trend in pumpage has been relatively constant only varying between 0.30 and 0.37 mgd since 1988. The OWMP estimated 1990 pumpage as 0.33 mgd and the current 12-MAV is 0.339 mgd as of September 1993. Therefore, the current 12-MAV seems reasonable for existing use from this well.

g. WAIALEE I (Well No. 4101-07) - The well site was inspected and verified on October 19, 1993.

The first issue is that there are possibly two (2) other active wells owned by private individuals within a mile radius of the well. Neither has submitted applications nor objections to this application. One is downgradient of the applicant’s well but since the applicant’s well is near the ocean and has been in use since 1945, adverse impacts have already been felt. The other well has reported use in the OWMP but, again, has not submitted an application. Staff will be following up on this matter.

The second issue is that the BWS request for 0.500 mgd for these wells seems high compared to the current actual use (see Exhibit 5). The general trend in pumpage has been relatively constant only varying between 0.30 and 0.37 mgd since 1988. The OWMP estimated 1990 pumpage as 0.33 mgd and the current 12-MAV is 0.339 mgd as of September 1993. Therefore, the current 12-MAV seems reasonable for existing use from this well.
h. WAI AL E II (Well No. 4101-08) - The well site was inspected and verified on October 19, 1993.

The first issue is the same as the first issue of the previous application since these wells are in close proximity.

The second issue is that the BWS request for 0.750 mgd for these wells seems high compared to the current actual use (see Exhibit 5). The general trend in pumpage has been relatively constant only varying between 0.40 and 0.47 mgd since 1988. The OWMP estimated 1990 pumpage at 0.46 mgd and the current 12-MAV is 0.411 mgd as of September 1993. Therefore, the current 12-MAV seems reasonable for existing use from this well although it is unusual that the use is at a low point even though should be near a peak since September is the end of the summer period of weather.

3. HANOHANO ENTERPRISES (Well No. 3553-01) - This application was field verified on October 4, 1993. No significant changes from the original registration field investigation on October 18, 1990 were found.

The first issue with this application is that the existing end use is less than that specified in the application. The application requested both existing and future use for 70 acres of aquaculture and 250 units of future elderly housing. The applicant currently has a total of about 12 acres of active aquaculture; 11.5 acres in aquaculture for mullet and tilapia; and less than 0.5 acres for live food and tropical fish cultivation. Actual use has not been reported to the Commission. Based on the Oahu Water Management Plan 12 acres of aquaculture would use approximately 0.432 mgd. The OWMP estimated the use at 0.70 mgd in 1990. Staff would like to consider comments from ADP in addition to the OWMP to make a better assessment of actual need of the aquaculture. Additionally, the BWS has commented that the requested amount may be in excess of the aquifer's sustainable yield and that water should be recycled through ponds for more efficient use.

The second issue is that of effects on Punaluu Stream. Discharge from this use flows into Papakoko-Haleaha Stream and since this use has been ongoing for the last 10 years, the impacts have already been felt. DAR has commented that Punaluu Stream is one of the highest quality habitats for native species on Oahu. If requests are for future increases in pumpage then DAR has requested confirmation that flows into Punaluu Stream will not be impacted.

The third and hardest issue to resolve is the future use requested for the 250 unit elderly housing development. Such a development would reasonably require about 0.100 mgd according to county standards (250 x 400 gpd for multi-family low-rise). However, there is no zoning for this project. The applicant has been working with the State Department of Health (DOH) and the County Department of Housing and Community Development (DHCD) in obtaining a 201E exemption to normal zoning requirements for affordable housing. However, the applicant is caught in a catch-22 situation whereby the county has required the applicant to provide evidence that water will be available for this project yet the Commission will not approve future projects without appropriate county zoning. Staff has informed the county of the overall situation of the Koolauloa Aquifer System and that it appears water may be available as early as January 1994 if other existing uses are established by the Commission. The applicant has indicated that they are willing to cutback on their existing aquaculture water use to make water available for their project, if necessary. Since the project is for the beneficial use of affordable housing, the applicant is seeking a special 201E exemption from zoning requirements, comments from DAR and BWS, and the existing use impacts are probably established in the area, staff does not foresee a problem allowing this special case to use a future use within the existing use limits. However, staff also realizes that if the Commission were to approve a permit allowing future use in this manner it may be construed as "water-banking" the ground water by a private entity.

4. NIHIPALI (Well No. 3855-12) - This application requires a field investigation.

5. KAIO (Well No. 3956-07) - This application was originally verified from a field investigation on October 10, 1990. No significant changes in the existing portion of the request were found. However, the applicant does include a future use request.
The first issue with this applicant is that the requested amount of water for the existing use is high. The field investigation found water consumption on a total of 0.5 acre for taro, banana, and ti leaf, livestock, and one (1) tank of tilapia. No reports of water use have been made by the applicant making it difficult to estimate actual use and need. However, the 1990 field investigation measured flow from the artesian source at 12 gpm or 17,280 gpd. Assuming taro to be the most water intensive cultivation, the Oahu Water Management Plan for 0.5 acres of taro would require 3,000 gpd. Additionally, the field investigation found that the tank with tilapia required an additional 3,000 gpd. Assuming the needs of the few livestock does not exceed 1,000 gpd, the justified need under existing conditions would be about 7,000 gpd.

The second issue is that part of the request is for future uses for Kaio Flowers I & II. The total acreage of these future uses will be about another 0.5 acre for various floriculture. Under the Oahu Water Management Plan this future need would require an additional 3,700 gpd. Since this is such a small use, staff does not see a reason to deny the applicant’s request but rather suggests deferral on the future use portion until existing uses are established in the area.

RECOMMENDATION

Staff recommends:

1. For all approved water use permits, that the Commission add the special condition that the applicants may continue their existing use of ground water within the limits approved by the Commission, and the actual issuance for the interim permit shall not be a reason to interrupt their existing uses.

2. That the Commission approve the issuance of interim water use permits to the Estate of James Campbell for the reasonable and beneficial existing salt water aquacultural needs according to Table 2 and their corresponding described uses subject to the standard water use permit conditions listed in Attachment B.

3. That the Commission approve the issuance of interim water use permits to the Estate of James Campbell for the reasonable and beneficial existing needs according to Table 3 and their corresponding described uses subject to the standard water use permit conditions listed in Attachment B.

4. That the Commission approve the issuance of interim water use permits to the Honolulu Board of Water Supply for the reasonable and beneficial existing municipal uses according to Table 4, subject to the standard water use permit conditions listed in Attachment B.

5. That the Commission approve the issuance of an interim water use permit to Hanohano Enterprises, Inc. for the reasonable and beneficial use of 432,000 gallons per day of potable water for aquaculture over 12 acres from the Hanohano Well (Well No. 3553-01), subject to the standard water use permit conditions listed in Attachment B and the following special condition:

   a. Should the applicant provide written evidence that the County DHCD approves a 201E exemption for the elderly affordable housing project then the applicant may modify a corresponding portion of their existing aquacultural use to be used by the exemption-approved project within the Commission-approved water use permit limits under recommendation 2.
That the Commission defer action on the water use permit application for George N. Nihipali, Jr. for the Nihipali Well (Well No. 3855-12).

 That the Commission approve the issuance of an interim water use permit to Jacob I. Kaio, Sr. for the reasonable and beneficial use of 2,000 gallons per day of potable water for agricultural irrigation from the Kaio Artesian Well (Well No. 3956-07), subject to the standard water use permit conditions listed in Attachment B and the following special condition:

b. The future use portion of the application shall be deferred until existing uses in the Koolauloa area are established.

Respectfully submitted,

RAE M. LOUI
Deputy Director

APPROVED FOR SUBMITTAL:

KEITH W. AHUE, Chairperson
Chairperson and Members  
Commission on Water Resource Management  
December 8, 1993

WATER USE PERMIT DETAILED INFORMATION

Source Information

AQUIFER:

- Sustainable Yield:
- Existing Water Use Permits:
- Available Allocation:
- Total of other pending allocations:

WATER USE PERMIT

DETAILED INFORMATION

Source Information

AQUIFER: Koolauloa System, Windward Sector, Oahu

- Sustainable Yield: 35 mgd
- Existing Water Use Permits: 0.323 mgd
- Available Allocation: 34.677 mgd
- Total of other pending allocations: 67.433 mgd

+WELL INDEX INFORMATION

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</tbody>
</table>

ATTACHMENT A
Use Information

See Exhibit 3 for individual applications use descriptions.

Nearby Surrounding Wells and Other Registered Ground Water Use

Information from the registration program indicates there are possibly 84 existing wells in the Koolauloa Aquifer System. Several of these wells have been initially field checked but many of the declarants, including the larger users, have not been completely field verified. Several are not in use or are rights claims. However, the Oahu Water Management Plan estimated that the existing withdrawals from the Koolauloa Aquifer System is 13.6 mgd as of 1990.

See attached exhibits as referenced from following table.

Public Notice

See Exhibit 1.

Objections

Specific objections or comments are identified under analysis and issues portion of this submittal. The public notice specifies that an objector meet the following requirements: (1) state property or other interest in the matter; (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; (3) state all grounds for objections to the proposed permits, (4) provide a copy of the objection letter(s) to the applicant, and (5) submit objections meeting the previous requirements to the Commission according to Exhibit 1. General objections from the Native Hawaiian Advisory Council are listed in Attachment C.

Briefs in Support

Responses to objections, or briefs in support, regarding the application are required to be filed with the Commission ten (10) days after an objection is filed and, presumably, copies are served to the applicant. No briefs in support were filed with the Commission. The following briefs in support are summarized as follows:

Field Investigation

See Exhibit 4.
STANDARD WATER USE PERMIT CONDITIONS

1. The ground water described in the water use permit may only be taken from the location described, used for the reasonable-beneficial use described, and at the location described above and in the attachments. 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." (HAR §13-171-2).

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 HAR §13-171-13 which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in section §13-171-2;
   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 174C-101(a), HRS.

4. The ground water use approved must not interfere with surface or ground water rights or reservations.

5. The ground water use approved must not interfere with interim or permanent instream flow standards or policies as determined by the Commission. 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 permit is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and staff submittal approved by the Commission at its December 8, 1993 meeting are incorporated into the permit by reference.

8. Any modification of the permit terms, conditions, or uses can only be made with the express written consent of the Commission on Water Resource Management.

9. The water use 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 water sources in quantity, quality, or both;
   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 Homes, 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.

ATTACHMENT B
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. If the ground water source does not presently exist, the new well shall be completed, i.e. able to withdraw water for the proposed use on a regular basis, within twenty-four (24) months from the date the water use permit is approved.

11. An approved flowmeter(s) must be installed to measure withdrawals and a monthly record of withdrawals, water-levels, salinity, and temperature must be kept and reported to the Commission on a monthly basis in accordance the Commission’s September 16, 1992 action on reporting requirements;

12. The water use permit shall be subject to the Commission’s periodic review of the applicable aquifer’s sustainable yield. The amount of ground water use authorized by the permit may be reduced by the Commission if the sustainable yield of the Koolauloa Aquifer System, or relevant modified aquifer, is reduced;

13. The water use permit may not be transferred or the use rights granted by this permit sold or in any other way alienated. Pursuant to HAR §13-171-25 and the requirements of Chapter 174C, the Commission has the authority to allow the transfer of the permit and the use rights granted by the permit in a manner consistent with HAR §13-171-25. Any such transfer shall only occur with the Commission’s prior express written approval. Any sale, assignment, lease, alienation, or other transfer of any interest in this permit shall be void.

14. The use(s) authorized by law and by the water use permit do not constitute ownership rights.

15. The permittee shall comply with all applicable laws, rules, ordinances, and other agencies’ permits and conditions pertaining to water use or the water resource.

16. The permittee shall prepare and submit a water shortage plan within 30 days of issuance of the permit to assist the Commission in fulfilling 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 Koolauloa Ground Water Management Area.

17. The water use permit granted shall be an interim water use permit, pursuant to HAR §13-171-21. The final determination of the water use quantity shall be made within five years of the filing of the application to continue the existing use.

18. The water use permit shall be issued only after AG review.

19. The water use permit shall be subject to the Commission’s establishment of instream standards and policies to Stream Protection and Management (SPAM), as well as legislative mandates to protect stream resources.

ATTACHMENT B
MEMORANDUM

TO: Rae M. Loui, Deputy Director
FROM: David L. Martin, Water Project Manager
Native Hawaiian Advisory Council


DATE: November 26, 1993

NHAC hereby requests additional information from COWRM and the Board of Water Supply (BWS) explaining various sections of the Board's water use permit applications. These sections include 1(b) Landowner, 8 Quantity of Water Requested, and 15(a) Impact on sustainable yield.

1(b) LANDOWNER - Please provide a list of subject BWS well sites which were obtained from State lands via executive orders including the title status of those State lands.

8 QUANTITY OF WATER REQUESTED - Please provide information showing the amount of water quantity requested in relation to the 12 month moving average and the 5 year average use.

15(a) IMPACT ON SUSTAINABLE YIELD - Please provide information comparing the total existing, planned and proposed uses of water with the sustainable yield of each aquifer.

Please note that I have attached all memoranda forms dated October 27, 1993 covering BWS's permit applications. At this point I am unable to complete a review of these applications without additional information, therefore I am requesting an extended review period. Your immediate attention with this matter is appreciated, I await your response.

ATTACHMENT C
TO: State of Hawaii Commission on Water Resource Management
SUBJECT: COMMENTS AND OBJECTIONS RE: WATER USE PERMIT APPLICATIONS
WAIMANALO, KOOLAUPOKO, KAHANA, AND KOOLAULOA GROUND WATER
MANAGEMENT AREAS
Public Notice Undated, Published November 3 & 10, 1993
Send written objections by November 26, 1993

I. COMMENTS

a. Hanohano Well No. 3553-01

4. SOURCE TYPE is not indicated.

10. PROPOSED USE: Irrigation is not indicated.

14. POTENTIAL RESTRICTIONS ON WATER USE:

(e) Other: Since COWRM may only allocate water to projects
which have received the necessary land use, county, and community
plan approvals, the application form should include a table
allowing applicants to illustrate their degree of compliance with
these requirements.

15. REMARKS, EXPLANATIONS: A table illustrating the estimated
breakdown between quantities of existing and new water use among
agriculture, aquaculture, and domestic should be provided.

TABLE 1. MULTIPLE TMRs TO USE REQUESTED WATER

The final column, "% OF TOTAL TO BE USED OVER NEXT 4 YEARS," should
be revised for accuracy.

b. BWS Applications

7. (c) County Zoning is not described.

10. QUALITY OF WATER REQUESTED: Potable is not indicated on some
applications.

11. PROPOSED USE: Municipal is not indicated.

12. NUMBER AND TYPE OF UNITS TO BE SERVED: Statistics for the
Windward Oahu System should be given.

ATTACHMENT D
II. OBJECTIONS

Native Hawaiian Advisory Council, Inc. (NHAC) represents persons with property interests in lands within the hydrologic units of the sources of water supply and/or who will be directly and immediately affected by the proposed water uses. Furthermore, NHAC advocates the enforcement of constitutional, statutory, and common laws which require consideration and accommodation of various appurtenant, riparian, correlative, and Hawaiian water rights, as well as other Hawaiian rights, in the Water Commission's (COWRM) allocation process. Under the public trust doctrine imposed upon Hawaii water law by the State Constitution, common law, and judicial precedent, water resources are owned by the public. Thus all people have property interests in all water sources and may be admitted to any and all proceedings involving their disposition, regulation, and management.

a. The following table identifies selected NHAC clients with property and other interests (distinct from those of the general public) in the subject water management areas on whose behalf subsequent general and specific objections are filed. NHAC reserves the rights to amend this table to later include other affected clients.

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<td>and Pearl</td>
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b. General Objections to All Permit Applications

(1) Property or Other Interest in the Matter
Refer to Table in II.a. above.

(2) Questions to which Objections are Taken

(a) Questions of Procedure

NHAC objects to COWRM's apparent plan to process water use permits applications on a first-come, first-served basis. In order to fulfill the legislative intent of water management area designation, a comprehensive view of existing, planned, and proposed water uses and water rights in each hydrologic unit is required. COWRM should merely collect applications during the one year post-designation application period. Then after the application period is closed, and surveys of water rights and reserved water uses are completed, COWRM can assess and evaluate each permit application with regard to competing applications for existing and new uses; reserved, declared, and certified water uses; instream flow standards; water rights; and the overall water situation in each hydrologic unit. Without such a process, COWRM will not be able to meet Water Code requirements for evaluating competing uses within the frameworks of the "reasonable and beneficial" standard, "Public interest," and other legally-imposed constraints.

In response to COWRM's letter of November 17, 1992, we further studied Hawaii Administrative Rules (HAR) Title 13, Chapter 171 and still find no explicit or implicit language supporting your contention that processing water use permits as we suggest is inconsistent with these rules or would require rulemaking. NHAC attended "... numerous Commission presentations and workshops on existing WMAs and the newly designated WMAs at which we [COWRM]
presented and provided various handouts which show the WUPA processing procedure" (emphasis added). To our knowledge COWRM never formally adopted as policy any of the various procedures it now employs in water use permit application processing. The rules are vague, ambiguous, and incomplete - in this context it seems that COWRM creation of different policies for different WMAs is inappropriate. It seems that hearings are required to discuss clarification and of the rules and unification of the policies.

Two distinct classes of WMAs will emerge if COWRM proceeds on a first-come, first-served basis in some WMAs and with a comprehensive management review of all uses and applications in other WMAs. In the first case, determination of whether competing WUPAs exceed the available supply becomes a second tier of the designation process. NHAC believes such a management regime requires rulesmaking. Granting WUPAs on a first-come, first-served basis circumvents a number of the conditions for Water Use Permit issuance, particularly if specific reservations for Hawaiian Homelands beneficiaries are not previously implemented and allocations to county boards of water supply for municipal purposes are not established.

While NHAC recognizes there is a rule that COWRM act upon permit applications within 90 or 180 days [HAR 13-171-19(c)] we do not see this as a constraint to the approach we are suggesting. COWRM records over the last six years shows that "action" includes deferral of decision making until information needs are met, as well as categorization of applications to facilitate future decision making.

(b) Questions of Fact

The permit application information distributed by COWRM for comment should also include the results of COWRM's field verification of declared water uses and should compare the quantity of water requested with the current 12 month moving average and the post-Water Code long-term (about 6 year) average water use. It should also show how total applicant existing, planned, and proposed water uses in the subject WMA compare with overall WMA totals and with sustainable yield. This factual information is critical in comprehensively evaluating reasonable and beneficial use and public interest in the WMA. This information, which is usually not presented by COWRM until the decision-making stage of the process, must be available earlier so that public comment and objection can take it into account.

(c) Questions of Law

COWRM appears not to be in compliance with HAR 13-171-11(b), which implies that COWRM will determine water supply allocated to the county boards of water supply in each water management area. These gross allocations to the counties, as well as gross reservations to
Hawaiian Home Lands (required under Act 325), must be defined prior to any new water use permitting to other parties.

In a previous response to this objection, COWRM (March 3, 1993) stated that "... allocations granted to the county water systems generally allow the county departments of water supply to distribute water within their system and within the limits imposed by allocation. This does not imply that the Commission will or must determine the final and gross water amounts to be allocated to the county water supplies." This reasoning seems confused - if COWRM is the agency responsible for "the limits imposed by allocation," then it should "determine the final and gross water amounts to be allocated to county water supplies."

Further analysis of HAR 13-171 reveals that:

1. Permit applications for existing uses only compete with other permit applications for existing uses [HAR 13-171-14(c)].

2. Competition between permit applications for existing uses is subject to public hearing requirements [HAR 13-171-14(c)], while competition between permit applications for new uses is not (HAR 13-171-16). For existing uses, the allocation between competing applications is determined via the hearing, while for new uses the allocation seems to be subject to dispute resolution and public interest balancing tests. The rules are silent about competition between permit applications for existing uses, new uses, declared uses, certified uses, water reservations, and instream flows.

3. Existing uses are assumed reasonable if less than 25,000 gallons per month. If more than 25,000, it is still reasonable and beneficial if no objections are filed [HAR 13-171-14(b)], but is subject to public hearing if objections are raised. Reasonable and beneficial is only one of the 6 things the applicant must establish under HAR 13-171-13, which all apply equally to existing and new users.

4. There appear to be no guidelines for reasonable and beneficial determinations of new uses, no requirements for public hearing regarding same, and no vehicle for requesting such public hearing.

The existing rules do not appear to place any restrictions on simultaneous processing of applications for existing and new ground water uses, along with certification of declared surface water uses. They do not expressly disallow direct consideration of applications for existing ground water uses within the context of new ground water uses and declared surface water uses, even though some different procedures apply. The inclusion of "public interest" consistency requirements [HAR 13-171-13(4)] seems to give COWRM enough latitude for such processing, notwithstanding other intricacies of rule.
(d) Questions of Policy

1. Procedure

We have been repeatedly told by the Attorney General that water management area designation creates a "clean slate" and a "level playing field." As such, from the moment of designation we cannot consider any existing water use to be reasonable and beneficial or in the public interest until such determinations are formally made by the Water Commission.

The procedure being followed in Windward Oahu and Molokai WMA is inconsistent with that employed in Pearl Harbor WMA. This is confirmed in COWRM's letter of March 3, 1993 which explains that "In its February 17, 1993 decision regarding Molokai and Windward water use applications, the Commission on Water Resource Management will defer action on all new water use permit applications until July 1993" (implying that applications for existing uses will be processed first and separately). "In the Pearl Harbor area, the Commission is reviewing all currently filed requests together: existing, planned, and proposed uses." COWRM has not explained why the policies are different in different WMA.

Given the vagueness of the administrative rules governing the process, COWRM should provide a clear explanation for these differing policies. Also note that neither of the two procedures described above considers other issues water rights, water reservation, instream flow, and certification of declared surface water uses discussed on our objections. COWRM has not explained why these issues should not be comprehensively considered in ground water use permit application processing.

On March 3, 1993 COWRM also wrote that "... a survey of all water rights and reservation issues cannot be settled fairly or adequately within such a short time period. Because of this, the Commission plans to include conditions in water use permits which will expressly allow for quantity reduction in permits if and when it may be required."

The resolution of water rights and reservations and other issues must not be held hostage to a perceived need to issue permits for existing water uses. Now is the proper stage in the process for examining trade-offs between existing ground water uses, water rights, water reservations, surface water uses, instream flows, and streamflow restoration. To further postpone such examination merely continues the entrenched water allocation policies that the Water Code seeks to avoid, and unnecessarily multiplies the number of proceedings which must be held in the future to deliberate downsizing of existing uses to accommodate new uses.
2. Public Notice

We question if all water use declarants, water source registrants, and water use permit applicants in the affected areas have been served direct notice of the pending applications and the deadline for filing objections? Without such notice, these persons cannot be expected to have timely knowledge of pending applications, much less file timely objections. The Water Commission, through its Nakata Subcommittee, has acknowledged this reality and recommended implementation of a process for direct notification of affected parties.

In previously responding to similar concerns, Rae M. Loui wrote on August 12, 1993 that "The Nakata subcommittee did not recommend notices be sent to all nearby declarants." We recall that the subcommittee did recommend that registries of declarants placed in various categories be maintained, and reason that a logical cause of the need for such maintenance is to allow the Commission to easily identify declarants using and/or claiming interests in various water sources. Once declarants are identified, it is only fair that they be directly notified of proposed actions potentially affecting their interests.

Mrs. Loui also wrote that "... given the 200+ permits we have pending and the lack of computer programming to easily identify nearby declarants, it would be unmanageable." "These are my thoughts only and do not represent the policy of the Commission."

With regard to the 200+ permits, in many cases numerous permit applications have been filed by a single applicant in a single water management area, so that individual notices for each of these numerous applications could be combined into a single notice. Also, if COWRM would adopt our recommendation for a finite, repeating application window, notification tasks would be more easily accomplished.

COWRM's existing WATRDAT database has the capability to be programmed to easily identify nearby declarants. The major task remaining is to allow sorting and cross-indexing (ground & surface water) of records by water source rather than by declarant name or TMK number. NHAC rejects COWRM arguments that the notification requirements we recommend are "unmanageable," and suggest that COWRM place a high priority on implementing the necessary computer programming, preferably of a type which allows integration with the State GIS framework. NHAC is available to assist with this work.
J. Public Comment and Objection

There are persistent ambiguities and inconsistencies concerning the procedures and deadlines for filing comments on and objections to water use permit applications which must be resolved in order to institute a clear and fair process.

a. HAR 13-171-18

(a) "Within ten working days after the last public notice of the pending permit application, a party may file with the commission, written objections to the proposed permit and a brief in support of such objections."

This implies that in order to be valid, objections must be received at COWRM on or before the tenth working day after the last public notice.

"Such party shall serve copies of the objections and brief upon the applicant."

This does not specify when the applicant must be served.

(d) "The support brief shall:
(1) Answer specifically the points of procedure, fact, law, or policy to which objections were taken; and
(2) State the facts and reasons why the permit should be approved."

This conflicts with (a), which implies that briefs are to be written in support of objections, not in support of applications [as suggested in (d)].

b. Public Notice

The standard Public Notice of water use permit applications directs that interested persons "Send written objections by" a specific date (the tenth day after the last public notice) to COWRM and the applicant. This implies that objections should exhibit a postmark or other evidence of being "sent" on or before that date.

c. COWRM Review and Comment Solicitation

The standard memorandum circulated by COWRM with water use permit applications requests ("please") that a form indicating the level of review of the application be returned by a specific date (ten working days after the last public notice), implying that the form should be received at the COWRM office on or before that date. While the form has a space for indicating "no objections," it has no space for indicating "Objections attached."
This form does not appear to be the subject of any rule, nor does it appear to establish a strict deadline for returning the form. In particular, it allows a reviewer to request additional information and an extended review period for a particular water use permit application. In practice, COWRM could receive a form requesting additional information and an extended review period on the same day that the Public Notice established as the deadline for sending (evidenced by postmark or other evidence of initiating transmittal) objections and that HAR established as the deadline for filing objections at COWRM (evidenced by receipt at COWRM). Yet there appear to be no COWRM procedures for responding to requests for extended review, much less for notifying applicants and other interested parties if these requests are indeed granted.

3. Regulatory and Management Coordination

We are increasingly concerned about the lack of clear guidelines for timing, sequencing, and coordinating COWRM permitting processes with environmental review processes conducted under other authorities (including HRS 343, BLNR Conservation District Use permitting, DOH 401 and NPDES, and County grading and drainage ordinances).

(3) Grounds for Objections to Proposed Permits

As evidenced by the above discussions, proposed permits should be deferred until the conclusion of public hearings because:

1. COWRM procedure for processing the permit applications is not in compliance with the Water Code and its Administrative Rules.

2. COWRM has not provided adequate factual background for public review of, comment upon, and objection to the proposed permits.

3. Laws governing permit application processing are vague, contradictory, and incomplete.

4. COWRM policy governing permit application processing is vague, contradictory, inconsistent, and excessively informal.

5. Current COWRM policy and procedure does not promote or allow for comprehensive, conjunctive, and concurrent processing of water use permit applications, water use declarations, instream flow standard and sustainable yield concerns, and water rights and water reservation issues.
c. General Objections to BWS Permit Applications

(1) Property or Other Interest in the Matter
Refer to Table in II.a. above.

(2) Questions to which Objections are Taken
   (a) Questions of Procedure
Refer to b. (2) (a) above.

The procedure employed in processing this batch of BWS permit applications is inexplicably different from that previously employed in Pearl Harbor GWMA. COWRM has a duty to coordinate ground water use permitting with surface water use certification, instream flow standard and sustainable yield reevaluation, and water rights and water reservation determinations.

   (b) Questions of Fact
Refer to b. (2) (b) above.

Permit application line 1.(b) consistently indicates BWS as "LANDOWNER OF SOURCE." It has been common procedure for BWS to acquire well sites through set aside of State lands by executive order. NHAC has requested in a separate letter that additional information on the title history of each well site be provided so that we can determine which well sites occupy ceded lands.

   (c) Questions of Law
Refer to b. (2) (c) above.

NHAC alleges that the practice of transferring ceded lands to BWS by executive order subverts and circumvents the water licensing requirements of HRS, in some cases avoiding necessary compensation to the Hawaiian Homes Commission and Office of Hawaiian Affairs for use of ceded lands trust resources.

   (d) Questions of Policy
Refer to b. (2) (d) and c. (2) (b) above.

(3) Grounds for Objections to Proposed Permits

1. All of the subject BWS applications indicate on line 15(c) that applicant does not know if its existing uses affect Hawaiian Home Lands uses. Therefore applicant has not established that these proposed uses of water conform with the requirements of HAR 13-171-13 (1)-(5) and will not affect Hawaiian Home Lands uses.
Thus COWRM may not issue permits until public hearings are held to determine what portion, if any, of existing BWS uses should be abandoned in favor of Hawaiian Home Lands uses.

2. All of the subject BWS applications fail to describe potential restrictions on use arising from effects on future legal uses such as planned agricultural uses and activation of uses guaranteed by appurtenant, riparian, and correlative water rights. Therefore applicant has not established that these proposed uses of water conform with HAR 13-171-13 (1), (2), and (4)-(6), and COWRM may not issue permits until public hearings are held to determine what portion, if any, of existing BWS uses should be abandoned in favor of future legal uses.

3. All of the subject BWS applications indicate on Line 15.(a) that "Impact on Sustainable yield" is that of an "Existing use." Existing uses do impact sustainable yield characteristics, notably the lowering of equilibrium head arising from increased sustainable yield. Because of the "clean slate" and "level playing field" effect of designation, COWRM may not issue water use permits until public hearings are held to assess the impacts of changes in sustainable yield upon equilibrium heads and localized water levels, and to determine what portion, if any, of existing BWS uses should be abandoned in favor of lowering sustainable yields.

4. Any number of the subject BWS applications may involve water sources sited on ceded lands that were transferred by executive order from the State to BWS. Wherever this is the case, COWRM may not issue water use permits until public hearings are held concerning the avoidance of water licensing requirements and lack of County compensation to the Hawaiian Homes Commission and OHA for its use and extraction of ceded lands trust resources.

5. None of the subject BWS applications indicate how total existing, planned, and proposed BWS uses compare with other existing, planned, and proposed uses and sustainable yields. Such information is critical to complete and fair assessment of compliance with water use permit conditions set forth in HAR 13-171-13. Thus COWRM may not issue permits until hearings are held to determine the overall water use permit application and planning situation for each aquifer, and to assess what shares of their sustainable yields could be allocated to BWS and other major water users.

d. Specific Objections to Specific Applications

(1) Property or Other Interest in the Matter

Refer to Table in II.a. above.
(2) Questions to which Objections are Taken

(a) Questions of Procedure
Refer to b. and c. (2)(a) above.

(b) Questions of Fact
Refer to b. and c. (2)(b) above.

WAIMANALO TUNNELS

We believe that portions of the tunnels may be situated on and/or underly Hawaiian Home Lands. We are not aware of any agreements between BWS and HHC governing BWS use of the sites and resources.

WAIHEE WELLS

Line 16 of the application states that the well "Has not operated since court mandated flow of 2.7 MGC in Waihee Stream under appeal." This contradicts Line 15(a) of the application and the Public Notice which indicate existing use. When exactly did use of this source cease?

(c) Questions of Law
Refer to b. and c. (2)(c) above.

(d) Questions of Policy
Refer to b. and c. (2)(d) above.

(3) Grounds for Objections to Proposed Permits

1. In Koʻolaulapoko GWMA, the following BWS applications indicate on line 15.(b) that BWS existing uses affect instream flow standards:

Luluku Tunnel, Haiku Tunnel, Haiku Well, Kahaluu Tunnel, Waihee Tunnel, Waihee Inclined Wells, Waihee Wells.

Therefore applicant has not established that these proposed uses of water conform with the requirements of HAR 13-171-13 (1)-(4), and COWRM may not issue water use permits until public hearings are held to determine what portions, if any, of existing BWS uses should be restored to instream flows.

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2. In Ko‘olaupoko GWMA, the following BWS applications indicate on line 15.(d) that BWS existing uses affect other existing legal uses:

Haiku Tunnel, Waihee Tunnel, Waihee Inclined Wells, Waihee Wells.

The following BWS applications indicate on line 15.(d) that applicant does not know if BWS existing uses affect other existing legal uses:

Luluku Tunnel.

Therefore applicant has not established that these proposed uses of water conform with the requirements of HAR 13-171-13 (1)-(4), and COWRM may not issue water use permits until public hearings are held to determine what portions, if any, of existing BWS uses should be abandoned in favor of other existing legal uses.

3. If portions of the Waimanalo tunnels are sited on or underlay Hawaiian Home Lands, and no agreements exist between BWS and HHL concerning site use and resource extraction, then a water use permit should not issued until public hearings are held and the land use situation is resolved.

4. If Waihee Wells has not been used since the 1989 deadline for filing declarations of water use, a water use permit may not be issued until the application has been reprocessed as an application for a new use.

III. SUMMARY

While COWRM, staff, and the public have participated in discussions about water use permit application processing, there have been no formal declarations of COWRM permit application processing policy, and different procedures are being applied in different WMAs. It appears that COWRM staff and NHAC are advocating different interpretations of the Administrative Rules governing the water use permitting process, and that public hearings are needed to help the Commissioners decide what kind of interpretation best serves the purposes of the Water Code and the public interest.

We therefore state our overall objection to current COWRM procedures and policies regarding water use permit issuance, in a large part because they do not yet exist. We reserve the right to submit additional specific objections to specific permit applications at later dates, since present information about the overall water management context of such permit applications is insufficient for allowing comprehensive, fair assessments.
NHAC requests that COWRM postpone decision-making on all water use permit applications for the subject Water Management Areas until:

1) public hearings about COWRM procedure and policy in processing water use permit applications are concluded and administrative rules governing these processes are revised;

2) necessary assessments of water rights, reserved water uses, surface water uses, and instream flow standards have been completed;

3) these assessments, issuance of water use permits, and certification of declared water uses are woven into an integrated water management decision-making process.

We must implement water use permit application processing methodologies that avoid the continuation of first-come, first-serve permitting. First-come, first-serve water use permit processing contradicts the very heart of the intent of water management area designation. It negates COWRM's effort to involve the community in the water allocation process because it diffuses rather than concentrates the arena of public participation. We cannot have comprehensive water resource management without comprehensive evaluation of water use scenarios.

A finite repeating application period for water management area allocations should be established, after which all applications received in each period can be comprehensively reviewed by a Windward Working Group and COWRM staff for processing recommendations.

NHAC requests that a Windward Working Group be formed similar to the Molokai Working Group in order to recommend reforms to the current piece-meal process of establishing reasonable and beneficial use and resolutions of public interest balancing tests for Windward water.

When existing surface water users have not even been afforded the opportunity to obtain certification, it is extremely unfair for new and existing groundwater uses to have permit applications processed and permits issued (permits which are solid allocations of water and recognition of rights to use that water) when people who have surface and instream uses aren't under designation, are not field verified (so the Commission has no baseline data on what these uses and instream flows might be that they're supposed to protect), and there is no certificate of "reasonable and beneficial" water use. A declaration of water use is an application for certification. One should be able to obtain and use certification in playing off against water use permit applications for groundwater because it is acknowledged in the Code that a certificate does have some meaning and it is something that one should be presenting when getting into a dispute or even a legal battle over water.
At the very least there needs to be some kind of concurrent processing of water use permit applications and declared uses of surface waters. It should be done in a comprehensive way so that everything is on the table at once, even though the specific processes, approvals, and permits are different.

NHAC also supports and concurs with objections filed by Charles Reppun and windward Neighborhood Boards.

Mahalo,

David L. Martin, Water Claims Manager

pc: Honolulu Board of Water Supply
    Kahana Valley State Park
    Kualoa Ranch, Inc.
    Hanohano Enterprises, Inc.
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**Aquifer System: KOOLAULOA**
**ISLAND OF OAHU**

**Aquifer System: KOOLAULOA**

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67 Applications Totaling 67.429 mgd
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4 Permits Totaling 0.323
Available Allocation = 34.677

Exhibit 2
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**Note:** The table continues with similar entries for other aquifer systems and uses.
Aquifer System: KOOLAUOAA

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PENDING WATER USE PERMIT APPLICATIONS FIELD INVESTIGATION STATUS REPORT 12/01/93
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65 Applications
BWS PUMPAGE - PUNALUU WELLS III
WELL NOS. 3453-06,07

MONTHLY VALUES  12-MAV  REQUESTED AMOUNT

MONTH (Latest Data 9/93)
Well No. 3553-03,04,06 to 08
BWS PUMPAGE - PUNALUU WELLS II
WELL NOS. 3553-03 TO 08; 3554-03

MONTHLY VALUES

12-MAV

REQUESTED AMOUNT

MONTH (Latest Data 9/93)
BWS PUMPAGE - HAUULA WELL
Well No. 3655-01

MONTHLY VALUES  12-MAV  REQUESTED AMOUNT
CAMPBELL ESTATE PUMPAGE
MALAEKAHANA WELL (Well No. 3956-01)

MONTHLY VALUES  12-MAV  REQUESTED AMOUNT

Month (Latest Data 10/93)
CAMPBELL ESTATE PUMPAGE
PUMP 6 (Well No. 3957-07)

MONTHLY VALUES  12-MAV  REQUESTED AMOUNT

JUL 92  JAN 93  JUL 93
Month (Latest Data 10/93)
Well No. 4057-01
CAMPBELL ESTATE PUMPAGE
PUMP 1 (Well No. 4057-01)

MONTHLY VALUES  12-MAV  REQUESTED AMOUNT
CAMPBELL ESTATE PUMPAGE
PUMP 8 (Well No. 4057-06)

MONTHLY VALUES  12-MAV  REQUESTED AMOUNT

Month (Latest Data 4/93)
CAMPBELL ESTATE PUMPAGE
PUMP 12 (Well No. 4057-07)

MONTHLY VALUES
- 12-MAV
- REQUESTED AMOUNT

Pumpage (mgd)

Month (Latest Data 8/93)
BWS PUMPAGE - KAHUKU WELLS
Well Nos. 4057-15,16

MONTHLY VALUES  12-MAV  REQUESTED AMOUNT
Well No. 4100-01
BWS PUMPAGE - WAIALEE WELL II
Well No. 4101-08

MONTHLY VALUES  12-MAV  REQUESTED AMOUNT

Pumpage (mgd)

Month (Latest Data 9/93)

JAN 88  JAN 89  JAN 90  JAN 91  JAN 92  JAN 93
CAMPBELL ESTATE PUMPAGE
PUMP 15 ARMY (Well No. 4157-04)

MONTHLY VALUES - 12-MAV - REQUESTED AMOUNT

JAN 92          JAN 93

Month (Latest Data 9/93)
CAMPBELL ESTATE PUMPAGE
KAHUKE AIRBASE WELL (Well No. 4158-12)

MONTHLY VALUES — 12-MAV — REQUEST AMOUNT
October 14, 1993

The Honorable Keith W. Ahue
Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources

Dear Mr. Ahue:

Withdrawal of Objections

The Department of Hawaiian Home Lands has been in a position to raise objections to various applications for water use permits, particularly in Windward O'ahu, on the basis that water reservations were yet required to meet statutory obligations to Hawaiian home lands.

Please be advised that as the proposed water reservations in O'ahu and Moloka'i water management areas are finalized, our objections for this reason are thereby withdrawn.

Warmest aloha,

Hoaliku L. Drake, Chairman
Hawaiian Homes Commission

HLD:BH:ci/1608L.77
SEP 21 1993

MEMORANDUM

TO: Aquatic Resources
Forestry and Wildlife
Historic Preservation
Land Management
Natural Area Reserve System
Office of Conservation and Environmental Affairs
State Parks
Water and Land Development
Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
Water Use Permit Application
Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Campbell Estate for Well No. 4257-01. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 21, 1993 and September 28, 1993.

We would appreciate your review of the attached application and please return this form by October 12, 1993.

If you have any questions regarding this application, please contact Roy Hardy at [Redacted].

LN:ky
Attachments

Response: Contact person: Steve Tagoiwa Phone: 70365

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: [Signature] Date: 11/3/93
SEP 21 1993

MEMORANDUM

TO: Aquatic Resources
    Forestry and Wildlife
    Historic Preservation
    Land Management
    Natural Area Reserve System
    Office of Conservation and Environmental Affairs
    State Parks
    Water and Land Development
    Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
           Water Use Permit Application
           Koolauloa Ground Water Management Area, Oahu

               Transmitted for your review and comment is a copy of a water use permit
               application for Campbell Estate for Well No. 4257-02. Public notice of this application
               will be published in the Honolulu Star Bulletin issues of September 21, 1993 and

               We would appreciate your review of the attached application and please return
               this form by October 12, 1993.

               If you have any questions regarding this application, please contact Roy Hardy
               at ___________

LN:ky
Attachments

Response: Contact person: Steve Togawa Phoner
( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: ___________________________  Date: _____________
SEP 21 1993

MEMORANDUM

TO: Aquatic Resources
    Forestry and Wildlife
    Historic Preservation
    Land Management
    Natural Area Reserve System
    Office of Conservation and Environmental Affairs
    State Parks
    Water and Land Development
    Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
        Water Use Permit Application
        Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Campbell Estate for Well No. 4257-01. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 21, 1993 and September 28, 1993.

We would appreciate your review of the attached application and please return this form by October 12, 1993.

If you have any questions regarding this application, please contact Roy Hardy at ________________________________.

LN: ky
Attachments

Response: Contact person: ________________________________

☐ We have no comments
☐ We have no objections
☐ Comments attached
☐ Additional information requested
☐ Extended review period requested

Signature: MANABU TAGOMORI
Date: 10/12/93
SEP 21 1993

MEMORANDUM

TO: Aquatic Resources
    Forestry and Wildlife
    Historic Preservation
    Land Management
    Natural Area Reserve System
    Office of Conservation and Environmental Affairs
    State Parks
    Water and Land Development
    Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
          Water Use Permit Application
          Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Campbell Estate for Well No. 4257-02. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 21, 1993 and September 28, 1993.

We would appreciate your review of the attached application and please return this form by October 12, 1993.

If you have any questions regarding this application, please contact Roy Hardy at [redacted].

LN:ky
Attachments

Response: Contact person: __________________________ Phone: __________________________

☐ We have no comments
☐ We have no objections
☐ Comments attached
☐ Additional information requested
☐ Extended review period requested

Signed: [Redacted] Date: 10/12/93
October 11, 1993

The Honorable Keith W. Ahue, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources

Dear Mr. Ahue:

Water Use Permits

Thank you for the opportunity to respond to the following applications for water use within the Windward groundwater management area:

Kahuku-Campbell: (4157-04, 08, 10, 11;
                      4257-01, 02;
                      4258-09)

Laie/Hauula-Zion: (3554-01, 02;
                    3654-03;
                    3755-04, 06;
                    3855-04;
                    3856-04, 07;
                    3956-05)

These applications for existing wells appear to be for continuing uses; they do not affect Hawaiian home lands and we have no objections.

Warmest aloha,

Hoalikulani L. Drake, Chairman
Hawaiian Homes Commission
State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Commission on Water Resource Management
Honolulu, Hawaii

SEP 21 1993
MEMORANDUM

TO:  
- Aquatic Resources
- Forestry and Wildlife
- Historic Preservation
- Land Management
- Natural Area Reserve System
- Office of Conservation and Environmental Affairs
- State Parks
- Water and Land Development
- Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
Water Use Permit Application
Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Campbell Estate for Well No. 4257-01. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 21, 1993 and September 28, 1993.

We would appreciate your review of the attached application and please return this form by October 12, 1993.

If you have any questions regarding this application, please contact Roy Hardy at [redacted].

LN:ky
Attachments

Response: Contact person: ____________________________ Phone: ____________________________

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: [Signature] Date: 10/6/93
State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Commission on Water Resource Management
Honolulu, Hawaii

SEP 21 1993

MEMORANDUM

TO:          
             Aquatic Resources
             Forestry and Wildlife
             Historic Preservation
             Land Management
             Natural Area Reserve System
             Office of Conservation and Environmental Affairs
             State Parks
             Water and Land Development
             Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
         Water Use Permit Application
         Koolauloa Ground Water Management Area, Oahu

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If you have any questions regarding this application, please contact Roy Hardy at [redacted]

LN:ky
Attachments

Response: Contact person: __________________________ Phone: __________________________

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: __________________________ Date: 10/26/93
MEMORANDUM

TO: Mrs. Hoaliku L. Drake, Director
    Department of Hawaiian Home Lands

Dr. John C. Lewin, M.D., Director
    Department of Health

Mr. Clayton H. W. Hee, Chairperson
    Office of Hawaiian Affairs

Mr. Kazu Hayashida, Manager & Chief Engineer
    Honolulu Board of Water Supply

FROM: Keith W. Ahue, Chairperson
    Commission on Water Resource Management

SUBJECT: Water Use Permit Application
    Koolauloa Ground Water Management Area, Oahu

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We would appreciate your review of the attached application and please return this form by October 12, 1993.

If you have any questions regarding this application, please contact Roy Hardy
at .

Response: Contact person: Herbert H. Minakami
Phone: 

☐ We have no comments
☐ We have no objections
☐ Comments attached
☐ Additional information requested
☐ Extended review period requested

Signed: Kazu Hayashida
Manager and Chief Engineer

Date: 10/5/93
Mr. Keith Ahue, Chairperson  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  

Dear Mr. Ahue:  

Subject: Your Letters of September 21 and 24, 1993 Regarding Water Use Permit Applications for Various Applicants  

We have no objections to issuance of water use permits for the following:  

1. Department of Land and Natural Resources Exploratory Wells in Mokuleia, Nos. 3309-01 and 3309-02  
2. Gentry Caprock Wells, Nos. 2001-04 and 2001-05  
3. Casey Well, No. 3453-08  
4. Hawaii State Hospital Well, No. 2448-01  
5. Montgomery Well, No. 2751-08  

We have no objections to issuance of water use permits for these wells.  

6. Zions Securities Corporation Wells, Nos. 3554-01 and 02, 3654-03, 3755-04 and 06, 3855-04, 3956-04 and 07, 3956-05  

We have no objections to the issuance of permits for existing uses for these wells. We recommend, however, a serious review of the water use from well No. 3755-06 to irrigate 51 acres of grass to determine whether the irrigation's needs can be met with an alternative source such as caprock water.
7. Campbell Estate Kahuku Caprock Wells, Nos. 4157-04, 4157-08, 4157-10, 4157-11, 4257-01 and 4257-02

We have no objections to the issuance of water use permits for these caprock wells used for aquaculture.

We return the forms with appropriate boxes marked.

Very truly yours,

KAZU HAYASHIDA
Manager and Chief Engineer

Enclosure
MEMORANDUM

TO: 
Mrs. Hoaliku L. Drake, Director
Department of Hawaiian Home Lands

Dr. John C. Lewin, M.D., Director
Department of Health

Mr. Clayton H. W. Hee, Chairperson
Office of Hawaiian Affairs

Mr. Kazu Hayashida, Manager & Chief Engineer
Honolulu Board of Water Supply

FROM: Keith W. Ahue, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Application
Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Campbell Estate for Well No. 4257-01. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 21, 1993 and September 28, 1993.

We would appreciate your review of the attached application and please return this form by October 12, 1993.

If you have any questions regarding this application, please contact Roy Hardy at [contact information redacted].

LN:ky
Attachments

Response: Contact person: Herbert H. Minakami Phone: [redacted]

We have no comments
We have no objections
Comments attached
Additional information requested
Extended review period requested

Signed: [Signature]
Kazu Hayashida
Manager and Chief Engineer
<table>
<thead>
<tr>
<th>TO:</th>
<th>INIT:</th>
<th>PLEASE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>G. Matsumoto</td>
<td>F. Ching</td>
<td>See Me</td>
</tr>
<tr>
<td>E. Hirano</td>
<td>L. Mizuno</td>
<td>Call</td>
</tr>
<tr>
<td>P. Haraguchi</td>
<td>G. Bauer</td>
<td>Review &amp; Comment</td>
</tr>
<tr>
<td>N. Fujii</td>
<td>K. Yoda</td>
<td>Take Action</td>
</tr>
<tr>
<td>R. LOUI</td>
<td>S. Kokubun</td>
<td>Investigate &amp; Report</td>
</tr>
<tr>
<td>E. SAKODAI</td>
<td>Y. SHIROMA</td>
<td>Draft Reply</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acknowledge Receipt</td>
</tr>
<tr>
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<td></td>
<td>Type Final</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xerox copies</td>
</tr>
</tbody>
</table>

**FOR YOUR:**
- Approval
- Signature
- Information

DATE: 9/6/93
FILE IN: 4257 01 02

Copies for files
I think original has been filed.
THE ESTATE OF JAMES CAMPBELL

September 22, 1993

Mr. Neal Fujii
State of Hawaii
Department of Land and Natural Resources
Commission on Water Resource Management

Dear Mr. Fujii:

Water Use Permit Applications For
Wells Listed Below and Status

1. Well 3957-03, Pump 3A

   This well is one of six wells located at the old plantation Battery No. 3. Well has not
   been in use for years, but will be rehabilitated for aquaculture operation to commence
   in next three to six months.

2. Well 4100-02, Kawela

   This well has not operated for a number of years. This well is in the Waialee
   Aquifer. We plan to rehabilitate this well sometime in 1994 for agriculture
   operations.

3. Well 4157-04, Pump 15

   This well services the Air Force and Amorient Aquaculture prawn ponds. Water use
   is 1,100,000 gallons per day. Amorient may not have filed reports for last 12
   months.

4. Well 4157-05, USFW 1
   Well 4157-06, USFW 2
   Well 4157-07, USFW 3

   These wells are operated by U. S. Fish & Wildlife Service for the wildlife refuge at
   Kahuku. We understand they were filling monthly water use reports.
Mr. Neal Fujii  
September 22, 1993  
Page 2

5. Well 4157-09, IKKO (Lot J)  
   This well is the primary source for salt water for all of Amorient Aquafarms shrimp  
   ponds on the Kamehameha Highway at Kahuku. Daily production is 5,000,000  
   gallons per day. We understood Amorient was filing monthly water use reports on  
   this well.

6. Well 4157-11, Pacific Sea Farms  
   This well is not in use due to the financial difficulties of Pacific Sea Farms. The well  
   may be rehabilitated if a new aquaculture tenant takes over this operation.

7. Wells 4158-01 to 11, Pump 5  
   This old plantation pump station has been abandoned for years. The state is taking  
   over this area as part of a condemnation procedure.

8. Well 4159-02, Punamano Pump 2  
   This is the Air Force operated well using about 1,250 gallon per day. We understood  
   the Air Force was making monthly water use reports.

9. Well 4257-01, Pacific Sea Farms  
   Well 4257-02, Pacific Sea Farms  
   These are the main supply wells for what was the Pacific Sea Farms shrimp  
   operation. Well 4257-01 supplied about 5,000,000 gallons per day and Well 4257-02  
   is a back-up well. We understood Pacific Sea Farms was making monthly water use  
   reports.

10. Well 4258-04, RCA Building  
    This well supplies salt water to the Amorient hatchery at the RCA Building at  
    Kahuku. Well is used only when hatchery is in operation and supplies about 130,000  
    gallons per day at those times. Again we understand monthly water use reports were  
    being made.
Mr. Neal Fujii  
September 22, 1993  
Page 3

11. Well 4258-09, Pacific Sea Farms

This well has not been in use by Pacific Sea Farms. A new aquaculture tenant may want to rehabilitate this well for future aquaculture operations.

Please give me a call if you have any questions at [Redacted].

Sincerely,

James E. Menor  
Administrator,  
Natural Resources

edbg:01045100\K10066
MEMORANDUM

TO: Rae M. Loui, Deputy Director  
Commission on Water Resource Management

FROM: Don Hibbard, Administrator  
Historic Preservation Division

SUBJECT: Application for Water Use Permit, Ko‘olauloa Ground Water  
Management Area, O‘ahu  
Campbell Estate for Well Nos.:  
4157-08,-10,-11; 4257-01,-02  
Kahuku, Ko‘olauloa, O‘ahu  
TMK 5-6-02:009

Thank you for the opportunity to review these projects. The applicant proposes to use water from existing sources. Since an approved permit will not authorize any ground disturbing activities we believe that there will be "no effect" on historic sites.

EJ:jt
The Honorable Keith W. Ahue  
State of Hawaii  
Department of Land and Natural Resources  
Commission of Water Resource Management  

Dear Mr. Ahue:

We have received the following water permit applications. Thank you for the opportunity to review these applications:

<table>
<thead>
<tr>
<th>Applicant Name</th>
<th>Water Mgt. Area</th>
<th>Amount Requested (gpd)</th>
<th>Tax Map</th>
<th>Well Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Campbell</td>
<td>Koolauloa</td>
<td>3,000,000</td>
<td>5-6-02:9</td>
<td>4157-08</td>
</tr>
<tr>
<td>James Campbell</td>
<td>Koolauloa</td>
<td>3,000,000</td>
<td>5-6-02:9</td>
<td>4157-10</td>
</tr>
<tr>
<td>James Campbell</td>
<td>Koolauloa</td>
<td>3,700,000</td>
<td>5-6-02:0</td>
<td>4157-11</td>
</tr>
<tr>
<td>James Campbell</td>
<td>Koolauloa</td>
<td>5,200,000</td>
<td>5-6-02:9</td>
<td>4257-01</td>
</tr>
<tr>
<td>James Campbell</td>
<td>Koolauloa</td>
<td>3,700,000</td>
<td>5-6-02:9</td>
<td>4257-02</td>
</tr>
</tbody>
</table>

We have a serious concern regarding five separate water application permits filled by the Estate of James Campbell. The quantities of water requested amount to 18,600,000 gpd, roughly 53 percent of the estimated sustainable yield for the Koolauloa aquifer.

We have no way to know how much water from the Koolauloa aquifer has already been allocated to other users and how the Campbell's water request would impact the remaining sustainable yield. But our basic concern is that the allocation of such large amounts of water to a single user may preclude equal usage by other users.
In granting water permits, the Commission must make provisions to secure water allocations for Native Hawaiian users. As long as these reservations are addressed, we have no objections in granting water permits to the above applicant.

Sincerely yours,

Clayton H.W. Hee
Chairperson
MEMORANDUM

TO: Mrs. Hoaliku L. Drake, Director
Department of Hawaiian Home Lands
Dr. John C. Lewin, M.D., Director
Department of Health
Mr. Clayton H. W. Hee, Chairperson
Office of Hawaiian Affairs
Mr. Kazu Hayashida, Manager & Chief Engineer
Honolulu Board of Water Supply

FROM: Keith W. Ahue, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Application
Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Campbell Estate for Well No. 4257-01. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 21, 1993 and September 28, 1993.

We would appreciate your review of the attached application and please return this form by October 12, 1993.

If you have any questions regarding this application, please contact Roy Hardy

Response:

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: [Signature]
Date: 09/29/93
MEMORANDUM

TO: Mrs. Hoaliku L. Drake, Director
Department of Hawaiian Home Lands

Dr. John C. Lewin, M.D., Director
Department of Health

Mr. Clayton H. W. Hee, Chairperson
Office of Hawaiian Affairs

Mr. Kazu Hayashida, Manager & Chief Engineer
Honolulu Board of Water Supply

FROM: Keith W. Ahue, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Application
Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Campbell Estate for Well No. 4257-02. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 21, 1993 and September 28, 1993.

We would appreciate your review of the attached application and please return this form by October 12, 1993.

If you have any questions regarding this application, please contact Roy Hardy at [redacted].

Response: Contact person: Luis A. Manrique
Phone: [redacted]

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: [redacted] Date: 09/29/93
Ms. Donna Goth  
Campbell Estate

Dear Ms. Goth:

Application for a Water Use Permit  
Koolauloa Ground Water Management Area, Oahu

In reference to our letter of correspondence, dated August 31, 1993, acknowledging receipt of your completed water use permit applications for Well Nos. 4257-01 & 02, a correction to the findings of the field investigation is in order. During the June 8, 1993 field investigation of Well No. 4257-01, it was determined that, at 75% capacity, this source can supply a maximum of 5,040,000 gallons per day (gpd), rather than 720,000 gpd as was erroneously stated in our last correspondence letter to you.

As such, we have reevaluated your existing and future ground water requests. Your request for an allocation of 5,200,000 gpd from this source exceeds your estimate of 1,500,000 gpd as your actual existing water use. Therefore, we are assuming that the difference between the requested allocation and your actual water use, 3,700,000 gpd, is for future expansion of your aquaculture operations.

If you have any questions, please contact Roy Hardy at [redacted] or Lenore Nakama at [redacted]

Sincerely,

[Signature]

RAE M. LOUI  
Deputy Director

LN:fc
Ms. Donna Goth
Campbell Estate

Dear Ms. Goth:

Application for a Water Use Permit
Koolauloa Ground Water Management Area, Oahu

We acknowledge receipt, on June 23, 1993, of your completed water use permit applications for Well Nos. 4257-01 & 02. You can expect your applications to be processed within ninety (90) days from the date of receipt unless there are objections to your applications. We will be sending you a copy of the public notice for your applications and any further information regarding the status of your applications.

Our June 8, 1993 field investigation of your proposed source and use sites indicated that the maximum daily pumping capacity at Well No. 4257-01 is 720,000 gallons, and that Well No. 4257-02 is to be used as a backup supply. Please justify your requests for allocations of 5.2 and 3.7 million gallons per day, respectively, from these two sources.

If you have any questions, please contact Roy Hardy or Lenore Nakama at

Sincerely,

RAE M. LOUI
Deputy Director

4257-01
3,500 gpm
cap gpd
5,040,000

4500 gpm
capacity gpd
6,480,000
Honorable Frank F. Fasi, Mayor
City & County of Honolulu
City Hall

Attn: Mr. Jeremy Harris

Dear Mayor Fasi:

Notice of an Application for a Water Use Permit
Koolauloa Ground Water Management Area, Oahu

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 Campbell Estate for Well No. 4257-01, which will be published in the Honolulu Star Bulletin.

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.

Very truly yours,

KEITH W. AHUE

LN:ky
Enc.
Honorable Frank F. Fasi, Mayor  
City & County of Honolulu  
City Hall

Attn: Mr. Jeremy Harris  

Dear Mayor Fasi:

Notice of an Application for a Water Use Permit  
Koolauloa Ground Water Management Area, Oahu

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 Campbell Estate for Well No. 4257-02, which will be published in the Honolulu Star Bulletin.

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.

Very truly yours,

[Signature]
KEITH W. AHUE  
Chairperson

LN:ky  
Enc.
SEP 24 1993

MEMORANDUM

TO: Mrs. Hoaliku L. Drake, Director
    Department of Hawaiian Home Lands

         Dr. John C. Lewin, M.D., Director
         Department of Health

         Mr. Clayton H. W. Hee, Chairperson
         Office of Hawaiian Affairs

         Mr. Kazu Hayashida, Manager & Chief Engineer
         Honolulu Board of Water Supply

FROM: Keith W. Ahue, Chairperson
      Commission on Water Resource Management

SUBJECT: Water Use Permit Application
         Koolauloa Ground Water Management Area, Oahu

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We would appreciate your review of the attached application and please return this form by October 12, 1993.

If you have any questions regarding this application, please contact Roy Hardy at [Contact Information].

LN:ky
Attachments

Response: Contact person: _______________ Phone: ____________

   ( ) We have no comments
   ( ) We have no objections
   ( ) Comments attached
   ( ) Additional information requested
   ( ) Extended review period requested

Signed: ___________________________ Date: ____________
MEMORANDUM

TO: Mrs. Hoaliku L. Drake, Director
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   Commission on Water Resource Management

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MEMORANDUM

TO:

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments

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If you have any questions regarding this application, please contact Roy Hardy at

Response:

( ) We have no comments
( ) We have no objections
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Signed:

Date:

Attachments
SEP 21 1993

MEMORANDUM

TO: Aquatic Resources
Forestry and Wildlife
Historic Preservation
Land Management
Natural Area Reserve System
Office of Conservation and Environmental Affairs
State Parks
Water and Land Development
Other Interested Parties

FROM: Rae M. Loui, Deputy Director

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DOFAW HAS NO COMMENTS OR OBJECTIONS TO THE PROPOSED REQUEST.

Response: Contact person: __________________________ Phone: __________

(✓) We have no comments
(✓) We have no objections
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( ) Additional information requested
( ) Extended review period requested

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MEMORANDUM

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Forestry and Wildlife
Historic Preservation
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(✓) We have no objections
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MEMORANDUM

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    Forestry and Wildlife
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          Koolauloa Ground Water Management Area, Oahu

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Response: Contact person: __________________ Phone: __________________

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☐ We have no objections
☐ Comments attached
☐ Additional information requested
☐ Extended review period requested

Signed: __________________ Date: 9/27/93

LN:ky
Attachments
SEP 21 1993

MEMORANDUM

TO: Aquatic Resources
Forestry and Wildlife
Historic Preservation
Land Management
Natural Area Reserve System
Office of Conservation and Environmental Affairs
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Water and Land Development
Other Interested Parties

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LN:ky
Attachments

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☐ We have no comments
☐ We have no objections
☐ Comments attached
☐ Additional information requested
☐ Extended review period requested

Signed: _________________________ Date: ____________
SEP 21 1993

MEMORANDUM

TO: Aquatic Resources
    Forestry and Wildlife
    Historic Preservation
    Land Management
    Natural Area Reserve System
    Office of Conservation and Environmental Affairs
    State Parks
    Water and Land Development
    Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
          Water Use Permit Application
          Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Campbell Estate for Well No. 4257-02. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 21, 1993 and September 28, 1993.

We would appreciate your review of the attached application and please return this form by October 12, 1993.

If you have any questions regarding this application, please contact Roy Hardy at [redacted].

LN:ky
Attachments

Response: Contact person: __________________ Phone: __________

(✓) We have no comments
(✓) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: __________________ Date: _________

DOFAW HAS NO COMMENTS OR OBJECTIONS TO THE PROPOSED REQUEST.
Ms. Rae M. Loui  
Deputy Director  
State of Hawaii  
Department of Land and Natural Resources  
Commission on Water Resource Management

Dear Ms. Loui:

Application for Water Use Permit  
Wells 4257-01 and 02

Wells 4257-01 and 02 have been operated by Pacific Sea Farms. They indicated to us the amount of salt water these wells supply to their shrimp operation.

Pacific Sea Farms is in financial difficulty, but they had planned on expanding their shrimp raceway operations and thus the need for additional salt water.

Please give me a call if you need additional information at __________.

Sincerely,

[Signature]

James E. Menor  
Administrator,  
Natural Resources
Ms. Donna Goth
Campbell Estate

Dear Ms. Goth:

Enclosed is a copy of the public notice for your water use permit applications for Well Nos. 4157-08, 10, & 11 and 4257-01 & 02 which will be published in the Honolulu Star Bulletin issues of September 21, 1993 and September 28, 1993.

Please be aware that there may be objections to your applications. 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 applications 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 Roy Hardy at [redacted] or Lenore Nakama at [redacted]

Sincerely,

[Signature]

RAE M. LOUI
Deputy Director

LN:fc
Encl.
PUBLIC NOTICE

Applications for Water Use Permit
Ground Water Management Areas

Applications for the following water use permits have been received and are hereby made public in accordance with Department of Land and Natural Resources Administrative Rules 13-171, "Designation and Regulation of Water Management Areas."

Haw Mar Ent Ogo (Well No. 4157-08)
Applicant: Campbell Estate
Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Haw Mar Ent Ogo Well, Well No. 4157-08, at Kahuku, Oahu at Tax Map Key: 5-6-2:9
Quantity Requested: 3,000,000 gallons per day.
Existing Water Use: Saltwater aquaculture
Place of Water Use: Kahuku at Tax Map Key: 5-6-2:9

Haw Mar Ent Clam (Well No. 4157-10)
Applicant: Campbell Estate
Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Haw Mar Ent Clam Well, Well No. 4157-10, at Kahuku, Oahu at Tax Map Key: 5-6-2:9
Quantity Requested: 3,000,000 gallons per day.
Existing Water Use: Saltwater aquaculture
Place of Water Use: Kahuku at Tax Map Key: 5-6-2:9

Pacific Sea 1 (Well No. 4157-11)
Applicant: Campbell Estate
Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Pacific Sea 1 Well, Well No. 4157-11, at Kahuku, Oahu at Tax Map Key: 5-6-2:9
Quantity Requested: 3,700,000 gallons per day.
New Water Use: Saltwater aquaculture
Place of Water Use: Kahuku- RCA Building at Tax Map Key: 5-6-2:9

Pacific Sea 2 (Well No. 4257-01)
Applicant: Campbell Estate
Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Pacific Sea 2 Well, Well No. 4257-01, at Kahuku, Oahu at Tax Map Key: 5-6-2:9
Quantity Requested: 5,200,000 gallons per day.
Existing Water Use: Saltwater aquaculture
Place of Water Use: Kahuku at Tax Map Key: 5-6-2:9

Pacific Sea 3 (Well No. 4257-02)
Applicant: Campbell Estate

Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Pacific Sea 3 Well, Well No. 4257-02, at Kahuku, Oahu at Tax Map Key: 5-6-2:9
Quantity Requested: 3,700,000 gallons per day.
Existing Water Use: Saltwater aquaculture
Place of Water Use: Kahuku at Tax Map Key: 5-6-2:9

Written objections or comments on the applications for water use permits 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; (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 permits. Send written objections by October 12, 1993 to 1) the Commission on Water Resource Management, [redacted] and 2) a copy of the objection letter(s) to the applicant at the above address.

COMMISSION ON WATER RESOURCE MANAGEMENT

[Signature]

RAE M. LOUI for
KEITH W. AHUE
Chairperson

Dated: SEP 17 1993

SEP 21 1993

MEMORANDUM

TO: Aquatic Resources
    Forestry and Wildlife
    Historic Preservation
    Land Management
    Natural Area Reserve System
    Office of Conservation and Environmental Affairs
    State Parks
    Water and Land Development
    Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
          Water Use Permit Application
          Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Campbell Estate for Well No. 4257-01. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 21, 1993 and September 28, 1993.

We would appreciate your review of the attached application and please return this form by October 12, 1993.

If you have any questions regarding this application, please contact Roy Hardy at [redacted].

LN:ky

Attachments

Response: Contact person: ___________________________ Phone: ___________

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: ___________________________ Date: ___________
SEP 21 1993

MEMORANDUM

TO: Aquatic Resources
     Forestry and Wildlife
     Historic Preservation
     Land Management
     Natural Area Reserve System
     Office of Conservation and Environmental Affairs
     State Parks
     Water and Land Development
     Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
Water Use Permit Application
Koolauloa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Campbell Estate for Well No. 4257-02. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 21, 1993 and September 28, 1993.

We would appreciate your review of the attached application and please return this form by October 12, 1993.

If you have any questions regarding this application, please contact Roy Hardy at [redacted]

LN:ky
Attachments

Response: Contact person: ____________________ Phone: __________

( ) We have no comments
( ) We have no objections
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Signed: ____________________ Date: __________
SEP 21 1993

MEMORANDUM

TO: Aquatic Resources
    Forestry and Wildlife
    Historic Preservation
    Land Management
    Natural Area Reserve System
    Office of Conservation and Environmental Affairs
    State Parks
    Water and Land Development
    Other Interested Parties

FROM: Rae M. Loui, Deputy Director

SUBJECT: Request for Comments
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Transmitted for your review and comment is a copy of a water use permit application for Campbell Estate for Well No. 4257-01. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 21, 1993 and September 28, 1993.

We would appreciate your review of the attached application and please return this form by October 12, 1993.

If you have any questions regarding this application, please contact Roy Hardy at [contact information].

LN:ky
Attachments

Response: Contact person: __________________________ Phone: __________________________

☐ We have no comments
☐ We have no objections
☐ Comments attached
☐ Additional information requested
☐ Extended review period requested

Signed: __________________________ Date: 09/27/93
Ms. Donna Goth  
Campbell Estate

Dear Ms. Goth:

Application for a Water Use Permit  
Koolauloa Ground Water Management Area, Oahu

We acknowledge receipt, on June 23, 1993, of your completed water use permit applications for Well Nos. 4257-01 & 02. You can expect your applications to be processed within ninety (90) days from the date of receipt unless there are objections to your applications. We will be sending you a copy of the public notice for your applications and any further information regarding the status of your applications.

Our June 8, 1993 field investigation of your proposed source and use sites indicated that the maximum daily pumping capacity at Well No. 4257-01 is 720,000 gallons, and that Well No. 4257-02 is to be used as a backup supply. Please justify your requests for allocations of 5.2 and 3.7 million gallons per day, respectively, from these two sources.

If you have any questions, please contact Roy Hardy at [Contact Information]

Sincerely,

[Signature]

RAE M. LOUI  
Deputy Director

LN:ko
TO THE ORDER OF

Department of Land & Natural Resources
Commission on Water Resource Management

Twenty Five DOLLARS

VOID AFTER 90 DAYS

TO THE ORDER OF

Department of Land & Natural Resources
Commission on Water Resource Management

Twenty Five DOLLARS

VOID AFTER 90 DAYS

To Kay 7/16/93
Dear Mr. Hardy:

Application for Water Use Permits
Salt Water

Enclosed are 18 applications for water use permits for the following wells, along with a $25 filing fee for each application.

- Well 4258-08
- Well 4258-14
- Well 4258-12
- Well 4258-13
- Well 4258-15
- Well 4258-16
- Well 4258-17
- Well 4157-09

- Well 4258-05
- Well 4258-06
- Well 4258-07
- Well 4258-01
- Well 4258-02
- Well 4258-12
- Well 4157-11
- Well 4258-10

If you need additional information, please give me a call at 541-2141.

Sincerely,

James E. Menor
Administrator,
Natural Resources
**APPLICATION FOR WATER USE PERMIT**

- **Ground Water** or **Surface Water**

### Instructions:
- Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Dept of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at...

#### 1. Applicanl (a) **APPLICANT**

- Firm/Name: The Estate of James Campbell
- Contact Person: Donna Goth

#### 2. Water Management Area:

- **Anonymous**
- **Anonymous**

#### 3. Existing Source Name and State Number:

- **Anonymous**

#### 4. Source Location:

- Address: Kahuku
- **Anonymous**

#### 5. Source Type (check one):

- **Anonymous**

#### 6. Method of Taking Water (check one):

- **Anonymous**

#### 7. Location of Proposed Water Use:

- **Anonymous**

#### 8. Quantity of Water Requested:

- **Anonymous**

#### 9. Method of Measurement:

- **Anonymous**

#### 10. Quality of Water Requested:

- **Anonymous**

#### 11. Proposed Use:

- **Anonymous**

#### 12. Number and Type of Units to Be Served (explain):

- **Anonymous**

#### 13. Total Acres Proposed for Irrigation and Type of Crop:

- **Anonymous**

#### 14. Proposed Time of Water Withdrawal or Diversion:

- **Anonymous**

#### 15. Applicant Must Briefly Describe Following Potential Restrictions on Use:

- **Anonymous**

#### 16. Remarks, Explanations:

- **Anonymous**

**NOTE:** Signing below indicates that the applicant understands that, if a water use permit is granted by the Commission on Water Resource Management, a permit is subject to prior existing permitted uses, changes in sustainable yields and Interim Flow Standards, reserved uses as defined by the Commission, and Hawaiian Home Lands Uses. In addition, applicant understands that, upon permit approval, a water shortage plan must be submitted should the Commission require one.

**Applicant (print):** The Estate of James Campbell

**Signature:**

**Date:** 6/17/93

**Landowner (print):** The Estate of James Campbell

**Signature:**

**Date:** 6/17/93
APPLICATION FOR WATER USE PERMIT

**Ground Water** or **Surface Water**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
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<tbody>
<tr>
<td>(a) APPLICANT</td>
<td>The Estate of James Campbell</td>
</tr>
<tr>
<td>Firm/Name</td>
<td>The Estate of James Campbell</td>
</tr>
<tr>
<td>Contact Person</td>
<td>Donna Sath</td>
</tr>
<tr>
<td>Address</td>
<td>Windward Oahu/Koolauloas</td>
</tr>
<tr>
<td>(b) LANDOWNER</td>
<td>The Estate of James Campbell</td>
</tr>
<tr>
<td>Firm/Name</td>
<td>The Estate of James Campbell</td>
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<tr>
<td>Contact Person</td>
<td>Donna Sath</td>
</tr>
<tr>
<td>Address</td>
<td>Windward Oahu/Koolauloas</td>
</tr>
</tbody>
</table>

2. WATER MANAGEMENT AREA: Windward Oahu/Koolauloas

3. (a) EXISTING SOURCE NAME AND STATE NUMBER: Well No. 4257-02

4. SOURCE LOCATION: Address: Kahuku, Tax Map Key: 5-6-02:9

5. SOURCE TYPE (check one): Stream, Dike-confined, Perched, Caprock

6. METHOD OF TAKING WATER (check one): Artesian Flow, Well & Pump, Diverted Surface Flow

7. LOCATION OF PROPOSED WATER USE: (if possible, show on same maps as source location. Otherwise, attach similar maps)
   - Address: Kahuku
   - Land Use District (check one): Urban, Agriculture, Conservation, Rural
   - County Zoning (describe): A-2

8. QUANTITY OF WATER REQUESTED: 3,700,000 gallons per day

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

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

11. PROPOSED USE: Municipal (including hotels, stores, etc.), Domestic (individual, noncommercial, etc.), Irrigation, Industrial, Military, Other (explain)

12. NUMBER AND TYPE OF UNITS TO BE SERVED (explain): Aquaculture

13. TOTAL ACRES PROPOSED FOR IRRIGATION AND TYPE OF CROP: n/a, shrimp

14. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION: 24 hours per day

15. APPLICANT MUST BRIEFLY DESCRIBE FOLLOWING POTENTIAL RESTRICTIONS ON USE:
   - Impact on Sustainable yield (?): Unknown
   - Instream Flow Standards affected (?): None
   - Hawaiian Home Land uses affected (?): None
   - Other existing legal uses affected (?): None

16. REMARKS, EXPLANATIONS:

   (If more space is needed, continue on back side)

---

**Signature**

Applicant (print): The Estate of James Campbell

Landowner (print): The Estate of James Campbell

For Official Use Only:

Date Received: 
Date Approved: 

Notice Dates:

Public Mayor SBS Mail List Bulletin Public Hearing

NOTE: Signing below indicates that the applicant understands that a permit is subject to prior existing permitted uses, changes in sustainable yield and instream flow standards, reserved use as defined by the Commission, and Hawaiian Home Lands future uses. In addition, applicant understands that, upon permit approval, a water shortage plan must be submitted should the Commission require one.
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

FIELD MEMORANDUM

FILE REFS.: CAMPBELL ESTATE and PAC SEAFARMS

Inspected: June 8, 1993

SOURCES: Five salt water wells: 4257-01 with a 75 hp pump (capacity 3500 gpm) used in the cultivation of salt water shrimp, experimental mahimahi and oyster, clam and mollusk cultivation on a 2-1/2 (6 acre) hectare site. Mr. Utne reported that they anticipate having 50% or 3 acres in use in the near future. Well 4257-02 has as 100 hp pump (capacity 4500 gpm) that is used as a backup pump. Wells 4157-11, 4258-09 and 4258-10 are unused wells without pumps installed on them.

PRESENT: Mr. Amund Utne, President, Pacific Sea Farms, Inc.
Susan Swanson, CWRM

LOCATION: Kahuku, Oahu

FIELD NOTES: I met with Mr. Utne on June 8, 1993 at the Pacific Sea Farms facility. The access road is on the makai side, .1 mile west of Tanaka Store on Kam Hwy, outside of Kahuku. Mr. Utne showed me their five wells and explained how they were using the salt water. I had already inspected unused wells 4258-09 and 10 on May 28 & June 4, 1993. I had been waiting for Mr. Utne to return from a trip so I could inspect Pacific Sea Foods facilities with the other three wells.

This facility expects to utilize 50% of their 2-1/2 hectare or 6 acre facility in the near future. They are experimenting with growing mahimahi, oysters, clams and mullet; all on a small scale.

Pacific Sea Farms uses well 4257-01 as their primary salt water source. The system is automated so they were unsure how much water they were using. Their estimate was 1.5 mgd. Their water use declaration state that the pump on 4257-01 has a capacity of 3,500 gpm. I called Roscoe Moss, Inc. and confirmed that the capacities of these pumps was approximately correct. If the pump were operating 24 hours/day, it could pump 6,480,000 gallons per day. The automated equipment was pumping at 75% capacity during the inspection. Neither of the two pumps had meters. The ID # on well 4257-01 read 9403332-954. Campbell Estate’s GWMZ permit application requested 5,200,000 gpd of salt water from this well.

The ID # on the 100 hp National pump on well 4257-02 read "9403334-959. The pump on 4257-02 has a capacity of 4,500 gpm and could pump 5,040,000 gallons per day. This well is used as a backup well as an alternative to the 75 hp pump on 4157-01 and to keep the pump in good maintenance. The motors were US Electric brand. These pumps are exposed to the environment, ie not in a pumphouse. Campbell Estate has requested 3,700,000 gpd from this well.

Well 4157-11 has a 15" diameter casing, no pump, no meter. It was located near the shrimp raceways and is exposed to the environment. Campbell Estate’s GWMZ permit application has requested 3,700,000 gpd from this well.
Wells 4258-09 & 10 are located in pumphouses some distance from the Pacific Sea Farms facility. There are no pumps on these wells and no meters present. Campbell Estate's GWMZ permit application has requested 2,000,000 and 5,000,000 gpd from these wells.

Pacific Sea Farms facility is entirely covered to prevent contamination and loss by birds. The cultivation area is restricted, so I did not enter the covered raceways. There are several other small buildings where they are experimenting with other types of seafood cultivation.

Enclosed is a photo taken by DLNR's Aquaculture Development Branch with several aerial photographs. Also attached are photographs taken during the inspection, a USGS quad map, tax map key and other background information available.
FIELD INSPECTION INFORMATION CHECKLIST

PART I: USE OF WATER

GWMZ Applicant: CAMPBELL ESTATE

Campbell Estate's GWMZ permit application requested 5,200,000 gpd of salt water.

The water use declaration states that the pump capacity is 3,500. I verified the approximate capacity with one of the salepeople at Roscoe Moss, Inc. which modified the pipeline. (Operating 24 hours/day, this pump would be able to pump 5,040,000 gallons per day.)

Water Use Decl. File Ref. (If any): PAC SEAFARMS

State Well 4257-01  Pac Sea Farms #1

1. Tax Map Key where the water is used: TMK: 5-6-2:9
   Does the declarant own this land? Campbell Estate owns the land.

2. What is the water used for? cultivation of salt water shrimp.

3. Is the quantity of water use being measured? NO

4. If this person takes from a multi-user pipe or ditch system? NO

PART II: WATER SOURCE  State Well #4257-01  Name: Pacific Sea Farms #1

1. Where does the water come from/what kind of source is this? 15" diameter cased well with 75 hp pump

2. Show the source location on maps, determine latitude and longitude, and document the nature of source development by measurements, sketches, and photographs.
   How is the water taken? 75 hp pump on automated system. What is the capacity for taking (gpm)? 3,500 gpm
   How often is it taken (used)? pump is operating at 75% capacity. The system is automated, so as water is needed, the pump supplies it.

3. Tax Map Key at the source: TMK: 5-6-2:9
   Determine declarant's relation to source.

   Does the declarant:
   1) Operate and maintain the source? Pacific Sea Farms operates the well.
   2) Own the land at the source? Campbell Estate owns the land the source is on.
   3) Use the water from this source? Pacific Sea Farms uses the well.
   4) Own the land where the water is being used? Campbell Estate owns the land.

4. Does any one else also use water from this source? NO

Verified by Susan K. Swanson  Inspection Date: June 8, 1993
FIELD INSPECTION INFORMATION CHECKLIST

PART I: USE OF WATER

GWMZ Applicant: CAMPBELL ESTATE

The water use declaration states the capacity of the 100 hp pump at 4,500 gpm. I verified the approximate capacity with one of the salepeople at Roscoe Moss, Inc. which modified the pipeline. Operating 24 hours/day this would be 6,480,000 gallons per day. Campbell Estate’s GWMZ permit application requested 3,700,000 gpd of salt water.

Water Use Decl. File Ref. (If any): PAC SEAFARMS

State Well 4257-02 Pac Sea Farms #2

1. Tax Map Key where the water is used: TMK: 5-6-2:9
   Does the declarant own this land? No, Campbell Estate owns the land.

2. What is the water used for? backup source of water for salt water shrimp farm.

3. Is the quantity of water use being measured? NO

4. If this person takes from a multi-user pipe or ditch system? NO

PART II: WATER SOURCE State Well #4257-02 Name: Pacific Sea Farms #02

1. Where does the water come from/what kind of source is this? 15" diameter cased well with 100 hp pump.

2. Show the source location on maps, determine latitude and longitude, and document the nature of source development by measurements, sketches, and photographs.
   How is the water taken? (backup supply to 4257-01) 100 hp pump
   What is the capacity for taking (gpm)? 4500 gpm
   How often is it taken (used)? as need, backup supply and for pump maintenance.

3. Tax Map Key at the source: TMK: 5-6-2:9
   Determine declarant’s relation to source.
   Does the declarant:
   1) Operate and maintain the source? Pacific Sea Farms operates the well.
   2) Own the land at the source? Campbell Estate owns the land the source is on.
   3) Use the water from this source? Pacific Sea Farms uses the well.
   4) Own the land where the water is being used? Campbell Estate owns the land.

4. Does anyone else also use water from this source? NO

Verified by Susan K. Swanson    Inspection Date: June 8, 1993
This report has been prepared in accordance with 13-171-22(b) of the Hawaii Revised Statutes requiring a 20-year review of issued water use permits to determine permit compliance. Following is a summary of permit information, site characteristics, methodology, findings, and recommendations for this State permit file.

**Permit Information**

- **Water User:** Kahuku Shrimp Co., Inc.
- **Landowner of Source:** Campbell Estate
- **Permitted Withdrawal Rate:** 12.60 mgd (Based upon a 12-month moving average)
- **Water Management Area:** Koʻolauloa
- **Island:** Oahu
- **Aquifer Sector/System:** Windward/Koʻolauloa
- **System Sustainable Yield:** 35 mgd
- **Water Type:** Salt, Non-Potable
- **Original CWRM Date:** August 17th, 2005
- **Standard Conditions:** 1-19
- **Special Conditions:** 1-2, 20

**Water Source**

- **State Well Number(s):** 4157-11, 4257-01 & -02
- **Well Name:** Kahuku Shrimp 1-3
- **Water Source TMK Number(s):** 1st Division, 5-6-002:009
- **State Land Use Classification(s):** Agriculture/Conservation
- **County Zoning Classification(s):** AG-2/P-1
- **Geographical Coordinates:**
  - Kahuku Shrimp 1 (4257-01): Latitude 21° 41’ 51.3” North, Longitude 157° 57’ 42.2” West
  - Kahuku Shrimp 2 (4257-02): Latitude 21° 41’ 49.4” North, Longitude 157° 57’ 39.8” West
  - Kahuku Shrimp 3 (4157-11): Latitude 21° 41’ 49.0” North, Longitude 157° 57’ 42.1” West
End Use

End Use TMK Number(s): 1st Division, 5-6-002:009
State Land Use Classification(s): Agriculture/Conservation
County Zoning Classification(s): AG-2/P-1
Geographical Coordinates: Latitude 21° 41' 49.0'' North
Longitude 157° 57' 42.1'' West
Beneficial Use Explanation: Prior use for shrimp aquaculture

Background Information

The wells associated with this permit have not been in use since the shrimp farm was shut down on August 15th, 2006. Currently, the U.S. Fish & Wildlife Service is in process of taking over the approximately 100 acres on which the wells are located. Future plans are to convert the land into a wildlife refuge. According to the current permittee, the U.S. Fish & Wildlife Service may be interested in transferring the water use permits into their name. However, that process is being handled by the land owner, Campbell Estate, and has not yet been initiated.

There is no water use reporting record on file for the wells associated with this permit. Although no records are expected to be on file following the August 2006 shrimp farm closure, records should exist prior to that point in time. According to the standard conditions, reports of monthly withdrawals, salinity, temperature, and pumping times should have been submitted to the Commission on Water Resource Management on a yearly basis.

Water Use Permit 659 was approved during the August 17th, 2005 Commission on Water Resource Management meeting. This water source had been in use for approximately 13 years prior to the shutdown of the Kahuku Shrimp facility on August 15th, 2006. Standard conditions 1-19 and special conditions 1-2 & 20 are the governing conditions for this water use permit. A complete list of all standard and special conditions is given in the final summary report to the Legislature for the 20-year Water Use Permit Review.

Field Investigation Information

Contact: Bruce Smith
Site Address: 56-1069 Kamehameha Hwy.
Kahuku, HI 96731

Brown and Caldwell conducted a field investigation on January 14th, 2008 from 3:30 p.m. until 4:15 p.m. with Mr. Bruce Smith. During this time, type of water usage was verified, GPS
coordinates of well head(s) were recorded, flow meter installation and functionality were documented, and property TMK information was verified. The wellhead, its related appurtenances, and water usage area were visually inspected to assess compliance with permit conditions. Visual inspection of water loss/waste was limited to outdoor areas within the usage boundary. The physical location of the water source/end use site is an old shrimp farm, which is down a dirt driveway known as ‘Nudist Beach Rd.’ on the Mauka side of Kamehameha Highway approximately 1-mile beyond the Turtle Bay Resort. Reference the TMK and GIS maps in the permit file for a visual representation of the site.

Summary of Findings for Water Use Permit No. 659

Currently, there is no water being drawn from any of the three wells associated with this water use permit. The geographical coordinates of State Well Nos. 4257-01, 4257-02, and 4157-11, which are Kahuku Shrimp Wells 1-3, respectively, are given in ‘Water Source’ section above. The system previously in place drew salt water and sent it approximately 100 feet to the tanks used for shrimp aquaculture. Now that the site and system are no longer in use, the wells, pumps, motors, piping systems, and site structures are overgrown and deteriorated to such an extent that significant repairs would have to be made prior to any future use.

Based upon visual inspection of the system, each of the three wells and their respective pumps, flowmeters, and piping are no longer in working order. State Well No. 4257-01 (Kahuku Shrimp 1) appears to have significant damage to the piping immediately adjacent to the well head, creating a potential for well contamination from outside elements. State Well No. 4257-02 (Kahuku Shrimp 2) appears to have had its flowmeter removed or stolen. Furthermore, the cap that sealed the well from the elements has been removed, thereby exposing the well to potential contamination from outside elements. State Well No. 4157-11 (Kahuku Shrimp 3) appears to be fully assembled with a covered well and flowmeter. However, based upon the physical condition of the well and appurtenances, it is highly unlikely that the system has the capability to be operational. Reference the Appendix for photographs of each well.

The following are a list of standard condition(s)¹ that the permittee is/was found to be in non-compliance with:

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¹ Reference ‘Standard Conditions’ list given in the Final Summary Report to the Legislature for the 20-year Water Use Permit Review
(10) An approved flowmeter must be installed to measure monthly withdrawals and a month record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a yearly basis.

Based upon the lack of reporting even prior to the shrimp farm shutdown in August of 2006, it is evident that the permittee never submitted monthly records to the Commission on Water Resource Management.

(15) The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservations, 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 or forfeiture.

The permittee has been in total nonuse for approximately 1 1/2 years. Therefore, another 2 1/2 years of total nonuse could result in permanent revocation.

Recommendations

- Update the Commission’s electronic database with the following:
  - Create memo field with explanation of shrimp farm shutdown and current state of the property and well system components
  - Create memo field entry noting field investigation on 1/14/08
- Contact Mr. Bert Hatton at Campbell Estate to determine if the U.S. Fish & Wildlife Service will be utilizing these wells in the future.
- If the wells are to be used notify the permittee that nonuse for 2 1/2 years of additional nonuse could result in permanent revocation of the permit.
- If the wells will not be used in the immediate future, they should be sealed and capped to eliminate the risk of contamination to the Ko’olauloa Aquifer.
20-Year Water Use Permit Review
Water Use Permit No. 659

APPENDIX

Field Investigation Photographs
Figure 1 – State Well No. 4257-01 (Kahuku Shrimp 1)

Figure 2 – State Well No. 4257-02 (Kahuku Shrimp 2)
Figure 3 – State Well No. 4157-11 (Kahuku Shrimp 3)

Figure 4 – Former End Use (Abandoned Shrimp Aquaculture Tanks)
Standard Conditions List

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 <Insert Date> 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.

Variations of Standard Condition (8) are as follows:
   i. Modification of any permit condition shall be approved by the Commission. Modification of any permit condition without notification may result in the revocation of the water use permit.
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).

Variations of Standard Condition (10) are as follows:
   i. The applicant shall keep monthly pumpage estimates to be submitted annually to the Commission.
   ii. An approved flowmeter(s) need not be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a yearly basis (attached).
   iii. An approved flowmeter(s) must be installed to measure withdrawals and a monthly record of withdrawals, water-levels, salinity, and temperature must be kept and reported to the Commission on a monthly basis in accordance with the Commission's September 16, 1992 action on reporting requirements.
   iv. Approved flowmeters must be installed to measure monthly withdrawals and a monthly record of withdrawals must be kept and reported to the Commission on Water Resource Management on a monthly basis.
   v. 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 quarterly/yearly basis (attached).
   vi. An approved flowmeter shall be installed to measure water withdrawals
   vii. An approved flowmeter(s) must be installed to measure withdrawals; and a record of the withdrawals must be kept and reported to the Department of
Land and Natural Resources, Division of Water and Land Development, on a monthly basis.

viii. Although not stated as a condition of the permit §13-168-7 HAR requires you 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.

ix. An approved flowmeter shall be installed and the withdrawal from Well 1851-73 shall be recorded and reported to DLNR on a **monthly** basis by the owner and/or operator of the well.

x. The withdrawals from these wells shall be recorded and reported to the DLNR on a **monthly** basis by the BWS.

xi. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting water usage on a monthly basis.

xii. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage. Water usage shall be measured on a monthly basis and reported to the Commission.

xiii. The applicant shall provide and maintain an approved meter or other appropriate device or means for measuring and reporting total water usage. Water usage shall be measured on a monthly basis and reported to the Commission along with water level and salinity measurements.

11. This permit shall be subject to the Commission’s periodic review of the <Aquifer> 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 <Aquifer> 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 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 uses(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 conservations, 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 or 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 <Aquifer>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 or attached exhibits are incorporated herein by reference.

20. If the ground-water source does not presently exist, the new well shall be completed, i.e., able to withdraw water for the proposed use on a regular basis, within twenty-four (24) months from the date the water use permit is approved.

**Variations of Standard Condition (20) are as follows:**

i. The permit may be revoked if work is not started within six months of the date of issuance or if work is suspended or abandoned for six months. The work proposed in the permit application shall be completed within two years from the date of permit issuance.

21. This permit may not be transferred or the use rights granted by this permit sold or in any other way alienated. Pursuant to HRS § 174C-59 and the requirements of Chapter 174C, the Commission on Water Resource Management has the authority to allow the transfer of the permit and the use rights granted by this permit in a manner consistent with HRS § 174C-59. Any such transfer shall only occur with the Commission’s prior express written approval. Any sale, assignment, lease, alienation, or other transfer of any interest in this permit shall be void.

22. The water use permit granted shall be an interim water use permit, pursuant to HRS § 174C-50. The final determination of the water use quantity shall be made within five (5) years of the filing of the application to continue the existing use.

23. The water use permit shall be issued only after agricultural review.

24. That scheduled adjustments to Oahu Sugar Co. permitted use shall be initiated upon discontinuance of agricultural uses.
25. The issuance of this permit was approved by the Commission on Water Resource Management at its meeting on <Insert Date>.

26. The permit shall be subject to the review by the Attorney General.

27. The permit holder may be required to relinquish this permit at any time or specified time after issuance to the Board of Land and Natural Resources in accordance with Chapter 166 of Title 13.

28. The applicant shall obtain the necessary land acquisition documents from the Hawaii Housing Authority.
Special Conditions List

1. 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.

2. In the event that the tax map key at the location of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change within thirty (30) days after the permittee receives notice of the tax map key change.

3. The applicant shall contact the Environmental Management Division, State Department of Health, at 586-4304, concerning “GUIDELINES APPLICABLE TO GOLF COURSES IN HAWAII” date <Insert Date & Version #>.

4. Standard Condition 10 is emphasized, to report consumption on a regular basis.

5. The applicant may continue this existing use of ground water within the limits approved by the Commission, and the actual issuance of the interim permit shall not be a reason to interrupt this existing use.

6. This interim water use permit shall cease to become interim and shall be subject to HRS § 174C-55 upon administrative review of the quantity within five (5) years, provided that all conditions of the use (including the review of the quantity which shall not be greater than the amount initially granted) remain the same. Enforcement of the allocation limit shall be stayed pending staff’s review and issuance of a permanent water use permit.

7. As-built drawings of the well and pump, and a complete pumping test record shall be submitted within sixty (60) days.

8. In the event the pump tests show that aquifer boundary conditions do not support the requested withdrawals, the Commission reserves the right to amend this permit, after a hearing, to a level that is supported by the pump tests.

9. The existing use may be continued within the levels approved by the Commission, and the actual issuance of the permit document shall not be a reason to interrupt the approved level of use.

10. The filing of an application by Kukui, Inc. for a new or modified water use permit for the Kualapuu Aquifer in excess of 2.0 mgd (total system withdrawal) shall be just cause for re-consideration of this interim permit by the Commission.

11. Upon completion of a new transmission line for the transport of water use by Well #17, the permit shall be modified to reduce the allocation amount by the additional 79,220 gallons per day allocated for use of the Molokai Irrigation System.

12. Within six (6) months from the date of approval of a water use permit for the well, the applicant shall conduct a feasibility study and submit a report describing
alternative sources of nonpotable water for irrigation uses at the resort area. It is suggested that the developer consider use of dual lines in the subdivisions so that effluent may be used in the existing reuse system. Another consideration is the development of brackish water wells in the Kaluakoi Aquifer system for mixing with the effluent generated at the resort.

13. Within six (6) months from the date of approval of a water use permit for the well, the application shall evaluate the filter back discharges into Kakaako Gulch to determine if excessive preventable waste is occurring and identify possible measures to eliminate or reduce such waste. The evaluation shall be conducted in cooperation with the Commission staff and staff of the Department of Health’s Safe Drinking Water Branch, which regulates the drinking water system.

14. Within six (6) months from the date of approval of a water use permit for the well, the applicant shall 1) implement a leakage control and detection system and compete repairs to prevent such leakage and 2) implement use of xeriscaping and low-flow fixtures.

15. Action on the future use portion of the water use permit application for Well #17 (Well No. 0901-01) is deferred pending the establishment of existing uses in the aquifer. Kukui Inc.’s application for uses in excess of those uses existing on July 15, 1992 will be considered “new” uses and will be taken up by the Commission as soon as other existing use applications have been decided. In the interim,
   a. The Commission shall recognize that there is disagreement between the applicant’s staff calculations of reasonable-beneficial existing use
   b. The Applicant will have the burden of proof to show within six (6) months reasonable-beneficial existing use calculations that support the applicant’s request as opposed to staff’s calculations.
   c. The Commission’s enforcement of the approved existing use allocation will be suspended for six (6) months.

16. The permittee shall submit a notice of intent and written request to continue the use at least ninety (90) days prior to the expiration of the interim five-year permit.

17. The Commission shall delegate to Maui Department of Water Supply the authority to allocate the use of water for municipal purposes, as provided in §174C-48(b).

18. Maui Department of Water Supply shall be exempt from the requirements for permit modifications, as provided in §174C-57(c).

19. The permittee must meter water use and monitor chloride concentrations on a monthly basis and submit monthly reports of water use and chloride concentrations to the Commission.

20. Standard Condition 16 is waived for saltwater wells.

21. The permit will be revoked if (1) stream monitoring shows that pumping the well reduces stream flow, or (2) the electromagnetic resistivity survey indicates that the

...
well was drilled into a dike compartment, unless the applicant submits a petition for an amendment to the interim instream flow standard with the well completion report. However, no use of the water may be made without a Pump Installation Permit, which cannot be issued during consideration of the amendment of the interim instream flow standard.

22. The applicant shall present the results of the electromagnetic resistivity survey, pump tests, and stream monitoring to a community meeting as well as to the Commission.

23. A final determination of water use quantity shall be made within five (5) years of the filing date of the application (<Insert Date>) to continue existing use.

24. The applicant shall implement, by December 31, 1995, a biological and hydraulic monitoring program for a minimum 2-year period that: 1) documents the existing operating procedure, 2) seeks to identify the impacts of all operating alternatives on Waikolu Stream, and 3) seeks to identify the effectiveness of weir modifications (Dam No. 1). This program shall incorporate the three new wells, Wells #4-6 (Well Nos. 0855-06, -05, &-04, respectively), which may be pumped within the approved limits, for monitoring and testing purposes only. Further, semi-annual reports summarizing data and preliminary findings shall be submitted to the Commission. It is suggested that the Department of Agriculture work with the State Division of Aquatic Resources and other affected agencies to prepare the monitoring program in light of the difficult technical questions raised by this application. A particular concern is the coordination of this monitoring program with the ongoing National Park Service study by Anne Brasher. A draft of this plan shall be submitted to the Commission staff within ninety (90) days for technical review and comment. Results of the monitoring program shall be used to make recommendations to the Commission on any additional use of the wells, and shall be made readily available to all interested parties.

25. That the Commission approves the well construction permit for the Kamiloloa-Waiola Well (Well No. 0759-01), subject to the standard well construction conditions and the special conditions for the pumping well for the aquifer tests.

26. That the Commission authorizes the Chairperson to approve and issue a pump installation permit upon acceptance of adequate pump test result, subject to the standard pump installation conditions.

27. Should the well be used for back-up domestic supply, applicant is advised to contact DOH or otherwise ensure safe drinking water quality is maintained.

28. The applicant shall follow the agreed monitoring plan.

29. If pesticides used by the applicant are found in ground or surface water and can be traced to the applicant's use, the CWRM may revoke the permit immediately upon such finding.
30. Issuance of the interim permit shall be withheld until the reservation of water for DHHL is set by rule. Applicant may continue this existing use within the approved limits.

31. The applicant shall submit well modification and pump installation permit applications for administrative approval by chairperson prior to beginning any work required to complete well.

32. Should any stream flow impacts result from use, petition to amend interim instream flow standards shall be submitted.

33. Should any dewatering result from use, pumping shall cease immediately.

34. Shall submit accurate schematic diagram of distribution system for the battery of 5 wells.

35. Shall be subject to a 6-month independent audit & monitoring.

36. Final pump capacity shall be determined from pump test results & approved administratively by signature of chair.

37. The permittee shall seek and submit to the Commission within ninety (90) days written confirmation from the Department of Land Utilization of the non-conforming use.

38. Pumping shall cease immediately if the chloride reports show that the brackish water developed in the well exceeds 1,000 mg/l of chloride, unless a variance from the chloride limit has been granted. The authority to approve future variance requests is delegated to the chairperson.

39. The duration of the interim permit shall be:
   a. To July 1, 2006, or
   b. Until treated wastewater is available and acceptable for use, or
   c. Until such time that a significant change in permitted, actual, or projected uses or water supply occurs.

40. Action on any interim permit may be initiated by the Commission or any permittee upon letter request or pursuant to §174C-57 Haw. Rev. Stat. (Modification of permit terms).

41. This permit is approved under the assumption that wastewater will become available for reuse as an alternative supply source.

42. Require adherence to the chloride sampling protocol and the submittal of weekly chloride data. The authority to approve variances from the weekly reporting requirement is delegated to the Chairperson.

43. Require adherence to the Conservation Conditions.
44. In the event a water shortage is declared by the Commission, permittees in the <Insert Aquifer System> shall comply with the <Insert Aquifer System> water shortage plan adopted by the Commission.

45. The permittee shall contact the Department of Health, Clean Water Branch and obtain the necessary discharge permit(s).

46. Permit shall be interim and replaces existing WUP for 2051-07 & 11.

47. Applicant shall submit an acceptable archaeological inventory survey report to DHP. If historic sites affected, a plan to mitigate these affects must be accepted by DHP and completed by applicant.

48. Should the well be used for back-up domestic supply, applicant is advised to contact DOH or otherwise ensure safe drinking water quality is maintained.

49. (The permittee) may report monthly pumpage on yearly basis.

50. Prior to issuance of any permits, must submit filing fee for after-the-fact pump installation permit.

51. The term of this permit shall be twenty years from the date of issuance of the permit with a five-year Board review to determine compliance with the provisions of the permit.

52. The amount of water to be withdrawn under this permit shall be 0.19 mgd, averaged annually, for irrigation use. This permitted use of 0.19 mgd when added to a preserved use of 0.27 mgd amounts to a total of 0.46 mgd, averaged annually, which may be withdrawn from well 1646-01.

53. The use authorized by the permit must not interfered substantially and materially with existing individual household uses and existing uses.

54. The use of this well shall be subject to the shortage and emergency powers of the Board of Land and Natural Resources (BLNR).

55. This permit may be suspended or revoked, in accordance with Chapter 166.

56. The permit holder may be required to relinquish this permit to BLNR, in accordance with Chapter 166

57. The withdrawal from Well 1646-10 shall be recorded and reported to DLNR on a monthly basis by the permittee.

58. In the event that emergency water use occurs, the permittee shall notify the Commission in writing within one (1) day of pumping, to in form the Commission as to the nature of the emergency and the expected duration of the emergency. A water
use report shall also be filed pursuant to Standard Condition 10 and Administrative Rule 13-168-7.

59. Note DOH’s requirements related to non-potable water systems (attached to original permit).

60. Standard Condition 16 requiring the submittal of a water shortage plan is waived.

61. All non-potable spigots and piping shall be clearly labeled as “DO NOT DRINK, NON-POTABLE” to prevent direct human consumption.

62. Standard Condition 10 is modified. Due to the inability to take water level measurements, the requirement to measure monthly water levels is waived. In addition, as long as the U.S. Geological Survey is collecting and analyzing the chloride content of the well water, the requirement for the permittee to measure and report chlorides is also waived.

63. Well elevation components must be surveyed by a licensed surveyor and this information must be submitted to commission prior to issuance of permanent permit.

64. The permittee shall obtain approvals from the Department of Health and the U.S. Environmental Protection Agency prior to use of the water.

65. This water use permit, WUP No. <Insert #>, shall supersede WUP No. <Insert #>.

66. WUP No. <Insert #> is revoked.

67. Standard Condition 17 is waived.

68. Standard Condition 22 for interim water use permits shall not apply.

69. To supplement our records, we request that you provide a map of the Galbraith Est. lands west of Wahiawa (2100 ac+) and the associated TMK’s for use area.

70. Deferred action on portion requested for golf course irrigation pending further refinement of irrigation requirement and a feasibility study for utilization of surface water sources, including Wahiawa Reservoir.

71. Written justification be provided for any 'cushion' of 0.5 mgd.

72. The water use permit shall be an interim permit. The duration of the interim permit shall be until treated wastewater is available and acceptable for use. The permittee shall continue discussions with Honolulu Board of Water Supply regarding the use of reclaimed water.

73. The permittee is put on notice that this is a qualified approval in that this permit may be modified or revoked prior to the expiration of the interim permit if the
Commission decides that the use of additional basal ground water for dust control and landscape irrigation is not reasonable-beneficial use.

74. The permittee encouraged to use drought-tolerant landscaping to conserve water.

75. Should the applicant provide written evidence that the county DHCD approves a 201E exemption for the elderly affordable housing project then the applicant may modify a corresponding portion of their existing aquacultural use to be used by the exemption approved project within the Commission approved water use permit limits under recommendation 5.

76. The applicant shall obtain a water lease/permit from Land Division prior to actual use of the well water.

77. Require the permittee to sign a contract by May 14, 1998 with the City Department of Wastewater Management to buy and use 0.400 mgd of R-1 water for a corresponding reduction in allocation for Well Nos. 1900-02, 17 to 20, and 1901-03.

78. Standard Condition 9 is waived.

79. Standard Condition 10 is modified to exempt the permittee from monthly measurements of salinity and temperature.

80. Standard Condition 10 is waived.

81. Applicant must seek a determination from BLNR and Land Mgt Div as to whether water license required. If required, license must be obtained prior to issuance of permit. If not, permit will be issued w/out further action.

82. Commission defers action on use in excess of 452,000 gpd pending additional info from BWS and further staff analysis.

83. The permit shall be subject to the Commission's sustainable yield review by December 1990.

84. The Commission shall delegate to the Honolulu Board of Water Supply the authority to allocate the use of water for municipal purposes, in accordance with §174C-48(b) HRS.

85. Honolulu Board of Water Supply shall be exempt from the requirements of permit modifications as provided in §174C-57.

86. BWS must participate in discussions, to be coordinated by Commission Staff, regarding a monitoring program to address impacts to Kāneʻohe Bay water quality, prior to any action on applications for future municipal uses.

87. A pump installation permit application must be made and approved prior to the installation of a permanent pump.
88. The water withdrawn shall be 0.7 mgd for municipal use.

89. The installed pump capacity of the well shall not be more than 700 gpm or 1.01 mgd.

90. The term of permit shall automatically expire twelve months from the date of issuance.

91. The Honolulu Board of Water Supply may continue to submit monthly water data on their own form, provided that the data are submitted in a format that is acceptable to the Commission staff.

92. Standard Condition 7 shall not apply.

93. Standard Condition 22 shall not apply.

94. Standard Condition 10 is modified to exempt the permittee from monthly measurements of salinity and temperature.

95. This permit shall be subject to conditions providing for stream restoration if the Commission determines that additional water should be returned to the streams.

96. HECO 1 mgd for industrial use

97. Campbell Estate 1 mgd for municipal use through BWS, by separate agreement with HECO

98. BWS 1 mgd for municipal use.

99. The permit shall be subject to the Commission’s sustainable yield review by <Insert Date>.

100. The applicant shall obtain the current version of the Department of Health’s Guidelines Applicable to Golf Courses in Hawaii. Where relevant and viable, items of the guidelines should be implemented and sustained appropriately. To obtain the current version, contact the Safe Drinking Water Branch, Environmental Management Division at 8<redacted> (Honolulu).

101. The future use portion of the application shall be deferred until existing uses in the Koolauloa area are established.

102. The water to be withdrawn under this permit shall be a total of 0.03 mgd (0.02 mgd preserved plus an additional 0.01 mgd permitted use), averaged annually, for domestic and irrigation use

103. Existing well 1851-09 shall be properly sealed by a licensed drilling contractor. A well modification permit application, enclosed, shall be submitted to the Department for approval of the well sealing. A filing fee for sealing the well will not be required.
104. The permittee is required to test the source using a certified private laboratory and submit the test results to the Commission within three (3) months. The Commission will then forward the results to the Department of Health for their review. The Department of Health recommends that the well be routinely tested for microbiological and chemical parameters thereafter.

105. The permittee is required to submit a completed Registration of Well and Declaration of Water use by <Insert Date>.

106. The permittee shall contact the Department of Health for a written determination on the status of their water system and comply with any Department of Health requirements for monitoring and testing.

107. In the event that the original spring source decontaminates, the new well authorized will be shut down.

108. That within each aquifer the total permitted use shall not exceed the sustainable yield.

109. That any water available for allocation shall be for in-district use.

110. That scheduled reductions to Oahu Sugar Co. permitted use shall be initiated upon final termination of an Osco lease or sub-lease, whichever occurs later.

111. That permits for water use issued in accordance with the proposed schedule shall be interim permits subject to review and adjustment by 1995.

112. That the permit shall be an interim permit for a new use which is afforded to existing users as specified in §13-171-20.

113. That the original allocation of 0.200 mgd shall be taken to hearing for possible revocation at a later date to complete the transfer of the water use permit entirely to Well No. 3407-02. This revocation would reduce the current allocation afforded to the Kunihiro Well (Well No. 3406-06) to zero.

114. This allocation incorporates the unspecified domestic needs of the applicant and therefore necessitates a single meter be installed at the well.

115. Should any impacts to nearby wells or streams be established by the use of this well, the applicant shall address these issues to the satisfaction of the Commission.

116. If an economically feasible nonpotable source is identified, the applicant shall convert to the alternative nonpotable source.

117. The permit shall be subject to the Chairperson's approval of a water use plan recommending possible measures to prevent or minimize saltwater contamination and establish courses of action to follow should the aquifer become to saline to use.
118. Permittee shall provide the necessary end-use information on the 10th residence to allow regulation of the use under Chapter 174C.

119. Standard Conditions 10 & 18 shall not apply.

120. Standard Condition 10 is modified to exempt the permittee from the requirement to install a flowmeter. Salt water withdrawals may instead be estimated based on pumping capacity and run time.

121. The applicant shall review the existing year long period of pumpage and streamflow data and provide analysis on ground and surface water interaction. Deadline is January 25, 1994.

122. The water use permit for Well Nos. 2301-27 to -32 for 0.75 mgd (WUP No. 419) shall be revoked upon issuance of a pump installation permit for the well.

123. The permittee shall use mulching to decrease evaporative losses and manage irrigation scheduling to minimize water demand.

124. The permittee shall submit a detailed agricultural plan to support any future water use permit application for increased agricultural use at this parcel.

125. If not already obtained, the permittee shall seek and obtain any necessary permits from the Department of Health for the proposed discharge to Malaekahana Stream.

126. Standard Condition 10 is modified to waive the requirement for installing a water meter on Well Nos. 2358-21, 22, and 29. The permittee shall install a water meter on Well No. 2358-26 to measure total monthly flow through the discharge line. This quantity should then be assumed to be the rate of natural flow from the other three wells for monthly reporting purposes.

127. The permit shall be effective upon submittal of documentation by Navy that it has met the DOH requirements for a public system.

128. This WUP shall be subject to Army's application for a WUP to reduce the permitted use of the Army's Schofield Shaft (2901-02 to 04, 10) by 0.208 mgd to a new total of 5.648 mgd. The Army's application shall be submitted within 60 days after the approval of this WUP or this WUP shall be void. Approval of the modification request shall be obtained from the CWRM prior to use of Well No. 3100-02 and issuance of this WUP.

129. Navy shall submit an after-the-fact PIPA, and approval of the permit shall be obtained prior to use of the well.

130. The well shall not be used for drinking water purposes unless it is properly tested and treated.
131. This permit is approved subject to reclaimed water becoming a practical alternative and provided that the Department of Health approves the reuse application.

132. Should any opae ula be recovered in the well water, the permittee shall notify the Division of Aquatic Resources and provide specimens to the Division of Aquatic Resources for analysis.

133. If a single meter at the well is used, the Commission shall allow an additional 1,000 gallons per day to the water use permit amount for the domestic needs of two residences, although a permit for individual domestic consumption is not required. Otherwise, the applicant must provide a meter to separately measure the irrigation consumption.

134. This permit is approved under the requirement that conversion to either: 1) treated wastewater becoming available for reuse as an alternative supply source, provided that Department of Health concerns over the use of treated effluent over the potable water aquifer have been addressed; and/or 2) other nonpotable source becoming available will occur in a timely manner.

135. These permits shall be subject to a review of actual use within four years for possible modification of the permitted amount.

136. The permit shall be reviewed in two (2) years for possible additional revocation due to nonuse.

137. The allocation is based on the projects listed in Exhibit 5 (of Item 10 of the May 20, 1998 Staff Submittal), except for the Queen’s Beach GC (TMK 139-11-2,3), Lot 9 (TMK 139-17-51), and Varsity Place (TMK 128-24-35).

138. Kamehameha Schools Bishop Estate/Honolulu Board of Water Supply shall transfer the water use permit within ninety (90) days of the effective date of the transfer of the pump station to the Honolulu Board of Water Supply, pursuant to §174C-59 Hawaii Revised Statutes.

139. The permittee shall ensure that the water is recycled by either directing it into the Waiahole Ditch for use by downstream farmers (subject to the approval of the Agribusiness Development Corporation's Board) or into Waieke Farm's existing irrigation system.

140. The permittee shall file a completed application to modify WUP No. 758 to reduce the allocation by 0.100 mgd within 60 days. If a completed water use permit modification application is not received within 60 days from this submittal’s date, then the subject water use permit application (WUPA No. 767) shall be deemed denied without prejudice without the need for another hearing.

141. The water withdrawn shall be for municipal use. No improvements to the existing sources are required as the existing source capacities are greater than the increase.
142. Water license must be determined through LM.

143. Proposed other uses will be considered at a later date.
Water Use Permit Survey
(Please complete one survey form for each WUP)

WUP Number: 659
Well Number(s): 4257-01, 4257-02, & 4157-11

Contact Information (of the person who will be present at site visit):
Name: [Redacted] Fax: __________

Best time to reach for phone interview: ANY WEEKDAY 8:00 - 1600

Property
[Redacted]
Zip: [Redacted]

Well Location TMK (list all if multiple wells present): ____________________________
Water Use TMK (list all if used on multiple lots): ____________________________

Water Use/Well Information:
Is the water source currently in use? Yes ☐ No ☒
If no, please explain: CESSATION 8/15/06

What are you currently using the water for? (example: “Use for 45 acres of diversified agriculture and 3 residences”):

Is a flow meter installed and working properly? Yes ☐ No ☒
If no, please explain: N/A

Do you submit monthly water use reports to the State? Yes ☐ No ☒
If no, please explain: N/A

Field Investigations:
A representative from Brown and Caldwell will be visiting wells in your area over the next several months between the times of 9:00 am and 5:00 pm. Each site investigation will take approximately 1-2 hours. Please indicate up to three potential days of the week and availability times for an on-site inspection of the well location and verification of water use compliance. The permit holder must provide Brown and Caldwell with at least five (5) working days notice of the need to reschedule.

Option #1 Date (M-F): 7/1/08 Time: 9:00 am ☐ 12:00 pm ☐ 3:00 pm ☒
Option #2 Date (M-F): 4/14/08 Time: 9:00 am ☐ 12:00 pm ☐ 3:00 pm ☒
Option #3 Date (M-F): 7/21/08 Time: 9:00 am ☐ 12:00 pm ☐ 3:00 pm ☒

Once this survey is returned, a Brown and Caldwell representative will be contacting you to conduct a phone interview and finalize the exact date and time of your field investigation. Please fax/mail completed surveys by December 12th, 2007 and direct any questions related to this survey to Mr. Milo Smith of Brown and Caldwell at:
1099 Alakea Street, Suite #2400
Honolulu, HI 96813
Tel: (808) 203-2661
Fax: (808) 533-0226
mcsmith@brwncald.com

For Official Use Only
Received: 12/12/07 Information Updated: 12/13/07 Phone Interview Completed: 12/13/07
Notes/Comments:
Phone Interview

WUP Number: 4257-01, 02, 4157-11
Well Number(s): 659
Contact Name: Bruce Smith
Phone Number: 685-7874

Attempt #1: Date/Time: 1/6/08 - 9:15 a.m. Result: Reached
Attempt #2: Date/Time: N/A Result: N/A

Well Location TMK(s): Verify with GPS upon site visit / 5-6-002:009
Water Use TMK(s): 5-6-002:009

Water Source Address: 56-106A Kamehameha Hwy
City: Kailua Zip Code: 96731
Currently using water source? Yes ☐ No ☒
Notes/Comments: Operations ceased on 3/15/06

How often is the water source being used? Daily ☐ Weekly ☒ Monthly ☐
Notes/Comments: N/A - Not in use

How long have you been using this water source? 13 years prior to shutdown.
Has there been any rezoning of the water source/water use properties? Yes ☐ No ☒
Have you reported the rezoning to the State? Yes ☐ No ☒ N/A ☒
If no, explain: 

Scheduled field investigation day/time: 1/14/08 @ 3:00 p.m.
Notes (Special directions, site conditions, potential hazards, general notes, etc.):

- No Special Directions
- Send confirmation email prior to visit. 
- Located approx. 200 ft. past U.S. Military Installation entrance (before Kailua shrimp farms) on Makai side of highway.
Comments To Make:

- Although we prefer that you do not change your scheduled field investigation time, if you require a reschedule, you must provide Brown and Caldwell with at least five (5) working days notice of the need to reschedule.
- A representative from Brown & Caldwell will be making a reminder phone call to you sometime during the week prior to your scheduled field investigation.
- It is very important that you provide access to the site at the day and time agreed upon. Due to a very tight schedule, if you fail to provide access at the agreed upon time and/or do not reschedule with at least a five (5) working day notice, a makeup date will not be allowed.
- If for some reason you don’t know where your well head is located, it would be a good idea to locate it prior to your field investigation to help make the visit go quickly and smoothly.
- Other

- Formerly used for shrimp aquaculture?
- CWBM is Aug 17, 2005... who was permitted prior to that? (Since well has been used for approx. 13 years.
- Any future plans to use the wells?
- Or Transfer the WUP?
  - To U.S. Fish Wildlife Service
  - 60 Acres - Taxable
  - 45 Acres - Non-Taxable

Interviewed By: M.S. Date: 1/6/08 Time: 9:15 am
Field Investigation Checklist

WUP Number: 659  Well Number(s): 4257-01, 02, 4157-11

Water Source
Well Location TMK(s): 5-6-002:009
Well Head GPS Coordinates:
Well Type: Salt Water - Well Pump
Currently using water source?
Yes ☐ No ☒
Notes/Comments:
Kahuku Shrimp Farm Shut Down

Is there a flow meter installed?
Yes ☒ No ☐
Is the flow meter operational?
Yes ☐ No ☒
Notes/Comments:
Well no longer in use

Water Use
Water Use TMK(s): 5-6-002:009
What is the water being used for?
Nothing (Used to be shrimp farming)

Is the water being used within the permitted boundaries?
Yes ☐ No ☒
If no, explain:
No water use.

Is there any observed wasting of water or water loss?
Yes ☐ No ☒
If no, explain:

Are the permit conditions being complied with?
Yes ☒ No ☐
If no, explain:

Other
Photographs of:
Water Source ☒
Water Meter ☐
Usage Area ☒
Pump/Motor ☒

General Notes/Comments:
4257-01: 21°41’.855’N, 157°57.704’W (±14 ft)
4257-02: 21°41’.824’N, 157°57.664’W, (±14 ft)
4157-11: 21°41’.811’N, 157°57.702’W (±15 ft)

Investigated By: M.S. Date: 1/14/08 Time: 3:30
August 23, 2005

Approval of Water Use Permit No. 659 for Well No. 4257-01, 4257-02 & 4157-11 Koolauloa Ground-Water Management Area, Oahu

This letter transmits your water use permit for Kahuku Shrimp 1, 2 & 3 Wells (Well No.4257-01, 4257-02 & 4157-11) for use of 12.600 million gallons per day (mgd) of water on a 12-month moving average basis that was approved by the Commission on Water Resource Management (Commission) on August 17, 2005. 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. 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.

2. In the event that the tax map key at the location of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change within thirty (30) days after the permittee receives notice of the tax map key change.

3. Standard Condition 16 is waived for salt water wells.

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.

If you have any questions, please call Ryan Imata of the Commission staff at 5

Sincerely,

Peter T. Young
Chairperson

Attachments

c: The Estate of James Campbell
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

GROUND-WATER USE PERMIT
WUP NO. 659

PERMITTEE

Permittee/Water User
Address  Kahuku Shrimp Co. Inc.

Landowner of Source
Address  The Estate of James Campbell

PERMITTED SOURCE INFORMATION

Island  Oahu
Water Management Area
Aquifer Sector  Windward
Aquifer System  Koolauloa
System Sustainable Yield  35
Well Name  Kahuku Shrimp 1, 2 & 3 Wells
State Well No.  4257-01, 4257-02 & 4157-11

PERMITTED USE INFORMATION

Reasonable beneficial use  Aquaculture
Withdrawal (12 month moving ave.)  12.600 mgd
Location of water use
TMK #  5-6-002:009
State land use classification  AG
County zoning classification  AG-2

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 August 17, 2005 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) need not be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a yearly basis (attached).
This permit shall be subject to the Commission's periodic review of the Koolauloa 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 Koolauloa 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 Koolauloa 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.

W. Roy Sando

PETER T. YOUNG, Chairperson
Commission on Water Resource Management

Attachment

c: The Estate of James Campbell
LETTER OF TRANSMITTAL

RICHARD M. SATO & ASSOCIATES, INC. • CONSULTING ENGINEERS • CIVIL & STRUCTURAL

2065 S. KING ST.

TO: STATE OF HAWAII
DEPARTMENT OF LAND & NATURAL RESOURCES
1151 PUNCHBOWL ST. (KALANI MOKU BUILDING)

ATTENTION: ROOM 227

DATE: DECEMBER 12, 1985

PROJECT: MLE TWO HECTARE COMMERCIAL SHRIMP FARM

WE ARE SENDING YOU: HEREWITH □ UNDER SEPARATE COVER
TRACINGS □ PRINTS □ SHOP DRAWINGS □ COPY OF LETTER □ SPECIFICATIONS □ CALCULATIONS

OTHER

COPIES • DATE • DESCRIPTION

1 • SIGNED APPLICATION FOR WELL DRILLING PERMIT

1 • SITE PLAN

THese ARE TRANSMITTED: □ FOR YOUR USE □ AS REQUESTED □ FOR REVIEW AND COMMENT □ FOR APPROVAL

REMARKS:

BY: LAWRENCE K. KIGA

COPIES TO:
Over the Hawaiian Ridge and Their
Volcanol., Vol. 29, pp. 735-760.

the Kawaihae Quadrangle, Kohala
of Science Thesis, University of

Ground Water Exploration on Maui,
Soundings. Master of Science

Microearthquake Study of the
In Seismic Studies on a Kilauea
al Report.

1981, Self-Potential Observations on
Council Transactions, 1980 Annual

Schlumberger Survey of Maui Island,
irces Council Transactions, 1980

Ages from Lavas of the Hawaiian
# DIVISION OF WATER AND LAND DEVELOPMENT

**FROM:**  

**DATE:** 1/13  

**FILE IN:** 4257-01704

<table>
<thead>
<tr>
<th>TO: INITIAL</th>
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<td>See Me</td>
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<td>Take Action By</td>
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<td>K. Oshiro</td>
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**REMARKS:**  

Handwritten note:  

- Marine Corps. also applied to BWS - will NOT be done here.

- Permit. BWS will sign 1st copy of this DRP.
Ms. Susan Swanson  
State of Hawaii  
Commission on Water Resource Management  
Department of Land and Natural Resources  
Division of Water Resource Management

Dear Susan:

Please be advised that Kahuku Prawn Company is now being operated by Mr. Dave Bigger. His phone number is 7 [redacted].

Also Pacific Sea Farms is now leased to Kahuku Shrimp Company operated by Mr. Bruce Smith. His phone number is [redacted].

Hawaii Aquaculture Company, Inc. operates the hatchery Well No. 4258-10. Mr. Spencer Malecha is the operator at phone number [redacted].

If you have any questions, please call me at [redacted].

Sincerely,

James E. Menor  
Administrator,  
Natural Resources
Date of report: May 7, 1984  
Person filing report: Loran H. Runnels

A. OWNER: Marine Culture 
WELL: Injection Well #1  
B. GENERAL LOCATION: Kahuku
C. DRILLING COMPANY: Roscoe Hose Company
D. TYPE OF RIG: 28L DRILLING COMPLETED
E. ELEVATION, msl: Top of drilling platform: +5 ft.  
Height of drilling platform above ground surface: ft. elevation:  
F. HOLE SIZE: 30 inch dia. to 32 ft. below drilling platform. 
   24 inch dia. to 80 ft. below drilling platform. 
G. CASING INSTALLED: 24 in. DD x PVC, in wall solid section to 20 ft. below drilling platform.  
   1.5 in. DD x PVC, in wall perforated section to 80 ft. below drilling platform. 
   Type of perforation: Slot.
H. ANNULUS: Grouted 0 ft. to 19 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.  
   Depth of bottom of airline: ft. below which elevation is ft.

J. INITIAL WATER LEVEL: ft. below drilling platform. Date of measurement:
K. INITIAL CHLORIDE: ppm, total depth of well ft. below drilling platform  
   Sampling Date: 

L. PUMPING TESTS:  
   Reference point (R.P.) used: which elevation is ft.  
   Date: March 28, 1984  
   Start water level: 5 ft. below R.P. Start water level: ft. below R.P.  
   End water level: ft. below R.P. End water level: ft. below R.P.  
   Depth of well: ft. below R.P. Depth of well: ft. below R.P.  
   Elapsed Time (hours) Rate Draw- down (ft) Temp. Rate Draw- down (ft) Temp.  
   Rate (ppm) Draw- down (ft) Temp.  
   1:30 to 1:30: 2000 100 11-3  
   2:30 to 3:30: 3000 11-3  
   3:30 to 4:30: 4000 21-3  

M. DRILLER'S Log:  
   Depth, ft. Rock Description & Remarks Water Level, ft.  
   0 to 2 Sand  
   2 to 20 Coral  
   20 to 48 Hard coral  
   48 to 68 Coral, soft  
   68 to 80 Coral  

N. REMARKS:  
   24" PVC pipe class 100  
   15" PVC class 125

SUBSURFACE FORMATION:  
   Rock Description & Remarks  
   Water Level, ft.  
   0 to 2 Sand  
   2 to 20 Coral  
   20 to 48 Hard coral  
   48 to 68 Coral, soft  
   68 to 80 Coral  

FOR DRILLER'S USE:  
   INSTRUCTIONS: Send three (3) copies to Manager-Chief Engineer, Division of Water and Land Development.  

FOR OFFICIAL USE:  
   Latitude:  
   Longitude:  
   Well No.:  


date: June 28, 1999

5/30/99
Date of report: May 7, 1984
Person filing report: Joran H. Runnels

A. OWNER: Marine Culture
NAME: Injection Well #2
WELL:

B. GENERAL LOCATION: Kahuku

C. DRILLING COMPANY: Roaace Moss Company

D. TYPE OF RIG: 36 ladder

G. DATE OF REPORT: March 1984

E. ELEVATION, msl: Top of drilling platform 6'-5" ft. Bench mark and method used to determine
Height of drilling platform above ground surface: 22 ft. elevation:

F. HOLE SIZE: 30 inch dia. to 122 ft. below drilling platform.

G. CASING INSTALLED: 24 in. x 3" PVC, in wall solid section to 20 ft. below drilling platform.

H. ANNULUS: Grouted 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 well 70 ft.
- Depth of bottom of airline ft. below which elevation is 24 ft.

J. INITIAL WATER LEVEL: ft. below drilling platform. Date of measurement.

K. INITIAL CHLORIDE: ppm, total depth of well ft. below drilling platform

L. PUMPING TESTS:
- Reference point (R.P) used: which elevation is ft.
- Sampling Date: March 29, 1984
- Date: January 12, 1984
- Start water level: 6'-9" ft. below R. P.
- End water level: ft. below R. P.
- Depth of well: ft. below R. P.
- Drawdown: (gpm)
- Refilled: Time (hours) Drawn Down (gpm)
- Rated: Time (hours) Drawn Down (gpm)
- Temp. Class.

M. DRILLER'S LOG:

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<th>Depth, ft.</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level, ft.</th>
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<td>to</td>
<td>to</td>
<td>To</td>
</tr>
<tr>
<td>100 to 150</td>
<td>Sand</td>
<td>to</td>
<td>to</td>
<td>To</td>
</tr>
</tbody>
</table>

N. REMARKS: 24" PVC pipe class 100

FOR OFFICIAL USE

INSTRUCTIONS: Send three copies to Manager-Chief Engineer, Division of Water and Land Development


FOR DRILLER'S USE

Job Name
Job No.
Driller's Report

Date of report: May 7, 1984
Person filing report: Loren R. Runnels

A. OWNER: Marine Culture
   NAME: Injection #3
   WELL: LAND
   LOCATION: 35
   C. DRILLING COMPANY: Sonoco Moss Company
   TYPE OF RIG: 360
   DRILLING COMPLETED: March 1984
   INSTALLATION: To date
   REMARKS:

   FOR OFFICIAL USE
   latitude: 21
   longitude: 157
   WELL No.: 100

   FOR DRILLER'S USE
   Job Name: DI
   Job No.: 201

   INSTRUCTIONS: Send three (3) copies to Manager, Chief Engineer, Division of Water and Land Development.

DRILLER'S REPORT

DESCRIPTION

Date of report: May 7, 1984
Person filing report: Loran H. Runnels

A. OWNER: Marine Culture
B. GENERAL LOCATION: Kahuku
C. DRILLING COMPANY: Bowser Hoag Company
D. TYPE OF RIG: 365
E. ELEVATION: msl: Top of drilling platform
F. HOLE SIZE: 24
G. CASING INSTALLED: 24 OD PVC 13 ID PVC
H. ANNULUS: Grouted
I. PERMANENT PUMP INSTALLATION:
   - Pump type, make, serial no.
   - Motor type, H.P., voltage, r.p.m.
   - Depth of pump intake setting
   - Depth of bottom of airline

HYDROLOGY

J. INITIAL WATER LEVEL: ft. below drilling platform, Date of measurement
K. INITIAL CHLORIDE: ppm, total depth of well

L. 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.

M. DRILLER'S LOG:

<table>
<thead>
<tr>
<th>Depth, ft.</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level, ft.</th>
<th>Depth, ft.</th>
<th>Rock Description &amp; Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 2</td>
<td>Coral, limestone</td>
<td>to</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>2 to 8</td>
<td>Coral, limestone</td>
<td>to</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>8 to 33</td>
<td>Hard coral</td>
<td>to</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>33 to 42</td>
<td>Hard coral</td>
<td>to</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>42 to 53</td>
<td>Hard limestone</td>
<td>to</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>53 to 63</td>
<td>Coral</td>
<td>to</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>63 to 72</td>
<td>Hard Coral</td>
<td>to</td>
<td>to</td>
<td></td>
</tr>
<tr>
<td>72 to 140</td>
<td></td>
<td>to</td>
<td>to</td>
<td></td>
</tr>
</tbody>
</table>

N. REMARKS: 24" PVC class 100 15" PVC pipe class 123

FOR DRILLER'S USE

Job Name
Job No.

INSTRUCTIONS: Send three (3) copies to Manager-Civil Engineer, Division of Water and Land Development, P. O. Box 273, Honolulu, Hawaii 96820.


CRN OFFICIAL USE

Latitude
Longitude

Well No.
INJECTION WELLS
1-243 HAUOKU OAHU
INJECTION WELLS
I-243
MAHOOKU OAHU
DEPARTMENT OF LAND & NATURAL RESOURCES
DIVISION OF WATER AND LAND DEVELOPMENT

DRILLER'S REPORT

DESCRIPTION

Date of report: May 07, 1984  Person filing report: Loran H. Runnels

A. OWNER: Marine Culture
   NAME: Production # 2
   LOCATION: Kauiku, Oahu

B. GENERAL LOCATION: Roscoe Moss Company
   LOCATION: Kauiku, Oahu

D. TYPE OF RIG: 36L DRILLING COMPLETED: 84
   DRILLER: Leasionia Moalii

E. ELEVATION, msl: Top of drilling platform +10 ft.  Height of drilling platform above ground surface  ft. elevation:

F. HOLE SIZE: 30 inch dia. to 60 ft. below drilling platform.
   24 inch dia. to 137 ft. below drilling platform.
   24 inch dia. to 137 ft. below drilling platform.

G. CASING INSTALLED: 24 in. I.D. x PVC in. wall solid section to 57 ft. below drilling platform.
   15 in. I.D. x PVC in. wall perforated section to 137 ft. below drilling platform.
   Type of perforation: 40 feet of slots

H. ANNULUS: Grouted 0 ft. to 75 ft. below drilling platform.
   Gravel packed 75 ft. to 100 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.
   - Depth of bottom of airline ft. below which elevation is ft.

HYDROLOGY

J. INITIAL WATER LEVEL: ft. below drilling platform. Date of measurement.

K. INITIAL CHLORIDE: ppm, total depth of well ft. below drilling platform.

L. PUMPING TESTS:
   | Date       | Start water level | End water level | Depth of well | Sampling Date |
   | March 25, 1984 | 9' 8"           | ft. below R. P. | ft. below R. P. | ft. |

M. DRILLER'S LOG:

<table>
<thead>
<tr>
<th>Depth, ft.</th>
<th>Rock Description &amp; Remarks</th>
<th>Water Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 8</td>
<td>Coral, Limestone</td>
<td>ft.</td>
</tr>
<tr>
<td>9 to 12</td>
<td>Limeatone</td>
<td>to</td>
</tr>
<tr>
<td>12 to 23</td>
<td>Hard coral</td>
<td>to</td>
</tr>
<tr>
<td>23 to 64</td>
<td>Hard Limestone</td>
<td>to</td>
</tr>
<tr>
<td>64 to 82</td>
<td>Coral, Loose</td>
<td>to</td>
</tr>
<tr>
<td>82 to 104</td>
<td>Hard Limestone</td>
<td>to</td>
</tr>
<tr>
<td>104 to 122</td>
<td>Coral</td>
<td>to</td>
</tr>
<tr>
<td>122 to 137</td>
<td>Clay and mud</td>
<td>to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>to</td>
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<td></td>
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<td></td>
<td>to</td>
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<td>to</td>
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</tbody>
</table>

N. REMARKS: 24" PVC pipe class 100 15" PVC pipe class 125

FOR DRILLER'S USE

INSTRUCTIONS: Send three(3) copies to: Manager-Chief Engineer, Division of Water and Land Development


FOR OFFICIAL USE

Latitude 21 42 01
Longitude 157 57 49
Well No. 4257-02
**Driller's Report**

**Description**

- **Date of report:** May 7, 1984
- **Person filing report:** Loran H. Rummells

**A. Owner**
- Marine Culture

**B. General Location**
- Kahuku

**C. Drilling Company**
- Roscoe Moss Company

**D. Type of Rig**
- 36L

**E. Elevation, mls:** Top of drilling platform +11' ft. 
- Height of drilling platform above ground surface: __________ ft. elevation:

**F. Hole Size:**
- 30 inch dia. to 57 ft. below drilling platform.
- 24 inch dia. to 137 ft. below drilling platform.

**G. Casing Installed:**
- 24 in. O.D. x PVC in wall solid section to 57 ft. below drilling platform.
- 15 in. O.D. x PVC in wall perforated section to 137 ft. below drilling platform.
- Type of perforation: 40 foot of slots

**H. Annulus:** Grouted 0 ft. to .75 ft. below drilling platform.
- Gravel packed .75 ft. to 120 ft. below drilling platform.

### Hydrology

- **J. Initial Water Level:** ft. below drilling platform. Date of measurement.
- **K. Initial Chloride:** ppm, total depth of well ft. below drilling platform.

**L. Pumping Tests:**
- **Date:** March 19, 1984
- **Reference point (R.P.) used:** which elevation is ft.

**M. Driller's Log:**
- **Depth, ft.:**
- **Rock Description & Remarks:**
- **Water Level:** ft.
- **Water Level:** ft.

**N. Remarks:** 24" PVC pipe class 100, 15" PVC pipe class 125.
TO: State of Hawaii  
Department of Land & Natural Resources  
1151 Punchbowl Street  

DATE: January 11, 1984  

ATTENTION:  

PROJECT: MARINE CULTURE ENTERPRISES TWO HECTARE COMMERCIAL SHRIMP FARM  

WE ARE SENDING YOU: ☒ HEREWITH ☐ UNDER SEPARATE COVER  
THE FOLLOWING ITEMS:  
☐ TRACINGS ☐ PRINTS ☐ SHOP DRAWINGS ☐ COPY OF LETTER ☐ SPECIFICATIONS ☐ CALCULATIONS  
☐ OTHER  

COPIES • DATE • DESCRIPTION  

<table>
<thead>
<tr>
<th>1</th>
<th>1/10/84 • APPLICATION FOR WELL DRILLING PERMIT</th>
</tr>
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<tbody>
<tr>
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REMARKS:  

THESE ARE TRANSMITTED: ☒ FOR YOUR USE ☐ AS REQUESTED ☐ FOR REVIEW AND COMMENT ☐ FOR APPROVAL  

REMARKS:  

COPIES TO:  

BY: Lawrence K. Koga
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

WELL DRILLING PERMIT

for
Marine Culture Enterprises, Well #1
Panatu, Oahu
State Well No. 94-16-10-257-91
Kahuku, Oahu

TO: H. Asa Hayashi
Manager & Chief Engineer
Marine Culture Enterprises

In accordance with Chapter 166, Control of Ground Water Use in the State of Hawaii, your application to drill a well at Panatu, Oahu, Tax map key 6-4-6, is approved subject to the following conditions:

1-5-6-01

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 and a map showing the exact location of the well if different from the proposed location.

5. The applicant comply with all applicable rules, ordinances, and laws.

[Signature]
Edgar A. Hamasu

Date of Issuance: Feb. 8, 1982

bcc: Dept of Health
USGS
Richard M. Sato and Associates, Inc.
Attn: Lawrence K. Koga

SUSUMU ONO, Chairman of the Board
WELL DRILLING PERMIT

for

Marine Culture Enterprises, Well #2
Punalu'u Well #2
State Well No. 5153-10 4757-02
Punalu'u, Oahu, Kahuku

TO: Mr. Kazu Hayashi, Marine Culture Enterprises

In accordance with Chapter 166, Control of Ground Water Use in the State of Hawaii, your application to drill a well at Punalu'u, Oahu, Tax Map Key 9-4-35, 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 and a map showing the exact location of the well if different from the proposed location.

5. The applicant comply with all applicable rules, ordinances, and laws.

Edgar A. Hamasu

Feb. 8, 1982
Date of Issue

SUSUMU ONO, Chairman of the Board

bcc: Dept of Health
USGS
Richard M. Salo and Associates, Inc.
Attn: Lawrence K. Koga
A DIVISION OF WATER AND LAND DEVELOPMENT

From: [Name]
Date: 11/20
File by:

To: Initial

Robert T. Chuck
Takeo Fujii
James Yoshimoto
Manabu Tagomori
George Morimoto
Herbert Morimatsu
George Miyashiro
Harold Sakai
Losilo Asari
Albert Ching
George Matsumoto
Daniel Lum
Paul Matsuo
Noboru Kaneshiro
Edwin Sakoda

See Me
Take action by
Route to your branch
Review & comment
Draft reply by
For Information
Xerox distributed
Acknowledge receipt
File

Jane Sakai
Doris Hamada
Lorraine Nanbu
Jean Slorot
Elsie Yonamine
Kay Oshiro

4257-01-02

[Signature]
January 18, 1984

Mr. Robert Chuck  
Manager-Chief Engineer  
Department of Land and Natural Resources  
Division of Water and Land Development  

Dear Mr. Chuck:

Subject: Well Permit to The Estate of James Campbell

Enclosed for your information and files are copies of the well application and the approved well permit issued to The Estate of James Campbell for the drilling of two salt water wells at TMK: 5-6-02:Por. 09.

If you have any questions, please call Chester Lao at [redacted]

Very truly yours,

HERBERT H. MINAKAMI  
Chief, Planning and Engineering Division  

Enclosures
TO: Mr. O. K. Stender
The Estate of James Campbell

Your application of January 11, 1984 has been approved in accordance with Chapter III of our Rules and Regulations for the Protection, Development and Conservation of Water Resources in the City and County of Honolulu.

You are hereby granted a permit to drill two salt water wells at TMK: 5-6-02:por. 09, at the locations and in accordance with the drawings submitted with your application.

This permit is granted subject to the Rules and Regulations of the Board of Water Supply and the following conditions:

1. Mr. Chester Lao of the Board of Water Supply, telephone 548-5276, shall be notified before any work covered by this permit commences.

2. This permit will be valid upon receipt by the Board of Water Supply of a permittee bond in the amount of $5,000.00 in accordance with Chapter III, Sec. 3-305 of these Rules and Regulations.

3. The wells shall be drilled by a well driller licensed in the State of Hawaii.

4. The depth of the wells shall be limited to 135 feet or the top of the basalt, whichever is less.

5. Upon completion of the project, the following shall be submitted to the Board of Water Supply:
   a) A record of geologic formations encountered.
   b) As-built drawings of the well including well appurtenances and piping.
c) Submission of chemical analyses of water samples collected during aquifer testing.

6. The casings shall be grouted with neat cement.

7. The owner shall install a flow measuring device at such time as required by the Board of Water Supply. This meter shall be installed if chemical analysis of the water indicates a significant fresh water component.

KAZU HAYASHIDA
Manager and Chief Engineer

1/17/84
Date of Permit

cc: James R. Dybdal
    Campbell Estate

I. G. Gentner
    Marine Culture Enterprises
APPLICATION FOR DRILLING, MODIFYING, RECASING OR REUSING WELLS

INSTRUCTIONS: Please send 1 copy to Honolulu Board of Water Supply, who will distribute to other agencies concerned. In filling out, refer to Rules and Regulations of the Honolulu Board of Water Supply adopted on May 10, 1976 and applicable rules and regulations of the State Department of Health.

OWNER: (See BWS Rules and Regulations Chapter III, Sec. 3-305, Item 1a)

<table>
<thead>
<tr>
<th>MARINE CULTURE ENTERPRISES</th>
<th>CAMPBELL ESTATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>500</td>
</tr>
</tbody>
</table>

1. APPLICATION FOR WELL: (See Chapter III, Sec. 3-305, Item 1)

   - Drill [X]
   - Reuse
   - Modification
   - Recase
   - Change in use

2. WORK TO BE PERFORMED BY: (See Chapter III, Sec. 3-311)

   ROSCOE MOSS DRILLING COMPANY (Contractor Lic. C-2101)
APPLICATION FOR DRILLING, MODIFYING, RECASING, OR REUSING WELLS

3. USE OF WELL: (See Chapter III, Sec. 3-305, Item 1c)

Provide saline groundwater for raising shrimps on a 2 Hectare Shrimp Farm.

4. ATTACHMENTS: (Each copy of the application shall have a complete set of attachments)

a. Location of well: Old Kahuku Airfield, Kahuku, Hawaii
   Tax Map Key: 1-5-6-02:9

b. Land area served: (Attach map showing exact location of well and area served. See Chapter III, Sec. 3-305, Items 1b and 1d)
   See Attached

c. Description of well and appurtenant details:
   (See Chapter III, Sec. 3-305, Item 1e)
   See Attached
   2. Production wells

   [Additional lines and text not fully legible]
5. The Owner hereby agrees to install, operate, and maintain control of the well in accordance with the laws of the State of Hawaii and the Rules and Regulations of the Honolulu Board of Water Supply and the State Department of Health.

The Owner hereby understands that a fee of One Hundred Dollars ($100.00) and a permittee bond of the amount not greater than Twenty-five Thousand Dollars ($25,000.00), said amount of the bond to be set by the Engineer, are required for the drilling or excavation of each new well. The $100.00 fee per well shall be payable to the Board and shall accompany this application. The amount of the permittee bond shall be stipulated when the well owner is notified that his permit has been granted.

(See Chapter III, Sec. 3-305, Items 2 and 2a)

6. The Owner hereby agrees to the following special conditions for this well:

[Signature]

Date Submitted

[Signature]  
Name of applicant if other than Owner
Figure 20

MARINE CULTURE ENTERPRISES
KAHUKU, OAHU, HAWAII
CONCEPTUAL SUPPLY AND INJECTION
WELLFIELD CONFIGURATIONS
12/83
Elson T. Killam Associates, Inc.
Environmental and Hydraulic Engineering
(340 Madison Avenue, New York, New York)
FUTURE PRODUCTION WELLS

DITCH "A"

CONVERTED TEST WELL H-1

OXYGEN PLANT

FINISHING

BROODSTOCK

UTILITY

SCALE: 1" = 80'

MARINE CULTURE ENTERPRISES
KAHUKU, OAHU, HAWAII
SUPPLY WELL LOCATIONS FOR
TWO HECTARE COMMERCIAL SHRIMP FARM

Elson T. Killam Associates, Inc.
Environmental and Hydraulic Engineers
P.O. Box 385, Wailuku, HI 96793-0385
LAND SURFACE DATUM

30-INCH DIAMETER BOREHOLE

50'

24-INCH DIA. BOREHOLE

CENTRALIZERS

135'

140'

24-INCH I.D. PVC
SOLID WELL CASING

CEMENT GROUT

PACKER

16-INCH SOLID PVC
WELL CASING

MINIMUM 2-FOOT THICK
LAYER OF FINE SAND

GRAVEL PACK - SUITABLE
FOR USE WITH .102-
SLOT WELL SCREEN

16-INCH PVC WELL SCREEN
.102-SLOT WITH 1/8"
SLOT SPACING

16-INCH SOLID PVC
WELL CASING

MARINE CULTURE ENTERPRISES
KAHUKU, OAHU, HAWAII
RECOMMENDATION FOR SUPPLY WELL REDESIGN

Elson T. Killam Associates, Inc.
Environmental and Hydrological Engineers
1205 Park Avenue, New Haven, Connecticut 06509

FIGURE 22
CONCEPTUAL DESIGN, FINAL DESIGN 15' MAY BE MODIFIED TO SUIT FIELD CONDITIONS.

CEMENT GROUT

BLANK CASING

COARSE GRAVEL PACK

.250-SLOT PVC SLOTTED WELLSCREEN

BLANK CASING SUMP

MARINE CULTURE ENTERPRISES
KAHUKU, OAHU, HAWAII

CONCEPTUAL DESIGN - INJECTION WELLS

FIGURE 24
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
Reference: Regulation 9, Dept. of Land & Natural Resources.

Is the well located in a Designated Ground Water Control Area?  Yes  X  No
If "yes", application must be accompanied by a Water Use and/or Water Supply Permit and a non-refundable filing fee of $100 payable to the Department of Land & Natural Resources. However, if application is for minor modification of well, filing fee may be waived. If "no", no filing fee is required. Filing fee is waived for federal, state, and county government agencies.

1. WELL LOCATION: Island  Oahu  Tax Map Key 1-5-6-02:9  Attach a plot plan showing well location referenced to established property boundaries.

2. WATER USER  Marine Culture Enterprises  Telephone ________________
Address _______________________________________________________________________

3. PROPOSED DRILLING COMPANY: Roscoe Moss Drilling Company

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):
Two new wells to provide saline groundwater for raising shrimps on a 2 Hectare Commercial Shrimp Farm.

5. PROPOSED SECTION OF WELL

Elevation at top of casing 2.0 ft., msl.

Ground Elev. ________________ ft., msl

Cement Grout __________ ft.
Hole Dia. __________ in.
Total Depth __________ ft.
Rock Packing __________ ft.

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 11,000,000 gallons total ☐ Monthly gallons ☐ Yearly gallons

8. PROPOSED PUMP OR FLOW CAPACITY: ☐ @ 3800 gal/min = 7600 gallons per minut

Signature: ____________________________ Date: 10 Jan 84
Water User

Signature: ____________________________ Date: 6 Jan 84
Landowner of Well Site

For Official Use:
State Well No. ___________
DLNR Permit No. ___________
DLNR Application No. ___________
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.

Reference: Regulations Chapter 182-21 of Land & Natural Resources.

Is the well located in a Designated Ground Water Control Area?  [ ] Yes  [ ] No

If "yes", application must be accompanied by a Water Use and/or Water Supply Permit and a non-refundable filing fee of $100 payable to the Department of Land & Natural Resources. However, if application is for minor modification of well, filing fee may be waived. If "no", no filing fee is required. Filing fee is waived for federal, state, and county government agencies.

1. WELL LOCATION: Island  [ ] Oahu Tax Map Key 1-5-6-02:9. Attach a plot plan showing well location referenced to established property boundaries.

2. WATER USER:  [ ] Marine Culture Enterprises

3. PROPOSED DRILLING COMPANY: Roscoe Moss Drilling Company

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):

Provide one (1) additional saline groundwater well to raise shrimps on an existing Two Hectare Commercial Shrimp Farm.

PROPOSED SECTION OF WELL

<table>
<thead>
<tr>
<th>Ground Elev.</th>
<th>9 ft., msl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement Grout</td>
<td>60 ft.</td>
</tr>
<tr>
<td>Hole Dia.</td>
<td>30 in.</td>
</tr>
<tr>
<td>Total Depth</td>
<td>180 ft.</td>
</tr>
<tr>
<td>Rock Packing</td>
<td>65 ft.</td>
</tr>
</tbody>
</table>

*Approximate elev. at filing. Final elev. (msl) by a surveyor licensed by the State must be submitted at start of construction.

5. PROPOSED USE:  [ ] Municipal  [ ] Military  [ ] Agriculture  [ ] Domestic  [ ] Disposal  [ ] Industrial  [ ] Other (specify) ________

6. PROPOSED AMOUNT OF WITHDRAWAL: Check most appropriate box and fill in amount.

[ ] Daily 16.4 M gallons  [ ] Monthly __________ gallons  [ ] Yearly __________ gallons

7. PROPOSED PUMP OR FLOW CAPACITY: __________ gallons per minute

Signature: Water User  
Date: 12/10/85

Signature: Landowner of Well Site  
Date: 12/4/85

For Official Use:
State Well No. 4257-04  
DLNR Permit No.  
DLNR Application No.  

PERMIT NOT ISSUED
TEMPORARY 1/2" PLATE W/ 1/2" VENT HOLE. TACK WELD TO CASING

FINISH GRADE

30-INCH DIA. BOREHOLE

24-INCH SOLID PVC WELL CASING

CEMENT GROUT

PACKER (15"x10" REDUCER OPTIONAL)

15 INCH SOLID PVC WELL CASING

2-FOOT THK. MIN. LAYER OF FINE SAND

GRAVEL PACK

CENTRALIZERS

15 INCH PVC WELL SCREEN DESIGNED FOR 4,000 GPM AT A MAXIMUM ENTRANCE VELOCITY OF 8 FPS SEE SPECS.

24-INCH DIA. BOREHOLE

15 INCH SOLID PVC WELL CASING

136' -

140' -

PRODUCTION WELL DETAIL
NOT TO SCALE
MARINE CULTURE ENTERPRISES
KAHUKU, OAHU, HAWAII
RECOMMENDATION FOR SUPPLY WELL REDESIGN

FIGURE 22
FUTURE PRODUCTION WELLS

DITCH "A"

CONVERTED TEST WELL H-1

OXYGEN PLANT

FINISHING

BROODSTOCK
CONCEPTUAL DESIGN, FINAL DESIGN MAY BE MODIFIED TO SUIT FIELD CONDITIONS.
CONCEPTUAL LOCATIONS, FUTURE WELLS FOR EXPANSION TO 6-HECTARES

EXIST. DITCH

EXIST. PAVEMENT (ABANDONED RUNWAY)

FRESH WATER WETLANDS

FRESH WATER WETLANDS

CONCEPTUAL LOCATIONS, SEA WATER PRODUCTION WELLS FOR INITIAL 2-HECTARES

PROPOSED EFFLUENT DISPOSAL DITCH TO OCEAN

INJECTION WELL LOCATIONS

FUTURE COLLECTOR DITCH

FUTURE PRODUCTION UNITS

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