July 5, 1995

Honorable Michael D. Wilson, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii

Dear Mr. Wilson:

Water Use Permit (WUP) Applications
Ewa Caprock Groundwater Management Area, Oahu

Attached for your information are comments by the Board of Water Supply on the notice of applications for water use permits for the Ewa Caprock Groundwater Management Area. Comments by the Planning Department were forwarded earlier in a letter dated June 22, 1995, a copy which is attached.

Should you have any questions, please call Randolph Hara at [redacted]

Sincerely,

[Signature]
CHERYL D. SOON
Chief Planning Officer

CDS:lh

Attachments

cc: Honorable Jeremy Harris, Mayor
   (Mayor’s Control No. 23037)
June 29, 1995

TO: CHERYL D. SOON, CHIEF PLANNING OFFICER  
PLANNING DEPARTMENT

FROM: RAYMOND H. SATO, MANAGER AND CHIEF ENGINEER  
BOARD OF WATER SUPPLY

SUBJECT: STATE WATER COMMISSION'S LETTER DATED MAY 30, 1995 TO  
MAYOR JEREMY HARRIS ON THE NOTICE OF APPLICATIONS FOR  
WATER USE PERMITS, EWA CAPROCK GROUNDWATER MANAGEMENT  
AREA, OAHU

We have no objections to the applications for permits for groundwater from the Ewa Caprock Aquifer.

If you have any questions, please contact Herbert H. Minakami at "". 
June 22, 1995

Honorable Michael D. Wilson, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii

Dear Mr. Wilson:

Water Use Permit (WUP) Applications
Ewa Caprock Groundwater
Management Area, Oahu

This is in response to your memorandum dated May 30, 1995. We have reviewed the subject applications for non-potable water in the Ewa Caprock Aquifer for irrigation uses and provide the comments below for your consideration.

- Ewa by Gentry - 265,700 gpd; Hawaii Prince Golf Club - 500,000 gpd;
  Arbors - 63,000 gpd; Palm Villas II - 48,000 gpd; Palm Court - 66,000 gpd;
  Estate of James Campbell (Kapolei) - 302,000 gpd

The projects are shown on the Ewa Development Plan Land Use Map (DPLUM). Therefore, we have no objections to these temporary water use permit requests.

- Kapolei Golf Course and Villages of Kapolei - 1,494,000 gpd

The area identified within the HFDC request is designated Agriculture on the Ewa DPLUM. Although the proposed and existing uses are not consistent with this designation, the projects does have Act 15 exemption from County planning and zoning regulations. Therefore, we have no objections to HFDC request.
Ewa Marina - 1.5 mgd

The Ewa Marina (Haseko (Ewa), Inc.) development is shown on the Ewa DPLUM. However, the allocation of water for the Ewa Marina project may be premature at this time. Use of the water will not be needed until several approvals are granted. The Haseko Corporation is in ongoing discussion regarding drainage and the permits for the marina construction are part of a Commission on Water Resource Management contested case hearing.

Construction of the project including subdivision, grading and building permits will be delayed until these issues are resolved. We are unable to provide an estimate of when the project would be ready for an allocation. Please be clear that this comment regarding timing in no way is in opposition to development of Ewa Marina. The project should not be penalized from future allocations of water to implement the Ewa Development Plan.

Please be advised that the City is preparing a policy regarding reuse of Honouliuli Sewage Treatment Plant effluent within the Ewa plains area. When this effluent is available for public use, we recommend that the Commission require non-potable water users to use the treated effluent to meet their non-potable water needs.

Should you have any questions, please call Eugene Takahashi at [REDACTED]

Sincerely,

CHERYL D. SOON
Chief Planning Officer

CDS:js

cc: The Honorable Jeremy Harris, Mayor
EXTENSION -- Interim Water Use Permits
Ewa Caprock Ground Water Management Area, Oahu

Applicant:

(Well Nos. 1905-08,10)
The Estate of James Campbell

(Well Nos. 2003-01,02,04,05,07)
State of Hawaii,
Housing Finance & Development Corp.

(Well Nos. 1900-02,17 to 20 & 1901-03)

(Well Nos. 2001-03,04,05,09,10 & 2003-06)
Gentry Development Co.

(Well No. 2001-07)
The Arbors Association

Landowner:

Same

Same

Same

Same

Same
Staff Submittal

(Well No. 2001-08)
Palm Villas II Association
Same

(Well No. 2002-12)
Palm Court Association
Same

(Well No. 1902-01)
Haseko (Ewa), Inc.
Same

Background:

At the July 13, 1994 and January 25, 1995 meetings of the Commission on Water Resource Management (Commission), interim water use permits for durations of one year or less were approved for the above groundwater sources for various nonpotable uses at new developments in Ewa, Oahu. These permits are due to expire on July 12, 1995.

Expiration dates are being specified for water use permits in the Ewa Caprock because there are uncertainties regarding the present sustainable yield of the Ewa Caprock Aquifer and the impacts of land use changes on future water availability.

Requests for new water use permits to continue current groundwater uses after the July 12, 1995 expiration date have been received from each of the applicants.

RECOMMENDATION:

Staff recommends that the Commission extend the duration of the present water use permits until such time that a decision is made at a meeting on Oahu.

Respectfully submitted,

RAE M. LOUI
Deputy Director

APPROVED FOR SUBMITTAL:

MICHAEL D. WILSON, Chairperson
Minutes
Commission on Water Resource Management
July 5, 1995

Unanimously approved. (Nobriga/Giralda

ITEM 6  PARKER RANCH, APPLICATION FOR A STREAM CHANNEL ALTERATION PERMIT, CONSTRUCTION OF A WATERLINE CROSSING, WAIKOLOA AND WAIKOLOA IKI STREAMS, KAMUELA, HAWAII (TMK 6-5-01:01 AND 21)

STAFF PRESENTATION: David Higa

Unanimously approved. (Nobriga/Cox)

ITEM 8  EXTENSION - INTERIM WATER USE PERMITS, EWA CAPROCK GROUND WATER MANAGEMENT AREA, OAHU

STAFF PRESENTATION: Roy Hardy

Unanimously approved. (Nobriga/Cox)

ITEM 9  STATUS REPORT ON AFTER-THE-FACT STREAM CHANNEL ALTERATION AND STREAM DIVERSION WORKS PERMITS AND PETITION TO AMEND THE INTERIM INSTREAM FLOW STANDARD, HILAWA AND LALAKEA STREAMS, HONOKAA, HAWAII (TMK 4-8-03:06)

STAFF PRESENTATION: David Higa

The following persons gave oral and written testimonies:

Mr. Peter Simmons, Bishop Estate
Mr. Paul Matsuo, Dept. of Agriculture
Mr. Patrick Gardner, Legal Aid Society of Hawaii
Mr. Lawrence Miller
Mr. Jeffrey Quin
Mr. Robert Shioji
Mr. Ben Mahilum
Mr. Kakalau
Ms. Catherine Allen
Ms. Clara Lakakalia
Mr. Abraham Kamakawiwoole
Mr. Christopher Rathburn
Ms. Brenda Machado Lee
Mr. Jim Cain
Mr. Burt Kauhi
Mr. Karl Foytik
Mr. Kia Fronda

Chairperson Wilson stated that the purpose of this item was to get input from the community. A decision will be made at a later date.
Dear Mr. Wilson:

Subject: Your Letter of May 30, 1995 on the Ewa Caprock Groundwater Use Permit Applications

Thank you for the opportunity to comment on these applications for permits for groundwater from the Ewa Caprock Aquifer. We have no objections to the permits and return the cover memo marked accordingly.

If you have any questions, please contact Herbert H. Minakami at [Redacted]

Very truly yours,

[Signature]

FOR RAYMOND H. SATO
Manager and Chief Engineer

Attachment

Pure Water . . . man’s greatest need — use it wisely
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, Ewa Caprock Ground Water Management Area, O‘ahu for Well Nos. 1900-02, 17-20; 1901-03; 1902-01; 1905-08,10; 2001-03-05,07-10; 2002-12; 2003-01-07  
Honouliuli, ‘Ewa, Oahu  

Thank you for the opportunity to review this project. The applicants propose 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:jk
Honorable Michael D. Wilson, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii

Dear Mr. Wilson:

Water Use Permit (WUP) Applications
Ewa Caprock Groundwater
Management Area, Oahu

This is in response to your memorandum dated May 30, 1995. We have reviewed the subject applications for non-potable water in the Ewa Caprock Aquifer for irrigation uses and provide the comments below for your consideration.

- Ewa by Gentry - 265,700 gpd; Hawaii Prince Golf Club - 500,000 gpd; Arbors - 63,000 gpd; Palm Villas II - 48,000 gpd; Palm Court - 66,000 gpd; Estate of James Campbell (Kapolei) - 302,000 gpd

The projects are shown on the Ewa Development Plan Land Use Map (DPLUM). Therefore, we have no objections to these temporary water use permit requests.

- Kapolei Golf Course and Villages of Kapolei - 1,494,000 gpd

The area identified within the HFDC request is designated Agriculture on the Ewa DPLUM. Although the proposed and existing uses are not consistent with this designation, the projects does have Act 15 exemption from County planning and zoning regulations. Therefore, we have no objections to HFDC request.
Honorable Michael D. Wilson, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
June 22, 1995
Page 2

Ewa Marina - 1.5 mgd

The Ewa Marina (Haseko (Ewa), Inc.) development is shown on the Ewa DPLUM. However, the allocation of water for the Ewa Marina project may be premature at this time. Use of the water will not be needed until several approvals are granted. The Haseko Corporation is in ongoing discussion regarding drainage and the permits for the marina construction are part of a Commission on Water Resource Management contested case hearing.

Construction of the project including subdivision, grading and building permits will be delayed until these issues are resolved. We are unable to provide an estimate of when the project would be ready for an allocation. Please be clear that this comment regarding timing in no way is in opposition to development of Ewa Marina. The project should not be penalized from future allocations of water to implement the Ewa Development Plan.

Please be advised that the City is preparing a policy regarding reuse of Honouliuli Sewage Treatment Plant effluent within the Ewa plains area. When this effluent is available for public use, we recommend that the Commission require non-potable water users to use the treated effluent to meet their non-potable water needs.

Should you have any questions, please call Eugene Takahashi at [redacted]

Sincerely,

Cheryl D. Soon
Chief Planning Officer

CDS:js

cc: The Honorable Jeremy Harris, Mayor
To: The Honorable Michael Wilson, Chairperson
Commission on Water Resource Management

From: Dr. Bruce Anderson
Deputy Director, Environmental Health

Subject: Water Use Permit Applications

Ewa Caprock Groundwater Management
Aiea, Oahu
TMK: 9-1-12: 05

Thank you for allowing us to review and comment on the subject applications contained in your memorandum dated May 30, 1995.

We have no objections to the use of the Ewa Caprock groundwater for irrigation purposes in the Ewa Management Area. However, there are plans to provide treated wastewater effluent for non-potable purposes in the immediate area of the Ewa Caprock Aquifer. The Department of Health recommends that Water Use Permit from this aquifer be granted only if no other alternative source is available, and only until the effluent is available to the applicant. Once the effluent becomes available, we recommend that the applicant be given a reasonable time to connect to the effluent water system, then the Water Use Permit, should be withdrawn. Provisions to include the proper infrastructure to implement these conditions should be required as part of any new construction plans.

All reuse plans must conform to applicable provisions of the Department of Health's "Guidelines for the Treatment and Use of Reclaimed Water." We reserve the right to review the detailed plans for conformance to these guidelines and to the Hawaii Administrative Rules, Chapter 11-62.

Should you have any questions, please contact Ms. Lori Kajiwara of the Wastewater Branch at [contact information]

cc: WWB
June 2, 1995

Mr. Michael D. Wilson
Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources

Dear Mr. Wilson:

Subject: Applications for Water Use Permits - Ewa Caprock Groundwater Management Area, Oahu (Public Notice)

We have reviewed the subject document received with your memorandum dated May 30, 1995, and have the following comments to offer:

1. The following TMKs are located within the State Land Use Urban District:

   9-1-10: 17
   9-1-12: 5, 6, 7
   9-1-16: 1, 35
   9-1-70: 132

2. TMKs 9-1-10: 6 and 7 are located within the State Land Use Agricultural District.

3. According to current TMK records, TMK 9-1-61: 9 has been transferred to TMK 9-1-69: 4, which is located within the State Land Use Agricultural District.

4. TMK 9-1-16: 25 is located within the State Land Use Urban and Agricultural Districts. We would like to note that LUC Docket No. A94-708/Office of State Planning, State of Hawaii, which proposes the reclassification of portions of this parcel from the State Land Use Agricultural District to the Urban District, is tentatively scheduled for action on July 27 & 28, 1995.
5. The following areas are predominantly located within the State Land Use Urban District, however, portions of these areas may also be located within the State Land Use Agricultural District:

   A) City of Kapolei
   B) Kapolei Business Park
   C) Kapolei Regional Park
   D) Kapolei Golf Course
   E) Villages of Kapolei

We have no other comments to offer at this time.

We have enclosed your cover memorandum as requested.

Should you have any questions, please feel free to call me or Kathy Yonamine at [redacted].

Sincerely,

ESTHER UEDA
Executive Officer

EU:KY:th
enc.
Transmitted for your review and comment is a copy of the public notice for water use permit applications in the Ewa Caprock Aquifer. The applicants were previously awarded interim water use permits for durations of one year or less, which will expire on July 12, 1995. The requests are for new water use permits to continue current or immediate nonpotable uses in the Ewa Caprock Groundwater Management Area. Public notice of the water use permit applications will be published in the Honolulu Star Bulletin issues of June 3, 1995 and June 7, 1995.

We would appreciate your review of the proposed nonpotable uses for any conflicts or inconsistencies with the programs, plans, and objectives specific to your organization or department only. Please return this cover memo form by June 22, 1995.

If you have any questions regarding these applications, please contact Lenore Nakama at [contact information redacted].

Attachment(s)

Response:

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

Contact person: Kathy Yonamine  Phone: [phone number redacted]
Signed: [signature]  Date: 6/05/95
PUBLIC NOTICE

Applications for Water Use Permits
Ewa Caprock Groundwater Management Area, Oahu

The following applications for new interim water use permits for the Ewa Caprock Aquifer 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." Each of the applicants below have been awarded interim water use permits for durations of one year or less, which will expire on July 12, 1995.

Haseko Well No. 1 (Well No. 1902-01)
Applicant: Haseko (Ewa), Inc.
Date Completed Application Received: May 22, 1995
Aquifer: Ewa Caprock Aquifer System, Oahu
Water Source: Haseko Well No. 1 (Well No. 1902-01) at Oahu Sugar Co. Field 088, Ewa, Oahu, Tax Map Key 9-1-12:5
Quantity Requested: 1,500,000 gallons per day.
Water Use: Golf course, roadway, and maintenance irrigation
Place of Water Use: Ewa Marina development, Ewa, Oahu, TMKs 9-1-12:5,6,7

Geiger Park (2001-03)
Applicant: Gentry Development Co.
Date Completed Application Received: May 22, 1995
Aquifer: Ewa Caprock Aquifer System, Oahu
Water Source: Geiger Park (Well No. 2001-03), located near intersection of Geiger and Ft. Weaver Rds., Ewa, Oahu, TMK 9-1-16:35
Quantity Requested: 30,000 gallons per day.
Water Use: Irrigation for 10-acre park
Place of Water Use: Ewa by Gentry development, Ewa, Oahu, TMK 9-1-16:35

Sunrise Apts. (2001-04)
Applicant: Gentry Development Co.
Date Completed Application Received: May 22, 1995
Aquifer: Ewa Caprock Aquifer System, Oahu
Water Source: Sunrise Apts. (Well No. 2001-04), Ewa by Gentry construction site, Ewa, Oahu, TMK 9-1-61:8
Quantity Requested: 40,000 gallons per day.
Water Use: Landscape irrigation
Place of Water Use: Ewa by Gentry development, Ewa, Oahu, TMKs 9-1-61:7,41-50
Soda Creek III (2001-05)

Applicant: Gentry Development Co.

Date Completed Application Received: May 22, 1995
Aquifer: Ewa Caprock Aquifer System, Oahu
Water Source: Soda Creek III (Well No. 2001-05), Ewa by Gentry development, Ewa, Oahu, TMK 9-1-70:132
Quantity Requested: 20,000 gallons per day.
Water Use: Landscape and roadway irrigation
Place of Water Use: Ewa by Gentry development, Ewa, Oahu, TMKs 9-1-70:132

Ft. Weaver Apts. (2001-09)

Applicant: Gentry Development Co.

Date Completed Application Received: May 22, 1995
Aquifer: Ewa Caprock Aquifer System, Oahu
Water Source: Ft. Weaver Apts. (Well No. 2001-09), Ewa by Gentry development, Ewa, Oahu, TMK 9-1-61:2
Quantity Requested: 23,400 gallons per day.
Water Use: Landscape and roadway irrigation
Place of Water Use: Ewa by Gentry development, Ewa, Oahu, TMKs 9-1-61:2,9

Gentry Golf Course (2003-06)

Applicant: Gentry Development Co.

Date Completed Application Received: May 22, 1995
Aquifer: Ewa Caprock Aquifer System, Oahu
Water Source: Gentry Golf Course (Well No. 2003-06), Ewa by Gentry development, Ewa, Oahu, TMK 9-1-61:2
Quantity Requested: 130,200 gallons per day.
Water Use: Landscape irrigation
Place of Water Use: Ewa by Gentry development, Ewa, Oahu, TMKs 9-1-61:Lots 2 & 54

Gentry Area 24 (2001-10)

Applicant: Gentry Development Co.

Date Completed Application Received: May 22, 1995
Aquifer: Ewa Caprock Aquifer System, Oahu
Water Source: Gentry Area 24 (Well No. 2001-10), Ewa by Gentry development, Ewa, Oahu, TMK 9-1-10:17
Quantity Requested: 22,100 gallons per day.
Water Use: Landscape and roadway irrigation
Place of Water Use: Ewa by Gentry development, TMKs 9-1-10:17
EP 22 & Wells 1 to 5 (1900-02, 17 to 20 & 1901-03)
Applicant: Hawaii Prince Golf Club
Date Completed Application Received: May 22, 1995
Aquifer: Ewa Caprock Aquifer System, Oahu
Water Source: EP 22 & Wells 1 to 5 (1900-02, 17 to 20 & 1901-03), Hawaii Prince Golf Club, Ewa, Oahu, TMKs 9-1-10:6,7
Quantity Requested: 500,000 gallons per day.
Water Use: Golf course irrigation
Place of Water Use: Hawaii Prince Club, Ewa, Oahu, TMK 9-1-10:6

Arbors (2001-07)
Applicant: The Arbors Homeowners Association
Date Completed Application Received: May 22, 1995
Aquifer: Ewa Caprock Aquifer System, Oahu
Water Source: Arbors (2001-07), The Arbors, Ewa by Gentry, Ewa, Oahu, TMK 9-1-61:32
Quantity Requested: 63,000 gallons per day.
Water Use: Landscape irrigation
Place of Water Use: The Arbors, Ewa by Gentry, Ewa, Oahu, TMK 9-1-61:28,32,36-39

Palm Villa II (2001-08)
Applicant: Palm Villas II Association
Date Completed Application Received: May 10, 1995
Aquifer: Ewa Caprock Aquifer System, Oahu
Water Source: Palm Villa II (2001-08), Palm Villas II, Ewa by Gentry, Ewa, Oahu, TMK 9-1-61:27
Quantity Requested: 48,000 gallons per day.
Water Use: Landscape irrigation
Place of Water Use: Palm Villas II, Ewa by Gentry, Ewa, Oahu, TMKs 9-1-61:13-15,25-27,34

Palm Court (2002-12)
Applicant: Palm Court Homeowners Association
Date Completed Application Received: May 22, 1995
Aquifer: Ewa Caprock Aquifer System, Oahu
Water Source: Palm Court (2002-12), Palm Court, Ewa by Gentry, Ewa, Oahu, TMK 9-1-61:22
Quantity Requested: 66,000 gallons per day.
Water Use: Landscape irrigation
Place of Water Use: Palm Court, Ewa by Gentry, Ewa, Oahu, TMKs 9-1-61:17-23
Kapolei Irr (1905-08 & 10)
Applicant: The Estate of James Campbell
Date Completed Application Received: May 22, 1995
Aquifer: Ewa Caprock Aquifer System, Oahu
Water Source: Kapolei Irr (1905-08 & 10), Kapolei City development, TMK 9-1-16:01
Quantity Requested: 302,000 gallons per day.
Water Use: Nonpotable urban uses
Place of Water Use: City of Kapolei, Kapolei Business Park, Kapolei Regional Park, Oahu

Kapolei Irr A,B,C-1,D,E (2003-01,02,04,05,07)
Applicant: State of Hawaii
Housing Finance and Development Corp. Blvd.
Date Completed Application Received: May 23, 1995
Aquifer: Ewa Caprock Aquifer System, Oahu
Water Source: Kapolei Irr A,B,C-1,D,E (2003-01,02,04,05,2003-07), Kapolei Golf Course, TMK 9-1-16:25
Quantity Requested: 1,494,000 gallons per day.
Water Use: Golf course and urban irrigation
Place of Water Use: Kapolei Golf Course and Villages of Kapolei, Oahu

Written objections or comments on the above applications may be filed by any person who has property interest in any land within the Ewa Caprock Groundwater Management Area, any person who will be directly and immediately affected by the proposed water use(s), or any other interested person. Written objections shall: (1) state property or other interest in the matter (provide TMK information); (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; and (3) state all grounds for objections to the proposed permit. Written objections must be received by June 22, 1995. Objections must be sent to 1) the Commission on Water Resource Management, and 2) the applicant(s) at the above address(es).

COMMISSION ON WATER RESOURCE MANAGEMENT

EDWIN T. SAKODA for

Michael D. Wilson
Chairperson

Dated: 5/30/95

Mr. Ronald M. Uemura
Gentry Development Co.

Dear Mr. Uemura:

Enclosed is a copy of the public notice for your water use permit applications for six (6) Ewa by Gentry wells in the Ewa Caprock Aquifer. The attached notice will be published in the Honolulu Star Bulletin issues of June 3, 1995 and June 7, 1995.

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

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

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

Sincerely,

[Signature]
RAE M. LOUI
Deputy Director

LN:ss
Encl.
TO:  
Mr. Kali Watson, Chairperson  
Department of Hawaiian Home Lands  
Dr. Lawrence Milke, Director  
Department of Health  
Mr. Clayton H. W. Hee, Chairperson  
Office of Hawaiian Affairs  
Ms. Esther Ueda, Executive Officer  
Land Use Commission  
Mr. Raymond Sato, Manager & Chief Engineer  
Honolulu Board of Water Supply  
Mr. Patrick Onishi, Director  
Department of Land Utilization  
Mrs. Cheryl D. Soon, Chief Planning Officer  
Planning Department  

FROM:  
Michael D. Wilson, Chairperson  
Commission on Water Resource Management  

SUBJECT: Water Use Permit Applications  
Ewa Caprock Groundwater Management Area, Oahu  

Transmitted for your review and comment is a copy of the public notice for water use permit applications in the Ewa Caprock Aquifer. The applicants were previously awarded interim water use permits for durations of one year or less, which will expire on July 12, 1995. The requests are for new water use permits to continue current or immediate nonpotable uses in the Ewa Caprock Groundwater Management Area. Public notice of the water use permit applications will be published in the Honolulu Star Bulletin issues of June 3, 1995 and June 7, 1995.

We would appreciate your review of the proposed nonpotable uses for any conflicts or inconsistencies with the programs, plans, and objectives specific to your organization or department only. Please return this cover memo form by June 22, 1995.

If you have any questions regarding these applications, please contact Lenore Nakama at 587-0218.

Attachment(s)

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

Contact person: June Harrigan  
Phone:  
Date: 6/14/95

Signed: Art Baneckham  
Date: 6/14/95
To: The Honorable Michael Wilson, Chairperson
Commission on Water Resource Management

From: Dr. Bruce Anderson
Deputy Director, Environmental Health

Subject: Water Use Permit Applications

Ewa Caprock Groundwater Management
Aiea, Oahu
TMK: 9-1-12: 05

June 19, 1995

Thank you for allowing us to review and comment on the subject applications contained in your memorandum dated May 30, 1995.

We have no objections to the use of the Ewa Caprock groundwater for irrigation purposes in the Ewa Management Area. However, there are plans to provide treated wastewater effluent for non-potable purposes in the immediate area of the Ewa Caprock Aquifer. The Department of Health recommends that Water Use Permit from this aquifer be granted only if no other alternative source is available, and only until the effluent is available to the applicant. Once the effluent becomes available, we recommend that the applicant be given a reasonable time to connect to the effluent water system, then the Water Use Permit, should be withdrawn. Provisions to include the proper infrastructure to implement these conditions should be required as part of any new construction plans.

All reuse plans must conform to applicable provisions of the Department of Health’s "Guidelines for the Treatment and Use of Reclaimed Water." We reserve the right to review the detailed plans for conformance to these guidelines and to the Hawaii Administrative Rules, Chapter 11-62.

Should you have any questions, please contact Ms. Lori Kajiwara of the Wastewater Branch at [redacted].

Cc: WWB
TO: Mr. Kali Watson, Chairperson
Department of Hawaiian Home Lands

Dr. Lawrence Miike, Director
Department of Health

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

Ms. Esther Ueda, Executive Officer
Land Use Commission

Mr. Raymond Sato, Manager & Chief Engineer
Honolulu Board of Water Supply

Mr. Patrick Onishi, Director
Department of Land Utilization

Mrs. Cheryl D. Soon, Chief Planning Officer
Planning Department

FROM: Michael D. Wilson, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Applications
Ewa Caprock Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of the public notice for water use permit applications in the Ewa Caprock Aquifer. The applicants were previously awarded interim water use permits for durations of one year or less, which will expire on July 12, 1995. The requests are for new water use permits to continue current or immediate nonpotable uses in the Ewa Caprock Groundwater Management Area. Public notice of the water use permit applications will be published in the Honolulu Star Bulletin issues of June 3, 1995 and June 7, 1995.

We would appreciate your review of the proposed nonpotable uses for any conflicts or inconsistencies with the programs, plans, and objectives specific to your organization or department only. Please return this cover memo form by June 22, 1995.

If you have any questions regarding these applications, please contact Lenore Nakama at [redacted]

Attachment(s)

Response:

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

Signed: [redacted]

Date: 06/23/95
TO: Mr. Kali Watson, Chairperson
   Department of Hawaiian Home Lands

   Dr. Lawrence Miike, Director
   Department of Health

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

   Ms. Esther Ueda, Executive Officer
   Land Use Commission

   Mr. Raymond Sato, Manager & Chief Engineer
   Honolulu Board of Water Supply

   Mr. Patrick Onishi, Director
   Department of Land Utilization

   Mrs. Cheryl D. Soon, Chief Planning Officer
   Planning Department

FROM: Michael D. Wilson, Chairperson
   Commission on Water Resource Management

SUBJECT: Water Use Permit Applications
   Ewa Caprock Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of the public notice for water use permit applications in the Ewa Caprock Aquifer. The applicants were previously awarded interim water use permits for durations of one year or less, which will expire on July 12, 1995. The requests are for new water use permits to continue current or immediate nonpotable uses in the Ewa Caprock Groundwater Management Area. Public notice of the water use permit applications will be published in the Honolulu Star Bulletin issues of June 3, 1995 and June 7, 1995.

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If you have any questions regarding these applications, please contact Lenore Nakama at

Attachment(s)

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

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

Signed: RAYMOND H. SATO
Manager and Chief Engineer

Date: 06/1995
TO: Aquatic Resources
    Forestry and Wildlife/Natural Area Reserve System
    Historic Preservation
    Land Management
    Office of Conservation and Environmental Affairs
    State Parks
    Water and Land Development

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

SUBJECT: Request for Comments
    Water Use Permit Applications
    Ewa Caprock Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of the public notice for water use permit applications in the Ewa Caprock Aquifer. The applicants were previously awarded interim water use permits for durations of one year or less, which will expire on July 12, 1995. The requests are for new water use permits to continue current or immediate nonpotable uses in the Ewa Caprock Groundwater Management Area. Public notice of the water use permit applications will be published in the Honolulu Star Bulletin issues of June 3, 1995 and June 7, 1995.

We would appreciate your review of the proposed nonpotable uses for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please return this cover memo form by June 22, 1995.

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

LN:ss
Attachment(s)

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

Contact person: MANABU TAGOMORI
Phone: 6 9 0 1

Signed: ________________ Date: ________________
Transmitted for your review and comment is a copy of the public notice for water use permit applications in the Ewa Caprock Aquifer. The applicants were previously awarded interim water use permits for durations of one year or less, which will expire on July 12, 1995. The requests are for new water use permits to continue current or immediate nonpotable uses in the Ewa Caprock Groundwater Management Area. Public notice of the water use permit applications will be published in the Honolulu Star Bulletin issues of June 3, 1995 and June 7, 1995.

We would appreciate your review of the proposed nonpotable uses for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please return this cover memo form by June 22, 1995.

If you have any questions regarding these applications, please contact Lenore Nakama at [name redacted].

Response:

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

Contact person: [name redacted]  Phone: [redacted]
Signed: [signature]  Date: 6/13/95
TO:  
Aquatic Resources  
Forestry and Wildlife/Natural Area Reserve System  
Historic Preservation  
Land Management  
Office of Conservation and Environmental Affairs  
State Parks  
Water and Land Development  

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

SUBJECT:  Request for Comments  
Water Use Permit Applications  
Ewa Caprock Groundwater Management Area, Oahu  

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We would appreciate your review of the proposed nonpotable uses for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. **Please return this cover memo form by June 22, 1995.**

If you have any questions regarding these applications, please contact Lenore Nakama at [phone number redacted].

LN:ss  
Attachment(s)  

Response:  6/7/95  
(✓) We have no comments  
(✓) We have no objections  
( ) Comments attached  
( ) Additional information requested  
( ) Extended review period requested

DOFAW HAS NO COMMENTS OR OBJECTIONS TO THE PROPOSED REQUEST.

Contact person:  Administrator  
Phone:  [phone number redacted]  

Signed:  ____________________ Date:  _______ 

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

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

SUBJECT: Request for Comments  
Water Use Permit Applications  
Ewa Caprock Groundwater Management Area, Oahu

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We would appreciate your review of the proposed nonpotable uses for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please return this cover memo form by June 22, 1995.

If you have any questions regarding these applications, please contact Lenore Nakama at [Contact Information].

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

Contact person: [Name]  Phone: [Phone Number]

Signed: [Signature]  Date: 6-2-95
State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Commission on Water Resource Management
Honolulu, Hawaii
MAY 30 1995

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

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

SUBJECT: Request for Comments
Water Use Permit Applications
Ewa Caprock Groundwater Management Area, Oahu

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We would appreciate your review of the proposed nonpotable uses for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please return this cover memo form by June 22, 1995.

If you have any questions regarding these applications, please contact Lenore Nakama at

LN: ss
Attachment(s)

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

Contact person: Phone:

Signed: Date: 6/11/95
Transmitted for your review and comment is a copy of the public notice for water use permit applications in the Ewa Caprock Aquifer. The applicants were previously awarded interim water use permits for durations of one year or less, which will expire on July 12, 1995. The requests are for new water use permits to continue current or immediate nonpotable uses in the Ewa Caprock Groundwater Management Area. Public notice of the water use permit applications will be published in the Honolulu Star Bulletin issues of June 3, 1995 and June 7, 1995.

We would appreciate your review of the proposed nonpotable uses for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please return this cover memo form by June 22, 1995.

If you have any questions regarding these applications, please contact Lenore Nakama at

Response:

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

Contact person: ______________________ Phone: ______________________

Signed: ______________________ Date: ______________________
TO: Other Interested Parties

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

SUBJECT: Request for Comments
Water Use Permit Applications
Ewa Caprock Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of the public notice for water use permit applications in the Ewa Caprock Aquifer. The applicants were previously awarded interim water use permits for durations of one year or less, which will expire on July 12, 1995. The requests are for new water use permits to continue current or immediate nonpotable uses in the Ewa Caprock Groundwater Management Area. Public notice of the water use permit applications will be published in the Honolulu Star Bulletin issues of June 3, 1995 and June 7, 1995.

We would appreciate your review of the proposed nonpotable uses for any conflicts or interferences with the programs, plans, and objectives of the organization or agency that you represent. Written objections should be made in accordance with Section 13-171-18 of our Administrative Rules and must be filed by the June 22, 1995 deadline.

If you have any questions regarding these applications, please contact Lenore Nakama at [phone number]

LN:ss
Attachment(s)

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

Contact person: ____________________________ Phone: ____________________________

Signed: ____________________________ Date: ____________________________
TO: Mr. Kali Watson, Chairperson
Department of Hawaiian Home Lands
Dr. Lawrence Miike, Director
Department of Health
Mr. Clayton H. W. Hee, Chairperson
Office of Hawaiian Affairs
Ms. Esther Ueda, Executive Officer
Land Use Commission
Mr. Raymond Sato, Manager & Chief Engineer
Honolulu Board of Water Supply
Mr. Patrick Onishi, Director
Department of Land Utilization
Mrs. Cheryl D. Soon, Chief Planning Officer
Planning Department

FROM: Michael D. Wilson, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Applications
Ewa Caprock Groundwater Management Area, Oahu

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We would appreciate your review of the proposed nonpotable uses for any conflicts or inconsistencies with the programs, plans, and objectives specific to your organization or department only. Please return this cover memo form by June 22, 1995.

If you have any questions regarding these applications, please contact Lenore Nakama at [email protected].

Attachment(s)

Response:

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

Contact person: ___________________________ Phone: ___________________________

Signed: ___________________________ Date: ___________________________
Honorable Jeremy Harris, Mayor  
City & County of Honolulu  
City Hall  

Dear Mayor Harris:

Notice of Applications for Water Use Permits  
Ewa Caprock Groundwater 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 water use permit applications for the Ewa Caprock Groundwater Management Area, which will be published in the Honolulu Star Bulletin.

These requests are for new water use permits to continue current or immediate nonpotable uses at new developments in Ewa, Oahu. The applicants were previously awarded interim water use permits for durations of one year or less, which will expire on July 12, 1995.

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 would appreciate receiving your comments, within the next sixty (60) days, on whether these proposed nonpotable uses are consistent with county plans and policies.

Aloha,

Michael D. Wilson

Enclosures
May 22, 1995

Ms. Rae Loui
Deputy Director
Commission on Water Resource Management

Dear Ms. Loui:

Subject: Request For Extension of the Water Use Permits For
Wells 2001-03 to -05, -09, and -10 and 2003-06
Ewa Caprock Groundwater Management Area

In response to your letter of May 5, 1995, we wish to confirm by this letter that Gentry Development Company will require the continued use of the following six Ewa Caprock Wells:

<table>
<thead>
<tr>
<th>State No.</th>
<th>Project Name</th>
<th>Use Allocation (MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-03</td>
<td>Geiger Park</td>
<td>.0300</td>
</tr>
<tr>
<td>2001-04</td>
<td>Sunrise Apartments</td>
<td>.0400</td>
</tr>
<tr>
<td>2001-05</td>
<td>Soda Creek III (Sun Terra Tot Lot)</td>
<td>.0200</td>
</tr>
<tr>
<td>2001-09</td>
<td>Fort Weaver Apartments (Coronado)</td>
<td>.0234</td>
</tr>
<tr>
<td>2003-06</td>
<td>Gentry Golf Course</td>
<td>.1302</td>
</tr>
<tr>
<td>2001-10</td>
<td>Gentry Area 24</td>
<td>.0221</td>
</tr>
</tbody>
</table>

The first four wells are currently in use. Based on pumpage records to date, no modifications of the permits are required. The last two wells, wells no. 2003-06 and 2001-10, are currently under design. Their construction is expected to begin before the end of 1995.

We have also attached an updated annual non-potable demand projection to the year 2000.

Sincerely,

GENTRY HOMES, LTD.

Randolph K. Ohue
Vice President

attachment
RKO.ev
/wellfrut.doc
## EWA BY GENTRY NON-POTABLE WATER USE FORECAST

<table>
<thead>
<tr>
<th>Project Name</th>
<th>TMK</th>
<th>County Development Plan Designation</th>
<th>County Zoning</th>
<th>State Land Use District</th>
<th>No. of Units</th>
<th>Units (a) or Lin. Ft (ft)</th>
<th>GPD per Acre or Lin. Foot</th>
<th>Year of Development Plan (GPD)</th>
<th>Completed/ Approved</th>
<th>Cumulative Total (GPD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 1 (PV-1)</td>
<td>9-1-50-91</td>
<td>LDA</td>
<td>A-1</td>
<td>Urban</td>
<td>15.39</td>
<td>a</td>
<td>2,000</td>
<td>30,780</td>
<td>30,780</td>
<td></td>
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<tr>
<td>Area 1 (PC-1)</td>
<td>9-1-121-1, 9-1-12-29 per 1</td>
<td>LDA</td>
<td>A-1</td>
<td>Urban</td>
<td>4.7</td>
<td>a</td>
<td>2,000</td>
<td>9,400</td>
<td>9,400</td>
<td></td>
</tr>
<tr>
<td>Area 2 (PV-2)</td>
<td>9-1-1-13, 2-13, 3-27, 34-39</td>
<td>LDA</td>
<td>A-1</td>
<td>Urban</td>
<td>15.67</td>
<td>a</td>
<td>2,000</td>
<td>31,340</td>
<td>31,340</td>
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<tr>
<td>Area 23</td>
<td>9-1-10-17</td>
<td>LDA</td>
<td>A-1</td>
<td>Urban</td>
<td>7.48</td>
<td>a</td>
<td>2,000</td>
<td>14,960</td>
<td>14,960</td>
<td></td>
</tr>
<tr>
<td>Area 26A</td>
<td>9-1-10-2</td>
<td>LDA</td>
<td>A-1</td>
<td>Urban</td>
<td>9.75</td>
<td>a</td>
<td>2,000</td>
<td>19,500</td>
<td>19,500</td>
<td></td>
</tr>
<tr>
<td>Area 26B</td>
<td>9-1-10-2</td>
<td>LDA</td>
<td>A-1</td>
<td>Urban</td>
<td>15.08</td>
<td>a</td>
<td>2,000</td>
<td>30,160</td>
<td>30,160</td>
<td></td>
</tr>
<tr>
<td>Area 29</td>
<td>9-1-10-por 2 &amp; 15</td>
<td>PARK</td>
<td>P-2</td>
<td>Urban</td>
<td>6</td>
<td>a</td>
<td>2,000</td>
<td>24,000</td>
<td>24,000</td>
<td></td>
</tr>
<tr>
<td>Area 30</td>
<td>9-1-10-por 2 &amp; 15</td>
<td>LDA</td>
<td>A-1</td>
<td>Urban</td>
<td>16</td>
<td>a</td>
<td>2,000</td>
<td>32,000</td>
<td>32,000</td>
<td></td>
</tr>
<tr>
<td>North South Rd.</td>
<td>9-1-1-53, 55</td>
<td>street</td>
<td>street</td>
<td>Urban</td>
<td>3500</td>
<td>ft</td>
<td>2.75</td>
<td>9,625</td>
<td>9,625</td>
<td></td>
</tr>
<tr>
<td>HS Rd. Ft. 3</td>
<td>9-1-73</td>
<td>street</td>
<td>street</td>
<td>Urban</td>
<td>1400</td>
<td>ft</td>
<td>2.75</td>
<td>3,850</td>
<td>3,850</td>
<td></td>
</tr>
<tr>
<td>Geiger Rd.</td>
<td>9-1</td>
<td>street</td>
<td>street</td>
<td>Urban</td>
<td>1800</td>
<td>ft</td>
<td>2.75</td>
<td>4,950</td>
<td>4,950</td>
<td></td>
</tr>
<tr>
<td>Geiger Rd. Ext.</td>
<td>9-1</td>
<td>street</td>
<td>street</td>
<td>Urban</td>
<td>4000</td>
<td>ft</td>
<td>2.75</td>
<td>11,000</td>
<td>11,000</td>
<td></td>
</tr>
<tr>
<td>FWR (Soda Creek)</td>
<td>9-1</td>
<td>street</td>
<td>street</td>
<td>Urban</td>
<td>2300</td>
<td>ft</td>
<td>2.75</td>
<td>6,325</td>
<td>6,325</td>
<td></td>
</tr>
<tr>
<td>FWR (GC, 6, 8, 4)</td>
<td>9-1</td>
<td>street</td>
<td>street</td>
<td>Urban</td>
<td>3600</td>
<td>ft</td>
<td>2.75</td>
<td>8,250</td>
<td>8,250</td>
<td></td>
</tr>
<tr>
<td>FWR (Sun Terra)</td>
<td>9-1</td>
<td>street</td>
<td>street</td>
<td>Urban</td>
<td>1200</td>
<td>ft</td>
<td>2.75</td>
<td>3,300</td>
<td>3,300</td>
<td></td>
</tr>
<tr>
<td>Sun Terra Tot Lot</td>
<td>9-1-70</td>
<td>RES</td>
<td>R-5</td>
<td>Urban</td>
<td>1</td>
<td>a</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>Iroquois P. Rd.</td>
<td>9-1</td>
<td>street</td>
<td>street</td>
<td>Urban</td>
<td>3400</td>
<td>ft</td>
<td>2.75</td>
<td>9,350</td>
<td>9,350</td>
<td></td>
</tr>
<tr>
<td>Rd. AA</td>
<td>9-1-1-10-por 18,19,20, 2</td>
<td>street</td>
<td>street</td>
<td>Urban</td>
<td>6500</td>
<td>ft</td>
<td>2.75</td>
<td>17,875</td>
<td>17,875</td>
<td></td>
</tr>
<tr>
<td>Kolowaska Dr.</td>
<td>9-1-1-10-por 24</td>
<td>street</td>
<td>street</td>
<td>Urban</td>
<td>3000</td>
<td>ft</td>
<td>2.75</td>
<td>8,250</td>
<td>8,250</td>
<td></td>
</tr>
<tr>
<td>Kolowaska Dr. Ext</td>
<td>9-1-10-por 19</td>
<td>street</td>
<td>street</td>
<td>Urban</td>
<td>1000</td>
<td>ft</td>
<td>2.75</td>
<td>2750</td>
<td>2750</td>
<td></td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-1-1-por 2</td>
<td>PARK/GC</td>
<td>P-2, A-1, B-5</td>
<td>Urban</td>
<td>1625</td>
<td>a</td>
<td>4,000</td>
<td>130,000</td>
<td>130,000</td>
<td></td>
</tr>
</tbody>
</table>

### NOTES:

1. Roadway landscaping is estimated at an average of 2.75 GPD / linear foot of roadway based on plans completed to date by various landscape architects.
2. Commercial and public facilities are estimated at 1200 GPD gross area based on BWS non-potable water use guidelines. Industrial is estimated at 2800 GPD / acre based on these standards.
3. Irrigation of parks is estimated at 4000 GPD / gross area.
4. Irrigation of low density multi-family residential parcels is estimated at 4000 GPD per landscaped area. Development to date has averaged 50 percent of the parcel in landscaping.
5. Course irrigation is estimated at 4000 GPD net area. The total area of turfgrass and adjacent landscaping is 162.5 acres of the 172.2 gross acres of the three parcels which comprise the golf course.
Mr. Ronald M. Uemura  
Gentry Development Company

Dear Mr. Uemura:

Notice of Water Use Permit Expiration  
Well Nos. 2001-03 to 05, 09, 10 & 2003-06  
Ewa Caprock Groundwater Management Area, Oahu

On July 13, 1994 and January 25, 1995, the Commission on Water Resource Management (Commission) approved interim water use permits for durations of one year or less for the following Ewa by Gentry wells:

<table>
<thead>
<tr>
<th>Well No.</th>
<th>Allocation (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geiger Park</td>
<td>0.0300</td>
</tr>
<tr>
<td>Sunrise Apts.</td>
<td>0.0400</td>
</tr>
<tr>
<td>Soda Creek III</td>
<td>0.0200</td>
</tr>
<tr>
<td>Ft. Weaver Apt.</td>
<td>0.0234</td>
</tr>
<tr>
<td>Gentry Golf Course</td>
<td>0.1302</td>
</tr>
<tr>
<td>Gentry Area 24</td>
<td>0.0221</td>
</tr>
</tbody>
</table>

Please be aware that these interim water use permits are due to expire on July 12, 1995.

If you require continued use of these wells after the July 12, 1995 expiration date, please confirm this in writing by May 22, 1995. Please indicate any modifications to the present allocations or any other permit term that should be made at this time. All proposed modifications should be fully described and supported. In addition, please attach updated annual nonpotable demand projections to the year 2000 and 5-year demand projections to project build-out for each of these caprock source(s).

All timely requests for new or continued use(s) of Ewa Caprock groundwater will be submitted for Commission action, tentatively, at the meeting of June 14, 1995. Failure to respond by the May 22, 1995 date will create a presumption of abandonment of the use beginning July 13, 1995. If you wish to revive the use after July 13, 1995, you must apply for a permit pursuant to §13-171-12 Hawaii Administrative Rules.

As you are aware, the Commission hired a consultant to develop a nonpotable water master plan for Central Oahu and the Ewa Plain. On April 3, 1995, you were sent a copy of the 3-part pre-final draft report, "Water Reclamation" (February 1995), which recommends reuse of treated sewage effluent as a means of recharging the caprock aquifer. Please do not overlook the May 15, 1995 deadline for submitting your comments on the draft report. Your participation and input is essential to the development and implementation of a successful nonpotable water master plan for Ewa, Oahu.

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

Sincerely,

[Signature]

RAE M. LOUI  
Deputy Director

LN:ss
Chairperson and Members  
Commission on Water Resource Management  
July 13, 1994

ITEM 4  
OAHU COUNTRY CLUB, WELL MODIFICATION AND WATER USE PERMIT APPLICATIONS, OCC IRRIGATION WELL (WELL NO. 2050-01)  

Unanimously approved (Girald/Nobriga).

ITEM 3  
APPLICATIONS FOR WATER USE PERMITS AND WELL CONSTRUCTION/PUMP INSTALLATION PERMITS, EWA CAPROCK GROUND WATER MANAGEMENT AREA, OAHU  

The Estate of James Campbell (1905-06 & 10)  
State of Hawaii, Housing Finance & Development Corp. (2003-01 to 05)  
Hawaii Prince Golf Club (1900-02 & 17 to 20, 1901-03)  
Gentry Hawaii, Ltd. (2001-03 to 05, 07, 08 & 2002-12)  
Gentry Development Corp. (2001-09 & 10)  
Haseko (Ewa), Inc. (1902-01)  

Ms. Nakama recommended that the following be added under Recommendation 1 and presented an updated summary:  

“a. Any water use permit granted for Well No. 1902-01 be effective as of October 1994, when the lease to Oahu Sugar Company expires.”  

The following items were brought up by the Commission members:  

1. Why is it that there is not enough data on the wells as far pumping?  

Many of the Gentry wells have been constructed in the last couple of years, therefore not much data have been received. Although the Oahu Sugar wells are old wells, there isn’t much data on chlorides. Staff is in the process of establishing a network and identifying index wells that will monitor and track response.  

2. When will the Non-potable Water Master Plan be completed and available for the Commission’s use for decision making?  

As projected, the draft recommendations will be available in about four months and the final report by December.  


a. Provide a means to encourage cooperation in monitoring resource and finding a feasible alternate nonpotable source.  

b. Immediate and long-term future viability of resource is uncertain.  

4. Concern was expressed and users of the wells were asked to comply with providing data as necessary.  

5. Why was July 12, 1995 chosen for the duration of the water use permits rather than when the Non-potable Master Plan is finalized?  

a. It would be a year from the Commission meeting where it is being heard and one year permits are being recommended.  

b. Although the Non-potable Master Plan would be finalized, the sources may not be immediately available.
c. There is nothing to prevent the Commission from hearing the permits again in an earlier timeframe.

d. Even if the Plan is finalized, it would still take additional time for Commission review and approval.

6. Some water should be saved for agriculture, not all should be given to development.

7. Shorten permit time period to emphasize the importance of using effluent wherever possible.

Applicants Gentry, Haseko, and Campbell Estate had no testimony. HFDC provided written testimony dated July 8 (see files).

Toni Bissen of Native Hawaiian Advisory Council (NHAC) provided written and oral testimony (see files).

Ms. Nakama clarified several questions presented by Ms. Ziegler of Sierra Club Legal Defense Fund.

Chairperson Ahue asked Mr. Thomas of HFDC to clarify Mr. Conant's request to deviate from the guidelines relative to the issuance of interim permits, subject to annual review, because the sale of the golf course would "fall through". He felt there should be some discussion relative to the policies and guidelines in regards to the sale. Mr. Thomas said timing is critical and asked the Commission to defer HFDC's application until the next meeting so they can consult with the Commission staff.

Ms. Bissen commented that the Commission, in applying the Water Code, should be satisfied that the water request can be accommodated with the available water. With the information and uncertainties brought up, she felt that the first criterion was not established and that the standards should be adhered to. She asked what the rush was to act on the application.

Ms. Loui stated that the permits have expired and two months ago the Commission gave the applicants a two-month stay to continuing pumping. There is no official estimate for the caprock because it is a different type of resource, it is a brackish resource. Overpumpage is self-regulating in that the applicant would regulate their pumpage if it becomes too salty for use. Therefore the concern is not the same as for a basal lens.

In regards to HFDC's permit, it would make sense to continue the temporary permit and this would not stop the Commission from revisiting the permit request next month.

In regards to the issue of compliance, Dr. Sybinsky asked if staff could report to the Commission on the figures. Chairperson Ahue stated that could be done administratively.

Unanimously approved as amended (Giraldo/Nakata).

ITEM 5 DEPARTMENT OF TRANSPORTATION, APPLICATION FOR STREAM CHANNEL ALTERATION PERMIT, UNNAMED STREAM, MAKaha, OAHU

Unanimously approved (Nobriga/Giraldo).
Chairperson and Members  
Commission on Water Resource Management  
State of Hawaii  
Honolulu, Hawaii

Gentlemen:

Applications for Water Use Permits and  
Well Construction/Pump Installation Permits  
Ewa Caprock Ground Water Management Area, Oahu

**Applicant:**  
(Well No. 1905-08 & 10)  
The Estate of James Campbell

(Well Nos. 2003-01 to 05)  
State of Hawaii,  
Housing Finance & Dev. Corp.

(Well Nos. 1900-02 & 17 to 20, 1901-03)  
Hawaii Prince Golf Club

(Well Nos. 2001-03 to 05,07,08 & 2002-12)  
Gentry Hawaii, Ltd.

(Well No. 2001-09 & 10)  
Gentry Development Corp.

(Well No. 1902-01)  
Haseko (Ewa), Inc.

**Landowner:**  
Same

Same

Same

Same

Same

Background

The boundaries of the brackish Ewa Caprock Aquifer were officially adopted by the Commission on March 3, 1993, without any sustainable yield estimate. In the 1988-1992 timeframe, permits totalling 19.524 million gallons per day (mgd) were awarded mainly to existing irrigation uses (e.g., Oahu Sugar Co.). Other permits totalling 39.608 mgd were for various salt water and highly brackish to saline water uses (chlorides > 1,000 MG/L) at the western end of the aquifer.

To satisfy the needs of new developments in the Kapolei and Pualoa areas of the caprock (Exhibit 1), temporary water use permits not exceeding one year were granted to the applicants listed in Exhibit 2. These temporary permits expired on April 28, 1994. At the May 18, 1994 Commission meeting, action on all pending applications were deferred to allow applicants an additional thirty (30) days to comply with the conditions of the temporary permits. These conditions were met within the specified deadline, and with the exception of the City Dept. of Housing and Community Development, all applicants
Chairperson and Members
Commission on Water Resource Management

July 13, 1994

have submitted requests for renewal of the allocations described in their expired temporary permits.

In addition, three new applications for future uses of caprock water require action by the Commission. Haseko (Ewa), Inc. submitted a completed application on May 18, 1994 for a new water use from an existing caprock well. The other two applications were filed by the Gentry Development Corp. for new wells, pumps, and future water uses. One of these applications was deferred at the April 28, 1994 Commission meeting because consistency with county zoning had not been established. The second Gentry application on file was completed on June 9, 1994. Specific information regarding the sources, uses, notifications, objections, and field investigation(s) are described in Attachment A and the attached exhibits.

Analysis & Issues

The current guideline used for sustainable yield for water suitable for irrigation uses (chlorides < 1,000 MG/L) is 21 mgd. After cessation of sugarcane operations, the sustainable yield will be reduced to 16 mgd. Although Yuen & Associates, Inc. (1989) made these estimates based on three aquifer systems (Malakole, Puuloa, and Kapolei), the Commission did not officially adopt the separate aquifer systems. If the sustainable yield were divided between the three aquifer systems, the Puuloa Aquifer System may be presently over-allocated. Tables 1 & 2 show current allocations and pending applications for water use permits in relation to the unofficial sustainable yield estimates for the Puuloa and Kapolei Aquifer Systems.
Chairperson and Members  
Commission on Water Resource Management  
July 13, 1994

TABLE 1. PUULOA AQUIFER SYSTEM

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PUULOA SYSTEM (mgd)</th>
<th>12-MAV (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Yield Estimate</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Less: Other Existing Permits*</td>
<td>(18.670)</td>
<td>15.13</td>
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<tr>
<td>Available Allocation</td>
<td>-3.670</td>
<td></td>
</tr>
<tr>
<td>Expired Temporary Permits:</td>
<td>(0.843)</td>
<td>1.885**</td>
</tr>
<tr>
<td>Hawaii Prince Golf Club</td>
<td>0.036</td>
<td>1.770**</td>
</tr>
<tr>
<td>(EP 22 &amp; Wells 1 to 5)</td>
<td></td>
<td></td>
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<tr>
<td>Gentry Pacific, Ltd.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Geiger Park)</td>
<td>0.030</td>
<td>0.046</td>
</tr>
<tr>
<td>(Golf Villa I)</td>
<td>0.063</td>
<td>0.028</td>
</tr>
<tr>
<td>(Palm Villa 2)</td>
<td>0.048</td>
<td>0.019</td>
</tr>
<tr>
<td>(Palm Court 3)</td>
<td>0.066</td>
<td>0.022</td>
</tr>
<tr>
<td>(Geiger Apartment)</td>
<td>0.400</td>
<td>0.000</td>
</tr>
<tr>
<td>(Soda Creek III)</td>
<td>0.200</td>
<td>0.000</td>
</tr>
<tr>
<td>Pending Complete Applications:</td>
<td>(1.786)</td>
<td></td>
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<tr>
<td>Gentry Development Corp.</td>
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<td></td>
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<tr>
<td>(Fort Weaver Apts.)</td>
<td>0.048</td>
<td></td>
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<tr>
<td>(Temporary Irrigation)</td>
<td>0.238</td>
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<td>Haseko (Ewa), Inc.</td>
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<tr>
<td>(Haseko Well No. 1)</td>
<td>1.500</td>
<td></td>
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<tr>
<td>Pending Incomplete Applications:</td>
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<td></td>
</tr>
<tr>
<td>Haseko (Ewa), Inc. (Ewa Marina)**</td>
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<td></td>
</tr>
</tbody>
</table>

* Refer to Exhibit 4 for a listing of other existing permits.
** Includes 0.9 mgd prior permitted use for Hawaii Prince Golf Club (see Exhibit 4).
*** Proposed Ewa Marina will result in a permanent reduction in storage capacity.

See Supplemental Table 1 (attached)
TABLE 2. KAPOLEI AQUIFER SYSTEM

<table>
<thead>
<tr>
<th>ITEM</th>
<th>KAPOLEI AQUIFER SYSTEM (mgd)</th>
<th>12-MAV (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Yield Estimate</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Less: Other Existing Permits*</td>
<td>(1.150)</td>
<td>0.000</td>
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<tr>
<td>Available Allocation</td>
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<td></td>
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<tr>
<td>Expired Temporary Permits:</td>
<td></td>
<td></td>
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<tr>
<td>Campbell Estate (Kapolei Irr I)</td>
<td>0.302</td>
<td>0.000</td>
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<tr>
<td>State HFDC (Kapolei Irr A,B,C,D,E)</td>
<td>1.494</td>
<td>0.879</td>
</tr>
</tbody>
</table>

The available data on water quality and the effects of pumpage is limited. A network has not yet been established, and the data from the applicants is insufficient to determine impacts, let alone predict impacts. The Campbell Estate has proposed to construct a monitor well to collect data that will provide greater insight on the behavior and response of the aquifer. Other applicants should also be motivated to collect and contribute data for this type of analysis.

Given the uncertainties with respect to the present sustainable yield of the caprock aquifer and the impacts of land use changes on future water availability, an important policy matter is the use of reclaimed water. How much should the uncertainty in caprock water availability drive the encouragement of the use of reclaimed water?

At present, reuse water appears to be the most promising and practical solution in the long term. However, because additional treatment, infrastructure development, modification of governmental policies and regulations, and other factors must be worked out before this source may be utilized, reclaimed effluent is not a solution in the short term.

One of the conditions of the temporary permits was to develop a joint plan for conversion to an alternate nonpotable source. Reclaimed water from Honouliuli Wastewater Treatment Plant was identified by all applicants as a potential nonpotable source. Other sources that were identified include Waiahole Ditch water and basal aquifer water. Efforts to identify and jointly convert to an alternate nonpotable source will be directed and coordinated by staff. However, the applicants must actively participate and cooperate in this process.

To address the expected increase in nonpotable water demand for urban uses, the Commission has hired a consultant to develop a nonpotable water master plan for Central Oahu, including the Ewa plain. However, the scope of the work is broad and must be supported by the individual plans and programs of the applicants.

In the interim, staff feels that existing and authorized planned developments in the Ewa area should be supported, provided that the conditions for a water use permit set forth in §174C-49 are successfully met. There is clearly a need to develop a long-range plan and organization, and all decisions made in the interim should count towards this goal.

Issues related to the pending requests for temporary permit renewals are
summarized as follows (source locations are shown in Exhibits 1A to 1L monthly water use graphs are shown in Exhibits 3A to 3F):

1. **Hawaii Prince Golf Club** - Average use reported by the Hawaii Prince Golf Club has exceeded permitted use for the last seven months (Exhibit 3A). However, because usage is estimated based on the pump capacities of their six wells (Exhibit 1A), reported usage is most likely over-estimated. Contracts have been awarded to install flow meters in each of the wells, and usage will continue to be monitored over the next year.

Higher than average usage may be attributed to large evaporative losses from the ten interconnected lakes, which have a total surface area of 32 acres. The lakes were designed to function as necessary storage facilities and also provide golf course water features. It is estimated that roughly 150,000 gallons per day (gpd) are lost to evaporation. Seepage is minimal, as all lakes are lined. The build-up of salts in the soils is a very real and legitimate concern, and regular over-watering is necessary to leach the salts. In the past, the Commission has allocated extra water to address this problem.

The Hawaii Prince is actively engaged in working towards more efficient utilization of their water supplies. Replanting on fifty acres is scheduled and, beginning next month, wetting agents will be injected into the soils twice each month. Also, some perimeter areas are no longer irrigated. It is projected that the allocation described in the expired temporary permit plus a 10% increase above their total permitted use will be sufficient.

2. **Gentry Pacific Ltd.** - Although the Geiger Apartment and Soda Creek III wells have not been used to date, well drilling is completed and pumps have been ordered and are expected to be operational within three to five weeks.

3. **Campbell Estate** - No usage of the well has been reported to date. However, a contract is being finalized to outfit the wells with pumps and contracts will be issued shortly for transmission mains to tie the pumps and well complex to existing nonpotable lines. It is expected that pumpage will begin by September 1994.

4. **State Housing Finance and Development Corp** - There are no issues related to this application. The request for permit has been granted (attached). A summary of new applications is provided as follows:

1. **Gentry Development Corp.** - Applications have been submitted for two new wells for future irrigation uses.

The Fort Weaver Apt. Well will be used to supply the first phase of Gentry’s Fort Weaver Apt. project and the adjacent highway landscaping. The requested allocation of 48,400 gpd will be used for irrigation of 7.8 acres.

The application for Gentry’s Temporary Irrigation Well was originally submitted as a request for irrigation of a future golf course site. However, zoning for the golf course has not been approved and the revised application now indicates use will be for permanent and temporary landscape irrigation. The requested allocation is for 238,000 gpd to used on a total of 43.4 acres. The proposed well is a skimming well equipped with 2 pumps with capacities of 200 gallons per minute.

One issue with these applications is that estimated demands (5,400 and 6,200 gpd/acre) exceeds that determined by staff to be reasonable for this type of use (3,000 gpd/acre). Because the applicants’ projected demands varied widely and
lacked consistency, staff used information from the Hawaii Water System Standards 1985, county consumption guidelines, discussions with other government agencies for dust control, and existing water use report information for golf courses in the Ewa area to derive estimates for different types of uses that are considered reasonable, fair, and consistent. Previous allocations for the temporary permits were based on these estimates.

The conservation of water should be made a priority, and staff feels applicants should be encouraged to develop and adhere to plans and programs designed to mitigate the dry climate and conserve the available water resources. Because these uses may potentially be in competition, an equitable method for allocating water is necessary.

These applications have been reviewed by the Mayor's Office, the Board of Water Supply, the Dept. of General Planning, the Department of Land Utilization, the Dept. of Health, the Dept. of Hawaiian Home Lands, the Office of Hawaiian Affairs, and all the division within the State Dept. of Land and Natural Resources. Because no objections to these applications were submitted, staff finds that the conditions for a water use permit have been met, provided that the allocation approved is reasonable for this type of use.

This submittal was finalized on the morning of the July 7, 1994 deadline for filing objections to the Temporary Irrigation Well applications. Any objections received by the deadline will be brought forth during the Commission meeting.

2. **Haseko (Ewa), Inc.** - The application for the Haseko Well No. 1 specifies that the water will be used for golf course, landscape, and maintenance irrigation and for dust control on surrounding fallow areas, formerly in sugarcane. The projected demands are consistent with staff's estimates for these uses.

The water will be drawn from a well currently being used by Oahu Sugar Co. The current allocation for the well is 4.16 mgd. When the lease expires in October 1994, control of the well will revert back to Haseko. The present allocation will be reduced from 4.16 mgd to 1.5 mgd. Therefore, approval of this application will not result in greater draw from the system.

The application was sent for review by the Mayor's Office, the Board of Water Supply, the Dept. of General Planning, the Department of Land Utilization, the Dept. of Health, the Dept. of Hawaiian Home Lands, the Office of Hawaiian Affairs, and all the division within the State Dept. of Land and Natural Resources. Because no objections have been submitted, staff finds that the conditions for a water use permit have been met.

This submittal was finalized on the morning of the July 7, 1994 deadline for filing objections to the application. Any objections received by the deadline will be brought forth during the Commission meeting.

**RECOMMENDATION**

Staff recommends that the Commission:

1. Approve the issuance of temporary water use permits which shall be valid until July 12, 1995, to the applicants with completed applications listed in Tables 1 and 2. The permits shall be for allocations described in Tables 1 and 2, for the reasonable and beneficial uses described in the applications, and from the wells specified in their applications, except for the Gentry Development Corp. and the Hawaii Prince Golf Club.

2. Approve the issuance of a well construction permit and a temporary water use...
Chairperson and Members
Commission on Water Resource Management
July 13, 1994

permit to the Gentry Development Corp. for the reasonable and beneficial use of
23,400 gallons per day of nonpotable water from the Fort Weaver Apt. Well
(Well No. 2001-09) for landscape and roadway irrigation use on 7.8 acres.

a. The well construction permit shall be subject to the standard conditions
listed in Attachment D.

b. The pump installation permit shall be approved administratively pending
the results of the drilling and testing.

c. The temporary water use permit shall be valid until July 12, 1995.

3. Approve the issuance of a well construction permit and a temporary water use
permit to the Gentry Development Corp. for the reasonable and beneficial use of
130,200 gallons per day of nonpotable water from the Temporary Irrigation Well
(Well No. 2003-06) for permanent and temporary landscape irrigation on 43.4
acres.

a. The well construction permit shall be subject to the standard conditions
listed in Attachment D.

b. The pump installation permit shall be approved administratively pending
the results of the drilling and testing.

c. The temporary water use permit shall be valid until July 12, 1995.

Approve the issuance of a temporary water use permit which shall be valid until
July 12, 1995 to the Hawaii Prince Golf Club, for the reasonable and beneficial
use of 129,600 per day of nonpotable water from the combined pumpage of Wells
1 to 5 and EP 22 (Well Nos. 1900-02, 17 to 20 & 1901-03), for leaching salts
and supplemental irrigation water for the golf course.

a. Flow meters shall be installed in each well within three months from the
date of this submittal.

5. Require that applicants cooperate with the Commission’s initiative in the
development of the Nonpotable Water Master Plan for Central and Leeward Oahu.

6. Require that all temporary permits be subject to the standard conditions of a water
use permit listed in Attachment B and the Conservation conditions listed in
Attachment C.

Respectfully submitted,

RAE M. LOUI
Deputy Director

APPROVED FOR SUBMITTAL:

KEITH W. AHUE, Chairperson

Respectfully submitted,

R. C. Sakoda


WATER USE PERMIT DETAILED INFORMATION

Source Information

AQUIFER: Ewa Caprock Aquifer System, Oahu
Sustainable Yield: 19.82 mgd
Existing Water Use Permits: 19.82 mgd
Available Allocation: 19.82 mgd
Total of other pending allocations: 19.82 mgd

1. WELL:
   Location: Fort Weaver Apt. Well (Well No. 2001-09)
   Ewa by Gentry, Oahu, TMK:9-1-61:2
   Year Drilled: NA
   Casing Diameter: 12 in.
   Elevations (msl= 0 ft.)
   Water Level: NA ft.
   Ground: 34 ft.
   Bottom of Solid Casing: 4 ft.
   Bottom of Perforated: 14 ft.
   Bottom of Open Hole: -20 ft.
   Total Depth: 54 ft.
   Grouted Annulus Depth: 28 ft.
   Pump Capacity: 100 gpm

2. WELL:
   Location: Temporary Irrigation Well (Well No. 2001-10)
   Ewa by Gentry, Oahu, TMK:9-1-61:2
   Year Drilled: NA
   Casing Diameter: NA in.
   Elevations (msl= 0 ft.)
   Water Level: NA ft.
   Ground: NA ft.
   Bottom of Solid Casing: NA ft.
   Bottom of Perforated: NA ft.
   Bottom of Open Hole: NA ft.
   Total Depth: NA ft.
   Grouted Annulus Depth: NA ft.
   Pump Capacity: 2 @ 200

3 WELL:
   Location: Haseko Well No. 1 (Well No. 1902-01)
   Haseko Golf Course site, Oahu, TMK:9-1-12:5
   Year Drilled: 1964
   Casing Diameter: NA in.
   Elevations (msl= 0 ft.)
   Water Level: 2 ft.
   Ground: 5 ft.
   Bottom of Solid Casing: NA ft.
   Bottom of Perforated: NA ft.
   Bottom of Open Hole: -3 ft.
   Total Depth: 8 ft.
   Grouted Annulus Depth: NA ft.
   Pump Capacity: NA gpm
Use Information

1. Quantity Requested: 48,400 gallons per day.
   Proposed Type of Water Use: Landscape irrigation for 7.8 acres.
   Place of Water Use: Ewa by Gentry, Oahu, at TMK: 9-1-61:2&8
   Reported Water Usage: NA mgd
   Nearby Similar Water Usage: 3,000 gpd

2. Quantity Requested: 238,000 gallons per day.
   Proposed Type of Water Use: Landscape irrigation for 43.4 acres.
   Place of Water Use: Ewa by Gentry, Oahu, at TMK: 9-1-61:2&54
   Reported Water Usage: NA mgd
   Nearby Similar Water Usage: 3,000 gpd

3. Quantity Requested: 1,500,000 gallons per day.
   Proposed Type of Water Use: Golf course, roadway, and maintenance irrigation; dust control.
   Place of Water Use: OSCo field 88, Oahu, at TMK: 9-1-12:5,6&7
   Reported Water Usage: 6.551 mgd
   Nearby Similar Water Usage: 1,000 to 4,000 gpd/acre

Ewa Caprock Aquifer System
Current 12-Month Moving Average Withdrawal: 15.131* mgd
* Does not include withdrawals at wells with expired temporary permit or withdrawals from Malakole area.

Nearby Surrounding Wells and Other Registered Ground Water Use

The Gentry developments are proposing to use other nearby wells in the vicinity of Well Nos. 2001-9 & 10. By distributing the pumpage over a large area, as opposed to one central pumping station, impacts to the aquifer should be minimized; other benefits are clearly derived from this strategy of well development. There are no other wells within a mile of Haseko’s Well No. 1. The 1992 Draft of the Oahu Water Management Plan did not provide an estimate for 1990 withdrawals.
Public Notice

In accordance with HAR §13-171-17, a public notice was published in the Star-Bulletin on June 15, 1994 and June 22, 1994 and copies of the notice were sent to the Mayor's office and the Board of Water Supply. Additional notice copies were sent to the County Council and Department of Water Supply. Copies of the completed application were sent to the Department of Health, Department of Hawaiian Home Lands, Office of Hawaiian Affairs, Aquatic Resources & Historic Preservation Divisions of the Department of Land and Natural Resources, and other interested parties for comments. Written comments and objections to the proposed permit were to be submitted to the Commission by July 7, 1994.

Objections

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 by July 7, 1994.

To the best of staff's knowledge there are no objectors who have property interest within the Ewa Caprock Aquifer System or who will be directly and immediately affected by the proposed water use.

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.

Field Investigation

Gentry's water sources and proposed uses were not investigated as the wells have not been drilled. Staff is in the process of verifying OSCo well sources.
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 July 13, 1994 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 with 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 Ewa Caprock 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 Ewa Caprock Ground Water Management Area.

17. The water use permit granted shall be an temporary permit valid until July 12, 1995.

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.
CONSERVATION CONDITIONS
EWA CAPROCK WATER USE PERMITS

1. The permittee shall adopt self-administered water conservation programs and plans with collective monitoring to protect and maintain the caprock resource. Water conservation programs and plans shall be submitted to the Commission within 60 days from the date of Commission approval.

2. Water conservation programs and plans shall address (as applicable) but not be limited to the following:
   a. Reduce the demand for non-potable water by:
      - Identifying and utilizing water efficient plants and drought tolerant plants for landscaping and quantifying their demands (Xeriscape);
      - Mulching planting areas with organic materials, etc., to minimize evaporation;
      - Efficiently maintaining the plants;
      - Improving land management practices to conserve water.
   b. Improve efficiency in use and reduce losses and waste of non-potable water by:
      - Using efficiently designed landscaping and irrigation systems;
      - Monitoring irrigation requirements and controlling usage accordingly;
      - Managing irrigation scheduling to minimize water demand;
      - Eliminating opportunities for water wastage;
      - Maintaining and improving irrigation systems as necessary.
   c. Industrial users should employ the recirculation of cooling water and the reuse of cooling and process water.

3. The permittee shall pursue and participate in alternative non-potable water source development and use such as wastewater reuse (direct reuse and/or recharge injection).

4. In the event that water conservation programs and plans are not complied with or that a waste of water is occurring, the Commission shall proceed with the necessary actions to revoke this permit.
STANDARD WELL CONSTRUCTION/PUMP INSTALLATION PERMIT CONDITIONS

1. The Commission shall be notified before work commences.

2. The well construction/pump installation permit shall be for construction, testing, and installation of a pumps of capacities specified in the application, or less, pump in the well, as determined by the pumping test results. The applicant shall coordinate with the Commission and conduct a pumping test in accordance with the protocol established by the Commission. A means to accurately measure water levels, acceptable to the Commission, shall also be provided. The applicant shall submit to the Commission the test results and proposed permanent pump information, based on the test, for approval by the Chairperson. No permanent pump may be installed and no water used from the well without the Chairperson's approval.

3. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct and pump water from a well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

4. The applicant shall comply with all applicable laws, rules, and ordinances.

5. 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.

6. The well construction/pump installation permit may be revoked if work is not started within six (6) months after the methodology and analysis of the test results are agreed upon. The work proposed in the well construction/pump installation permit application shall be completed within two years from the date of permit issuance.

7. That the pumping test shall follow the aquifer pump testing protocol established by the Commission. Prior to conducting the aquifer pump test, the applicant shall mutually agree with the Commission staff to a methodology and analysis of the test results.

8. The following shall be submitted to the Commission within thirty (30) days after completion of work:
   a. Well completion report.
   b. Elevations of well (referenced to mean sea level, msl) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other water quality data.

9. The well shall not be used for drinking water unless it is properly tested and approved by the State Department of Health.

10. The well construction/pump installation water use permit application and staff submittal approved by the Commission at its July 13, 1994 meeting are incorporated into the permit by reference.

11. The permit shall be subject to review by the Attorney General.
<table>
<thead>
<tr>
<th>APPLICANT</th>
<th>WELL NO.</th>
<th>WELL NAME</th>
<th>APPROVAL</th>
<th>WAP (mgd)</th>
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<tr>
<td>CAMPBELL ESTATE</td>
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**Aquifer System: KAPOLEI**

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<th>APPLICANT</th>
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<th>APPROVAL</th>
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**Aquifer System: PUULOA**

**14 Permits Totaling 1.771**

**20 Permits Totaling 3.567**
HAWAII PRINCE G.C. COMBINED PUMPAGE
(WELL NOS. 1900-02, 17 to 20)

EXHIBIT 3A
GENTRY PACIFIC, LTD. PUMPAGE
GEIGER PARK WELL (Well No. 2001-03)

DATE (Latest Data 12/93)

PUMPAGE (mgd)

CHLORIDE (mg/l)

MONTHLY VALUE

12-MAV

REQUESTED AM

CHLORIDE LEVEL

EXHIBIT 3B
GENTRY PACIFIC, LTD. PUMPAGE
GOLF VILLA 1 WELL (Well No. 2001-07)

MONTHLY VALUES  REQUESTED AMOUNT  CHLORIDE LEVEL

EXHIBIT 3C
GENTRY PACIFIC, LTD. PUMPAGE
PALM VILLA 2 WELL (Well No. 2001-08)

DATE (Latest Data 12/93)

MONTHLY VALUES  REQUESTED AMOUNT  CHLORIDE LEVEL

EXHIBIT 3D
STATE HFCD EWA-CAPROCK PUMPAGE
KAPOLEI WELLS (WELL-NOS. 2003-01 to 05)

PUMPAGE (mgd)

DATE (Latest Data)

MONTHLY VALUES  12-MAV  REQUESTED AMT

EXHIBIT 3F
# ISLAND OF OAHU

## Aquifer System: PUALOA

<table>
<thead>
<tr>
<th>APPLICANT</th>
<th>WELL NO.</th>
<th>WELL NAME</th>
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16 Permits Totaling 19.670

## Aquifer System: KAPOLEI

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2 Permits Totaling 1.150

STATEWIDE THERE ARE 2 PERMITS TOTALING 1.150

*Exhibit E*
TABLE 1. PUULOA AQUIFER SYSTEM

<table>
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<tr>
<th>Description</th>
<th>Value</th>
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<tr>
<td>Sustainable Yield Estimate</td>
<td>15</td>
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<tr>
<td>Less: Other Existing Permits</td>
<td>-18.67</td>
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<tr>
<td>Current Available Allocation</td>
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<tr>
<td>Less: Renewal Requests</td>
<td>-0.843</td>
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<tr>
<td>Less: Requests for new uses</td>
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<tr>
<td>Total</td>
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<tr>
<td>Plus: Future revocation (1902-01)</td>
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<tr>
<td>Plus: Total of other OSCO permits</td>
<td>12.034</td>
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<tr>
<td>Potential available when OSCO ceases operations</td>
<td>9.895</td>
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* Control of well reverts back to Haseko in October 1994 when lease to OSCO expires.
all the upslope surface runoff for recharge as well. In short, HFDC has provided for perpetual prudent resource management through conservative use and through thoughtful planning for continued replenishment of the aquifer.

HFDC seeks the reasonable ability to transfer [the State's] correlative rights with respect to continued permanent use of the caprock wells in order to accomplish its mission.

Your thoughtful consideration and expeditious response to this request will be greatly appreciated. If there are any questions please call me at [redacted].

Sincerely,

[Signature]

JOSEPH K. COMANT
Executive Director
ultimate home owners and in all probability a segment of "affordable" purchasers would have been displaced. The golf course provides a viable economic, as well as technical, solution to the drainage requirements of this "affordable housing" Master Planned Community in addition to recharging the caprock aquifer with all onsite surface runoff and all offsite upslope surface runoff.

The Commission has previously established a precedent by ruling and granting preference to the HFDC in allocating potable water for the State of Hawaii's "affordable" housing projects.

2. The sale of the Kapolei Golf Course is essential to the mission of HFDC. HFDC is a State created agency whose sole existence is predicated on providing "affordable housing" for the people of the State of Hawaii. HFDC is a "collateral" agency to the Department of Land and Natural Resources (DLNR), Commission on Water Resource Management, and as such the strategic interests of the DLNR/CWRM and HFDC are somewhat common in nature and the overall interests of the State will be best served with the successful sale of the Kapolei golf Course.

The sale of the Kapolei Golf Course will replenish monies into the Homes Revolving Fund which is essential to the continued mission of HFDC in the production of "affordable housing" as it relates to the State's Comprehensive Housing Strategy.

3. Permanent "conditional" use is justifiably reasonable and prudent. Until such time as the CWRM can reasonably determine the future sustainable yield of the caprock aquifer, and as long as the continued use of HFDC's wells do not significantly diminish the calculated sustainable yield, continued use of the caprock wells should be considered as a reasonable request. As the CWRM currently permits use for salt water wells, salinity is of no concern except to the user; therefore, health, safety, or permanent environmental damage would be the normal concerns that would preclude issuance of permanent use permits. Also, and as previously mentioned, HFDC has invested literally millions of dollars into the development of a "closed loop" water resource management system which replenishes the caprock aquifer with not only the on-site generated surface runoff, but also by capturing
July 05, 1994

Mr. Keith W. Ahue
Department of Land and Natural Resources
Commission on Water Resources Management

Dear Mr. Ahue:

Thank you for the opportunity to review the water use permit application for Haseko (Ewa), Inc. for Well 1902-01, EP 27.

The Office of Hawaiian Affairs urges the Commission on Water Resource Management to halt the granting of this and all water use permits concerning water presently allocated to sugarcane lands. In dealing with the issue of water resources being released as the sugarcane industry phases out, the Commission must produce a comprehensive long-term plan which envisions the allocation of water reserves for groups which presently have virtually no access to existing water resources. Without that plan, there is a real danger that the present vacuum in land and water use planning could provide ripe opportunities for people and organizations seeking water use monopoly.

Sincerely yours,

Dante K. Carpenter
Administrator

LM:lm
Ms. Rae M. Loui, Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources

Dear Ms. Loui:

Subject: Amended Request for Extension of Water Use Permits
Ewa Caprock Water Management Area
Kapolei Irrigation Wells A, B, C, D, & E  (Wells Nos.: 2003-01 to 2003-05)

The Housing Finance and Development Corporation (HFDC) herewith respectfully requests that HFDC's prior request for extension of well permits dated April 15, 1994, be amended as follows:

From: A request for extension for a period of twelve months from April 27, 1994 until April 27, 1995.

To: A request for a permanent "conditional" use permit, until such time as the Commission on Water Resource Management (CWRM) considers a "viable alternative source" of non-potable water is readily available for use, or that continued use of the caprock wells presently in use by HFDC is detrimental to the long term sustainable yield of the Kapolei Caprock Aquifer.

It is presently HFDC's understanding that a "viable alternative source" of non-potable water is defined as: 1) Availability of Waiahole Ditch water within an economically obtainable distance to the user, or 2) Availability of "R-2" classified wastewater, from Honolulu WWTP, within an economically obtainable distance to the user and at an economically justifiable usage cost.
This request for an amendment to our application is precipitated by the following circumstances:

1. On June 9, 1994, HFDC's Board of Directors preliminarily approved the Kapolei Peoples, Inc. ("KPI") as the purchaser of the Kapolei Golf Course. KPI was the only party who submitted a proposal for the purchase of the Kapolei Golf Course and is ready, willing, and able to consummate the sale.

2. On June 22, 1994 the Executive Director of HFDC and staff met with the attorney for KPI to discuss the conditions of sale as proposed by KPI. The most significant condition proposed by the prospective purchaser was for a permanent commitment for 1.0 million gallons per day of non-potable irrigation water. This condition of sale, if not overcome, will prevent any further negotiation of a sales agreement between HFDC and KPI. Simply stated, if irrigation water cannot in some form be guaranteed to the prospective purchaser, there will be no sale.

3. HFDC is currently operating the wells on annual renewable "temporary use permits" which condition is unacceptable to the purchaser, KPI.

In support of the above stated request for a "conditional" permanent permitted use, and as additional historical and general information, the following facts are submitted for your consideration:

1. The Kapolei Golf Course is an "affordable housing" related project to the Villages of Kapolei Master Planned Community. The golf course serves as an integral major component in the overall master drainage system for the Villages of Kapolei (Villages), a State of Hawaii "affordable housing" project. The housing Villages themselves could not have been developed without the construction of the golf course retention/detention basin. In addition to the unique "closed loop" aquifer recharge aspects of the drainage system, the excavation of the golf course provided 2.5 million cubic yards of free fill-material required to remove approximately 1/3 of the Villages from a flood inundation zone. An alternative drainage system could have been developed, but not without tremendous additional cost to the development of the Villages. The added costs would have been passed on to the
Testimony Presented to the
Commission on Water Resource Management
7/13/94
Regular Commission Meeting

Aloha, and thank you for the opportunity to present testimony to the Commission concerning Agenda #1, items 3, 4, 5, 6, 7, 9 and 11. I'm Toni Nissen with the Native Hawaiian Advisory Council.

NHAC BELIEVES THAT THE CRITERIA USED TO ISSUE WATER USE PERMITS DOES NOT COMPLY WITH THE STATE WATER CODE OR ADMINISTRATIVE RULES. FURTHER, NO WATER USE PERMITS SHOULD BE ISSUED FROM THE EWA CAPROCK GROUND WATER MANAGEMENT AREA DRAWING FROM THE PUUOlAQ AQUIFER SYSTEM BECAUSE IT IS OVERALLOCATED.

In order to obtain a water use permit an applicant shall establish that the proposed use of water meets seven listed criteria. H.R.S. 174C-49(a), H.A.R. 13-171-13(a). These seven items are:

1. Can be accommodated with the available water source;
2. Is a reasonable-beneficial use as defined in section 174C-3;
3. Will not interfere with any existing legal use of water;
4. Is consistent with the public interest;
5. Is consistent with state and county general plans and land use designations;
6. Is consistent with county land use plans and policies; and
7. Will not interfere with the rights of the department of Hawaiian home lands as provided in section 221 of the Hawaiian Homes Commission Act.

In the submittals prepared by Commission staff, two tables outline the sustainable yield for the Puuola and Kapolei aquifer systems. In table 1, it shows existing water uses and requested water uses. In combination these uses exceed the sustainable yield of the Puuola aquifer.
PUULOA AQUIFER SYSTEM

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
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<tr>
<td>Estimated Sustainable Yield</td>
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<tr>
<td>Existing Uses</td>
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<td>TOTAL</td>
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<tr>
<td>Expired Temporary Permits</td>
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<tr>
<td>TOTAL</td>
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<tr>
<td>Requested Uses</td>
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<tr>
<td>TOTAL</td>
<td>-5,456 mgd</td>
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</tbody>
</table>

(all information taken from table 1)

Total allocations exceed the estimated sustainable yield of the Puuloa aquifer, given this situation it would seem impossible to meet criteria #1 - Whether the water use requested can be accommodated with the available water source. All requests cannot be accommodated by the available water source. On these grounds alone the water use permits should be denied. We are disappointed that the staff has not commented about the potential effects of pumpage exceeding sustainable yield and/or has included other factors mitigating those concerns. We need more information about which uses can and cannot be accommodated.

Furthermore, staff states, "because no objections have been submitted, staff finds that the conditions for a water use permit [the seven criteria] have been met." see p.6. The Water Code is clear, it is the applicant that must establish that all criteria for obtaining a permit are met. A permit cannot be granted on the basis of other agencies not filing objections with the Commission. In addition to considering other agency recommendations, it is the Commission that must determine based on the information presented to it by the applicant and staff recommendation whether to issue a permit.

The Water Commission is mandated to preserve, protect and manage Hawaii's precious water resource. Proper management of the resource is dependent on applying fair and just standards to all water allocation decisions. Those standards are clearly listed in H.R.S. 174C-49 and H.A.R. 13-171-13 and must be complied with as a matter of law.

Item 4 Oahu County Club, Well Modification and Water Use Permit Applications, OCC Irrigation Well (Well No. 2050-01)

Again, because no objections have been filed by other agencies this is held to mean that all criteria for a permit have been met. A permit cannot be issued unless the applicant has established that all criteria has been met.
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

ROM: Rae M. Loui, Deputy Director

OBJECT: Request for Comments
Water Use Permit Application
Ewa Caprock Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Gentry Development Co. for Well No. 2001-05. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 15, 1993 and September 22, 1993.

We would appreciate your review of the attached application and please return this application within the review period requested.

If you have any questions regarding this application, please contact Roy Hardy at (808) 586-0600 or Lenore Nakama at (808) 586-0601.

We have no comments
We have no objections
Comments attached
Additional information requested

Date: 11/5/93

[Signature]
Mr. Keith Ahue  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  

Re:  Temporary Water Use Permits; Ewa Caprock Ground Water Management Area, Oahu; Ewa By Gentry  

Dear Mr. Ahue:  

This letter is in response to the Commission's May 18, 1994 deferral of action on our request to renew temporary water use permits for the Ewa Caprock Aquifer, and the May 26, 1994 letter from Commission staff requesting substantially the same information. At the Commission meeting and in the letter, staff identified areas that needed supplemental information. They are:  

1. Our water shortage plan;  
2. Data from caprock wells generated by Gentry not previously submitted;  
3. Updated annual non-potable demand projections for the four-year period through 1997;  
4. Updated status of Geiger Apartment well and Soda Creek III well (Well Nos. 2001-04 and -05), with time estimate for actual use of sources.  
5. Water level and chloride data collected to date, with explanation for any missing data.  

We understand that our renewal request has been tentatively scheduled for the July 13, 1994 meeting of the Commission.
Included in this letter and its enclosures is information intended to answer the informational needs of the Commission and its staff:

**Water Shortage Plan**

If the Commission declares a water shortage in the Ewa Caprock Groundwater Management Area requiring a reduction in pumpage from our wells, Gentry has one short-term — and several long-term — options. Each individual irrigation system has a back-up connection to the Board of Water Supply's potable system. In the short term, irrigation supply would be provided through this connection. However, BWS would not accept this as a permanent solution. Long-term options available to us are discussed in our alternate Non-Potable Source Plan, previously submitted: Honouliuli Wastewater Treatment Plant effluent; Waiahole Ditch; and basalt aquifer wells. Within the Ewa By Gentry-East project, we are sizing pipelines to accommodate all of these possibilities.

**Caprock Data Generation and Participation**

We feel that the pumpage and chloride levels that we have submitted monthly provide the best record of the caprock's viability; however, we have generated other information and it has been previously submitted. Three small diameter observation holes have been drilled through the upper limestone layer into the underlying calcareous mud. Locations of these holes are shown on Figure 1. Due to excavation for drainage and other purposes, the borehole located next to Kaloi Gulch and labeled "Gentry GC" no longer exists. However, development has not yet closed the boreholes labeled "FGE 1" and "FGE 2," which are on the east side of Ft. Weaver Road. Table 2 is a compilation of the elevation and dimensions of all three boreholes. Respective salinity profiles through their water columns are shown on Figure 2 (these were previously included in our alternate Non-Potable Source Plan). Recently recorded water levels in FGE 1 are reproduced as Figure 3.

We have not been approached by your staff to participate in a regional data gathering effort or monitoring network, but are certainly willing to do so. Access to any of our wells or boreholes can be arranged at any time on reasonable notice. If a program is put into place, we will be pleased to cooperate in the joint effort. Since the water level recorder is still operating in FGE 1 borehole, any data gathering from it should be coordinated with our consultant.

**Updated Four-year Non-Potable Water Use Projections**

Table 1 contains our updated Non-Potable Water Use Projections for the four-year period through 1997. It includes present uses and all projects requiring non-potable supply that we expect to develop within the next four years.
Updated Status of Geiger Apartment Well and Soda Creek III Well

Wells have been drilled for both projects. Pumps have been ordered and are expected to be installed and in operation in three to five weeks.

Water Levels

Air lines were installed in all of the operating wells within Ewa By Gentry. None were hooked up to recorders because the water level requirement was not then understood. Thus, no water level information has yet been generated. We are in the process of converting these air lines to one-inch sounding tubes as an easier way to obtain water level data, particularly since the operation and maintenance responsibilities for each well have been or will eventually be turned over to the homeowner associations that they serve. The first sounding tube has just been installed in the Arbors well. Its water level readings will be provided starting with the next monthly report. Sounding tubes will be installed in the other wells as each is converted to a variable frequency drive. We anticipate completion of these sequentially over the next three to four months. This will enable water levels to be measured and reported on a monthly basis.

It is hoped that the foregoing will be satisfactory to the Commission and its staff. Please feel free to contact me ( ), Randy Ouye ( ), or our consultant, Tom Nance ( ), if additional information is required.

Sincerely,

Barry Edwards
Project Director - Ewa By Gentry
Gentry Homes

Enclosures

cc: Ms. Rae Loui (w/encl)
    Mr. Randy Ouye (w/encl)
    Mr. Tom Nance (w/encl)
Table 2
Compilation of Data on the
Three Observation Holes in Ewa by Gentry

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Gentry GC</th>
<th>FGE1</th>
<th>FGE2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Elevation (Ft msl)</td>
<td>40</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Top of Casing Elevation (Ft msl)</td>
<td>Not surveyed</td>
<td>31.52</td>
<td>31.01</td>
</tr>
<tr>
<td>Original Depth of the Borehole (Ft)</td>
<td>120</td>
<td>121</td>
<td>140</td>
</tr>
<tr>
<td>Thickness of the Overlying Alluvial Silt (Ft)</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Thickness of the Limestone Layer (Ft)</td>
<td>110</td>
<td>105</td>
<td>130</td>
</tr>
<tr>
<td>Elevation at the Bottom of the Limestone (Ft msl)</td>
<td>(-)75</td>
<td>(-)79</td>
<td>(-)103</td>
</tr>
<tr>
<td>Penetration Into the Mud Layer (Ft)</td>
<td>5</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Elevation at the Bottom of the Originally Drilled Borehole (Ft msl)</td>
<td>(-)80</td>
<td>(-)90</td>
<td>(-)109</td>
</tr>
<tr>
<td>Groundwater Level (Ft msl)</td>
<td>1.9±</td>
<td>1.2 to 1.6</td>
<td>1.2 to 1.5</td>
</tr>
<tr>
<td>Present Status</td>
<td>Lost to Construction</td>
<td>2-Inch PVC Casing to the Bottom</td>
<td>2-Inch PVC Casing Removed; Lower 15 Feet of Hole Lost</td>
</tr>
</tbody>
</table>

Notes:
1. All three boreholes were drilled by Fewell Geotechnical Engineering. Gentry GC was done in August 1992. FGE 1 and 2 were done in July 1993.

2. An elevation benchmark was not established for the Gentry GC borehole. Its elevation is estimated by the depth to groundwater.
Figure 1
Observation Holes in Ewa by Gentry
Notes:

1. Locations of the 2-inch observation holes are shown on Figure 1. All penetrate through the top limestone layer into the mud aquiclude below.

2. The Gentry GC profile was made on September 5, 1992.

3. The FGE1 and FGE2 profiles were made on December 1, 1993.

Figure 2

Salinity Profiles of Observation Holes in Ewa by Gentry
Figure 3
Recorded Water Level in FGE 1
April 12 to May 14, 1994
CONDITIONS OF TEMPORARY CAPROCK PERMITS

<table>
<thead>
<tr>
<th>Applicant</th>
<th>Monthly Reports</th>
<th>Water Shortage Plan</th>
<th>Data Generation &amp; Participation</th>
<th>Conservation Plan</th>
<th>Ewa Caprock Regional Plan</th>
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<tr>
<td></td>
<td>Pumpage</td>
<td>Water Level</td>
<td>Chlorides</td>
<td>No</td>
<td>No</td>
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<tr>
<td>DHCD</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Campbell Estate</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Gentry Hawaii, Ltd.</td>
<td>No</td>
<td>No</td>
<td>Yes*</td>
<td>No</td>
<td>No</td>
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<tr>
<td>State HFDC</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Hawaii Prince</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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</table>

* Not in use  
Yes* Intermittent
<table>
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<tr>
<th>Project Name</th>
<th>TMK</th>
<th>County Development Plan Designation</th>
<th>County Zoning</th>
<th>State Land Use District</th>
<th>No. of Units</th>
<th>Units Acres (a) or Lin. Feet (ft)</th>
<th>GPD per Acre or Lin. Foot</th>
<th>Already Completed - 1993</th>
<th>Year of Development Plan (GPD)</th>
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<tr>
<td>Area 1 (PV-1)</td>
<td>9-1-50:91</td>
<td>LDA</td>
<td>A-1 Urban</td>
<td>15.39 a</td>
<td>2,000</td>
<td>30,780</td>
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<td>1994</td>
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<td>Area 1 (PC-1)</td>
<td>9-1-12:1, 9-1-12:29 por 1</td>
<td>LDA</td>
<td>A-1 Urban</td>
<td>4.7 a</td>
<td>2,000</td>
<td>9,400</td>
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<td>1995</td>
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<td>9-1-12:1, 9-1-12:29 por 1</td>
<td>LDA</td>
<td>A-1 Urban</td>
<td>16.7 a</td>
<td>2,000</td>
<td>33,400</td>
<td></td>
<td></td>
<td>1996</td>
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<tr>
<td>Area 4 (PV-2)</td>
<td>9-1-61:5,13-18,25-27,34</td>
<td>LDA</td>
<td>A-1 Urban</td>
<td>15.67 a</td>
<td>2,000</td>
<td>31,340</td>
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<tr>
<td>Area 8</td>
<td>9-1-61:56</td>
<td>LDA</td>
<td>A-1 Urban</td>
<td>5.93 a</td>
<td>2,000</td>
<td>11,060</td>
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<tr>
<td>Area 8A</td>
<td>9-1-61: por 8</td>
<td>Commercial</td>
<td>A-1 Urban</td>
<td>3.86 a</td>
<td>1,200</td>
<td>4,632</td>
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<td>Area 9</td>
<td>9-1-61: por 8</td>
<td>Commercial</td>
<td>A-1 Urban</td>
<td>6.67 a</td>
<td>1,200</td>
<td>8,00</td>
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<td>Area 10</td>
<td>9-1-61: 7, 41-50</td>
<td>LDA</td>
<td>A-1 Urban</td>
<td>11.71 a</td>
<td>2,000</td>
<td>23,420</td>
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<td>Area 11</td>
<td>9-1-61: 35</td>
<td>PARK</td>
<td>P-2 Urban</td>
<td>10.07 a</td>
<td>4,000</td>
<td>40,280</td>
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<td>Area 13</td>
<td>9-1-69: por 6</td>
<td>LDA</td>
<td>AG-2 Urban</td>
<td>6.94 a</td>
<td>2,000</td>
<td>13,88</td>
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<td>Area 14</td>
<td>9-1-69: por 6</td>
<td>LDA/AG</td>
<td>AG-2 Urban</td>
<td>20.01 a</td>
<td>2,000</td>
<td>25,62</td>
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<td>Area 16</td>
<td>9-1-69: por 6</td>
<td>IND</td>
<td>AG-2 Urban</td>
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<td>2,000</td>
<td>26,62</td>
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<td>50,820</td>
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<td>PARK</td>
<td>AG-1 Urban</td>
<td>12.05 a</td>
<td>4,000</td>
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<td>Area 23</td>
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<td>AG-1 Urban</td>
<td>9 a</td>
<td>2,000</td>
<td>18,000</td>
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<td>Area 24</td>
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<td>LDA</td>
<td>A-1 Urban</td>
<td>7.48 a</td>
<td>2,000</td>
<td>14,960</td>
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<td>Area 25</td>
<td>9-1-10: por 17</td>
<td>PF</td>
<td>AG-1 Urban</td>
<td>8 a</td>
<td>1,200</td>
<td>9,600</td>
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<tr>
<td>Area 26A</td>
<td>9-1-10: por 2</td>
<td>LDA</td>
<td>A-1 Urban</td>
<td>9.75 a</td>
<td>2,000</td>
<td>19,500</td>
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<td>Area 26B</td>
<td>9-1-10: por 2</td>
<td>LDA</td>
<td>A-1 Urban</td>
<td>15.08 a</td>
<td>2,000</td>
<td>30,160</td>
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<td>Area 29</td>
<td>9-1-10: por 2 &amp; 15</td>
<td>PARK</td>
<td>P-2 Urban</td>
<td>6 a</td>
<td>4,000</td>
<td>6,000</td>
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<td>Area 30</td>
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<td>16 a</td>
<td>2,000</td>
<td>30,000</td>
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<td>North South Rd.</td>
<td>9-1-61: por 59, 55</td>
<td>street</td>
<td>street Urban</td>
<td>3500 if</td>
<td>2,75</td>
<td>9,625</td>
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<td>NS Rd. Ph. 3</td>
<td>9-1-73</td>
<td>street</td>
<td>street Urban</td>
<td>1400 if</td>
<td>2,75</td>
<td>3,850</td>
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<td>Geiger Rd.</td>
<td>9-1-1</td>
<td>street</td>
<td>street Urban</td>
<td>1800 if</td>
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<td>4,950</td>
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<td>street</td>
<td>street Urban</td>
<td>4000 if</td>
<td>2,75</td>
<td>11,000</td>
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<td>FWR (Soda Creek)</td>
<td>9-1-1</td>
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<td>street Urban</td>
<td>2300 if</td>
<td>2,75</td>
<td>6,325</td>
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<td>FWR (GC, 6, 8, 4)</td>
<td>9-1-1</td>
<td>street</td>
<td>street Urban</td>
<td>3000 if</td>
<td>2,75</td>
<td>8,250</td>
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<td>FWR (Sun Terra)</td>
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<td>street Urban</td>
<td>1200 if</td>
<td>2,75</td>
<td>3,300</td>
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<tr>
<td>Sun Terra Tot Lot</td>
<td>9-1-70</td>
<td>RES</td>
<td>R-5 Urban</td>
<td>1 a</td>
<td>2,75</td>
<td>4,000</td>
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<td>Iroquois Pt Rd.</td>
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<td>3400 if</td>
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<td>9,350</td>
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<td>Rd. AA</td>
<td>9-1-10: por 18, 19, 20, 2</td>
<td>street</td>
<td>street Urban</td>
<td>6500 if</td>
<td>2,75</td>
<td>17,875</td>
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<td>Kolowaka Dr.</td>
<td>9-1-61: por 24</td>
<td>street</td>
<td>street Urban</td>
<td>3000 if</td>
<td>2,75</td>
<td>8,250</td>
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<td></td>
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</tr>
<tr>
<td>Kolowaka Dr. Ext.</td>
<td>9-1-10: por 19</td>
<td>street</td>
<td>street Urban</td>
<td>1000 if</td>
<td>2,75</td>
<td>2,750</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-61: por 2</td>
<td>PARK/GC</td>
<td>P-2, A-1, R-5</td>
<td>Urban</td>
<td>162.5 a</td>
<td>4,000</td>
<td></td>
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<td>YEAR'S TOTAL:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>174,625</td>
<td>34,480</td>
<td>315,747</td>
<td>414,305</td>
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<td>CUMULATIVE TOTAL:</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>174,625</td>
<td>209,105</td>
<td>524,852</td>
<td>939,157</td>
</tr>
</tbody>
</table>

NOTES:  
1. Roadway landscaping is estimated at an average of 2.75 GPD / linear foot of roadway based on plans completed to date by various landscape architects.  
2. Commercial and public facilities are estimated at 1200 GPD gross area based on BWS non-potable water use guidelines. Industrial is estimated at 2800 GPD / acre based on these standards.  
3. Irrigation of parks is estimated at 4000 GPD / gross area.  
4. Irrigation of low density multi-family residential parcels is estimated at 4000 GPD per landscaped area. Development to date has averaged 50 percent of the parcel in landscaping. Irrigation at 4000 GPD per net area is equivalent to 2000 GPD per gross area.
ITEM 3  
DEFERRAL - EXTENSION OF TEMPORARY WATER USE PERMITS, WELL CONSTRUCTION/PUMP INSTALLATION AND WATER USE PERMIT APPLICATIONS, EWA CAPROCK GROUND WATER MANAGEMENT AREA, OAHU

Campbell Estate - (1905-08)  
State of Hawaii, Housing Finance & Development Corp. - (2003-01 to 05)  
Hawaii Prince Golf Club - (1900-02, 17 to 20, 1901-03)  
Gentry Pacific, Ltd. - (2001-03, 07, 08, & 2002-12)  
Gentry Development Co. - (2001-04 & 05, 2001-09)  
City and County of Honolulu, Dept. of Housing & Community Development - (2002-13 & 2102-23)

Mr. Ing asked to be excused from participating on this item since his law firm represents one of the applicants.

Ms. Nakama said that currently there is no established network for collecting data to assess the current/future trends in the water availability but monitoring will be started shortly. Staff had anticipated that the applicants would on their own initiative collect additional data that would go into models that are being developed which would help to better understand the resource. To date, none of the applicants have generated additional data.

Ms. Nakama also corrected the last recommendation to read as "7" instead of another "6".

Mr. Cox expressed concern on:

1) Lack of data which he and Dr. Lewin had requested last year as part of the condition.

2) Missing information on the chlorides in the water data submitted.

Ms. Donna Goth of Campbell Estate explained that the data generation and participation was not possible because the wells are currently under construction, including the monitoring well. They are expected to be completed at the end of this year and as soon as data are generated, they will be submitted. In regards to the up-dated four-year projections, they do not anticipate an increase over their current allocation.

Mr. Tom Nance, representing Gentry, Ltd., submitted testimony (see file). He stated that the deferral was a surprise since monthly water reports (although the water levels were not submitted, that could be done), alternate source plan, conservation plan, and up-dated four-year projections have been submitted.

Mr. Nance requested that the 30-day period for submittal of information be extended to a 60-day period. Ms. Loui said that staff needs time to analyze data before the submittals are finalized and presented for Commission action. Mr. Cox agreed that the 30-day period should be kept.

Mr. Cox asked what would be done in regards to the water shortage plan. Ms. Nakama stated that staff would be approaching users for the information.

Unanimously approved 1) with the understanding that the applicants will cooperate with staff to get more information on the resource and 2) with the correction of the numbering in the conditions (Nakata/Cox).
ITEM 4  KUALOA RANCH, INC., APPLICATIONS FOR WATER USE PERMITS, KAHANA GROUND WATER MANAGEMENT AREA (3251-01 & 03). OAHU

Mr. Cox recalled that the Board of Water Supply (BWS) had stated they had submitted an application for this water and asked if staff had followed up on this. Ms. Nakama replied that there was no application from BWS in the file. Mr. Chester Lao from BWS stated that he did not recall an application but would check at their office and get back to staff.

Unanimously approved (Cox/Ing).

ITEM 5  CITY AND COUNTY OF HONOLULU, DEPARTMENT OF PUBLIC WORKS APPLICATION FOR A STREAM CHANNEL ALTERATION PERMIT, CONSTRUCTION OF A REINFORCED CONCRETE LINING. KAPUNAHALA STREAM, KANEOHE

Unanimously approved (Cox/Nakata).

ITEM 6  KAUPULEHU LAND COMPANY, APPLICATION FOR PUMP INSTALLATION PERMITS. KAUPULEHU IRRIGATION WELLS 1 & 2, WELL NOs. 4757-01 & 02, KAUPULEHU, HAWAII

Mr. Ing was excused from participation in this application since his law firm represents the landowner.

Unanimously approved (Nakata/Cox).

ITEM 7  U.S. GEOLOGICAL SURVEY, APPLICATION FOR A WELL CONSTRUCTION PERMIT, DISCOVERY HARBOR OFFSITE EXPLORATORY WELL, WELL NO. 0337-01, NAALEHU, HAWAII

ITEM 8  U.S. GEOLOGICAL SURVEY, APPLICATION FOR A WELL CONSTRUCTION PERMIT, WAIOHINU EXPLORATORY WELL, WELL NO. 0437-01, WAIOHINU, HAWAII

ITEM 9  U.S. GEOLOGICAL SURVEY, APPLICATION FOR A WELL CONSTRUCTION PERMIT, PAAULIO MAUKA EXPLORATORY WELL, WELL NO. 6226-01, PAAULIO, HAWAII

ITEM 10  U.S. GEOLOGICAL SURVEY, APPLICATION FOR A WELL CONSTRUCTION PERMIT, KAUMANAA ESTATES EXPLORATORY WELL, WELL NO. 4010-01, KAUMANAA, HAWAII

ITEM 11  U.S. GEOLOGICAL SURVEY, APPLICATION FOR A WELL CONSTRUCTION PERMIT, KAIEIE MAUKA EXPLORATORY WELL, WELL NO. 4708-02, PAPAIKO, HAWAII

Mr. Sakoda asked the Commission to act on the USGS applications together since they were all similar exploratory wells for data gathering. Mr. Ing asked how the sites were selected. Mr. Sakoda replied that the three Counties
Mr. Ronald M. Uemura
Gentry Development Company

Dear Mr. Uemura:

Temporary Water Use Permit
Ewa Caprock Ground Water Management Area, Oahu

At the May 18, 1994 meeting of the Commission on Water Resource Management (Commission), the Commission deferred action on requests to renew expired temporary water use permits for the Ewa Caprock Aquifer and granted applicants an additional thirty (30) days to satisfy the conditions for temporary permit renewal. Usages awarded by the expired temporary permit may be continued for sixty (60) days.

We understand that you are requesting continued use of your sources at the allocations previously granted in the expired temporary permits. To support your request, the following should be provided by June 17, 1994:

1. A water shortage plan.

2. Any and all data from caprock wells that have been generated by your firm and that have not previously been submitted to the Commission. If there are no additional data, then you must submit a written statement that, to the best of your knowledge, all well data generated by your firm have been provided to the Commission and that no additional well data have been generated to date.

3. Updated annual nonpotable demand projections for the 4-year period, 1994 through 1997. If there have been no changes or updates since April 1993, you must submit a written statement to that effect.

4. An update on the status of the Geiger Apt. Well and Soda Creek III Well (Well Nos. 2001-04 & 05) and an estimate for actual use of these sources.
5. Any water level and chloride data that have been collected to date. If no water level data have been collected, then please provide a statement to that effect and state your reasons for your inability to collect such data. If all available chloride data have been provided to the Commission, then please provide a statement to that effect and briefly describe your measurement interval. Regular reports of monthly water levels and chloride data was a standard condition of your expired temporary permit.

Your renewal request has been tentatively scheduled for the July 13, 1994 Commission meeting. If you have any questions, please contact Lenore Nakama at [redacted].

Sincerely,

[Signature]

RAE M. LOUI
Deputy Director

LN:fc
# CONDITIONS OF TEMPORARY CAPROCK PERMITS

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<thead>
<tr>
<th>Applicant</th>
<th>Monthly Reports</th>
<th>Water Shortage Plan</th>
<th>Data Generation &amp; Participation</th>
<th>Conservation Plan</th>
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<td>Pumage</td>
<td>Water Level</td>
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* Not in use
Yes* Intermittent
Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Honolulu, Hawaii

Gentlemen:

DEFERRAL - Extension of Temporary Water Use Permits, Well Construction/Pump Installation and Water Use Permit Applications
Ewa Caprock Ground Water Management Area, Oahu

<table>
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<th>Applicant</th>
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<td>(Well Nos. 2003-01 to 05) State of Hawai'i, Housing Finance &amp; Development Corp.</td>
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<td>(Well Nos. 1900-02, 17 to 20, 1901-03) Hawaii Prince Golf Club</td>
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<td>(Well Nos. 2001-03,07,08 &amp; 2002-12) Gentry Pacific, Ltd.</td>
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<tr>
<td>(Well Nos. 2001-04 &amp; 05) Gentry Development Co.</td>
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<tr>
<td>(Well Nos. 2002-13 &amp; 2102-23) City &amp; County of Honolulu, Dept. of Housing &amp; Community Development</td>
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</tr>
<tr>
<td>(Well No. 2001-09) Gentry Development Co. P.O. Box 295 Honolulu, HI 96809</td>
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Background

The boundaries of the brackish Ewa Caprock Aquifer were officially adopted by the Commission on March 3, 1993 without any sustainable yield estimate. Permits totalling 19,564 mgd. were awarded in the 1988-1992 timeframe mainly to existing uses (eg. Oahu Sugar Co.). To satisfy the needs of new developments in the Kapolei and Puuloa areas of the caprock (Exhibit 1), temporary water use permits not exceeding one year were granted to the applicants listed in Exhibit 2. These temporary permits expired on April 28, 1993. All applicants have submitted a request for renewal of their temporary permits.
Gentry Development Corp. submitted a new application for a combined well construction/pump installation permit to the Commission on January 21, 1994. A completed application for a water use permit for the proposed source was submitted on February 10, 1994. Specific information regarding the source, use, notification, objections, and field investigation are described in Attachment A and the attached exhibits.

Analysis & Issues

The current guideline used for sustainable yield for water suitable for irrigation in the caprock area is 21 mgd. After cessation of sugarcane operations, the sustainable yield will be reduced to 16 mgd. Although Yuen & Associates, Inc. (1989) made these estimates based on three aquifer systems (Malakole, Puuloa, and Kapolei), the Commission did not officially adopt the separate aquifer systems. If the sustainable yield were divided between the three aquifer systems, the Puuloa Aquifer System may be presently over-allocated. Tables 1 & 2 show current allocations and pending applications for water use permits in relation to the unofficial sustainable yield estimates for the Puuloa and Kapolei Aquifer Systems.

### TABLE 1. PUULOA AQUIFER SYSTEM

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PUULOA AQUIFER SYSTEM (mgd)</th>
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<td>Pending Completed Applications: Gentry Development Co. (Ft Weaver Apt)</td>
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</table>
Chairperson and Members  
Commission on Water Resource Management  
May 18, 1994

* Refer to Exhibit 5 for a complete listing of permitted uses.  
** Includes 0.9 mgd prior permitted use (see Exhibit 5).  
*** Proposed Ewa Marina will result in a permanent reduction.

### TABLE 2. KAPOLEI AQUIFER SYSTEM

<table>
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The City & County irrigation needs are currently being met by obtaining water from Oahu Sugar Company. This change in use is a violation of the water use permits issued to Oahu Sugar Company and a reason for revocation of the permits. The City & County is requesting renewal of their temporary permit, although no usage of their allocation was ever made. Staff is conducting field verifications of the Oahu Sugar Company uses. The results of the investigation will be available by the end of the week.

The Commission has hired a consultant to develop a nonpotable water master plan for Central Oahu, including the Ewa plain. However, the scope of the work is broad and must be supported by the individual plans and programs of the applicants.

Condition 5 of the temporary permits required a joint plan for the conversion to an alternative nonpotable source. The plans that were submitted were individually written. Without exception, the applicants’ plans are to utilize caprock water for as long as possible. There did not appear to be serious attempts to develop a true plan for conversion. An important policy question is the use of reclaimed water. How much should the uncertainty in caprock water availability drive the encouragement of the use of reclaimed water?

Average use by the Hawaii Prince Golf Club has exceeded permitted use for the last seven months. Higher than average usage is attributed to regular over-watering to avoid salt build-up and large evaporative losses from ten interconnected lakes, which have a total surface area of 32 acres. One of the conditions of the temporary permit was a conservation plan, yet this inefficient use was not addressed. Important policy questions are whether the Commission on Water Resource Management should take action for the over-pumpage violation and whether these temporary permits have been adequate motivation to conserve water and to find alternatives.

The available data on water quality and the effects of pumpage is limited. A network has not yet been established, and the data from the applicants is insufficient to determine impacts, let alone predict impacts. The applicants should be motivated to collect and contribute data for this type of analysis.
None of the developers have fully complied with all conditions of the temporary permit, shown in Attachments B, C, and D. Condition 9 states: "Temporary permits shall not be renewed if any of the above is not provided or followed".

Gentry Development Co. has submitted applications for well construction/pump installation and water use permits for a new caprock source in the Puuloa Aquifer System. However, because the parcels on which the water is to be used have not been subdivided, it cannot be established that the appropriate zoning has been obtained for the project. The County has suggested that the applicant seek a determination from the Dept. of Land Utilization. The applicant is aware of the need for a zoning determination and has indicated that the necessary steps will be taken to support their application. In addition, the applicant should also be required to comply with the special conditions and conservation conditions that have been placed on other developers for temporary permit renewal.

RECOMMENDATION

Staff recommends that the Commission:

1. Defer action on the requests for temporary permit renewal until all of the conditions for renewal have been met.
2. Give the applicants a period of thirty (30) days from the date of this submittal to meet these conditions.
3. Allow the usages awarded by the expired temporary permits to continue for sixty (60) days from the date of this submittal.
4. Require that updated land use zoning information, one of the components of the Ewa Caprock Regional Plan to which all applicants are subject, be submitted in a format similar to that shown in Exhibits 3 & 4.
5. Require the submittal of any and all hydrologic data on the caprock collected to date by the applicants to meet Condition 7 of the original temporary permits.
6. Require an explanation for any usage above or below the allocated limit.

Defer the application for the Gentry Development Co. Fort Weaver Apt. Well (Well No. 2001-09) pending establishment of appropriate zoning for the project and compliance with the applicable special conditions and conservation conditions.

Respectfully submitted,

[Signature]
Deputy Director

APPROVED FOR SUBMITTAL:

KEITH W. AHUE, Chairperson

[Signature]

Attach.

- Ing excused from voting, professional conflict
- Donna got CR: caprock wells, incl. monitor well, still under construction, will provide data as soon as they become available
- Tom Nance, Gentry
- HI Prince

May 18, 1994
WATER USE PERMIT DETAILED INFORMATION

Source Information

**AQUIFER:** Puuloa Aquifer System, Ewa Caprock Aquifer, Oahu

- Sustainable Yield: NA mgd
- Existing Water Use Permits: 20.225 mgd
- Available Allocation: NA mgd
- Total of other pending allocations: 1.738 mgd

**WELL:** Ft. Weaver Apt. Well (Well No. 2001-09)

- Location: Ewa by Gentry Development, Oahu, TMK:9-1-61:2
- Year Drilled: NA
- Casing Diameter: 12 in.
- Elevations (msl = 0 ft.)
  - Water Level: NA ft.
  - Ground: 34 ft.
  - Bottom of Solid Casing: 4 ft.
  - Bottom of Perforated: -16 ft.
  - Bottom of Open Hole: -20 ft.
- Total Depth: 54 ft.
- Grouted Annulus Depth: NA ft.
- Pump Capacity: 100 gpm

Use Information

- Quantity Requested: 48,400 gallons per day.
- Proposed Type of Water Use: Landscape and roadway irrigation
- Place of Water Use: Ewa by Gentry Development, Oahu at TMK: 9-1-61:2&8

- Reported Water Usage: NA gpd
- Nearby Similar Water Usage: 3,000 gad
- Puuloa Aquifer System
- Current 12-Month Moving Average Withdrawal: 17.016 gpd

ATTACHMENT A
Chairperson and Members  
Commission on Water Resource Management  

Nearby Surrounding Wells and Other Registered Ground Water Use

There are fifteen other wells within a mile of the well (Exhibit 1A). Most of these are planned for future use at the Ewa by Gentry Development. No estimate of existing withdrawals from the Puuloa Aquifer System is provided in the 1992 Draft of the Oahu Water Management Plan.

Public Notice

In accordance with HAR §13-171-17, a public notice was published in the Star-Bulletin on March 17 & 24, 1994 and copies of the notice were sent to the Mayor’s office and the Board of Water Supply. Additional notice copies were sent to the County Council and Department of Water Supply. Copies of the completed application were sent to the Department of Health, Department of Hawaiian Home Lands, Office of Hawaiian Affairs, Aquatic Resources & Historic Preservation Divisions of the Department of Land and Natural Resources, and other interested parties for comments. Written comments and objections to the proposed permit were to be submitted to the Commission by April 11, 1994.

Objections

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 by April 11, 1994. No specific objections were filed with the Commission, however, the County has indicated that appropriate zoning for the project cannot be established at this time, and the applicant should seek a determination from the Dept. of Land Utilization.

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.

Field Investigation

The application is for a proposed water source and future water use and as such, no field investigation is warranted.

ATTACHMENT A
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 May 18, 1994 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 with 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 Ewa Caprock 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 Ewa Caprock 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
CONSERVATION CONDITIONS
EWA CAPROCK WATER USE PERMITS

1. The permittee shall adopt self-administered water conservation programs and plans with collective monitoring to protect and maintain the caprock resource. Water conservation programs and plans shall be submitted to the Commission within 60 days from the date of Commission approval.

2. Water conservation programs and plans shall address (as applicable) but not be limited to the following:
   a. Reduce the demand for non-potable water by:
      • Identifying and utilizing water efficient plants and drought tolerant plants for landscaping and quantifying their demands (Xeriscape);
      • Mulching planting areas with organic materials, etc., to minimize evaporation;
      • Efficiently maintaining the plants;
      • Improving land management practices to conserve water.
   b. Improve efficiency in use and reduce losses and waste of non-potable water by:
      • Using efficiently designed landscaping and irrigation systems;
      • Monitoring irrigation requirements and controlling usage accordingly;
      • Managing irrigation scheduling to minimize water demand;
      • Eliminating opportunities for water wastage;
      • Maintaining and improving irrigation systems as necessary.
   c. Industrial users should employ the recirculation of cooling water and the reuse of cooling and process water.

3. The permittee shall pursue and participate in alternative non-potable water source development and use such as wastewater reuse (direct reuse and/or recharge injection).

4. In the event that water conservation programs and plans are not complied with or that a waste of water is occurring, the Commission shall proceed with the necessary actions to revoke this permit.

ATTACHMENT C
Special Conditions
Ewa Caprock Temporary Water Use Permits

1. The temporary permits shall be valid for one (1) year from its approval date (April 28, 1994).

2. Quantities of allocations for each applicant are those calculated in Exhibit 3 for 1993 under the additional required allocation column. The pending applications which have no new or negative additional requirements are denied.

3. Each applicant’s allocation shall be for the cumulative withdrawals from the corresponding well sources specified by each applicant in Exhibit 2, except for Gentry Pacific’s well sources. Staff will be working with Gentry to associate water use permits for each well with each project individually within their total required allocation as shown in Exhibit 3.

4. Each applicant’s allocation shall be used only for the corresponding uses specified by each applicant in Exhibit 3.

5. Within one (1) year, the applicants shall jointly submit a plan for the conversion to an alternative non-potable source other than the Ewa Caprock Aquifer. This plan shall include the applicant’s intentions of funding the actual development of the alternative non-potable source.

6. Within sixty (60) days after approval, each applicant shall submit a water conservation plan or program according to the conditions in Attachment C.

7. The applicants shall continue to actively participate in the continuing development of the Ewa Caprock Regional Plan and its two main components which shall be coordinated by the Commission on Water Resource Management.

8. The applicants must actively participate in generating more information to show the utility of the caprock source in the absence of OSCo, recharge irrigation over the caprock and the complete absence of OSCo irrigation in the Pearl Harbor area.

9. Temporary permits shall not be renewed if any of the above is not provided or followed.

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<th>WELL NAME</th>
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EXHIBIT 2
**EWA CAPROCK REGIONAL PLAN**  
**NON-POTABLE WATER DEMAND FORECAST**  
**WATER USE PERMIT APPLICATIONS**

### Kapolei Caprock Area

<table>
<thead>
<tr>
<th>Developer</th>
<th>Project</th>
<th>Zoning Code</th>
<th>Acres</th>
<th>GPD/AC</th>
<th>1993 Projected Avg Use (GPD)</th>
<th>Existing Permits (MGD)</th>
<th>Additional Required Allocation (MGD)</th>
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**Subtotal Campbell Estate**

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<th>Acres</th>
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**Subtotal State HFDC**

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<th>Acres</th>
<th>GPD/AC</th>
<th>1993 Projected Avg Use (GPD)</th>
<th>Existing Permits (MGD)</th>
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**Kapolei Caprock Area Subtotal**

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<th>Acres</th>
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## PUUKOA CAPROCK AREA

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## MALEKOI AREA

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* not including salt water use
** 16.194 mgd permitted to Oahu Sugar, to be cutback to 12.030 mgd in 1995.

Notes:
1) Current 1.5 mgd temporary use permit to expire in 1993.
2) 0.08 mgd formerly permitted to Aloha State Corp.
3) 0.08 mgd formerly permitted to Gentry Development Co.
4) 0.90 mgd formerly permitted to The Myers Corp.
5) 0.60 mgd formerly permitted to Puukoa Homes, and
6) 0.10 mgd formerly permitted to Sago, Hawaii Inc.
### Exhibit 1

#### Kapolei Caprock Area Non-Potable Water Demand Forecast

<table>
<thead>
<tr>
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<th>1994 Projected Avg Use (GPD)</th>
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<th>1996 Projected Avg Use (GPD)</th>
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**Subtotal Campbell Estate**

331,286

| State HFDC           | Kapolei Villages-all (dust)   | 415,000                      | 335,000                      | 95,000                       |
| State HFDC           | Kapolei Village-Land Bank Grass | 100,000                    | 75,000                      | 50,000                      |
| State HFDC           | Kapolei Village-BP Access Rd  | 6,000                       | 6,000                       | 6,000                       |
| State HFDC           | Kapolei Village-Kamehameha Ave. | 22,000                    | 22,000                      | 22,000                      |
| State HFDC           | Kapolei Village-Kamehameha Ave. | 60,000                    | 60,000                      | 60,000                      |
| State HFDC           | Kapolei Village-Loop Rd       | 8,500                       | 8,500                       | 8,500                       |
| State HFDC           | Kapolei Village-Ewa Parkwy    | 26,000                      | 26,000                      | 26,000                      |
| State HFDC           | Kapolei Village-Farrington Hwy | 80,000                    | 80,000                      | 80,000                      |
| State HFDC           | Kapolei Village-14 acre Park  | 25,000                      | 25,000                      | 25,000                      |
| State HFDC           | Kapolei Village-Rec Center A  | 0                           | 0                           | 7,500                       |
| State HFDC           | Kapolei Village-Park          | 0                           | 0                           | 10,000                      |
| State HFDC           | Kapolei Village-Park          | 0                           | 0                           | 38,000                      |
| State HFDC           | Kapolei Village-Intermediate School | 0                      | 0                           | 88,000                      |
| State HFDC           | Kapolei Village-High School   | 0                           | 0                           | 183,000                     |
| State HFDC           | Kapolei Village-Element School | 0                          | 0                           | 38,000                      |
| State HFDC           | Kapolei Village-Element School | 0                          | 0                           | 38,000                      |
| State HFDC           | Kapolei Village-VSFA Biscet Rd | 31,000                    | 31,000                      | 31,000                      |
| State HFDC           | Kapolei Village-Village Center | 30,000                    | 30,000                      | 30,000                      |
| State HFDC           | Kapolei Village-Elderly Housing | 0                          | 0                           | 40,000                      |
| State HFDC           | Kapolei Golf Course           | 900,000                     | 900,000                     | 800,000                     |

**Subtotal State HFDC**

1,772,500

1,667,500

1,725,000

| Makakilo Golf Corp. | Makakilo Golf Course          | 1,150,000                    | 1,150,000                    | 1,150,000                    |

**Kapolei Caprock Area Subtotal**

2,183,786

1,998,786

2,141,286
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Exhibit 4
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TOTAL 1994 PROJECTED DEMAND 25,102 mgd
TOTAL 1995 PROJECTED DEMAND 22,172 mgd
ADDITIONAL REQUIRED 2,950 mgd

* not including salt water use.
### Aquifer System: KAPOLEI

**Sustainable Yield = 5 mgd**

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12 Permits Totaling 2.046
Available Allocation = 2.046

### Aquifer System: PUULOA

**Sustainable Yield = 15 mgd**

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31 Permits Totaling 20.225
Available Allocation = -5.225

EXHIBIT 5
Mr. Keith Ahue  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  

Dear Mr. Ahue:

RE: Extension of Ewa By Gentry's Temporary Water Use Permits in the Ewa Caprock Ground Water Management Areas

We request an extension of the temporary water use permits in the Ewa Caprock Ground Water Management Area. As far as we are aware, Ewa By Gentry has complied with all permit conditions and submittal requirements for its six caprock wells. Pumpage and chloride data has been submitted on a monthly basis. The required water conservation and non-potable alternate source plans have also been submitted. We are unsure of the Staff's reasons to defer the extension at this time.

The uncertain prospects of alternative non-potable sources in Ewa are reflected in our plan. It allows for Honouliuli effluent, Waiahole Ditch, or basalt aquifer wells to be a future source if required by the diminishing viability of the Caprock. All of the permit conditions have been met and there has been no change in the Caprock's quality to suggest that our use of it should be curtailed.

Very truly yours,

GENTRY HOMES

NORMAN H. DYER  
Executive Vice President
THE FOLLOWING FILE(S) ERASED

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<th>FILE TYPE</th>
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ERRORS

1) HANG UP OR LINE FAIL  
2) BUSY  
3) NO ANSWER  
4) NO FAX SIMILE CONNECTION

THE GENTRY COMPANIES

May 18, 1994

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

Dear Mr. Ahue:

RE: Extension of Ewa By Gentry's Temporary Water Use Permits in the
Pu'u Kuko'a Ground Water Management Areas
April 11, 1994

Via Fax and Hand Delivery

State of Hawaii
Department of Land and Natural Resources
Commission on Water Resource Management

Attention: Rae M. Loui, Deputy Director

Re: Temporary Water Use Permits, Ewa By Gentry Wells, Ewa Caprock Aquifer: Geiger Park Well, 2001-03; Golf Villa I Well, 2001-07; Palm Villa 2 Well, 2001-08; Palm Court 3 Well, 2002-12; Geiger Apartment Well, 2001-04; Soda Creek III Well, 2001-05

Dear Ms. Loui:

Thank you for your letter of March 29, 1994, describing the status of the temporary water use permits and the Ewa Caprock Regional Plan development.

Attached is the Ewa By Gentry water conservation plan that has been in effect during the term of the temporary permits at issue.

We apologize for not having submitted a copy to the staff earlier.

We plan to continue use of the existing sources for the permitted wells at the same allocations described in the permits. We would appreciate your consideration of all these use permits for the one-year extension request that you anticipate making to the Commission at its tentatively scheduled April 27, 1994 meeting.

If you have any need of further information, or have any questions, please contact me. My telephone number is [number redacted].

Sincerely,

Barry Edwards
Project Director - Ewa By Gentry
Gentry Homes, Ltd.

Enclosure

cc: Ms. Lenore Nakama (w/enc)
April 8, 1994

State of Hawaii
Department of Land and Natural Resources
Commission on Water Resource Management

Attention: Rae M. Loui, Deputy Director

Re: EWA BY GENTRY WATER CONSERVATION PLAN

Dear Ms. Loui:

The following program has been implemented with regard to water conservation and we feel this program is in compliance with the DLNR requirements for the water use permit:

1. The use of drought and salt tolerant trees, shrubs and groundcovers has been and will continue to be incorporated into all projects at Ewa by Gentry. In our continuing efforts to improve and adjust our landscaping for drought and salt tolerance, we have introduced Seashore Paspalum Grass for lawn areas and increased our utilization of coral, gravel and rock in lieu of groundcover planting, during the past year.

2. Irrigation systems are designed specifically to conform with non-potable water source pump requirements.

3. Irrigation controller schedules are adjusted during rainy periods to conserve water.

4. Broken irrigation pipes and equipment are promptly repaired to insure that water is not wasted. Irrigation heads, valves and controllers are routinely adjusted to maximize irrigation efficiency.

5. Installation of pop-up irrigation heads is utilized to reduce damage to exposed irrigation equipment and resulting water loss.

6. Irrigation submeters are being installed on specific irrigation zones downstream of primary irrigation water meters to improve irrigation monitoring and evaluation.
7. A landscape committee was formed to ensure continuity and compliance with water conservation requirements, and to improve design, installation and maintenance of landscaping, irrigation systems and non-potable wells.

8. A Landscape Booklet was developed which is distributed to all buyers at Ewa by Gentry. This guide stresses the importance of utilizing drought tolerant planting in combination with efficient irrigation, provides information on suitable drought tolerant plants and introduces homeowners to xeriscape as well as basic landscape design and installation concepts to insure successful landscaping.

This program has been extremely successful in our continuing efforts to minimize water usage and improve the Ewa by Gentry Community.

If you have any questions or concerns, please contact us.

Sincerely,

BROWNIE & LEE

Richard C. Brownlie, ASLA
Principal

RCB/sy
Mr. Ronald M. Uemura  
Gentry Development Company

Dear Mr. Uemura:

Notice of Expiration  
Temporary Water Use Permit  
Ewa Caprock Ground Water Management Area, Oahu

On April 28, 1993, the Commission on Water Resource Management (Commission) granted you temporary water use permits for the following Ewa by Gentry wells located in the Ewa Caprock Aquifer:

- Geiger Park Well (Well No. 2001-03)  
- Golf Villa 1 Well (Well No. 2001-07)  
- Palm Villa 2 Well (Well No. 2001-08)  
- Palm Court 3 Well (Well No. 2002-12)

Two additional temporary water use permits were approved by the Commission on October 27, 1993 for the proposed Geiger Apartment Well (Well No. 2001-04) and Soda Creek III Well (Well No. 2001-05). Your temporary water use permits for these six sources are due to expire on April 28, 1994.

It had been anticipated that the Ewa Caprock Regional Plan would be developed during this interim one-year period. As you may recall, the Ewa Caprock Regional Plan was to provide the following:

1. Updated land use zoning, acreage, and type of land use for projected yearly authorized planned non-potable water demands to 1996; and

2. Guidance for the production of alternative non-potable sources to supplement, replace, or enhance the caprock source in the absence of sugarcane irrigation return flow.
At this time, it is apparent that additional time will be required for full development and implementation of this plan. To address the existing non-potable needs of temporary permittees in the Ewa Caprock Aquifer, the Commission staff plans to submit a request for a one-year extension of the temporary permits at the Commission meeting tentatively scheduled for April 27, 1994.

As such, please notify the Commission in writing by April 15, 1994 if your plans for the following one-year period include continued use of your existing sources. If any modification in your present allocation is needed, please indicate a new amount and provide justification based on zoning, acreage, and type of land use in accordance with Commission policy. Failure to respond by the indicated deadline will create a presumption of abandonment of the use beginning April 29, 1994. If you desire to revive the use, you must apply for a permit under section 13-171-12.

We have attached a copy of the standard conditions and special conditions of your temporary water use permit. Thank you for reporting monthly chloride and use information for each of your four existing wells. We note that you have submitted a revised non-potable alternate source plan for Ewa by Gentry on March 4, 1994 in compliance with the conditions of your temporary permits. However, our records show that you have not submitted a water conservation plan by the July 28, 1993 deadline, which is also a requirement under the terms of your current permits. Any request for an extension of your temporary water use permits will be conditioned on the submittal of a plan for water conservation. Lastly, please submit any additional data that you may have regarding the current and/or projected water situation of the Ewa Caprock Aquifer.

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

Sincerely,

[Signature]

RAE M. LOUI
Deputy Director

LN:ky
Attachments
Chairperson and Members  
Commission on Water Resource Management  
April 28, 1993

Special Conditions  
Ewa Caprock Temporary Water Use Permits

1. The temporary permits shall be valid for one (1) year from its approval date (April 28, 1994).

2. Quantities of allocations for each applicant are those calculated in Exhibit 3 for 1993 under the additional required allocation column. The pending applications which have no new or negative additional requirements are denied.

3. Each applicant's allocation shall be for the cumulative withdrawals from the corresponding well sources specified by each applicant in Exhibit 2, except for Gentry Pacific's well sources. Staff will be working with Gentry to associate water use permits for each well with each project individually within their total required allocation as shown in Exhibit 3.

4. Each applicant's allocation shall be used only for the corresponding uses specified by each applicant in Exhibit 3.

5. Within one (1) year, the applicants shall jointly submit a plan for the conversion to an alternative non-potable source other than the Ewa Caprock Aquifer. This plan shall include the applicant's intentions of funding the actual development of the alternative non-potable source.

6. Within sixty (60) days after approval, each applicant shall submit a water conservation plan or program according to the conditions in Attachment C.

7. The applicants shall continue to actively participate in the continuing development of the Ewa Caprock Regional Plan and its two main components which shall be coordinated by the Commission on Water Resource Management.

8. The applicants must actively participate in generating more information to show the utility of the caprock source in the absence of OSCo. recharge irrigation over the caprock and the complete absence of OSCo. irrigation in the Pearl Harbor area.

9. Temporary permits shall not be renewed if any of the above is not provided or followed.

ATTACHMENT A
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 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.

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

5. The water use permit is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

6. The water use permit application and staff submittal approved by the Commission at its March 17, 1993 meeting are incorporated into the permit by reference.

7. 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.

8. 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. Meet reserved water requirements 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 Commissions'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.

9. An approved flowmeter(s) must be installed to measure withdrawals and a monthly record of withdrawals, water-levels, salinity, and temperature/need not/must be kept and reported to the Commission on a monthly basis in accordance with the Commission's September 16, 1992 action exempting this quantity of use from reporting requirements;

10. 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 Ewa Caprock Aquifer, or relevant modified aquifer, is reduced;

11. 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.

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

13. The permittee shall request modification of the permit when necessary to comply with all applicable laws, rules, and ordinances which will affect the permittee's water use.

14. 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 Ewa Caprock Ground Water Management Area.

15. The water use permit granted shall be an interim water use permit, as allowed under 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.

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

ATTACHMENT B
CONSERVATION CONDITIONS
EWA CAPROCK WATER USE PERMITS

1. The permittee shall adopt self-administered water conservation programs and plans with collective monitoring to protect and maintain the caprock resource. Water conservation programs and plans shall be submitted to the Commission within 60 days from the date of Commission approval.

2. Water conservation programs and plans shall address (as applicable) but not be limited to the following:

   a. Reduce the demand for non-potable water by:
      - Identifying and utilizing water efficient plants and drought tolerant plants for landscaping and quantifying their demands (Xeriscape);
      - Mulching planting areas with organic materials, etc., to minimize evaporation;
      - Efficiently maintaining the plants;
      - Improving land management practices to conserve water.

   b. Improve efficiency in use and reduce losses and waste of non-potable water by:
      - Using efficiently designed landscaping and irrigation systems;
      - Monitoring irrigation requirements and controlling usage accordingly;
      - Managing irrigation scheduling to minimize water demand;
      - Eliminating opportunities for water wastage;
      - Maintaining and improving irrigation systems as necessary.

   c. Industrial users should employ the recirculation of cooling water and the reuse of cooling and process water.

3. The permittee shall pursue and participate in alternative non-potable water source development and use such as wastewater reuse (direct reuse and/or recharge injection).

4. In the event that water conservation programs and plans are not complied with or that a waste of water is occurring, the Commission shall proceed with the necessary actions to revoke this permit.
Ms. Rae Loui  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii

Dear Ms. Loui:

Non-Potable Alternate Source Plan For Ewa by Gentry

Enclosed is the revised Non-Potable Alternate Source Plan for Ewa by Gentry. Creation of the plan is a requirement of Gentry's temporary water use permits for its Ewa limestone aquifer wells. A draft of the plan was originally submitted to you by Barry Edwards in December. It has been revised in accordance with comments in your February 8, 1993 letter.

If you need additional information or clarification of the revisions, feel free to contact Barry Edwards or me.

Sincerely,

[Signature]

Tom Nance

cc: Barry Edwards

Enclosure
Non-Potable Alternate Source Plan
For
Ewa by Gentry

Non-potable irrigation supply for Ewa by Gentry has been developed as independent systems supplied by wells which draw water from the Ewa limestone aquifer. To date, six of these systems have been constructed and two other wells have been drilled but are not yet outfitted. When the project is ultimately completed, a total of 19 of these well systems will have been constructed (see Figure 1). Combined average use is expected to be approximately two MGD. At the present time, the Ewa limestone aquifer is relatively robust and the water produced by its well is suitable for irrigation (refer to the salinity profiles on Figure 2). However, with Oahu Sugar Company's (OSCO) ongoing withdrawal of fields and its ultimate closing in June 1995, its irrigation return, the largest contributor to the aquifer's recharge, will diminish and then come to an end.

Gentry intends to continue to use its caprock wells as long as they produce water of acceptable quality. Although the loss of OSCO's irrigation return flow is likely to reduce the sustainable yield of the caprock by as much as 50 percent, the Ewa by Gentry site is uniquely positioned to utilize a portion of the aquifer's remaining yield. As evidenced by historic well development and the City's recent experience developing caprock irrigation wells for the Ewa Villages golf course, the inland limit of permeable limestone which yield sufficient water to wells is a short distance mauka of the railroad ROW. The Ewa by Gentry site is as far inland as practical to develop wells and minimize the adverse effect of seawater intrusion. There are two other pragmatic reasons to continue use of the caprock wells. First, development of the Gentry project has been based on this concept. A pipeline network was not installed in the areas already developed which would enable water from an offsite source to be delivered to the various multi-family, park, and school sites within the project. Second, Gentry's draft from the aquifer will be in small amounts at many locations throughout the 1000-acre project site. This is the best possible way to develop a total supply of about two MGD. However, it is recognized that the post-OSCO performance of the aquifer has some uncertainty. When and if it becomes necessary to end use of Gentry's caprock wells, one or the other of the two supply described below would be utilized.

December 1993
Revised: March 1994
Alternative No. 2.  Use of Reclaimed Wastewater as a Source of Supply

Only a short time ago, reclaimed wastewater was a promising alternate source of supply. However, recent events have raised questions on the availability and cost of this option:

- When OSCO closes in June 1995, a substantial quantity of the water it presently uses will become available for other irrigation uses. Scarcity of supply, the strongest motivation to use reclaimed wastewater, will be significantly reduced.

- Recent withdrawal by environmental intervenors from the contested case concerning the City Wastewater Department's request to waive EPA's secondary treatment requirement for its Honouliuli plant alters the economic prospects for effluent reuse. If secondary treatment is a regulatory requirement, effluent reuse might be economically feasible at the marginal cost of polishing it beyond secondary treatment to enable its direct reuse for irrigation. However, if secondary treatment is not provided, the cost to fully treat the effluent for any non-potable reuse would be prohibitive.

- DOH's Guidelines for the Treatment and Reuse of Reclaimed Water and its UIC regulations create additional costs for this option. Monitoring requirements are a substantial, ongoing expense. The UIC line is entirely makai of the Gentry site. This specifically prohibits use of injection wells for aquifer recharge, even if the effluent's quality meets DOH's requirements for direct reuse (R1 standards).

It is our understanding that negotiations among the City Wastewater Department, the State Department of Health, and the Federal EPA may result in a quantity of R-1 quality effluent from the Honouliuli WWTP becoming available for reuse at a future date. The pipeline shown on Figure 3 has been sized to keep this possibility viable. It has sufficient capacity to move water eastward from the Honouliuli WWTP as well as westward from OSCO's wells through its 24-inch pipeline. Delivery of effluent would be similar to Alternative No. 1 — into the wet well of the golf course, directly into the distribution systems east of Fort Weaver Road, and via seepage recharge in the golf course sumps and water features to supplement existing irrigation systems on the west side of the project.
Alternative No. 1. Use of OSCO's Basalt Aquifer Wells in Honouliuli After the Plantation's 1995 Closing

When OSCO closes in June 1995, a portion of the 60.62 MGD water use allocation it now has for its wells in the Waipahu-Waiawa and Ewa-Kunia aquifer sectors will become available for other uses. The amount available can be approximated by discounting its allocation by its irrigation return flow to the Ewa-Kunia and Waipahu-Waiawa aquifer sectors. The Water Commission's Report R-78 ("Review and Re-Evaluation of Groundwater Conditions in the Pearl Harbor Groundwater Control Area, Oahu, Hawaii" by George A.L. Yuen & Associates, May 1988) estimates the irrigation return as 17 MGD in the Waipahu-Waiawa Sector and 6 MGD in the Ewa-Kunia Sector. This means that the net available supply may be in the range of 35 to 40 MGD. Three of OSCO's well pumping facilities are in lower Honouliuli (EP 3 & 4, EP 5 & 6, and EP 7 & 8). Their portion of OSCO's 60.62 MGD total is 18.117 MGD. Reducing this by a proportionate share of irrigation return flow still leaves a net amount of 12 to 13 MGD potentially available. Figure 3 shows the locations of these wells and portions of OSCO's transmission system. These include the booster station known as EP 18 and a 24-inch pipeline which runs from EP 18, underneath Fort Weaver Road, and along the eastern boundary of the Gentry site on its way to EP 23. If necessary, Gentry proposes to utilize EP 3 and 4 (State Nos. 2102-02, -04 to -22) because of its location and because it is the most saline of the three batteries of wells (its chlorides are presently about 400 MG/L). It will be necessary to install new, smaller capacity pumps at the battery of wells, to construct a short pipeline segment (to bypass the EP 18 booster), and to extend Hawaiian Electric power to the facility. It is envisioned that the pumps' operation would be pressure actuated to respond to various irrigation supply requirements within Ewa by Gentry on an on-demand basis.

The transmission pipeline within Ewa by Gentry shown on Figure 3 would be connected to OSCO's 24-inch pipeline to convey water directly to the individual irrigation systems on the east side of Fort Weaver Road (these are designated as future well sites on Figure 1). This pipeline is also sized to deliver irrigation water to the wet well of the golf course pump station on the west side of Fort Weaver Road. It is not possible to retrofit the six existing wells on the west side of Fort Weaver Road because the land around them has already been developed. However, water features and drainage detention sumps to be constructed within the golf course will provide opportunities for aquifer recharge to supplement these wells.

To implement this option based on use of OSCO's EP 3 & 4, water use permits for OSCO's wells will have to be obtained from the State Commission on Water Resource Management. Easements to use OSCO's 24-inch transmission pipeline and to install a new pump station at EP 3 & 4 will also have to be obtained from the landowner, Campbell Estate.

- 2 -

December 1993
Revised: March 1994
Notes: 1. Locations of the 2-inch observation holes are shown on Figure 1. All penetrate through the top limestone layer into the mud aquiclude below.

2. The Gentry GC profile was made on September 5, 1992.

3. The FGE1 and FGE2 profiles were made on December 1, 1993.

Figure 2
Salinity Profiles of Observation Holes in Ewa by Gentry
Mr. Barry Edwards  
Ewa By Gentry  

Dear Mr. Edwards:

We have reviewed your draft non-potable alternate source plan and have the following informal comments:

1. Option 1 is not an alternative source of supply.

2. It is not a good assumption that all 60.62 mgd of OSCo's allocation will be available for other uses. About 30 mgd is a better estimate because of the reduced recharge.

3. It is not a good assumption that all 25 mgd of Waiahole Ditch water will be available for other uses. We currently have a filed petition to restore all of the windward streams affected by Waiahole Ditch. We also have a filed petition to reserve all of the water for agriculture.

4. The City is proceeding with plans to treat the next 12.5 mgd at Honouliuli to levels which will allow use as reclaimed water. The City is also required to conduct a marketing analysis for the effluent (see Consent Decree). Perhaps use of reclaimed water may be more economically attractive when the treatment of the 12.5 mgd is completed.

5. Could you more clearly explain the sentence: "DOH's Guidelines for the Treatment and Reuse of Reclaimed Water and its VIS regulations create strong financial disincentives to reuse wastewater." Are there changes you would recommend?

6. The pipeline is a good idea. Timeline?

Sincerely,

RAE M. LOUI  
Deputy Director

RML:ssk
Draft Non-Potable Alternate Source Plan

For

Ewa by Gentry

Non-potable irrigation supply has been developed for the Ewa by Gentry project as independent systems supplied by individual wells which draw water from the Ewa limestone aquifer. To date, six of these systems have been constructed and permits for two others have recently been obtained. When the project is ultimately completed, a total of 23 of these systems will have been constructed (see Figure 1). Combined average use of these systems is expected to be approximately two MGD. At the present time, the Ewa limestone aquifer is relatively robust (refer to the salinity profiles on Figure 2). However, with OSCO's ongoing withdrawal of fields and its ultimate closing in June 1995, OSCO's irrigation return, the largest contributor to the aquifer's recharge, will diminish and then come to an end. Alternative sources of supply for Ewa by Gentry are outlined below.

Option 1. Continued Use of On-Site Limestone Aquifer Wells

Gentry will continue to use its caprock wells as long as they produce water of acceptable quality. Although the loss of OSCO's irrigation return flow is likely to reduce the sustainable yield of the caprock by more than 50 percent, the Ewa by Gentry site is uniquely positioned to utilize a portion of the aquifer's remaining yield. As evidenced by historic well development and the City's recent experience developing caprock wells for West Loch and the Ewa Villages, the inland limit of permeable limestone is a short distance mauka of the railroad (ROW). The Ewa by Gentry site is as far inland as practical to develop wells away from the adverse effect of seawater intrusion.

There are two other reasons to continue use of the caprock wells. First, development of the project is based on this concept. Pipelines have not been installed in the developed areas which would enable water to be brought in from an offsite source to the various multi-family, park, and school sites within the project. Second, Gentry's draft from the aquifer will be in small amounts at many location throughout the project site, the best possible way to develop a total supply of about two MGD.

Option 2. Use of OSCO's Basalt Aquifer Wells in Honouliuli After the Plantation's 1995 Closing

At OSCO's scheduled June 1995 closing, the 60.62 MGD water use allocation it now has for its wells in the Waipahu-Waiawa and Ewa-Kunia aquifer sectors will become available for other uses. Three of OSCO's well pumping facilities are in lower Honouliuli (EP 3 & 4, EP 5 & 6, and EP 7 & 8). Their portion of OSCO's 60.62 MGD total is 18.117 MGD. Figure 3 shows these wells and other portions of OSCO's transmission system that would be utilized to deliver the wells' slightly brackish water to the Ewa by Gentry site. In addition to the wells, these facilities include the booster station known as EP 18 and a 24-inch pipeline which runs from EP 18, underneath Fort Weaver Road, and along the eastern boundary of the Gentry site on its way to EP 23.
The transmission pipeline within Ewa by Gentry shown on Figure 3 would be connected to OSCO's 24-inch pipeline. This transmission system would be sized to convey water directly to the wet wells of those systems not yet constructed (these are designated as future well sites on Figure 1). It is not possible to retrofit the six existing wells on the east side of Fort Weaver Road because the land around them has already been developed. However, water features and drainage sumps to be constructed within the golf course will provide opportunities for aquifer recharge to supplement these wells.

To implement this option, water use permits for OSCO's wells will have to be obtained from the State Commission on Water Resource Management and easements to use OSCO's pipelines and pumps will have to be obtained from the landowner, Campbell Estate.

Option 3. Use of Reclaimed Wastewater as a Source of Supply

Only a short time ago, reclaimed wastewater was the most promising alternate source of supply. However, recent events make this option difficult to implement:

- When OSCO closes in June 1995, 85 MGD will become available for other uses (60 MGD from basalt aquifer wells and 25 MGD from Waiahole Ditch). Scarcity of supply, the strongest motivation to use reclaimed wastewater, will be removed when OSCO's supply is available for other uses.

- Recent withdrawal by environmental intervenors from the contested case concerning the City Wastewater Department's request to waive EPA's secondary treatment requirement at Honouliuli means Honouliuli effluent will only receive primary treatment. The City has already halted planning and design to implement secondary treatment. A prospective user of Honouliuli effluent would have to provide secondary and tertiary treatment to meet DOH's quality criteria for reuse. The cost of doing this is substantially greater than other supply alternatives.

- DOH's Guidelines for the Treatment and Reuse of Reclaimed Water and its UIC regulations create strong financial disincentives to reuse wastewater. Treatment and monitoring requirements for reuse would be a substantial expense. The UIC line is entirely makai of the Gentry site. This specifically prohibits use of injection wells for aquifer recharge, even if the effluent's quality meets DOH's requirements for direct reuse (R1 standards).

Gentry will construct the pipeline shown on Figure 3 to keep the possibility of effluent reuse viable. It will be sized to enable Honouliuli WWTP effluent, when and if it becomes available, to be transmitted throughout the project site. In other words, the pipeline will be sized to move water eastward from the Honouliuli WWTP or westward from OSCO's 24-inch pipeline. Delivery of effluent would be similar to Option 2 — into the wet wells of future pumping facilities or by aquifer recharge in the golf course to supplement existing well pumping facilities.
Notes: 1. Locations of the 2-inch observation holes are shown on Figure 1. All penetrate through the top limestone layer into the mud aquiclude below.

2. The Gentry GC profile was made on September 5, 1992.

3. The FGE1 and FGE2 profiles were made on December 1, 1993.

Figure 2
Salinity Profiles of Observation Holes in Ewa by Gentry
October 27, 1993

HAND DELIVERY

Chairperson and Members
Commission on Water Resource Management
Kalanimoku Building

Re: Well Nos. 2001-04 and -05; Gentry Development Company, P.O. Box 295, Honolulu, Hawaii 96809; Well Construction and Water Use Permit Applications; Ewa Caprock Groundwater Management Area, Oahu

Gentlemen:

Gentry Development Company would like to comment on the staff's recommendation for denial without prejudice of the requested well construction and water use permits. These permits are designed to implement the nonpotable water system plan for Ewa By Gentry which has been in place since Gentry became involved with the project.

Gentry Development Company acquired the Ewa By Gentry project from Aloha State Corporation and the Estate of James Campbell in June 1987. In subsequent proceedings before the State Land Use Commission and the Honolulu City Council, it has always been represented that Gentry proposed to use nonpotable water to irrigate the golf course, greenways, multifamily landscaped areas and entry water features. In fact, the development of such a water system is a condition to both the urbanization order issued by the Land Use Commission on May 30, 1989 and our Unilateral Agreement for Ewa By Gentry with the City and County of Honolulu. Gentry also demonstrated the intention to develop a brackish irrigation system by the caprock water use plan submitted to the Commission on May 4, 1990, acknowledged in Commissioner Paty's response on July 17, 1990. Much other technical information about our continuing development of nonpotable water plans is available from Tom Nance, our consultant.

Since Aloha State Corporation was the developer of "Ewa Plantation," our predecessor development, use of the caprock aquifer for nonpotable irrigation needs was planned. The Ewa Water Master Plan, formulated in June 1984, documented those intentions.
The two wells in question are specifically described in our caprock water use plan, and existing Unilateral Agreement. These wells were granted permits by the Commission on May 24, 1989, but lapsed two years later because development had not yet progressed to the projects the wells were to serve. The projects that these permits are to serve have now been constructed. The Geiger Road Apartments well is to serve the project renamed Sun Rise, consisting of 408 multifamily units. The Soda Creek 3 well is to serve the tot lot park and common area landscaping within the project renamed Sun Terra, which has 451 single family homes.

It is important that the staff and the Commission appreciate that these well permit applications were not an afterthought, but were foreseen from the beginning of the Ewa By Gentry development (and even before then by the Ewa Plantation developers). It is important to our development that we be allowed to continue to implement the nonpotable water use plan, so long as the aquifer is providing acceptable quality brackish water. To date, water quality from the caprock under Ewa By Gentry has been quite acceptable for irrigation purposes.

Having clarified the factual background for the Commission, we ask the Commission to treat these well permit applications just as others within Ewa By Gentry and elsewhere over the caprock aquifer have been treated. Earlier this year, the Commission granted permits for other nonpotable wells within the Ewa By Gentry project, on a temporary basis, with standard conditions including the development of a plan for alternative nonpotable use within one year of the date the permits were issued. Even before the condition was imposed on Gentry's nonpotable use permits, we had been working toward an alternative source plan focusing on effluent reuse. We have already obtained a preliminary design for our own secondary treatment of primary effluent from nearby Honouliuli Wastewater Treatment Plant. We have also been working with other developers in the region to explore the effluent reuse option as an alternative to brackish water if water quality becomes unacceptable for irrigation purposes. We've also participated with others in the staff's efforts to promulgate a plan in this complicated and highly regulated reuse area. Establishing alternative plans takes time and much concerted effort. We feel that it is unfair to require development of a plan on short notice, when current temporary permit holders have been given a year to develop similar plans.

Since several of our nonpotable wells are already subject to the conditions requiring development of an alternative source plan, it stands to reason that the two permits that are before you will also have a plan within the same time period. The fact that Gentry already has at least one alternative use plan, and is studying others, should be weighed in Gentry's favor. Our development needs to make use of the nonpotable water source within the caprock aquifer that these wells can provide. Our master plan does not contemplate reliance on BWS potable sources for these purposes.
Given our long-standing intention to develop the Ewa By Gentry nonpotable system using caprock wells, and the requirement that we develop an alternative use plan under existing temporary permits, we urge the Commission to grant these two permit applications, and treat them like all the others granted temporarily through April 1994.

Thank you for your consideration.

Sincerely,

[Signature]

Barry Edwards
Vice President - Ewa By Gentry
Gentry Hawaii, Ltd.

cc: CRWM Staff
MINUTES
FOR THE MEETING OF THE
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: October 27, 1993
TIME: 9:00 a.m.
PLACE: Board Room
Kalanimoku Building

ROLL CALL: Chairperson Ahue called the meeting of the Commission on Water Resource Management to order at 9:06 a.m.

The following were in attendance:

MEMBERS: Mr. Keith Ahue
Mr. Richard Cox
Dr. John L. Lewin
Mr. Robert Nakata
Mr. Guy Fujimura

EXCUSED: Mr. Douglas Ing

STAFF: Ms. Rae Loui
Mr. Edwin Sakoda
Mr. Roy Hardy
Ms. Lenore Nakama
Ms. Sharon Kokubun

OTHERS:
Cynthia Thielen
Barry Ching
Dave Martin
Sam Keala
Brenda Lumeng
John Mink
John Wei
Martha Black
Jim Anthony
Alwyn Morisako
Tom Nance
Bary Usagawa
Jack Hitchcock
Max Shoura
Neil Hulbert
Andrew Yanoviak
Edsel Yamada

All written testimonies submitted at the meeting are filed in the Commission office and are available for review by interested parties. Some items were taken out of sequence to accommodate requests by applicants or interested parties.

ITEM 1 OLD BUSINESS/ANNOUNCEMENTS
Ms. Loui announced that Agenda 3, Item 5 water use permit for Zions Security, was withdrawn per the applicant's request.

ITEM 2 POAMOHO VENTURE, L.P., APPLICATION FOR A PUMP INSTALLATION PERMIT, POAMOHO A WELL (WELL NO. 3205-02), WAIALUA, OAHU
Unanimously approved (Nakata/Cox).
ITEM 3  DEFERRAL OF WATER USE PERMIT APPLICATIONS, WINDWARD OAHU GROUND WATER MANAGEMENT AREAS

Unanimously approved (Nakata/Cox).

ITEM 4  DUDLEY W.A. CHANG, APPLICATION FOR WATER USE PERMIT, KAHALULU WELL (WELL NO. 2758-09), KOOLAUPOKO GROUND WATER MANAGEMENT AREA, OAHU

Mr. Cox asked what the timeframe was for the completion of the review of applications for this area. Ms. Nakama said there are still quite a number of outstanding applications (mostly BWS) for which additional information was required and has just been received. These have gone out for public notice and should be scheduled within the next few months.

Discussion followed whereby the applicant explained that the well was dug in 1972 but was never used.

Ms. Nakama explained that because it was not in use at the time of designation, the applicant's request was being treated as a new use. Ms. Loui suggested an interim permit be approved so he can use the water.

Mr. Fujimura agreed that an interim permit could be issued as long as the applicant understands that it is an interim permit and the long term usage will be determined after all the applications have been reviewed and the existing uses are established.

Unanimously approved as amended as an interim permit (Fujimura/Cox).

ITEM 5  WATER USE PERMIT APPLICATIONS, KOOLAULOA GROUND WATER MANAGEMENT AREA, OAHU

Mr. Hardy reconfirmed that the Zions Security submittals were withdrawn per the applicant's request but requested the authority to hire a special master to address the concerns in regards to this applicant and other issues in this area. Ms. Loui added that the special master would be hired for fact-finding in view of the many issues surrounding this application and the need to sort out the facts. She requested two to three months for the fact-finding, after which initiation of a public hearing would be requested.

Dr. Jim Anthony supported the "appointment of a master who need not necessarily be an attorney".

The following was recommended by staff:

1)  Campbell Estate Fresh and Salt Water Uses - Action be deferred so for further evaluation of the aquacultural needs.

2)  Campbell Estate Non-Existing Pumpage - Deny without prejudice the non-existing uses for Wells Nos. 4258-06, 07, 10, 15, 16, & 17.

Unanimously approved as recommended by staff (Cox/Nakata).
ITEM 6  WELL CONSTRUCTION AND WATER USE PERMIT APPLICATIONS, EWA CAPROCK GROUND WATER MANAGEMENT AREA, OAHU

Mr. Barry Edwards, Vice President for Gentry Hawaii Ltd., noted that the wells were included in the Caprock Water Use Plans submitted to the Commission on May 4, 1990. A permit was secured earlier but was not constructed since they were not needed at that time.

Unanimously approved with the following amendments (Fujimura/Nakata):

1) Include amendments made to the Standard Conditions as approved in Agenda 2, Item 1

2) Deletion of staff Recommendation 2 to deny without prejudice the water use permits being requested.

3) Amended as follows:

"3. That the Commission approve the issuance of a well construction and water use permit until April 28, 1994 for the Geiger Apartment Well (Well No. 2001-04) and the Soda Creek III Well (Well No. 2001-04) for possible future use of irrigation water, ..."

ITEM 7  STATE OF HAWAII, DEPARTMENT OF LAND AND NATURAL RESOURCES, DIVISION OF WATER AND LAND DEVELOPMENT, WATER USE PERMITS AND WELL CONSTRUCTION PERMITS APPLICATION, KAWAIHAPAI & MOKULEIA WELLS (WELL NOS. 3309-01 & 02), MOKULEIA GROUND WATER MANAGEMENT AREA, OAHU

Mr. Hardy added Special Condition 2b. requiring the addition of a 1" diameter galvanized pipe.

Unanimously approved as amended (Cox/Nakata).

ADJOURNMENT The meeting was adjourned at 3:25 p.m.

Respectfully submitted,

SHARON S. KOKUBUN, Secretary

APPROVED AS SUBMITTED:

RAE M. LOUI
Deputy Director
Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Well Construction and Water Use Permit Applications
Ewa Caprock Ground Water Management Area, Oahu

Applicants:

1. (Well No. 2101-14)
   U.S. Fish & Wildlife Service

2. (Well Nos. 2001-04 & 05)
   Gentry Development Co.

Landowners:

U.S. Navy
Pacific Division, NAVFAC Eng. Cmd.
Pearl Harbor, HI 96860

Same

Background

The applicants submitted completed water use permit applications to the Commission as indicated in Exhibit 1. Specific information regarding the source, use, notification, objections, and field investigation(s) are described in Attachment A and the attached exhibits.

Well construction permit applications were originally submitted to the Commission by Gentry Development Company on February 9, 1989. These permits were approved on May 15, 1989 and issued on May 24, 1989. However, because the applicant failed to comply with work deadlines on which the permits were conditioned, new applications were submitted to the Commission on February 19, 1992.

Analysis & Issues

There are several issues to consider in relation to allocations of ground water in the Ewa Caprock Aquifer System. The first is that the sustainable yield of the system has not been firmly established. A previous study by Yuen & Associates estimated that a draft of 15 million gallons per day (mgd) may be sustained under conditions whereby Oahu Sugar Co. irrigation continues. This is changing as urban development replaces cane fields. Additional studies are being conducted to further address this issue. The results of these studies will provide additional guidance for management of the resource.

Currently, authorized uses for the entire caprock total 62.179 mgd (see Exhibit 2). Of this total, 33.68 mgd is for salt water uses from wells located near the shoreline. Because these wells are essentially tapping ocean water at depth, the impact of these withdrawals on the sustainable yield of the caprock is assumed to be negligible. Brackish water uses account for the remaining 28.499 mgd of existing allocations. Based on the reports of monthly water usage submitted to the Commission as of August 1993, actual 12-month moving average withdrawals of brackish water from the system total 20.666 mgd. If the estimate of 15 mgd is used as a guideline for the sustainable yield of the system, it would appear that ground water is already over-allocated. In fact, the Hawaii Prince G.C. is currently experiencing salting problems. The Hawaii Prince golf course is currently exceeding their allocation by 1 mgd to “flush” their grassed areas to avoid salt build-up. However, it is unclear whether this is a localized problem or a caprock-wide problem. Therefore, the ability of the aquifer to sustain the current rate of withdrawal over the longer term remains uncertain.
Furthermore, it is unclear how the system will respond to scheduled changes in land use to occur over the next few years. It is generally accepted that the aquifer will be adversely impacted by the conversion of land use from sugarcane production to more urban uses. However, the extent of this impact is not known. Decreases in ground water recharge derived from return irrigation flow may cause salinity levels to increase, thereby diminishing the reliability and suitability of the caprock as a brackish water source. Hydrologic studies by Mink and Nance estimate an associated reduction in sustainable yield of between 0 and 15 mgd. At this time, there is no firmer estimate than this.

Finally, on April 28, 1993 the Commission took action on numerous applications for water use permits from the Ewa caprock aquifer. Following land use designations and the most immediate needs of the applicants in conjunction with the uncertainties of the aquifer’s sustainable yield, the Commission approved temporary 1-year permits and directed the applicants towards planning for alternative sources. The primary alternative source is wastewater reuse from the Honolulu WWTP. To date, no draft of any plan of action has been submitted by any of the applicants granted temporary permits due to expire in six (6) months.

For the above reasons, staff feels that all future allocations from the caprock should be weighed heavily against the immediacy of the need and the availability of an alternative existing source. Where an alternate source is available to the applicant, such a source should be utilized until the above issues are resolved.

The applicants and their requests are summarized as follows:

1. **U.S. Fish & Wildlife Service** - The applicant requests an allocation of 432,000 gallons per day (gpd) from the Honolulu Unit Well (Well No. 2101-14) for an existing use of brackish water for maintenance of a 36.65-acre National Wildlife Refuge for endangered and migratory waterbirds. Relatively fresher water from this existing dug source is pumped into ponds and marshy areas bordering the West Loch of Pearl Harbor to maintain the brackish quality of the nesting area and optimal water depth. There is no alternative source available to the applicant.

   Because there is no meter installed on the well, actual water use is estimated based on pump capacity. The requested allocation of 432,000 gpd is the maximum capacity of the pump currently installed. This request appears high because, according to U.S. Fish & Wildlife personnel, the pump normally runs for about 10 hours per day during the winter months (October to February), for about 6 hours per day during the summer months (March through September), and for a maximum of 12 hours on any one day. Using the indicated maximum pumping time of 12 hours per day, actual withdrawals would be 216,000 gpd. Based on reported monthly water use for the five-year period from 1983 through 1987, use was consistent at 216,000 gpd.

   There are no wells located downgradient from this source, and no specific objections to this permit application have been filed. Authorization to continue this reasonable and beneficial existing use of water should not result in unacceptable adverse impacts to other local wells, streams, and the Ewa Caprock Aquifer System.

2. **Gentry Development Co.** - The applicant requests approval of well construction and water use permit applications for development of brackish water from two proposed sources to be used for irrigation of common areas in the Ewa by Gentry Development. This water use is currently supplied by the Board of Water Supply system. According to the applicant, this request was not submitted earlier because the need to switch to a non-potable source was not foreseen. However, the applicant has indicated that submission of an application at this time is largely in response to economic incentives rather than constraints in potable water availability.

   Given the uncertainty in the present and future sustainable yield of the system and the fact that an alternative source is available to the applicant, staff feels that this request for water use should be denied without prejudice. The applicant may resubmit these applications after April 28, 1994, when existing temporary permits are scheduled for review. Further, the applicant, in his resubmittal, must propose a plan to address alternatives to the brackish water and assess the impacts due to the homeowners associations’ reliance on these brackish sources. If the applicant is willing to take the risk...
involved in constructing the well, staff recommends approval of the request to drill the two proposed sources for testing purposes only.

RECOMMENDATION

1. That the Commission approve the issuance of an interim water use permit to the U.S. Fish & Wildlife Service for the reasonable and beneficial use of 216,000 gallons per day of brackish water from the Honouliuli Unit Well (Well No. 2101-14) for maintenance of the Pearl Harbor National Wildlife Refuge, subject to the standard water use permit conditions listed in Attachment B and the following special condition:

   a. 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.

2. That the Commission, deeming it in the public interest, approve the issuance of water use permits to (names of entities) to use 40,000 gallons per day of brackish water from the Geiger Apartment Well (Well No. 2001-04) and 20,000 gallons per day of brackish water from the Soda Creek III Well (Well No. 2001-05) for irrigation of common areas in the Ewa by Gentry Development. The applicant may resubmit these applications after April 28, 1994, when existing temporary permits are scheduled for review. Further, the applicant, in his resubmittal, must propose a plan to address alternatives to the brackish water and assess the impacts due to the homeowners associations' reliance on these brackish sources.

3. That the Commission approve the issuance of well construction permits for the Geiger Apartment Well (Well No. 2001-04) and the Soda Creek III Well (Well No. 2001-05) for testing purposes only and possible future use of irrigation water, if and when such water becomes available, subject to the standard well construction permit conditions listed in Attachment C and the following special condition:

   a. If the applicant chooses to drill these wells, the wells must be capped for protection of the groundwater resource.

Respectfully submitted,

[Signature]

RAE M. LOUI
Deputy Director

APPROVED FOR SUBMITTAL:

KEITH W. AHUE, Chairperson

[Signature]

[Stamp: Approved for Submittal]
**WATER USE PERMIT DETAILED INFORMATION**

**Source Information**

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

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<th>Year Drilled</th>
<th>Casing Diameter</th>
<th>Elevation (msl= 0 ft.)</th>
<th>Water Level</th>
<th>Ground</th>
<th>Bottom of Solid Casing</th>
<th>Bottom of Perforated</th>
<th>Bottom of Open Hole</th>
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**ATTACHMENT A**
Use Information

1. Quantity Requested: 432,000 gallons per day.
   Existing Type of Water Use: Maintenance of habitat for endangered and migratory waterbirds.
   Place of Water Use: Pearl Harbor National Wildlife Refuge - Houonuiui Unit at TMK: 9-1-17:12
   Reported Water Usage: 216,000 gpd
   Nearby Similar Water Usage: NA gpd

2a. Quantity Requested: 40,000 gallons per day.
    Proposed Type of Water Use: Irrigation of common areas in the Ewa by Gentry Development.
    Place of Water Use: Ewa by Gentry Development

2b. Quantity Requested: 20,000 gallons per day.
    Proposed Type of Water Use: Irrigation of common areas in the Ewa by Gentry Development.
    Place of Water Use: Ewa by Gentry Development

Ewa Caprock Aquifer System
Current 12-Month Moving Average Withdrawal: 62.197 gpd
(NA% of SY)

Nearby Surrounding Wells and Other Registered Ground Water Use

Information from the registration program indicates there are possibly forty-six (46) existing wells in the Ewa Caprock 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. No estimate of existing ground water withdrawals from the Ewa Caprock Aquifer System is provided in the Oahu Water Management Plan.

1. There are forty-nine (49) other wells within a mile of the well (see Exhibit 3A). Thirty-five (35) of these wells are currently in use.

2. There are twenty-seven (27) other wells within a mile of the wells (see Exhibit 3B). Eighteen (18) of these wells are currently in use.
Public Notice

In accordance with HAR §13-171-17, public notices were published in the Star-Bulletin as indicated in Exhibit 1 and copies of the notice were sent to the Mayor's office and the Board of Water Supply. Additional notice copies were sent to the County Council and Department of Water Supply. Copies of the completed application were sent to the Department of Health, Department of Hawaiian Home Lands, Office of Hawaiian Affairs, Aquatic Resources & Historic Preservation Divisions of the Department of Land and Natural Resources, and other interested parties for comments. Written comments and objections to the proposed permit were to be submitted to the Commission on the dates indicated in Exhibit 1.

Objections/Comments

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 by the dates indicated in Exhibit 1.

1. To the best of staff's knowledge there are no objectors who have property interest within the Ewa Caprock Aquifer System or who will be directly and immediately affected by the proposed water use. All objections and/or comments to the application are summarized as follows:

<table>
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<th>Objetor/Commentor</th>
<th>Objection/Comment</th>
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<tr>
<td>NHAC</td>
<td>General process of water use permit applications. Permitted use should be restricted to avoid any effects on the ability of native Hawaiians to use the area for traditional and customary purposes.</td>
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<td>DAR</td>
<td>No likelihood that well will reduce habitat for stream fishes. Strongly support approval.</td>
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<tr>
<td>HPD</td>
<td>No effects on historic sites.</td>
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<tr>
<td>DHHL</td>
<td>Condition permits upon appropriate monitoring and potential future adjustment.</td>
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2. To the best of staff's knowledge there are no objectors who have property interest within the Ewa Caprock Aquifer System or who will be directly and immediately affected by the proposed water use.

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.

ATTACHMENT A
Field Investigation

1. The water source and existing use was investigated on August 23, 1993. The investigation(s) verified the applicants request for water use permit.

2. No field investigation was required as these sources are not existing.
Chairperson and Members  
Commission on Water Resource Management  
October 27, 1993  

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.

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

5. The ground water use 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 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 October 27, 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 is not existing, the development of 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 Ewa Caprock 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 request modification of the permit when necessary to comply with all applicable laws, rules, and ordinances which will affect the permittee’s water use.

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 Ewa Caprock Ground Water Management Area.

17. The water use permit granted shall be an interim water use permit, as allowed under 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.
STANDARD WELL CONSTRUCTION PERMIT CONDITIONS

1. The Commission shall be notified before work commences.

2. The well construction permit shall be for construction and testing purposes only. The applicant shall coordinate with the Commission and conduct a pumping test in accordance with the protocol established by the Commission. A means to accurately measure water levels, acceptable to the Commission, shall also be provided. The applicant shall submit to the Commission the test results and proposed permanent pump information, based on the test, for approval by the Chairperson. No permanent pump may be installed and no water used from the well without the Chairperson’s approval.

3. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct and pump water from a well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

4. The applicant shall comply with all applicable laws, rules, and ordinances.

5. 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.

6. The well construction permit may be revoked if work is not started within six (6) months of the date of issuance or if work is suspended or abandoned for six months. The work proposed in the well construction permit application shall be completed within two years from the date of permit approval.

7. The following shall be submitted to the Commission within thirty (30) days after completion of work:
   a. Well completion report.
   b. Elevations of well (referenced to mean sea level, msl) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other water quality data.

8. The well construction and water use permit application and staff submittal approved by the Commission at its October 27, 1993 meeting are incorporated into the permit by reference.

9. The permit shall be subject to review by the Attorney General.
## WATER USE PERMIT APPLICATION NOTICE STATUS REPORT 10/15/93

<table>
<thead>
<tr>
<th>WUPA NO</th>
<th>APPLICANT</th>
<th>WELL NO</th>
<th>WELL NAME</th>
<th>EXIST</th>
<th>PROPOSED</th>
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<th>ACKNOWGD</th>
<th>ACCEPTED</th>
<th>PUBLIC 1</th>
<th>PUBLIC 2</th>
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<th>SUSPENSE</th>
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<th>AGENDA</th>
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<td>1</td>
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### Aquifer System: PUULOA

- **GENTRY DEVELOPMENT CO. 2001-04 GEIGER APARTMENTS**
  - Y 07/25/93 08/30/93 07/25/93 09/15/93 09/22/93 10/06/93 10/21/93 15 10/13/93 0.040
- **GENTRY DEVELOPMENT CO. 2001-05 SODA CREEK III**
  - Y 07/25/93 08/30/93 07/23/93 09/15/93 09/22/93 10/06/93 10/21/93 16 10/13/93 0.020
- **U S FISH & WILDLIFE 2101-14 HONOLULU UNIT**
  - Y 06/14/93 06/23/93 06/23/93 08/12/93 08/19/93 09/03/93 09/21/93 -17 10/13/93 0.432

- 3 Applications Totaling 0.492

**has** 3 Applications Totaling 0.492
### Aquifer System: KAPOLEI

<table>
<thead>
<tr>
<th>Applicant/Company</th>
<th>Well No.</th>
<th>Well Name</th>
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<th>WMD (mgd)</th>
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<tbody>
<tr>
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<td>1904-02</td>
<td>MAKAKILO GC</td>
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<td>CAMPBELL ESTATE</td>
<td>1905-08</td>
<td>KAPOLEI R1</td>
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<td>CAMPOLEI</td>
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12 Permits Totaling 2.946

### Aquifer System: MALAKOKE

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<th>Applicant/Company</th>
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<th>Well Name</th>
<th>Approval</th>
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<tr>
<td>HAWAIIAN REFINERY INC.</td>
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<td>C&amp;C DPV</td>
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<td>DPV 2</td>
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<td>GRACE PACIFIC</td>
<td>1905-06</td>
<td>EMA BEACH</td>
<td>03/27/87</td>
<td>2.000</td>
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<tr>
<td>GRACE PACIFIC</td>
<td>1905-07</td>
<td>EMA BEACH</td>
<td>03/27/87</td>
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<tr>
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<td>CHEVRON USA, INC.</td>
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23 Permits Totaling 39.608

### Aquifer System: PUULOA

<table>
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<th>Applicant/Company</th>
<th>Well No.</th>
<th>Well Name</th>
<th>Approval</th>
<th>WMD (mgd)</th>
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<tbody>
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<td>OAHU SUGAR CO., LTD.</td>
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<td>HAWAI I PRINCE GOLF CLUB</td>
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<td>HAWAI I PRINCE GOLF CLUB</td>
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<td>PULUOA HOMES, LTD.</td>
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<td>C&amp;C OF HONOLULU DOWNTOWN</td>
<td>1902-02</td>
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29 Permits Totaling 19.625

### Total Permits:

- 64 Permits Totaling 62,179
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
October 19, 1993

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, 24, 28 and 29, 1993 Requesting Comments on Water Use Permits for Various Applicants

<table>
<thead>
<tr>
<th>Applicant</th>
<th>Well No.(s)</th>
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</thead>
<tbody>
<tr>
<td>Ewa Gentry</td>
<td>2001-05</td>
</tr>
<tr>
<td>Dudley Chang</td>
<td>2750-09</td>
</tr>
<tr>
<td>State Housing Finance &amp; Development</td>
<td>2853-04 &amp; 05</td>
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<tr>
<td>MRTC/HIMB/UH</td>
<td>3051-02</td>
</tr>
<tr>
<td>Campbell Estate</td>
<td>4157-08, 4158-12 &amp; 13, 4258-05 to 08, 4258-10, and 4258-12 to 17</td>
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</tbody>
</table>

Thank you for the opportunity to comment on these applications for permits for existing water uses. The Board of Water Supply had no objections to the permits. Their comments included a request that the Department of Land and Natural Resources review the total quantity of requested water by Campbell Estate against the estimated sustainable yield of the Kahuku aquifer.

Warm personal regards.

Sincerely,

FFF:rk

cc: Jeremy Harris, Managing Director
October 25, 1993

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

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

FROM: John C. Lewin, M.D.
      Director of Health

SUBJECT: Applications for Water Use Permits
Ewa Caprock Ground Water Management Area

There are plans to provide treated wastewater effluent for non-potable purposes in the immediate area of the Ewa caprock aquifer. The Department of Health recommends that Water Use Permits from this aquifer be granted only if no other alternative source is available, and only until the effluent is available to the applicant. Once the effluent is available, it is recommended that the applicant be given a reasonable time to connect to the effluent water system and that the Water Use Permit be withdrawn.

JCL:BC:ch
C: Commissioners.
October 13, 1993

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 20 and 21, 1993 Regarding Applications for a Water Use Permit for Various Applicants

<table>
<thead>
<tr>
<th>Applicant</th>
<th>Well No.</th>
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</thead>
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<tr>
<td>Ruby Montgomery</td>
<td>2751-08</td>
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<tr>
<td>Raymond Caldeira</td>
<td>3855-11</td>
</tr>
<tr>
<td>Jacob I. Kaio, Sr.</td>
<td>3956-07</td>
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<td>Campbell Estate</td>
<td>4258-09</td>
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<tr>
<td>Gentry Development Co.</td>
<td>2001-04</td>
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<tr>
<td>Hawaii State Hospital</td>
<td>2448-01</td>
</tr>
<tr>
<td>DLNR-DOWALD Division</td>
<td>3309-01; &amp; 3309-02</td>
</tr>
<tr>
<td>Billy and Kanani Casey</td>
<td>3453-08</td>
</tr>
<tr>
<td>Warren Soh</td>
<td>3655-04</td>
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<tr>
<td>Zion Securities</td>
<td>3554-01, 02, &amp; 03;</td>
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<td></td>
<td>3755-05; 3755-06;</td>
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<td></td>
<td>3855-04; 3856-04;</td>
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<td></td>
<td>3856-07; &amp; 3956-05</td>
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</table>

Thank you for the opportunity to comment on these applications for water use permits. I have no objections to permits for these existing uses. The Board of Water Supply has made comments already on those applications where a comment was appropriate.

Warm personal regards.

Sincerely,

FFF: js
cc: Jeremy Harris, Managing Director
MINUTES

FOR THE MEETING OF THE
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: October 13, 1993
TIME: 9:00 a.m.
PLACE: Board Room
Kalanimoku Building

ROLL CALL: Chairperson Ahue called the meeting of the Commission on Water Resource Management to order at 9:09 a.m.

The following were in attendance:

MEMBERS: Mr. Keith Ahue
Mr. Richard Cox
Dr. John L. Lewin
Mr. Robert Nakata
Mr. J. Douglas Ing

EXCUSED: Mr. Guy Fujimura

STAFF: Ms. Rae Loui
Mr. Edwin Sakoda
Mr. Roy Hardy
Mr. Eric Hirano
Ms. Lenore Nakama
Ms. Sharon Kokubun

COUNSEL: Mr. William Tam

AGENDA 1

ITEM 1  MINUTES OF THE SEPTEMBER 15, 1993 MEETING

Unanimously approved (Cox/Nakata).

All written testimonies submitted at the meeting are filed in the Commission office and are available for review by interested parties. Some items were taken out of sequence to accommodate requests by applicants or interested parties.
Chairperson and Members
Commission on Water Resource Management
November 17, 1993

ITEM 6  
BIG ISLAND COUNTRY CLUB ESTATES, APPLICATION FOR A PUMP INSTALLATION PERMIT, BIG ISLAND COUNTY CLUB WELL 1 (WELL NO. 4950-01), PUU ANAHULU, NORTH KONA, HAWAII

Mr. Sakoda added the following to Condition 2:

"The applicant shall coordinate with the Commission and conduct a pumping test in accordance with the protocol established by the Commission."

Unanimously approved as amended (Cox/Nakata).

ITEM 7  
CLAYTON HAUMEA, APPLICATION FOR A PUMP INSTALLATION PERMIT, MAILI-TOMITA WELL (WELL NO. 2409-24), MAILE, OAHU

Unanimously approved (Cox/Nakata).

ITEM 8  
EXTENSION: NANSAY HAWAII, INC WELL CONSTRUCTION PERMIT, OU LI-NANSAY WELL 2 (WELL NO. 6146-01), OU LI, SOUTH KOHALA, HAWAII

Mr. Ing was excused from acting on this permit since his law firm represents the company.

Unanimously approved (Lewin/Cox).

ITEM 9  
EXECUTIVE SESSION: KOO LAU AGRICULTURAL CO., LTD. VS. THE COMMISSION ON WATER RESOURCE MANAGEMENT.

The Commission adjourned to an executive session to discuss Koolau Agricultural vs. the Commission litigation (Cox/Nakata).

AGENDA 3  
The meeting was called to order at 1:11 p.m.

ITEM 1  
DEFERRAL OF WATER USE PERMIT APPLICATIONS, OAHU WATER MANAGEMENT AREAS

Unanimously approved (Nakata/Cox).

ITEM 2  
RUBY MONTGOMERY, APPLICATION FOR WATER USE PERMIT, RL MONTGOMERY WELL (WELL NO. 2751-08), Koolaupoko Ground WATER MANAGEMENT AREA, OAHU

Unanimously approved with staff's deletion of Recommendation 1d regarding DHHL reservation (Ing/Lewin).

ITEM 3  
KAHALA HILTON, WATER USE PERMIT APPLICATIONS, KAHALA HILTON #1 AND #2 WELLS (WELLS NOS. 1646-05 & 06), WAI ALAE- WEST GROUND WATER MANAGEMENT AREA, OAHU

Mr. Ing asked to be excused from acting on this permit since his firm represents the applicant. Standard Condition #11 will be amended to require a yearly submission.
State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Commission on Water Resource Management  
Honolulu, Hawaii  

October 13, 1993 

Chairperson and Members  
Commission on Water Resource Management  
State of Hawaii  
Honolulu, Hawaii  

Gentlemen:  

Deferral of Water Use Permit Applications  
Oahu Ground Water Management Areas  

<table>
<thead>
<tr>
<th>Applicants</th>
<th>Landowner</th>
</tr>
</thead>
<tbody>
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<td>Honolulu Board of Water Supply</td>
<td>Same</td>
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<tr>
<td>Waiahole Irrigation Co., Ltd.</td>
<td>Same</td>
</tr>
<tr>
<td>State HFDC</td>
<td>Same</td>
</tr>
<tr>
<td>Campbell Estate</td>
<td>Same</td>
</tr>
<tr>
<td>Laie Water Co., Inc.</td>
<td>Same</td>
</tr>
<tr>
<td>Zion’s Security, Corp.</td>
<td>Same</td>
</tr>
<tr>
<td>Polynesian Cultural Center</td>
<td>Same</td>
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<tr>
<td>MRTC/HIMB/UH</td>
<td>Same</td>
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<tr>
<td>Dudley W.A. Chang</td>
<td>Same</td>
</tr>
<tr>
<td>Gentry Development Co.</td>
<td>Same</td>
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</table>

Background  

The Commission designated Windward Oahu and the island of Molokai, with their corresponding aquifer systems as ground water management areas, on May 5, & 13 1992, respectively. All registered ground water users have been sent an initial notification of the official date, July 15, 1992, on which the Commission would begin accepting water use permit applications for existing water use permits.
These applicants require Commission action to satisfy the ninety (90) day requirement for action but for various reasons staff wishes to defer action on the applications listed in Table 1.

**TABLE 1**

<table>
<thead>
<tr>
<th>Applicant</th>
<th>Reason for Deferral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honolulu Board of Water Supply</td>
<td>No response to CWRM request for more information on future projects.</td>
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<tr>
<td>Wells 1848-01</td>
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<td>Wells 2250-03</td>
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<td>Wells 2348-06</td>
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</tr>
<tr>
<td>Total 4 WUPAs</td>
<td></td>
</tr>
<tr>
<td>Waiahole Irrigation Co., Ltd.</td>
<td>No response to CWRM request for more information on OSCo. withdrawal impacts on future needs. Field investigation for use not complete.</td>
</tr>
<tr>
<td>Wells 2853-01</td>
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<tr>
<td>Wells 2953-01 &amp; 02</td>
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<td>Wells 3053-01</td>
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<td>Total 4 WUPAs</td>
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<tr>
<td>State HFDC</td>
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<td>Wells 2853-04 &amp; 05</td>
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<td>Total 2 WUPAs</td>
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</tr>
<tr>
<td>Campbell Estate</td>
<td>Objection deadline is 10/29/93.</td>
</tr>
<tr>
<td>Wells 4158-12 &amp; 13</td>
<td></td>
</tr>
<tr>
<td>Wells 4258-05 thru 17</td>
<td></td>
</tr>
<tr>
<td>Total 13 WUPAs</td>
<td></td>
</tr>
<tr>
<td>Laie Water Co., Inc.</td>
<td>Request of applicant.</td>
</tr>
<tr>
<td>Wells 3855-06 to 08</td>
<td></td>
</tr>
<tr>
<td>Wells 3956-03</td>
<td></td>
</tr>
<tr>
<td>Total of 1 WUPA</td>
<td></td>
</tr>
<tr>
<td>Zion’s Security, Corp.</td>
<td>Request of applicant.</td>
</tr>
<tr>
<td>Wells 3554-01 &amp; 02</td>
<td></td>
</tr>
<tr>
<td>Wells 3654-03</td>
<td></td>
</tr>
<tr>
<td>Wells 3755-04 &amp; 06</td>
<td></td>
</tr>
<tr>
<td>Wells 3855-04 &amp; 07</td>
<td></td>
</tr>
<tr>
<td>Wells 3956-05</td>
<td></td>
</tr>
<tr>
<td>Total 8 WUPAs</td>
<td></td>
</tr>
<tr>
<td>Polynesian Cultural Center</td>
<td>Request of applicant.</td>
</tr>
<tr>
<td>Well 3855-09</td>
<td></td>
</tr>
<tr>
<td>MRTC/HIMD/UH</td>
<td>Objection deadline is 10/18/93.</td>
</tr>
<tr>
<td>Well 3051-02</td>
<td></td>
</tr>
<tr>
<td>Dudley W. A. Chang</td>
<td>Objection deadline is 10/18/93.</td>
</tr>
<tr>
<td>Well 2750-09</td>
<td></td>
</tr>
<tr>
<td>U.S. Fish &amp; Wildlife Service</td>
<td>More staff analysis necessary.</td>
</tr>
<tr>
<td>Well 2101-14</td>
<td></td>
</tr>
<tr>
<td>Gentry Development Co.</td>
<td>More staff analysis necessary.</td>
</tr>
<tr>
<td>Well 2001-04 &amp; 05</td>
<td></td>
</tr>
</tbody>
</table>
RECOMMENDATION:

That the Commission defer action on the applications listed in Table 1.

Respectfully submitted,

RAE M. LOUI
Deputy Director

APPROVED FOR SUBMITTAL:

KEITH W. AHUE, Chairperson
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
Ewa Caprock Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Gentry Development Co. for Well No. 2001-04. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 15, 1993 and September 22, 1993.

We would appreciate your review of the attached application and please return this form by October 6, 1993.

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

LN:ko
Attachment(s)

Response: Contact person: Steve Tagawa Phone: 

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

Signed: Date: 09/27/93
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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We would appreciate your review of the attached application and please return this form by October 6, 1993.

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

LN:ko
Attachment(s)

Response: Contact person: [redacted] Phone: [redacted]

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

Signed: [redacted] Date: 10/13/97
The Honorable Keith W. Ahue  
State of Hawaii  
Department of Land and Natural Resources  
Commission of Water Resource Management

Attn: Ms. Rae Loui, Deputy

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>Campbell Estate</td>
<td>Koolauloa</td>
<td>1,500,000</td>
<td>5-6-02:1</td>
<td>4157-04</td>
</tr>
<tr>
<td>Zions Securities</td>
<td>Koolauloa</td>
<td>62,000</td>
<td>5-5-8:51</td>
<td>3956-05</td>
</tr>
<tr>
<td>Zions Securities</td>
<td>Koolauloa</td>
<td>108,000</td>
<td>5-3-12:01</td>
<td>3554-01</td>
</tr>
<tr>
<td>Zions Securities</td>
<td>Koolauloa</td>
<td>108,000</td>
<td>5-3-12:01</td>
<td>3554-02</td>
</tr>
<tr>
<td>Zions Securities</td>
<td>Koolauloa</td>
<td>108,000</td>
<td>5-3-12:01</td>
<td>3554-03</td>
</tr>
<tr>
<td>Zions Securities</td>
<td>Koolauloa</td>
<td>128,000</td>
<td>5-5-6:01</td>
<td>3855-04</td>
</tr>
<tr>
<td>Zions Securities</td>
<td>Koolauloa</td>
<td>5,000</td>
<td>5-5-6:11</td>
<td>3755-04</td>
</tr>
<tr>
<td>Zions Securities</td>
<td>Koolauloa</td>
<td>334,000</td>
<td>5-5-6:1</td>
<td>3856-04</td>
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<tr>
<td>Zions Securities</td>
<td>Koolauloa</td>
<td>167,000</td>
<td>5-5-6:1</td>
<td>3755-06</td>
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<tr>
<td>W. Soh</td>
<td>Koolauloa</td>
<td>500,000</td>
<td>5-3-15:18</td>
<td>3655-04</td>
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<tr>
<td>Zions Securities</td>
<td>Koolauloa</td>
<td>475,000</td>
<td>--</td>
<td>3856-07</td>
</tr>
<tr>
<td>B. Casey</td>
<td>Koolauloa</td>
<td>3,000</td>
<td>5-3-5:11</td>
<td>3453-08</td>
</tr>
<tr>
<td>Gentry Dev.</td>
<td>Pearl Harbor</td>
<td>40,000</td>
<td>9-1-61:07</td>
<td>2001-04</td>
</tr>
<tr>
<td>Gentry Dev.</td>
<td>Pearl Harbor</td>
<td>20,000</td>
<td>9-1-70:132</td>
<td>2001-05</td>
</tr>
<tr>
<td>R. Montgomery</td>
<td>Koolauupoko</td>
<td>2,000</td>
<td>4-7-6:1</td>
<td>2751-08</td>
</tr>
<tr>
<td>Hawaii State Hosp.</td>
<td>--</td>
<td>250,000</td>
<td>4-5-23:02</td>
<td>2448-01</td>
</tr>
</tbody>
</table>
In a recent letter addressed to you (Sept 29, 1993), we voiced our concerns over five Campbell Estate water permit applications requesting about 18 mgd from the Koolauloa aquifer, which has a 35 mgd sustainable yield.

In view of the increasing demand for water from the Koolauloa aquifer, we want to register again our concerns over potential overuse of the Koolauloa aquifer. We wonder whether the Commission keeps a record of the amount of water being withdrawn from the Koolauloa aquifer, for such records would certainly help in the formulation of strategies for future water allocations with clear-cut provisions for protecting water reserves for Native Hawaiians.

We urge the Commission to address these concerns when granting water permits in the future.

Sincerely yours,

[Signature]

Clayton H.W. Hee
Chairperson

LM:jl
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
    Ewa Caprock 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 6, 1993.

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

Attachment(s)
Memorandum to:
Mrs. Hoaliku L. Drake
Dr. John C. Lewin
Mr. Clayton H.W. Hee
Mr. Kazu Hayashida

Page 2

Response: Contact person: Luis A. Maniego Phone: __________

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

Signed: Luis A. Maniego Date: 10/07/93

SEP 21 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

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Attachment(s)
Memorandum to:
Mrs. Hoaliku L. Drake
Dr. John C. Lewin
Mr. Clayton H.W. Hee
Mr. Kazu Hayashida

Page 2

Response: Contact person: LUISA MANRIQUE Phone: [redacted]

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

Signed: [signature] Date: 10/07/93
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
          Ewa Caprock Ground Water Management Area, Oahu

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

Response: Contact person: ____________________________ Phone: [redacted]

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

Signed: [signature]
Date: 10/12/93
MEMORANDUM

TO: Aquatic Resources
    Forestry and Wildlife
    Historic Preservation
    Land Management
    Natural Area Reserve System
    Office of Conservation and Environmental Affairs
    State Parks
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If you have any questions regarding this application, please contact Roy Hardy at [redacted] or Lenore Nakama at [redacted].

LN:ko
Attachment(s)

Response: Contact person: ___________________________ Phone: ___________________________

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

Signed: [signature]
Date: 10/12/93
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 Gentry applications to continue water use within the Ewa Caprock groundwater management area (2001-04, 05). We have no objections.

For the future, we share a common concern that use and management of the caprock aquifer be carefully planned. Its hydrologic mechanics may be inadequately understood, and as it will be subject to changing land uses both immediately above and upgradient, and is anticipated to receive tailwater and wastewater injection, its use for multiple non-potable applications makes it a complex system requiring a level of management sophistication not needed before.

We understand that the Commission had considered a management planning task force, but we have not heard further; we support such an approach, and encourage its progress.

Warmest aloha,

Hoaliku L. Drake, Chairman
Hawaiian Homes Commission
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 2151-06
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, 3586-04 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.
Mr. Keith Ahue
Page 2
October 5, 1993

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

FROM: Don Hibbard, Administrator
       Historic Preservation Division

SUBJECT: Application for Water Use Permit, Ewa Caprock
         Ground Water Management Area, O'ahu
         Gentry Development Co. for Well No. 2001-04
         Honouliuli, Ewa, O'ahu
         TMK 9-1-61:007

Thank you for the opportunity to review this project. We have previously determined that this project will have "no effect" on historic sites (Doc No: 0676T). The parcel has for many years been planted in sugarcane making the presence of historic sites unlikely.

EJ:jt
MEMORANDUM

LOG NO: 9582
DOC NO: 9309EJ41

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

FROM: Don Hibbard, Administrator
Historic Preservation Division

SUBJECT: Application for Water Use Permit, Ewa Caprock
Ground Water Management Area, O'ahu
Gentry Development Co. for Well No. 2001-05
Honouliuli, Ewa, O'ahu
TMK 9-1-70:132

Thank you for the opportunity to review this project. We have previously determined that this project will have "no effect" on historic sites (Doc No: 0676T). The parcel has for many years been planted in sugarcane making the presence of historic sites unlikely.

EJ:jt
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
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We would appreciate your review of the attached application and please return this form by October 6, 1993.

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

Attachment(s)
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: 10/15/93
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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If you have any questions regarding this application, please contact Roy Hardy at [REDACTED] or Lenore Nakama at [REDACTED]

LN:ko
Attachment(s)

Response: Contact person: [REDACTED] Phone: [REDACTED]

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

Signed: [REDACTED] Date: [REDACTED]
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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Response: Contact person: ____________________________ Phone: ____________

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

Signed: [Signature]
Date: 10/5/93
TO: Roy
Called: Greg
Date: 10/26/93
Time:

WHILE YOU WERE OUT

Message: Greg being currently on portable system (BWS) so their users are quitting. They didn't foresee switching over.

Operator
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

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Response: Contact person: NINA Phone: [redacted]

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

Signed: [redacted] Date: [redacted]
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

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

LN:ko
Attachment(s)

Response: Contact person: ___________________________ Phone: ___________________________

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

Signed: ___________________________ Date: 10/5/93
MEMORANDUM

TO: Aquatic Resources
    Forestry and Wildlife
    Historic Preservation
    Land Management
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    Office of Conservation and Environmental Affairs
    State Parks
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If you have any questions regarding this application, please contact Roy Hardy at [Contact Information] or Lenore Nakama at [Contact Information].

LN:ko
Attachment(s)

Response: Contact person: 

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

Signed: 

Administrative
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

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LN:ko
Attachment(s)

Response: Contact person: ___________________________ Phone: ___________________________

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

DOFAW HAS NO COMMENTS OR OBJECTIONS TO THE PROPOSED REQUEST.

Signed: ___________________________ Date: 9/24
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  
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Response: Contact person: ___________________________ Phone: __________

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

DOFAW HAS NO COMMENTS OR OBJECTIONS TO THE PROPOSED REQUEST.

Signed: ___________________________ Date: __________
MEMORANDUM

TO:    Aquatic Resources
       Forestry and Wildlife
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       Land Management
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LN:ko
Attachment(s)

 Response: Contact person: ___________________ Phone: ________

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

DOFAW HAS NO COMMENTS OR OBJECTIONS TO THE PROPOSED REQUEST.

Signed: ___________________________ Date: 9/21/93
Mr. Randolph Ouye
Gentry Development Co.

Dear Mr. Ouye:

Enclosed is a copy of the public notice for your water use permit applications for Well Nos. 2001-04 & 05 which will be published in the Honolulu Star Bulletin issues of September 15, 1993 and September 22, 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:ko
Encl.
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
Ewa Caprock Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Gentry Development Co. for Well No. 2001-05. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 15, 1993 and September 22, 1993.

We would appreciate your review of the attached application and please return this form by October 6, 1993.

If you have any questions regarding this application, please contact Roy Hardy at ______ or Lenore Nakama at ______.

LN:ko
Attachment(s)

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
Dr. John C. Lewin
Mr. Clayton H.W. Hee
Mr. Kazu Hayashida

Page 2

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
    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
          Ewa Caprock Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Gentry Development Co. for Well No. 2001-04. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 15, 1993 and September 22, 1993.

We would appreciate your review of the attached application and please return this form by October 6, 1993.

If you have any questions regarding this application, please contact Roy Hardy at ☐☐☐☐ or Lenore Nakama at ☐☐☐☐.

Attachment(s)
INTERESTED OTHERS LIST

ADDITIONAL STANDARD CORRESPONDENCE

Mr. David Martin
Native Hawaiian Advisory Council
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. Lou, Deputy Director

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

Transmitted for your review and comment is a copy of a water use permit application for Gentry Development Co. for Well No. 2001-04. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 15, 1993 and September 22, 1993.

We would appreciate your review of the attached application and please return this form by October 6, 1993.

If you have any questions regarding this application, please contact Roy Hardy at [phone number] or Lenore Nakama at [phone number].

LN:ko
Attachment(s)

Response: Contact person: ___________________________ Phone: ________________

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

Signed: ________________________________ Date: ____________________
INTERESTED OTHERS LIST

ADDITIONAL STANDARD CORRESPONDENCE

Mr. David Martin
Native Hawaiian Advisory Council

[Redacted]
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
    Ewa Caprock Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Gentry Development Co. for Well No. 2001-05. Public notice of this application will be published in the Honolulu Star Bulletin issues of September 15, 1993 and September 22, 1993.

We would appreciate your review of the attached application and please return this form by October 6, 1993.

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

Attachment(s)
Memorandum to:
Mrs. Hoaliku L. Drake
Dr. John C. Lewin
Mr. Clayton H.W. Hee
Mr. Kazu Hayashida

Page 2

Response: Contact person: ____________________________ Phone: ____________

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

Signed: ____________________________ Date: ___________
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
Ewa Caprock 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 Gentry Development Co. for Well No. 2001-05, 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 enclosed 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

Enc.
PUBLIC NOTICE

Applications for Water Use Permits
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."

Kahananui Well (Well No. 0352-17)
Applicant: Wilma Kamakana Grambusch
Date Completed Application Received: August 19, 1993
Aquifer: Ualapue System, Southeast Sector, Molokai
Well Source: Kahananui Well, Well No. 0352-17, Kahananui Ahupuaa, Molokai at Tax Map Key: 5-6-6:14
Quantity Requested: 8,800 gallons per day
Existing Water Use: Irrigation of 2 acres of coffee trees and domestic service to 4 residences
Place of Water Use: Kahananui Ahupuaa, Ualapue, Molokai at Tax Map Key: 5-6-6:14 & 15

Kaio Artesian Well (Well No. 3956-07)
Applicant: Jacob I. Kaio, Sr.
Date Completed Application Received: August 17, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Kaio Artesian Well, Well No. 3956-07, Lot 40 AW 3773:2, Oahu at Tax Map Key: 5-5-8:40
Quantity Requested: 20,000 gallons per day
Existing/New Water Use: Irrigation of 3 acres of taro, flowers, and various vegetables
Place of Water Use: Lots 2, 9, & 40 AW 3773:2, at Tax Map Key: 5-5-8:40, 2, & 9

Umipaa Well (Well No. 0603-01)
Applicant: Hawaiian Research Ltd.
Date Completed Application Received: May 11, 1993
Aquifer: Manawaimui System, Central Sector, Molokai
Well Source: Umipaa Well, Well No. 0603-01, Kalamaula, Molokai, at Tax Map Key: 5-2-11:28
Quantity Requested: 11,000 gallons per day
Existing Water Use: Irrigation of 25 acres of corn and sorghum
Place of Water Use: Kalamaula, Molokai at Tax Map Key: 5-2-11:28, 10, & 33

(more)
Caldeira Well (Well No. 3855-11)
Applicant: Raymond Caldeira
Date Completed Application Received: July 9, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Caldeira Well, Well No. 3855-11, 55-238-D Kamehameha Hwy, Oahu at Tax Map Key: 5-5-1:60
Quantity Requested: 58,000 gallons per day
Existing Water Use: Irrigation of 1.2 acres of various crops and livestock operations
Place of Water Use: 55-238-D Kamehameha Hwy at Tax Map Key: 5-5-1:60

Pacific Sea 4 Well (Well No. 4258-09)
Applicant: Campbell Estate
Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Pacific Sea 4 Well, Well No. 4258-09, Kahuku, Oahu at Tax Map Key: 5-6-3:26
Quantity Requested: 2,000,000 gallons per day
New Water Use: Shrimp aquaculture
Place of Water Use: Kahuku at Tax Map Key: 5-6-3

Naiwa Dug Well (Well No. 0603-07)
Applicant: Maui Electric
Date Completed Application Received: July 16, 1993
Aquifer: Manawainui System, Central Sector, Molokai
Well Source: Naiwa Dug Well, Well No. 0603-07, Kahaapuhi Fishpond, Molokai at Tax Map Key: 5-2-11:23
Quantity Requested: 1,000 gallons per day
Existing Water Use: Fire protection system testing
Place of Water Use: Kahaapuhi fishpond at Tax Map Key: 5-2-11:31

Naiwa MECO Openpit (Well No. 0604-03)
Applicant: Maui Electric
Date Completed Application Received: July 16, 1993
Aquifer: Manawainui System, Central Sector, Molokai
Well Source: Naiwa MECO Openpit Well, Well No. 0604-03, MECO Palaau Power Plant, Molokai at Tax Map Key: 5-2-11:36
Quantity Requested: 150 gallons per day
Existing Water Use: Fire protection
Place of Water Use: MECO Palaau Power Plant at Tax Map Key: 5-2-11:36

(more)
Naiwa-MECO Irr. #1 (Well No. 0604-04)
Applicant: Maui Electric

Date Completed Application Received: July 16, 1993
Aquifer: Manawainui System, Central Sector, Molokai
Well Source: Naiwa-MECO Irr. #1 Well, Well No. 0604-04, MECO Palaaau Power Plant, Molokai at Tax Map Key: 5-2-11:31
Quantity Requested: 2,500 gallons per day
Existing/New Water Use: Irrigation of 10 acres of landscape
Place of Water Use: MECO Palaaau Power Plant at Tax Map Key: 5-2-11:31

Naiwa MECO Irr #2 (Well No. 0603-06)
Applicant: Maui Electric

Date Completed Application Received: July 16, 1993
Aquifer: Manawainui System, Central Sector, Molokai
Well Source: Naiwa MECO Irr #2 Well, Well No. 0603-06, MECO Palaaau Power Plant, Molokai at Tax Map Key: 5-2-11:31
Quantity Requested: 2,500 gallons per day
Existing/New Water Use: Irrigation of 10 acres of landscape
Place of Water Use: MECO Palaaau Power Plant at Tax Map Key: 5-2-11:31

Naiwa MECO Cooling Well (Well No. 0604-05)
Applicant: Maui Electric

Date Completed Application Received: July 16, 1993
Aquifer: Manawainui System, Central Sector, Molokai
Well Source: Naiwa MECO Cooling Well, Well No. 0604-05, MECO Palaaau Power Plant, Molokai at Tax Map Key: 5-2-11:31
Quantity Requested: 350,000 gallons per day
New Water Use: Industrial cooling and fire protection
Place of Water Use: MECO Palaaau Power Plant at Tax Map Key: 5-2-11:31

RL Montgomery Well (Well No. 2751-08)
Applicant: Ruby Montgomery

Date Completed Application Received: July 9, 1993
Aquifer: Koolaupoko System, Windward Sector, Oahu
Well Source: RL Montgomery Well, Well No. 2751-08, 47-477 Waihee Place, Oahu at Tax Map Key: 4-7-6:1
Quantity Requested: 2,000 gallons per day
Existing Water Use: Domestic service to 2 residences, livestock operations, and irrigation of 12 acres of various fruits and vegetables
Place of Water Use: 47-477 Waihee Place at Tax Map Key: 4-7-6:1

(more)
HI State Hosp/416 Well (Well No. 2448-01)
Applicant: Hawaii State Hospital

Date Completed Application Received: August 9, 1993
Aquifer: Koolaupoko System, Windward Sector, Oahu
Well Source: HI State Hosp/416 Well, Well No. 2448-01, 45-710 Keaahala Road, Oahu at Tax Map Key: 4-5-23:2
Quantity Requested: 250,000 gallons per day
Existing Water Use: Domestic consumption and irrigation of a 2,280 sq. ft. nursery
Place of Water Use: Hawaii State Hospital at Tax Map Key 4-5-23:2

Geiger Park Well (Well No. 2001-04)
Applicant: Gentry Development Co.

Date Completed Application Received: July 23, 1993
Aquifer: Ewa Caprock System, Pearl Harbor Sector, Oahu
Well Source: Geiger Park Well, Well No. 2001-04, Ewa By Gentry Development, Oahu at Tax Map Key: 9-1-61:7
Quantity Requested: 40,000 gallons per day
New Water Use: Irrigation of 13 acres of lawn and landscape
Place of Water Use: Ewa By Gentry Development at Tax Map Key: 9-1-61:7 & 41 to 50

Mokuleia Well (Well No. 3309-02)
Applicant: State of Hawaii
Dept. of Land and Natural Resources,
Division of Water and Land Development

Date Completed Application Received: August 13, 1993
Aquifer: Mokuleia System, North Sector, Oahu
Well Source: Mokuleia Well, Well No. 3309-02, Mokuleia, Oahu at Tax Map Key: 6-8-7:1
Quantity Requested: 0 gallons per day
New Water Use: Exploratory purposes only
Place of Water Use: Mokuleia exploratory well site

Soh Well (Well No. 3655-04)
Applicant: Warren Soh

Date Completed Application Received: July 14, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Soh Well, Well No. 3655-04, 53-120 Halai St. Hauula, Oahu at Tax Map Key: 5-3-15:18
Quantity Requested: 500,000 gallons per day
New Water Use: Irrigation of 1 acre of taro, mango and banana trees
Place of Water Use: 53-120 Halai St., Hauula, Oahu, Makao Valley at Tax Map Key: 5-3-15:18

(more)
**Waiono-Punaluu Well (Well No. 3453-08)**

**Applicant:** Billy and Kanani Casey

**Date Completed Application Received:** July 15, 1993

**Aquifer:** Koolauloa System, Windward Sector, Oahu

**Well Source:** Waiono-Punaluu Well, Well No. 3453-08, 53-416 G. Kam Hwy, Oahu at Tax Map Key: 5-3-5:11

**Quantity Requested:** 3,000 gallons per day

**Existing Water Use:** Domestic service to 1 residence and irrigation of 1 acre of banana and papaya trees

**Place of Water Use:** 53-416 G. Kam Hwy at Tax Map Key: 5-3-5:11

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**Quarry Well D (Well No. 3856-04)**

**Applicant:** Zions Securities Corp.

**Date Completed Application Received:** June 23, 1993

**Aquifer:** Koolauloa System, Windward Sector, Oahu

**Well Source:** Quarry Well D, Well No. 3856-04, Laie Quarry, Oahu at Tax Map Key: 5-5-6:1

**Quantity Requested:** 334,000 gallons per day

**Existing Water Use:** Irrigation of 51 acres of banana and papaya trees and grass

**Place of Water Use:** Behind BYUH campus at Tax Map Key: 5-5-6:1

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**Laie Maloo Well (Well No. 3755-04)**

**Applicant:** Zions Securities Corp.

**Date Completed Application Received:** June 23, 1993

**Aquifer:** Koolauloa System, Windward Sector, Oahu

**Well Source:** Laie Maloo Well, Well No. 3755-04, Mauka of Kamehameha Hwy, Oahu at Tax Map Key: 5-5-6:11

**Quantity Requested:** 5,000 gallons per day

**Existing Water Use:** Supply for livestock (1 horse)

**Place of Water Use:** Mauka of Kam Hwy in Laie at Tax Map Key: 5-5-6:11

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**Pump 15 (Well No. 4157-04)**

**Applicant:** Campbell Estate

**Date Completed Application Received:** July 16, 1993

**Aquifer:** Koolauloa System, Windward Sector, Oahu

**Well Source:** Pump 15, Well No. 4157-04, Kahuku, Oahu at Tax Map Key: 5-6-2:1

**Quantity Requested:** 1,530,000 gallons per day

**Existing Water Use:** Service to 6 military offices and 23 acres of aquacultural operations

**Place of Water Use:** Kahuku and Kahuku Army Training Area at Tax Map Key: 5-6-2:1, 21, & 26

*(more)*
Kawaihapai Well (Well No. 3309-01)
Applicant: State of Hawaii
Dept. of Land and Natural Resources,
Division of Water and Land Development

Aquifer: Mokuleia System, North Sector, Oahu
Well Source: Kawaihapai Well, Well No. 3309-01, Mokuleia, Oahu at Tax Map Key: 6-8-7:1
Quantity Requested: 0 gallons per day
New Water Use: Exploratory Purposes Only
Place of Water Use: Kawaihapai exploratory well site

Kapaka Farm Wells (Well Nos. 3554-01 & 02 and 3654-03)
Applicant: Zions Securities Corp.

Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Kapaka Farm Wells, Well Nos. 3554-01 & 02 and 3654-03, near Kaluanui Stream, Oahu at Tax Map Key: 5-3-12:1
Quantity Requested: 324,000 gallons per day
Existing Water Use: Irrigation of 33 acres of banana and papaya trees and various other crops
Place of Water Use: Near Kaluanui Stream mauka of Kam Hwy at Tax Map Key: 5-3-12:1

Prawn Farm Well (Well No. 3856-07)
Applicant: Zions Securities Corp.

Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Prawn Farm Well, Well No. 3856-07, along Poohaili Street, Oahu at Tax Map Key: 5-5-5:1
Quantity Requested: 475,000 gallons per day
Existing Water Use: Services 103-acre prawn farm
Place of Water Use: Windward Oahu at Tax Map Key: 5-5-5:1 & 23 and 5-5-8

Egg Farm Well (Well No. 3956-05)
Applicant: Zions Securities Corp.

Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Egg Farm Well, Well No. 3956-05, along Poohaili Street, Oahu at Tax Map Key: 5-5-8:55
Quantity Requested: 62,000 gallons per day
Existing Water Use: Service to chicken and egg farm
Place of Water Use: Along Poohaili Street at Tax Map Key: 5-5-8:51

(more)
Welfare Farm Well (Well No. 3855-04)
Applicant: Zions Securities Corp.

Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Welfare Farm Well, Well No. 3855-04, mauka of Kam Hwy, Laie, Oahu at Tax Map Key: 5-5-6:1
Quantity Requested: 128,000 gallons per day
Existing Water Use: Irrigation of 39 acres of banana and papaya trees and grass
Place of Water Use: Mauka of Kam Hwy, Laie at Tax Map Key: 5-5-6:1

Truck Farm Well (Well No. 3755-06)
Applicant: Zions Securities Corp.

Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Truck Farm Well, Well No. 3755-06, mauka of Kam Hwy, Laie, Oahu at Tax Map Key: 5-5-6:1
Quantity Requested: 167,000 gallons per day
Existing Water Use: Irrigation of 51 acres of grass
Place of Water Use: Mauka of Kam Hwy, Laie at Tax Map Key: 5-5-6:1

WM Kamakana Kawela (Well Nos. 0456-01 & 17)
Applicant: Wilma Kamakana Grambusch

Date Completed Application Received: August 19, 1993
Aquifer: Kawela System, Southeast Sector, Molokai
Well Source: WM Kamakana Kawela Well, Well Nos. 0456-01 & 17, Kam V Hwy, Kawela, Molokai at Tax Map Key: 5-4-1:29
Quantity Requested: 52,500 gallons per day
Existing Water Use: Irrigation of 9 acres of various crops
Place of Water Use: Kam V Hwy, Kawela, Molokai at Tax Map Key: 5-4-1:29

Soda Creek III (Well No. 2001-05)
Applicant: Gentry Development Co.

Date Completed Application Received: July 23, 1993
Aquifer: Ewa Caprock System, Pearl Harbor Sector, Oahu
Well Source: Soda Creek III Well, Well No. 2001-05, Ewa by Gentry Development, Oahu at Tax Map Key: 9-1-70:132
Quantity Requested: 20,000 gallons per day
New Water Use: Irrigation for 6.67 acres of lawn and landscape
Place of Water Use: Ewa by Gentry Development at Tax Map Key: 9-1-70

(more)
Kamakana Kakahaia Well (Well No. 0456-18)  
Applicant: Wilma Kamakana Grambusch  

Date Completed Application Received: August 19, 1993  
Aquifer: Kawela System, Southeast Sector, Molokai  
Well Source: Kamakana Kakahaia Well, Well No. 0456-18, Kam V Hwy, Kawela, Molokai  
Tax Map Key: 5-4-1:18  
Quantity Requested: 2,355 gallons per day  
Existing/New Water Use: Irrigation of 0.78 acres of banana  
Place of Water Use: Kam V Hwy., Kawela, Molokai at Tax Map Key: 5-4-1:12 & 8 and 5-5-1:18

WM. Kamakana #2 Well (Well No. 0456-19)  
Applicant: Wilma Kamakana Grambusch  

Date Completed Application Received: August 19, 1993  
Aquifer: Kawela System, Southeast Sector, Molokai  
Well Source: WM. Kamakana #2 Well, Well No. 0456-19, Kam V Hwy, Kawela, Molokai  
Tax Map Key: 5-4-1:2  
Quantity Requested: 90,000 gallons per day  
Existing Water Use: Aquaculture operations for 2.5 acres of limu and awa  
Place of Water Use: Kam V Hwy, Kawela at Tax Map Key: 5-4-1:2

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 6, 1993 to 1) the Commission on Water Resource Management, and 2) a copy of the objection letter(s) to the applicant at the above address.

COMMISSION ON WATER RESOURCE MANAGEMENT

KEITH W. AHUE  
Chairperson

Dated: SEP - 6 1993

Publish in: Honolulu Star Bulletin issues of September 15, 1993 and September 22, 1993
Applications for Water Use Permits
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."

Kahananui Well (Well No. 0352-17)
Applicant: Wilma Kamakana Grumbusch
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Well Source: Kahananui Well, Well No. 0352-17, Kahananui Ahupuaa, Molokai at Tax Map Key: 5-6-6:14
Quantity Requested: 8,800 gallons per day
Existing Water Use: Irrigation of 2 acres of coffee trees and domestic service to 4 residences
Place of Water Use: Kahananui Ahupuaa, Ualapue, Molokai at Tax Map Key: 5-6-6:14 & 15

Koio Artesian Well (Well No. 3956-07)
Applicant: Jacob I. Koio, Sr.
Date Completed Application Received: August 17, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Koio Artesian Well, Well No. 3956-07, Lot 40 AW 3773:2, Oahu at Tax Map Key: 5-5-8:40
Quantity Requested: 20,000 gallons per day
Existing/New Water Use: Irrigation of 3 acres of taro, flowers, and various vegetables
Place of Water Use: Lots 2, 9, & 40 AW 3773:2, at Tax Map Key: 5-5-8:40, 2, & 9

Umipaa Well (Well No. 0603-01)
Applicant: Hawaiian Research Ltd.
Date Completed Application Received: May 11, 1993
Aquifer: Manawainui System, Central Sector, Molokai
Well Source: Umipaa Well, Well No. 0603-01, Kalamaua, Molokai, at Tax Map Key: 5-2-11:28
Quantity Requested: 11,000 gallons per day
Existing Water Use: Irrigation Of 25 acres of corn and sorghum
Place of Water Use: Kalamaua, Molokai at Tax Map Key: 5-2-11:28, 10, & 33

(more)
Caldeira Well (Well No. 3855-11)
Applicant: Raymond Caldeira
Date Completed Application Received: July 9, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Caldeira Well, Well No. 3855-11, 55-238-D Kamehameha Hwy, Oahu at Tax Map Key: 5-5-1:60
Quantity Requested: 58,000 gallons per day
Existing Water Use: Irrigation of 1.2 acres of various crops and livestock operations
Place of Water Use: 55-238-D Kamehameha Hwy at Tax Map Key: 5-5-1:60

Pacific Sea 4 Well (Well No. 4258-09)
Applicant: Campbell Estate
Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Pacific Sea 4 Well, Well No. 4258-09, Kahuku, Oahu at Tax Map Key: 5-6-3:26
Quantity Requested: 2,000,000 gallons per day
New Water Use: Shrimp aquaculture
Place of Water Use: Kahuku at Tax Map Key: 5-6-3

Naiwa Dug Well (Well No. 0603-07)
Applicant: Maui Electric
Date Completed Application Received: July 16, 1993
Aquifer: Manawainui System, Central Sector, Molokai
Well Source: Naiwa Dug Well, Well No. 0603-07, Kahaapuhi Fishpond, Molokai at Tax Map Key: 5-2-11:23
Quantity Requested: 1,000 gallons per day
Existing Water Use: Fire protection system testing
Place of Water Use: Kahaapuhi fishpond at Tax Map Key: 5-2-11:31

Naiwa MECO Openpit (Well No. 0604-03)
Applicant: Maui Electric
Date Completed Application Received: July 16, 1993
Aquifer: Manawainui System, Central Sector, Molokai
Well Source: Naiwa MECO Openpit Well, Well No. 0604-03, MECO Palaau Power Plant, Molokai at Tax Map Key: 5-2-11:36
Quantity Requested: 150 gallons per day
Existing Water Use: Fire protection
Place of Water Use: MECO Palaau Power Plant at Tax Map Key: 5-2-11:36

(more)
Naiwa-MECO Irr. #1 (Well No. 0604-04)
Applicant: Maui Electric

Date Completed Application Received: July 16, 1993
Aquifer: Manawainui System, Central Sector, Molokai
Well Source: Naiwa-MECO Irr. #1 Well, Well No. 0604-04, MECO Palaau Power Plant, Molokai at Tax Map Key: 5-2-11:31
Quantity Requested: 2,500 gallons per day
Existing/New Water Use: Irrigation of 10 acres of landscape
Place of Water Use: MECO Palaau Power Plant at Tax Map Key: 5-2-11:31

Naiwa MECO Irr #2 (Well No. 0603-06)
Applicant: Maui Electric

Date Completed Application Received: July 16, 1993
Aquifer: Manawainui System, Central Sector, Molokai
Well Source: Naiwa MECO Irr #2 Well, Well No. 0603-06, MECO Palaau Power Plant, Molokai at Tax Map Key: 5-2-11:31
Quantity Requested: 2,500 gallons per day
Existing/New Water Use: Irrigation of 10 acres of landscape
Place of Water Use: MECO Palaau Power Plant at Tax Map Key: 5-2-11:31

Naiwa MECO Cooling Well (Well No. 0604-05)
Applicant: Maui Electric

Date Completed Application Received: July 16, 1993
Aquifer: Manawainui System, Central Sector, Molokai
Well Source: Naiwa MECO Cooling Well, Well No. 0604-05, MECO Palaau Power Plant, Molokai at Tax Map Key: 5-2-11:31
Quantity Requested: 350,000 gallons per day
New Water Use: Industrial cooling and fire protection
Place of Water Use: MECO Palaau Power Plant at Tax Map Key: 5-2-11:31

RL Montgomery Well (Well No. 2751-08)
Applicant: Ruby Montgomery

Date Completed Application Received: July 9, 1993
Aquifer: Koolaupoko System, Windward Sector, Oahu
Well Source: RL Montgomery Well, Well No. 2751-08, 47-477 Waihee Place, Oahu at Tax Map Key: 4-7-6:1
Quantity Requested: 2,000 gallons per day
Existing Water Use: Domestic service to 2 residences, livestock operations, and irrigation of 12 acres of various fruits and vegetables
Place of Water Use: 47-477 Waihee Place at Tax Map Key: 4-7-6:1

(more)
HI State Hosp/416 Well (Well No. 2448-01)
Applicant: Hawaii State Hospital

Date Completed Application Received: August 9, 1993
Aquifer: Koolaupoko System, Windward Sector, Oahu
Well Source: HI State Hosp/416 Well, Well No. 2448-01, 45-710 Keahala Road, Oahu at
Tax Map Key: 4-5-23:2
Quantity Requested: 250,000 gallons per day
Existing Water Use: Domestic consumption and irrigation of a 2,280 sq. ft. nursery
Place of Water Use: Hawaii State Hospital at Tax Map Key 4-5-23:2

Geiger Park Well (Well No. 2001-04)
Applicant: Gentry Development Co.

Date Completed Application Received: July 23, 1993
Aquifer: Ewa Caprock System, Pearl Harbor Sector, Oahu
Well Source: Geiger Park Well, Well No. 2001-04, Ewa By Gentry Development, Oahu at
Tax Map Key: 9-1-61:7
Quantity Requested: 40,000 gallons per day
New Water Use: Irrigation of 13 acres of lawn and landscape
Place of Water Use: Ewa By Gentry Development at Tax Map Key: 9-1-61:7 & 41 to 50

Mokuleia Well (Well No. 3309-02)
Applicant: State of Hawaii
Dept. of Land and Natural Resources,
Division of Water and Land Development

Date Completed Application Received: August 13, 1993
Aquifer: Mokuleia System, North Sector, Oahu
Well Source: Mokuleia Well, Well No. 3309-02, Mokuleia, Oahu at Tax Map Key: 6-8-7:1
Quantity Requested: 0 gallons per day
New Water Use: Exploratory purposes only
Place of Water Use: Mokuleia exploratory well site

Soh Well (Well No. 3655-04)
Applicant: Warren Soh

Date Completed Application Received: July 14, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Soh Well, Well No. 3655-04, 53-120 Halai St. Hauula, Oahu at Tax Map Key: 5-3-15:18
Quantity Requested: 500,000 gallons per day
New Water Use: Irrigation of 1 acre of taro, mango and banana trees
Place of Water Use: 53-120 Halai St., Hauula, Oahu, Makao Valley at Tax Map Key: 5-3-15:18

(more)
Waiono-Punaluu Well (Well No. 3453-08)

Applicant: Billy and Kanani Casey

Date Completed Application Received: July 15, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Waiono-Punaluu Well, Well No. 3453-08, 53-416 G. Kam Hwy, Oahu at Tax Map Key: 5-3-5:11
Quantity Requested: 3,000 gallons per day
Existing Water Use: Domestic service to 1 residence and irrigation of 1 acre of banana and papaya trees
Place of Water Use: 53-416 G. Kam Hwy at Tax Map Key: 5-3-5:11

Quarry Well D (Well No. 3856-04)

Applicant: Zions Securities Corp.

Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Quarry Well D, Well No. 3856-04, Laie Quarry, Oahu at Tax Map Key: 5-5-6:1
Quantity Requested: 334,000 gallons per day
Existing Water Use: Irrigation of 51 acres of banana and papaya trees and grass
Place of Water Use: Behind BYUH campus at Tax Map Key: 5-5-6:1

Laie Maloo Well (Well No. 3755-04)

Applicant: Zions Securities Corp.

Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Laie Maloo Well, Well No. 3755-04, Mauka of Kamehameha Hwy, Oahu at Tax Map Key: 5-5-6:11
Quantity Requested: 5,000 gallons per day
Existing Water Use: Supply for livestock (1 horse)
Place of Water Use: Mauka of Kam Hwy in Laie at Tax Map Key: 5-5-6:11

Pump 15 (Well No. 4157-04)

Applicant: Campbell Estate

Date Completed Application Received: July 16, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Pump 15, Well No. 4157-04, Kahuku, Oahu at Tax Map Key: 5-6-2:1
Quantity Requested: 1,530,000 gallons per day
Existing Water Use: Service to 6 military offices and 23 acres of aquacultural operations
Place of Water Use: Kahuku and Kahuku Army Training Area at Tax Map Key: 5-6-2:1, 21, & 26

(more)
Kawaihapai Well (Well No. 3309-01)
Applicant: State of Hawaii
Dept. of Land and Natural Resources, Division of Water and Land Development

Date Completed Application Received: August 13, 1993
Aquifer: Mokuleia System, North Sector, Oahu
Well Source: Kawaihapai Well, Well No. 3309-01, Mokuleia, Oahu at Tax Map Key: 6-8-7:1
Quantity Requested: 0 gallons per day
New Water Use: Exploratory Purposes Only
Place of Water Use: Kawaihapai exploratory well site

Kapaka Farm Wells (Well Nos. 3554-01 & 02 and 3654-03)
Applicant: Zions Securities Corp.

Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Kapaka Farm Wells, Well Nos. 3554-01 & 02 and 3654-03, near Kualoa Stream, Oahu at Tax Map Key: 5-3-12:1
Quantity Requested: 324,000 gallons per day
Existing Water Use: Irrigation of 33 acres of banana and papaya trees and various other crops
Place of Water Use: Near Kualoa Stream mauka of Kam Hwy at Tax Map Key: 5-3-12:1

Prawn Farm Well (Well No. 3856-07)
Applicant: Zions Securities Corp.

Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Prawn Farm Well, Well No. 3856-07, along Pohaili Street, Oahu at Tax Map Key: 5-5-5:1
Quantity Requested: 475,000 gallons per day
Existing Water Use: Services 103-acre prawn farm
Place of Water Use: Windward Oahu at Tax Map Key: 5-5-5:1 & 23 and 5-5-8

Egg Farm Well (Well No. 3956-05)
Applicant: Zions Securities Corp.

Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Egg Farm Well, Well No. 3956-05, along Pohaili Street, Oahu at Tax Map Key: 5-5-8:55
Quantity Requested: 62,000 gallons per day
Existing Water Use: Service to chicken and egg farm
Place of Water Use: Along Pohaili Street at Tax Map Key: 5-5-8:51
(more)
Welfare Farm Well (Well No. 3855-04)
Applicant: Zions Securities Corp.

Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Welfare Farm Well, Well No. 3855-04, mauka of Kam Hwy, Laie, Oahu at Tax Map Key: 5-5-6:1
Quantity Requested: 128,000 gallons per day
Existing Water Use: Irrigation of 39 acres of banana and papaya trees and grass
Place of Water Use: Mauka of Kam Hwy, Laie at Tax Map Key: 5-5-6:1

Truck Farm Well (Well No. 3755-06)
Applicant: Zions Securities Corp.

Date Completed Application Received: June 23, 1993
Aquifer: Koolauloa System, Windward Sector, Oahu
Well Source: Truck Farm Well, Well No. 3755-06, mauka of Kam Hwy, Laie, Oahu at Tax Map Key: 5-5-6:1
Quantity Requested: 167,000 gallons per day
Existing Water Use: Irrigation of 51 acres of grass
Place of Water Use: Mauka of Kam Hwy in Laie at Tax Map Key: 5-5-6:1

WM Kamakana Kawela (Well Nos. 0456-01 & 17)
Applicant: Wilma Kamakana Grambusch

Date Completed Application Received: August 19, 1993
Aquifer: Kawela System, Southeast Sector, Molokai
Well Source: WM Kamakana Kawela Well, Well Nos. 0456-01 & 17, Kam V Hwy, Kawela, Molokai at Tax Map Key: 5-4-1:29
Quantity Requested: 52,500 gallons per day
Existing Water Use: Irrigation of 9 acres of various crops
Place of Water Use: Kam V Hwy, Kawela, Molokai at Tax Map Key: 5-4-1:29

Soda Creek III (Well No. 2001-05)
Applicant: Gentry Development Co.

Date Completed Application Received: July 23, 1993
Aquifer: Ewa Caprock System, Pearl Harbor Sector, Oahu
Well Source: Soda Creek III Well, Well No. 2001-05, Ewa by Gentry Development, Oahu at Tax Map Key: 9-1-70:132
Quantity Requested: 20,000 gallons per day
New Water Use: Irrigation for 6.67 acres of lawn and landscape
Place of Water Use: Ewa by Gentry Development at Tax Map Key: 9-1-70

(more)
Kamakana Kakahaia Well (Well No. 0456-18)
Applicant: Wilma Kamakana Grambusch

Date Completed Application Received: August 19, 1993
Aquifer: Kawela System, Southeast Sector, Molokai
Well Source: Kamakana Kakahaia Well, Well No. 0456-18, Kam V Hwy, Kawela, Molokai at
Tax Map Key: 5-4-1:18
Quantity Requested: 2,355 gallons per day
Existing/New Water Use: Irrigation of 0.78 acres of banana
Place of Water Use: Kam V Hwy., Kawela, Molokai at Tax Map Key: 5-4-1:12 & 8 and
5-5-1:18

WM. Kamakana #2 Well (Well No. 0456-19)
Applicant: Wilma Kamakana Grambusch

Date Completed Application Received: August 19, 1993
Aquifer: Kawela System, Southeast Sector, Molokai
Well Source: WM. Kamakana #2 Well, Well No. 0456-19, Kam V Hwy, Kawela, Molokai at
Tax Map Key: 5-4-1:2
Quantity Requested: 90,000 gallons per day
Existing Water Use: Aquaculture operations for 2.5 acres of limu and awa
Place of Water Use: Kam V Hwy, Kwala at Tax Map Key: 5-4-1:2

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 6, 1993 to 1) the Commission on
Water Resource Management, and 2) a copy of the objection letter(s) to the applicant at the above address.

COMMISSION ON WATER RESOURCE MANAGEMENT

KEITH W. AHUE
Chairperson

Dated: SEP - 8 1993

Publish in: Honolulu Star Bulletin issues of September 15, 1993 and September 22, 1993
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
Ewa Caprock 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 Gentry Development Co. for Well No. 2001-04, 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 enclosed 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

Enc.
TO: Lenore/Roey P
DATE: 9/1
TIME: 10:03a
WHILE YOU WERE OUT
M: Gregg, Jukumitz
of: Tom Vance
Phone: [Redacted]

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Message: Well # 2001-04
Should be Geiger Apartments
and not Geiger Park.
Mr. Randolph Ouye

Dear Mr. Ouye:

Application for a Water Use Permit
Ewa Caprock Ground Water Management Area, Oahu

We acknowledge receipt, on July 23, 1993, of your completed water use permit applications for the Geiger Park and Soda Creek III Wells (Well Nos. 2001-04 & 05). You can expect your applications to be processed within ninety (90) days 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. In addition, we may need to visit and verify your proposed water source and use sites if we have not done so already under our registration program.

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
TO: G. Matsumoto
    E. Sakoda
    Y. Shiroma
    E. Hirano
    D. Higa
    G. Bauer
    R. Rozeboom
    R. Hardy
    R. LOUi
    S. KOKUBUN
    M. TAGOMORI
    L. Nanbu

PLEASE:

See Me
Call
Review & Comment
Take Action
Investigate & Report
Draft Reply
Acknowledge Receipt
Type Draft
Type Final
Xerox ___ copies

FOR YOUR:

Approval
Signature
Information

REMARKS:

Why now?
Ms. Rae Loui  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii

Dear Ms. Loui:

Water Use Permit Applications for  
Ewa Gentry - Geiger Road Apt. (Well No. 2001-04) and  
Ewa Gentry - Soda Creek III (Well No. 2001-05)

On behalf of Gentry Development Company, we are pleased to submit the enclosed water use permit applications and $25 filing fees for Well Nos. 2001-04 and -05 to be located in the Ewa by Gentry development. We previously submitted well construction permits for each of these wells which have not yet been processed by CWRM. Since the owner is anxious to drill and outfit these wells as soon as possible, your prompt action on these permit applications would be greatly appreciated.

If you have questions or need additional information, please call Randolph Ouye at the Gentry Development Company or me. Thank you for your attention to this matter.

Sincerely,

Greg Fukumitsu

Enclosures

cc: Randolph Ouye - Gentry Dev. Co.
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

APPLICATION FOR WATER USE PERMIT

7-1-93

PERMITTEE INFORMATION

1. (a) APPLICANT
   Firm/Name: GENTRY DEVELOPMENT COMPANY
   Contact Person: Randolph Ouye
   Address: ________________

   (b) LANDOWNER OF SOURCE
   Firm/Name: GENTRY DEVELOPMENT COMPANY
   Contact Person: Randolph Ouye
   Address: ________________

SOURCE INFORMATION

2. WATER MANAGEMENT AREA: Pearl Harbor Management Area
   (Ewa Caprock)
   ISLAND: Oahu

3. (a) EXISTING WELL/DIVERSION NAME AND STATE NUMBER: 2001-04
   (b) PROPOSED (NEW) WELL/DIVERSION NAME: Ewa Gentry - Geiger Road Apt.
   (c) LOCATION: Address: In Ewa by Gentry Development
   Tax Map Key: 9-1-61:7
   (Attach a USGS map, scale 1" = 2000", and a property tax map showing source location referenced to established property boundaries.)

USE INFORMATION

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

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

6. LOCATION OF PROPOSED WATER USE: (If possible, show on same maps as source location. Otherwise, attach similar maps)
   (a) Proposed use of water is: Existing
   (b) Tax Map Key: Location of use is on multiple TMKs, please complete Table 1 on back of application
   (c) Address: In Ewa by Gentry Development
   (d) Current Land Use District (check one): Urban
   Agriculture
   Conservation
   Rural
   (e) Current County Zoning Code: ________________

7. QUANTITY OF WATER REQUESTED: 40,000 gallons per day

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

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

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

11. TOTAL NUMBER OF RESIDENCES TO BE SERVED: Not Applicable

12. TOTAL ACRES TO BE IRRIGATED AND TYPE OF CROP: 13 Acs. of Park Lawn and Road Landscaping

13. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION: (daytime hours of operation, ex. 7 a.m. to 2 p.m.)

14. APPLICANT MUST BRIEFLY DESCRIBE FOLLOWING POTENTIAL RESTRICTIONS ON WATER USE:
    (a) Impact on Sustainable yield (?): No
    (b) Instream Flow Standards affected (?): No
    (c) Hawaiian Home Lands use affected (?): No
    (d) Other existing legal uses affected (?): No
    (e) Other (pending permits, EIS, etc.)?: No

15. REMARKS, EXPLANATIONS:

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

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 instream flow standards, reserved uses as defined by the Commission, and Hawaiian Home Lands future uses. In addition, applicant understands that, upon approval by any other governing body, the permit shall be amended by the Commission if any.
16. REMARKS, EXPLANATIONS (cont'd):

### TABLE 1. MULTIPLE TMKs TO USE REQUESTED WATER

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<tr>
<th>Project Name</th>
<th>TMK</th>
<th>Current County Zoning Code</th>
<th>Net Acres</th>
<th>GPD/Acre</th>
<th>Total GPD</th>
<th>Over Next 4 Years</th>
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Check Subtotal

|          |          |              | 25.00     | 0.00    | 25.00      |

Vendor: 14536  Dept of Land & Natural  Date: 07/16/1993  Check No: [redacted]
APPLICATION FOR WATER USE PERMIT

State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

APPLICATION FOR WATER USE PERMIT
7-1-93

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. PERMITTEE INFORMATION

   (a) APPLICANT
   Gentry Development Company
   Contact Person: Randolph Ouye
   Address: ____________________________

   (b) LANDOWNER OF SOURCE
   Gentry Development Company
   Contact Person: Randolph Ouye
   Address: ____________________________

2. SOURCE INFORMATION

   Pearl Harbor Management Area
   (Ewa Caprock)
   ISLAND: Oahu

3. LOCATION OF PROPOSED WATER USE:

   (a) EXITING WELL/DIVERSION NAME AND STATE NUMBER:
   2001-05
   (b) PROPOSED (NEW) WELL/DIVERSION NAME:
   Ewa Gentry - Soda Creek III
   (c) LOCATION: Address ____________________________
   In Ewa by Gentry Development
   Tax Map Key 9-1-70:132
   (Attach a USGS map, scale 1" = 2000, and a property tax map showing source location referenced to established property boundaries.)

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

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

USE INFORMATION

6. LOCATION OF PROPOSED WATER USE: (if possible, show on same maps as source location. Otherwise, attach similar maps)

   (a) Proposed use of water is:
   Existing
   New
   Both existing & new uses
   (b) Tax Map Key:
   (If location of use is over multiple TMKs, please complete Table 1 on back of application)
   (c) Address: ____________________________
   In Ewa by Gentry Development
   (d) Current Land Use District (check one):
   Urban
   Agriculture
   Conservation
   Rural
   (e) Current County Zoning Code: ____________________________

7. QUANTITY OF WATER REQUESTED: ____________________________ gallons per day

8. METHOD OF MEASUREMENT:
   Flowmeter
   Open-pipe
   Weir
   Office
   Other (explain)

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

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

   For questions 12 & 13: If multiple TMKs are involved, please complete Table 1 on back of application.

11. TOTAL NUMBER OF RESIDENCES TO BE SERVED: ____________________________

12. TOTAL ACRES TO BE IRRIGATED AND TYPE OF CROP:
    ____________________________ Acs. of Park Lawn and Road Landscaping
    ____________________________ acre (s)
    ____________________________ (crop)

13. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION:
    (daytime hours of operation, ex. 7 a.m. to 2 p.m.)

14. APPLICANT MUST BRIEFLY DESCRIBE FOLLOWING POTENTIAL RESTRICTIONS ON WATER USE:

   (a) Impact on Sustainable yield (T?): ____________________________
   Water use is subject to regional plan restrictions
   No

   (b) Instream Flow Standards affected (?):
   No

   (c) Hawaiian Home Lands use affected (?):
   No

   (d) Other existing legal uses affected (?):
   No

   (e) Other (pending permits, EIS, etc.) (?):
   No

15. REMARKS, EXPLANATIONS:

   ____________________________ (if more space is needed, continue on back side)

   ____________________________

Gentry Development Company, a Hawaii limited partnership
by
Gentry-Pacific, Ltd.
its General Partner

by
s

Gentry Development Company
a Hawaii limited partnership
Gentry-Pacific, Ltd.
s
Signature
Randolph K. Ouye, Vice Pres.

Signature
Randolph K. Ouye, Vice Pres.

Date
JUL 16, 93

Date
JUL 16, 93

For Official Use Only:
Date Received ____________________________
Date Accepted ____________________________

Hydrologic Unit No. ____________________________
State Well No. ____________________________

4/13/93 WUPA Form
### TABLE 1. MULTIPLE TMKs TO USE REQUESTED WATER

<table>
<thead>
<tr>
<th>Project Name</th>
<th>TMK</th>
<th>Current County Zoning Code</th>
<th>Net Acres</th>
<th>GPD/Acre</th>
<th>Total GPD</th>
<th>% of Total To Be Used Over Next 4 Years</th>
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</thead>
<tbody>
<tr>
<td>Soda Creek III, Tot Lot</td>
<td>9-1-70-132</td>
<td>R-5</td>
<td>0.80</td>
<td></td>
<td></td>
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<tr>
<td>North-South Road, South of Geiger Road</td>
<td>Public Road</td>
<td></td>
<td></td>
<td>1.95</td>
<td></td>
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<tr>
<td>Soda Creek III Roads</td>
<td>Public Road</td>
<td></td>
<td></td>
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<tr>
<td>Fort Weaver Road, South of Geiger Road</td>
<td>Public Road</td>
<td></td>
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</tr>
</tbody>
</table>
February 16, 1993

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

Dear Ms. Loui:

Subject: Updated Information on Water Use Permit Applications

Pursuant to your request of February 4, 1993, we submit the attached additional information to support our applications for Well Nos. 2001-03, 2001-07, 2001-08 and 2002-12.

We understand that you will be taking these applications before the Commission tomorrow for action. We would appreciate your recommendation for approval.

Please feel free to call me if I can be of further service.

Very truly yours,

GENTRY HAWAII, LTD.

[Signature]

Ronald M. Uemura, PE
Vice President - Engineering
### EWA BY GENTRY - STATUS OF NON-POTABLE WELLS

**DATE: FEBRUARY 12, 1993**

<table>
<thead>
<tr>
<th>WELL NO.</th>
<th>AREA NO.</th>
<th>SUBMITTED</th>
<th>APPROVED**</th>
<th>WATER USE PERMITS</th>
<th>APPROVED</th>
<th>EXISTING **</th>
<th>TAX MAP KEY</th>
<th>ZONING</th>
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<td>G-3</td>
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<td>5/24/89</td>
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<td></td>
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<tr>
<td>2001-02</td>
<td>ENTRY</td>
<td>1/31/89</td>
<td>X</td>
<td>2/28/90</td>
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<td></td>
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<td>2001-04</td>
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<td>2/18/92</td>
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<td>A1</td>
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<td>2001-05</td>
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<td>2/18/92</td>
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<td></td>
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<td>2001-06</td>
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<td>9/13/89</td>
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<td>(2002-13)</td>
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<td>9-1-10:POR 7</td>
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<td>9-1-10:POR 2</td>
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<td></td>
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<td>A1</td>
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</table>

* TEMPORARY LONG TERM PUMPING USE - EXPIRES 5/29/92; MUST APPLY FOR PERMANENT USE.

** APPROVAL GOOD FOR ONLY 2 YEARS.

*X* - CANNOT ACCOUNT FOR DATE.
<table>
<thead>
<tr>
<th>ACREAGE (MGD)</th>
<th>FLOW</th>
<th>YEAR WELL</th>
<th>REQUIRED</th>
<th>CONSERVATION PLANS/METHODS</th>
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<td>0.05</td>
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<td>USE OF XERISCAPE TYPE PLANTS &amp;</td>
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<td>DRIBBLER/DRIP IRRIGATION</td>
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<td>16</td>
<td>0.08</td>
<td>1997</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
November 21, 1994

Gentry Homes, Ltd.

Gentlemen:

On Friday, November 18, 1994 we completed the elevation survey of six (6) wells within the Ewa by Gentry Development at Honouliuli, Ewa, Oahu, Hawaii.

The origin of the benchmark for this project is the City and County Street Monument at the intersection of Farrington Highway and Makakilo Drive. The elevation being 115.79 msl. This datum has been used by Tom Nance, Water Resources Engineering for their studies of the Ewa Plain. We used a supplemental benchmark set by our firm during the original study for the Estate of James Campbell. Said benchmark is a "□" cut on the Waianae/makai end of the bridge south of the Ewa Municipal Golf Course on Fort Weaver Road.

The survey was run using a Wild NA3000 precise level with digital readout. The error of our run over 6 miles was 0.01 feet.

The results are as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplemental benchmarks, &quot;□&quot; cut on curb fronting guard shack on Fort Weaver at Kolowaka</td>
<td>29.07 msl</td>
</tr>
<tr>
<td>Sun Terr well (State No. 2001-05) &quot;□&quot; top of vault top of sounding tube</td>
<td>36.12 msl</td>
</tr>
<tr>
<td>Sunrise Well (State No. 2001-04) &quot;□&quot; top of vault top of sounding tube</td>
<td>38.14 msl</td>
</tr>
<tr>
<td>Description</td>
<td>Elevation</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Arbors Well (State No. 2001-07)</td>
<td>33.29 msl</td>
</tr>
<tr>
<td>&quot;Ω&quot; top of vault</td>
<td>28.93 msl</td>
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<tr>
<td>top of sounding tube</td>
<td></td>
</tr>
<tr>
<td>Palm Villa I. Well (State No. 2001-06)</td>
<td>40.45 msl</td>
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<tr>
<td>&quot;Ω&quot; top of vault</td>
<td>37.43 msl</td>
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<td>top of sounding tube</td>
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<tr>
<td>Palm Villa II Well (State No. 2001-08)</td>
<td>35.94 msl</td>
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<tr>
<td>&quot;Ω&quot; top of vault</td>
<td>31.96 msl</td>
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<tr>
<td>top of sounding tube</td>
<td></td>
</tr>
<tr>
<td>Palm Court Well (State No. 2002-12)</td>
<td>40.11 msl</td>
</tr>
<tr>
<td>&quot;Ω&quot; top of vault</td>
<td>35.89 mls</td>
</tr>
<tr>
<td>top of sounding tube</td>
<td></td>
</tr>
</tbody>
</table>

Please call, should you have any questions on this matter.

Very truly yours,

WALTER P. THOMPSON, INC.

James R. Thompson
President

JRT:hf
December 28, 1993

Mr. Keith W. Ahue  
Chairperson  
Commission on Water Resource Management  

Dear Mr. Ahue:

Subject: Soda Creek III Well ~ Well No. 2001-05

Enclosed please find a signed permit for the above well that was issued on December 21, 1993, by the Commission.

Please be advised that Gentry Development Company will be commencing construction and testing of the new well and installation of the pump within the next thirty days. Our contractor will be Roscoe Moss, Ltd. and our engineer is Tom Nance Water Resource Engineering.

We will submit the necessary reports to the Commission after completion of testing.

Very truly yours,

GENTRY HAWAII, LTD.

Randolph K. Ouye,  
Senior Vice President

RKO:sacm  
cc: T. Nance  

/sc3well-ewa
WELL CONSTRUCTION/PUMP INSTALLATION PERMIT

for

Soda Creek III Well
Well No. 2001-05
Ewa Caprock Ground Water Management Area, Oahu

TO: Gentry Development Company

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct, test, and install a pump in Soda Creek III Well (Well No. 2001-05), is approved subject to the following conditions:

1. The Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, before any work covered by this permit commences.

2. The permit shall be for construction, testing, and installation of a pump in the well. The applicant shall coordinate with the Commission and conduct a pumping test in accordance with the protocol established by the Commission. A means to accurately measure water levels, acceptable to the Commission, shall also be provided. The applicant shall submit to the Commission the test results and proposed permanent pump information, based on the test, for approval by the Chairperson. No permanent pump may be installed and no water used from the well without the Chairperson's approval.

3. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct and pump water from a well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

4. The applicant shall comply with all applicable laws, rules, and ordinances.

5. 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.

6. The permit may be revoked if work is not started within six (6) 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 approval.
7. The following shall be submitted to the Commission within 30 days after completion of the work:
   a. Well Completion Report.
   b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test record; including time, pumping rate, drawdown, chloride content, and water quality data.

8. The permit application and staff submittal approved by the Commission at its meeting on November 17, 1993 shall be incorporated herein by reference.

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed.

Applicant's Signature: [Signature]
Date: [Date]
Printed Name: Randolph K. Ouye
Firm or Title: Sr. Vice President, Gentry Hawaii, Ltd.

Please sign and return one copy of this permit to the Commission and retain a copy for your record.

cc: USGS
   Department of Health
   Safe Drinking Water Branch
   Wastewater Branch
   Ground Water Protection Program
   Honolulu Board of Water Supply
   Tom Nance Water Resources Engineering
WELL CONSTRUCTION/PUMP INSTALLATION PERMIT

for

Soda Creek III Well
Well No. 2001-05
Ewa Caprock Ground Water Management Area, Oahu

TO: Gentry Development Company

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct, test, and install a pump in Soda Creek III Well (Well No. 2001-05), is approved subject to the following conditions:

1. The Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, before any work covered by this permit commences.

2. The permit shall be for construction, testing, and installation of a pump in the well. The applicant shall coordinate with the Commission and conduct a pumping test in accordance with the protocol established by the Commission. A means to accurately measure water levels, acceptable to the Commission, shall also be provided. The applicant shall submit to the Commission the test results and proposed permanent pump information, based on the test, for approval by the Chairperson. No permanent pump may be installed and no water used from the well without the Chairperson's approval.

3. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct and pump water from a well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

4. The applicant shall comply with all applicable laws, rules, and ordinances.

5. 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.

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   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test record; including time, pumping rate, drawdown, chloride content, and water quality data.

8. The permit application and staff submittal approved by the Commission at its meeting on November 17, 1993 shall be incorporated herein by reference.

KEITH W. AHUE, Chairperson
Commission on Water Resource Management

DEC 21 1993
Date of Issuance

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed.

Applicant's Signature: ___________________________ Date: ______________

Printed Name: ________________________________
Firm or Title: ________________________________

Please sign and return one copy of this permit to the Commission and retain a copy for your record.

cc: USGS
   Department of Health
       Safe Drinking Water Branch
       Wastewater Branch
       Ground Water Protection Program
   Honolulu Board of Water Supply
   Tom Nance Water Resources Engineering
December 28, 1993

Mr. Keith W. Ahue  
Chairperson  
Commission on Water Resource Management

Dear Mr. Ahue:

Subject: Geiger Apartment Well ~ Well No. 2001-04

Enclosed please find a signed permit for the above well that was issued on December 21, 1993, by the Commission.

Please be advised that Gentry Development Company will be commencing construction and testing of the new well and installation of the pump within the next thirty days. Our contractor will be Roscoe Moss, Ltd. and our engineer is Tom Nance Water Resource Engineering.

We will submit the necessary reports to the Commission after completion of testing.

Very truly yours,

GENTRY HAWAII, LTD.

Randolph K. Ouye  
Senior Vice President

cc: T. Nance

/ggaptwl-ewa
WELL CONSTRUCTION/PUMP INSTALLATION PERMIT

for

Geiger Apartment Well
Well No. 2001-04
Ewa Caprock Ground Water Management Area, Oahu

TO: Gentry Development Company

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct, test, and install a pump in Geiger Apartment Well (Well No. 2001-04), is approved subject to the following conditions:

1. The Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, before any work covered by this permit commences.

2. The permit shall be for construction, testing, and installation of a pump in the well. The applicant shall coordinate with the Commission and conduct a pumping test in accordance with the protocol established by the Commission. A means to accurately measure water levels, acceptable to the Commission, shall also be provided. The applicant shall submit to the Commission the test results and proposed permanent pump information, based on the test, for approval by the Chairperson. No permanent pump may be installed and no water used from the well without the Chairperson's approval.

3. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct and pump water from a well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.
4. The applicant shall comply with all applicable laws, rules, and ordinances.

5. 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.

6. The permit may be revoked if work is not started within six (6) 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 approval.

7. The following shall be submitted to the Commission within 30 days after completion of the work:
   a. Well Completion Report.
   b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test record; including time, pumping rate, drawdown, chloride content, and water quality data.

8. The permit application and staff submittal approved by the Commission at its meeting on November 17, 1993 shall be incorporated herein by reference.

KEITH W. AHUE, Chairperson
Commission on Water Resource Management

DEC 21 1993
Date of Issuance
I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed.

Applicant's Signature: [Signature] Date: 1/27/83

Printed Name: Randolph K. Oupe, Sr. Vice President

Firm or Title: Gentry Hawaii, Ltd.

Please sign and return one copy of this permit to the Commission and retain a copy for your record.

cc: USGS
Department of Health
  Safe Drinking Water Branch
  Wastewater Branch
  Ground Water Protection Program
Honolulu Board of Water Supply
Tom Nance Water Resources Engineering
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

WELL CONSTRUCTION/PUMP INSTALLATION PERMIT

for

Geiger Apartment Well
Well No. 2001-04
Ewa Caprock Ground Water Management Area, Oahu

TO: Gentry Development Company

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct, test, and install a pump in Geiger Apartment Well (Well No. 2001-04), is approved subject to the following conditions:

1. The Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, before any work covered by this permit commences.

2. The permit shall be for construction, testing, and installation of a pump in the well. The applicant shall coordinate with the Commission and conduct a pumping test in accordance with the protocol established by the Commission. A means to accurately measure water levels, acceptable to the Commission, shall also be provided. The applicant shall submit to the Commission the test results and proposed permanent pump information, based on the test, for approval by the Chairperson. No permanent pump may be installed and no water used from the well without the Chairperson's approval.

3. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct and pump water from a well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.
4. The applicant shall comply with all applicable laws, rules, and ordinances.

5. 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.

6. The permit may be revoked if work is not started within six (6) 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 approval.

7. The following shall be submitted to the Commission within 30 days after completion of the work:
   a. Well Completion Report.
   b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test record; including time, pumping rate, drawdown, chloride content, and water quality data.

8. The permit application and staff submittal approved by the Commission at its meeting on November 17, 1993 shall be incorporated herein by reference.

KEITH W. AHUE, Chairperson
Commission on Water Resource Management

DEC 21 1993
Date of Issuance
I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed.

Applicant's Signature: ___________________ Date: __________

Printed Name: __________________________________________

Firm or Title: __________________________________________

Please sign and return one copy of this permit to the Commission and retain a copy for your record.

cc: USGS
   Department of Health
       Safe Drinking Water Branch
       Wastewater Branch
       Ground Water Protection Program
   Honolulu Board of Water Supply
   Tom Nance Water Resources Engineering
MEMORANDUM

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

FROM: Don Hibbard, Administrator
State Historic Preservation Division

SUBJECT: Application for Well Construction Permit, Wells 2001-04 and 2001-05 (Gentry Development Company)
Honouliuli, 'Ewa, O'ahu
TMK: 9-1-61: 5, 8

HISTORIC PRESERVATION PROGRAM CONCERNS:

A review of our records shows that there are unlikely to be significant historic sites at these parcels, as they have for many years been planted in sugarcane. Therefore, we believe that well construction at these parcels will have "no effect" on historic sites.

TD: jen
Mr. Randolph Ouye
Gentry-Pacific, Ltd.

Dear Mr. Ouye:

We have received your applications and filing fees for permits to construct two wells (Well Nos. 2001-04,05) at Ewa, Oahu, (TMKs 9-1-61:08,05). We are reviewing the applications for completeness.

Should you have questions, please call the Commission on Water Resource Management staff at [Redacted].

Sincerely,

[Signature]

RAE M. LOUI
Deputy Director

NF:ky
Mr. Kazu Hayashida  
Manager and Chief Engineer  
Board of Water Supply  
City and County of Honolulu

Dear Mr. Hayashida:

Well Construction and Pump Installation Permit Application(s)

Transmitted for your review and comment is a copy of the following permit application(s):

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
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<tbody>
<tr>
<td>Oahu</td>
<td>Gentry-Geiger Rd. Apts.</td>
<td>2001-04</td>
<td>Well Construction</td>
</tr>
<tr>
<td>Oahu</td>
<td>Gentry-Soda Creek 3</td>
<td>2001-05</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Please review the application(s) pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this letter.

Should you have any questions, please contact the Commission on Water Resource Management staff at [contact information removed].

Sincerely,

RAE M. LOUI  
Deputy Director
Mr. Clayton H. W. Hee
Chairman & Trustee At Large
Office of Hawaiian Affairs

Attn: Ms. Linda Delaney, Land & Natural Resources Division

Dear Mr. Hee:

Well Construction and Pump Installation Permit Application(s)

Transmitted for your review and comment is a copy of the following permit application(s):

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<td>Hawaii</td>
<td>Opihihali Well</td>
<td>1652-01</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Please review the application(s) pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this letter.

Should you have any questions, please contact Rae M. Loui, Deputy Director at [Contact Information].

Very truly yours,

[Signature]

WILLIAM W. PATY

Enc.
Honorable Hoaliku L. Drake  
Director  
Department of Hawaiian Home Lands  
State of Hawaii  

Dear Mrs. Drake:

Well Construction and Pump Installation Permit Application(s)

Transmitted for your review and comment is a copy of the following permit application(s):

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Please review the application(s) pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this letter.

Should you have any questions, please contact Rae M. Loui, Deputy Director at

Very truly yours,

WILLIAM W. PATY

Enc.
Ms. Marjorie Ziegler  
Sierra Club Legal Defense Fund, Inc.

Dear Ms. Ziegler:

Well Construction and Pump Installation Permit Application(s)

Transmitted for your information are copies of recent well permit application(s):

<table>
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Should you have questions, please contact the Commission on Water Resource Management staff at [phone number]

Sincerely,

RAE M. LOUI  
Deputy Director

NF:ky  
Enc.
MEMORANDUM

TO: Don Hibbard, Director
   Historic Preservation Program

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

SUBJECT: Well Construction and Pump Installation Permit Application(s)

Transmitted for your review and comment is a copy of the following permit application(s):

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Please review the application(s) pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this memo.

Should you have any questions, please contact the Commission on Water Resource Management staff at Enc.

Enc.
Mr. Thomas Arizumi, Chief
Environmental Management Division
State Department of Health
Five Waterfront Plaza
Attn: Mr. William Wong

Dear Mr. Arizumi:

Well Construction and Pump Installation Permit Application

Transmitted for your review and comment is a copy of the following permit application(s):

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Please review the application(s) pursuant to your area of concern and submit your comments to us, orally or in writing, ten (10) working days from date of this letter.

Should you have any questions, please contact the Commission on Water Resource Management staff [redacted].

Sincerely,

RAE M. LOUI
Deputy Director

Enc.
CHECKLIST

V WELL CONSTRUCTION PERMIT

PUMP INSTALLATION PERMIT

WELL NAME or LOCATION: Gentry-Soda Creek 3

ISLAND: Oahu

WELL NUMBER: 2001-04-05

Tax Map Key: 9-1-61:08

OWNER/OPERATOR:

Firm Name: Gentry-Pacific, Ltd.
Contact Person: Randolph Ouye

LANDOWNER:

Firm Name: same
Contact Person: __________
Address: __________
Phone: __________

Date application received: 2-19-92
Date acknowledged receipt/request more info: 3-18-92
Date application accepted: ____________________
Suspense date (90 days): ____________________
Date filing fee deposited: ____________________

Application sent to following:

Dept. of Hawn Home Lands 3-18-92
Dept. of Health 3-18-92
Office of Hawn. Affairs 3-18-92
State Hist Pres Div 2-18-92
Dept/Bd of Water Supply 3-18-92
Sierra Club L. D. F. 2-18-92
Koolauloa NB #28 (Oahu) 2-18-92
Dept.Pub. Wrks (Hawaii) 2-18-92

Additional List (Mo’ili’ili):

__________________________________________
__________________________________________
__________________________________________

Date agenda due: ____________________
Date submittal due: ____________________
Date submittal sent to applicant: ____________________

Date application approved or disapproved: ____________________
Date applicant notified of decision: ____________________

REMARKS: Re-application
Dear Manabu:

Well Drilling Permit Applications for the
Ewa by Gentry Project

The enclosed two well drilling permit applications and check for the filing fees are submitted on behalf of Gentry-Pacific, Ltd. These wells would be drilled, cased, and pump tested for their ultimate use to irrigate the landscaping at the Geiger Road Apartments and Soda Creek 3 projects within Ewa by Gentry. These wells would have State Nos. 2001-04 and 2001-05.

Also included is a map showing the six wells which have been completed and the two for which we are seeking a permit.

If you have any questions, please contact me or Randy Ouye at Gentry-Pacific.

Sincerely,

Greg Oikumune

Tom Nance

TN:It

cc: Randy Ouye

Enclosures
Locations of the Ewa by Gentry Wells
Vendor: 14536 Dept of Land & Natural Date: 02/07/10 Check No: 00003096

Date Description Gross Amt Adjusts Net Amount
01/31/1992 Well Const Permit Fee 50.00 0.00 50.00

for Well Nos: 2001-04 ($25.00) 2001-05 ($25.00)

Check Subtotal 50.00 0.00 50.00

Vendor: GENTRY DEVELOPMENT COMPANY

Receive
FEB 7, 1992
GENTRY HAWAII, LTD.

Pay
50 DOLLARS AND 00 CENTS

TO THE ORDER OF
Dept of Land & Natural Resources - Div Water/Land Dev
P.O. Box 373
Honolulu HI 96809

Signed: Victoria L. Beier

First Hawaiian Bank
IN THIS BLANK
CHECK AMOUNT

02/07/1992

50.00

NIK
X WELL CONSTRUCTION PERMIT

PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water and Land Development. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Department of Land and Natural Resources. (Filing fee waived for government agencies.) If necessary, phone

Hydrology/Geology Section for assistance.

Geiger Road Apartments Well

1. WELL LOCATION

Island Oahu

Tax Map Key 9-1-61:08

Address Ewa by Gentry Construction Site, Well to be No. (Geiger Rd Apt.)

(Attach a USGS map (scale 1"=2000') and property tax map showing well location referenced to established property boundaries.)

2. WELL OWNER

Firm Name Gentry-Pacific, Ltd.

Contact Person Randolph Ouye

Address

3. PROPOSED CONTRACTOR FOR:

Name Roscoe Moss Company

Address

4. PROPOSED WORK

Drill New Well

Alter

Install New Pump

Deepen

Seal

Replace Pump

Redrill

Abandon

Modify Pump

(Briefly describe the proposed work and fill in the diagram on the back of this form.)

5. PROPOSED USE

Municipal (including hotels, stores, etc.)

Military

Domestic (individual, noncommercial water systems)

Industrial

Irrigation (specify) Landscape at Geiger Apts.

Other (specify) ___

6. PROPOSED AMOUNT OF WITHDRAWAL

Approx. 80,000 gallons per day

7. PROPOSED PUMP INFORMATION

Pump Type: Vertical Turbine

Submersible

Centrifugal

Motor: Diesel

Gas

Electric: 10 Rated Horsepower

Rated Pump Capacity 130 gallons per minute (gpm)

Well Owner (print): GENTRY DEVELOPMENT COMPANY

By GENTRY PACIFIC, LTD. GENTRY PACIFIC, LTD.

Signature: RANDOLPH K. Ouye

Date: ________________

Land Owner (print): a Hawaii limited partnership

By GENTRY PACIFIC, LTD. its General Partner

Signature: RANDOLPH Ouye

Date: ________________

For Official Use Only:

Field Checked By

Latitude

Longitude

Hydrologic Unit

State Well No. 2001-04

Geiger Rd Apt.
Briefly describe the proposed work:

The well will be drilled, cased, and pump tested for its possible use to irrigate landscaping at Gentry's Geiger Road Apartments project.

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.
APPLICATION FOR

GENTRY HAWAII, LTD.

PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water and Land Development. Application must be accompanied by a non-refundable filing fee of $125.00 payable to the Department of Land and Natural Resources. (Filing fee waived for government agencies.) If necessary, phone 141-1663, Hydrology/Geology Section for assistance.

Soda Creek 3 Well

1. WELL LOCATION

Island: Oahu  Tax Map Key: 9-1-61:05
Address: Ewa by Gentry Construction Site, Well to be No. 2001-05 (Soda Creek 3)

(Attach a USGS map (scale 1"=2000') and property tax map showing well location referenced to established property boundaries.)

2. WELL OWNER

Firm Name: Gentry-Pacific, Ltd.
Contact Person: Randolph Ouye

LANDOWNER

Firm Name: Gentry-Pacific, Ltd.
Contact Person: Randolph Ouye

3. PROPOSED CONTRACTOR FOR:

Well Drilling  Pump Installation

Name: Roscoe Moss Company

Contractor’s License No.: 16437

4. PROPOSED WORK

Drill New Well  Deepen  Redrill
Alter  Seal  Abandon
Install New Pump  Replace Pump  Modify Pump

(Briefly describe the proposed work and fill in the diagram on the back of this form.)

5. PROPOSED USE

Municipal (including hotels, stores, etc.)  Military
Domestic (individual, noncommercial water systems)  Industrial
Irrigation (specify)  Landscape at Soda Creek #3  Other (specify)

6. PROPOSED AMOUNT OF WITHDRAWAL

Approx. 80,000 gallons per day

7. PROPOSED PUMP INFORMATION

Pump Type: Submersible  Centrifugal

Motor: Diesel  Gas  Electric: 10
Rated Pump Capacity: 130 gallons per minute (gpm)

GENTRY DEVELOPMENT COMPANY

By GENTRY PACIFIC, LTD.

General Partner

By GENTRY PACIFIC, LTD.

Its General Partner

For official use only: Latitude

Hydrologist Unit: State Well No. 2001-05

Date:
briefly describe the proposed work:

The well will be drilled, cased, and pump tested for its possible use to irrigate landscaping at Gentry's Soda Creek 3 project.

---

**PROPOSED SECTION OF WELL**

<table>
<thead>
<tr>
<th>Elevation at top of casing</th>
<th>37 ft., msl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Elev.</td>
<td>35 ft., msl*</td>
</tr>
<tr>
<td>Cement Grout</td>
<td>30 ft.</td>
</tr>
<tr>
<td>Hole Dia.</td>
<td>16 in.</td>
</tr>
<tr>
<td>Total Depth</td>
<td>57 ft.</td>
</tr>
<tr>
<td>Rock Packing</td>
<td>0 ft.</td>
</tr>
<tr>
<td>Solid Casing:</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>ASTM A-242 (Corten) Steel</td>
</tr>
<tr>
<td>Length</td>
<td>35 ft.</td>
</tr>
<tr>
<td>Diameter</td>
<td>12 in.</td>
</tr>
<tr>
<td>Wall thickness</td>
<td>0.3125 in.</td>
</tr>
<tr>
<td>Casing: /X/Perforated //Screen</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>ASTM A-242 (Corten) Steel</td>
</tr>
<tr>
<td>Length</td>
<td>20 ft.</td>
</tr>
<tr>
<td>Diameter</td>
<td>12 in.</td>
</tr>
<tr>
<td>Wall thickness</td>
<td>0.3125 in.</td>
</tr>
<tr>
<td>Openings</td>
<td>60 sq. in./L.F.</td>
</tr>
<tr>
<td>Open Hole:</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>2</td>
</tr>
<tr>
<td>Diameter</td>
<td>16 in.</td>
</tr>
</tbody>
</table>

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.*
To: DOWALD
Attention: Ed Sakoda
From: Greg Fukumitsu
Subject: Eva Gentry Irrigation Wells

If you do not receive all pages, please telephone immediately.

We are trying to confirm if a Water Use Permit for Irrigation Well #2002-12 has been submitted. The well has been completed and will be outfitted with a irrigation pump system.

Greg - The following wells require both water use & pump installation permits from the Commission:

1902-02, 2001-03 & 05, 2002-11 & 12

Also - see attached letter of Jul 17, 1990 concerning submittal of a water use plan.

Ed
**TRANSMISSION REPORT**

**THIS DOCUMENT (REDUCED SAMPLE ABOVE) WAS SENT**

**** COUNT ****

# 3

***SEND***

<table>
<thead>
<tr>
<th>NO</th>
<th>REMOTE STATION I.D.</th>
<th>START TIME</th>
<th>DURATION</th>
<th>#PAGES</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>5-17-91</td>
<td>4:13PM</td>
<td>1'42&quot;</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL 0:01'42" 3

XEROX TELECOPIER 7020
Mr. Ronald Uemura, PE  
Director of Engineering  
Gentry Development Company  

Dear Mr. Uemura:

Thank you for your letter and the report prepared by Tom Nance Water Resources Engineering concerning your plans to use non-potable caprock water for the Ewa by Gentry project.

We agree with the report that anticipated draft and recharge for the project area, after its completion, will be substantially lower than Oahu Sugar Company's pre-existing land use. However, draft will continue to exceed recharge by irrigation return flow, causing increasing salinization of the aquifer.

A condition of the Palm Villa Irrigation Well (Well No. 2002-13) permit and a similar condition of the well construction permits for the Ewa-Gentry Caprock Wells (Well Nos. 1902-02, 2001-03 to 05, 2002-11,12) requires a water use plan, to be approved by the Chairperson, "recommending possible measures to prevent or minimize saltwater contamination and establish courses of action to prevent the aquifer from becoming too saline to use". The purpose of the water use plan is to anticipate and identify future problems and to begin the search for practical solutions to those problems. Upon approval by the Chairperson, the plan will satisfy the conditions of the Palm Villa Well water use permit and pump installation permit, and the well construction permits for the Ewa-Gentry Caprock Wells.

Please submit the water use plan at your earliest convenience. Call Manabu Tagomori at [redacted] if you have any questions.

Very truly yours,
Mr. William W. Paty, Chairperson  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  

Dear Mr. Paty:  

Subject: Ewa by Gentry - Non-Potable Water Use Plan  

We are pleased to submit this report prepared by Tom Nance Water Resources Engineering dated April 26, 1990 regarding the effect on the caprock aquifer by our project. Also included is a preliminary land use plan with the proposed non-potable well sites shown and proposed dates when the projects are expected to be occupied (start of closings).

I am hopeful that this information should adequately address your concerns on the projects effect on the caprock aquifer.

Sincerely,  

GENTRY DEVELOPMENT COMPANY  

Ronald M. Uemura, PE  
Director of Engineering

Enclosures
Mr. Norm Dyer  
The Gentry Companies  

Dear Norm:  

Evaluation of the Effect of the Ewa by Gentry Project  
on the Honooluli-Puulea Sector of the Ewa Limestone Aquifer  

As requested, I have made an assessment of expected changes to the Ewa limestone aquifer as a result of converting the 1000-acre Ewa by Gentry site from sugarcane to residential, golf course, and other urban land uses. This letter report summarizes my analysis. Information it contains responds to concerns raised by the State Water Commission regarding your water use permit application for the Palm Villa irrigation well.

Oahu Sugar Company’s pre-existing land use on the 1000-acre site is summarized on Table 1. Prior to urbanization, Oahu Sugar Company had 964 acres in cane and the balance was open and unused. Of the 964 cane acres, 340 were irrigated by basalt aquifer wells; most of this land has already been taken down by Gentry. The other 624 acres in cane, most of which is still being cultivated, are irrigated by wells drawing from the limestone aquifer. Takedowns of the remaining cane lands are scheduled in three increments: December 1990, 1993, and 1994.

Table 2 is a capsule summary of OSCO’s draft from limestone wells and recharge to the aquifer by irrigation return flow over the 1000-acre site. (The basis of irrigation application rates, plant evapotranspiration, and all other details of the analysis can be found in an enclosure to this letter.) The net draft from the aquifer is 2.065 MGD, representing the excess of its draft from wells over the irrigation return flow. The basalt-irrigated fields are a significant benefit in this regard; they contribute to irrigation return flow with water brought in from sources outside the limestone aquifer.

Table 3 is a similar summary of anticipated draft and recharge for the Ewa by Gentry project after its completion. Draft by wells and recharge by irrigation return flow will both be substantially reduced in comparison to the pre-existing land use. More significantly, the excess of draft over recharge would be just 0.429 MGD or 21 percent of the net draft that occurred during full use of the land for cane cultivation.

Sincerely,

Tom Nance  

cc:  
Ron Uemura  
TH, PT, RO  
J. Burns  
Enclosures  

TN:It  

A Belt Collins & Associates Company
Table 1
Land Use by Oahu Sugar Company Prior to the Ewa

<table>
<thead>
<tr>
<th>General Area</th>
<th>Land Use</th>
<th>Field Number</th>
<th>Area (Acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above Geiger, West of Fort Weaver</td>
<td>Basalt-Irrigated Sugarcane</td>
<td>49</td>
<td>33.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>67 (Portion)</td>
<td>80.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>69</td>
<td>105.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>72</td>
<td>79.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>73</td>
<td>41.4</td>
</tr>
<tr>
<td></td>
<td>Open and Unused</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below Geiger, West of Fort Weaver</td>
<td>Limestone-Irrigated Sugarcane</td>
<td>74 (Portion)</td>
<td>57.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>92</td>
<td>76.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>93 (Portion)</td>
<td>116.4</td>
</tr>
<tr>
<td>Above Iroquois, East of Fort Weaver</td>
<td>Limestone-Irrigated Sugarcane</td>
<td>64 (Portion)</td>
<td>116.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>66 (Portion)</td>
<td>109.0</td>
</tr>
<tr>
<td></td>
<td>Open and Unused</td>
<td></td>
<td>20.0</td>
</tr>
<tr>
<td>Below Iroquois, East of Fort Weaver</td>
<td>Limestone-Irrigated Sugarcane</td>
<td>75</td>
<td>96.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>89 (Portion)</td>
<td>51.6</td>
</tr>
<tr>
<td></td>
<td>Open and Unused</td>
<td></td>
<td>7.0</td>
</tr>
</tbody>
</table>
### Table 2

**Oahu Sugar Company's Limestone Aquifer Draft and Recharge on the 1000-Acre Ewa by Gentry Site**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (Acres)</th>
<th>Draft by Limestone Wells (MGD)</th>
<th>Recharge to Limestone Aquifer (MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugarcane: Irrigated by Basalt Aquifer Wells</td>
<td>340</td>
<td>0.000</td>
<td>1.142</td>
</tr>
<tr>
<td>Sugarcane: Irrigated by Limestone Aquifer Wells</td>
<td>624</td>
<td>4.680</td>
<td>1.473</td>
</tr>
<tr>
<td>Open and Unused</td>
<td>36</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>1000</strong></td>
<td><strong>4.680</strong></td>
<td><strong>2.615</strong></td>
</tr>
</tbody>
</table>

### Table 3

**Anticipated Limestone Aquifer Draft and Recharge After Completion of the Ewa by Gentry Project**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (Acres)</th>
<th>Draft by Limestone Wells (MGD)</th>
<th>Recharge to Limestone Aquifer (MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential: Single Family</td>
<td>511</td>
<td>0.000</td>
<td>0.291</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>191</td>
<td>0.286</td>
<td>0.201</td>
</tr>
<tr>
<td>Golf Course: Irrigated Area</td>
<td>182</td>
<td>0.910</td>
<td>0.340</td>
</tr>
<tr>
<td>Park</td>
<td>6</td>
<td>0.000</td>
<td>0.001</td>
</tr>
<tr>
<td>School</td>
<td>8</td>
<td>0.096</td>
<td>0.021</td>
</tr>
<tr>
<td>Commercial</td>
<td>6</td>
<td>0.000</td>
<td>0.002</td>
</tr>
<tr>
<td>School</td>
<td>11</td>
<td>0.000</td>
<td>0.006</td>
</tr>
<tr>
<td>Industrial</td>
<td>30</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Drainage Sumps</td>
<td>39</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>1000</strong></td>
<td><strong>1.292</strong></td>
<td><strong>0.663</strong></td>
</tr>
</tbody>
</table>
Basis of Computed Draft by Wells and Recharge
by Irrigation Return Flow Rates for Various Land Uses

Sugarcane Fields Irrigated by Basalt Aquifer Wells

(1) The only fields irrigated by basalt aquifer wells are 49, a portion of 67, 69, 72, and 73 and these total 340 acres (all are mauka of Geiger Road and west of Fort Weaver Road).

(2) Average irrigation is 0.85 MGD per 100 acres, the approximate application rate in the 1980s.

(3) Sugarcane evapotranspiration is equivalent to 100 percent of the pan evaporation rate or 90 inches per year (Figure 14 in DLNR Report R74, "Pan Evaporation: State of Hawaii, 1894–1983").

(4) Average rainfall, based on the long-term records of gages 741 and 744, is 21 inches per year.

(5) Recharge by irrigation return is irrigation application plus rainfall minus evapotranspiration:

<table>
<thead>
<tr>
<th>Flow Component</th>
<th>Inches per Year</th>
<th>MGD/100 Ac.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflow: Irrigation Application</td>
<td>114</td>
<td>0.850</td>
</tr>
<tr>
<td>Rainfall</td>
<td>21</td>
<td>0.156</td>
</tr>
<tr>
<td>Total Inflow</td>
<td>135</td>
<td>1.006</td>
</tr>
<tr>
<td>Loss to Evapotranspiration</td>
<td>90</td>
<td>0.670</td>
</tr>
<tr>
<td>Net Recharge</td>
<td>45</td>
<td>0.336</td>
</tr>
</tbody>
</table>

Sugarcane Fields Irrigated by Limestone Aquifer Wells

(1) Fields within the 1000-acre Ewa by Gentry site irrigated by limestone aquifer wells are as follows:

<table>
<thead>
<tr>
<th>Area</th>
<th>Field No.</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Makai of Geiger, West of Fort Weaver</td>
<td>74 (portion)</td>
<td>57.8</td>
</tr>
<tr>
<td></td>
<td>92</td>
<td>76.8</td>
</tr>
<tr>
<td></td>
<td>93 (portion)</td>
<td>116.4</td>
</tr>
<tr>
<td>Makai of Iroquois, East of Fort Weaver</td>
<td>75</td>
<td>96.4</td>
</tr>
<tr>
<td></td>
<td>89 (portion)</td>
<td>51.6</td>
</tr>
<tr>
<td>Mauka of Iroquois, East of Fort Weaver</td>
<td>64 (portion)</td>
<td>108.5</td>
</tr>
<tr>
<td></td>
<td>66 (portion)</td>
<td>116.5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>624.0</td>
</tr>
</tbody>
</table>
(2) Average irrigation in the 1980s was approximately 0.75 MGD per 100 acres, slightly less than on the basalt-irrigated fields.

(3) Evapotranspiration and rainfall are the same as for basalt-irrigated fields.

(4) Recharge by irrigation return is computed as follows:

<table>
<thead>
<tr>
<th>Flow Component</th>
<th>Inches per Year</th>
<th>MGD/100 Ac.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflow:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irrigation Application</td>
<td>101</td>
<td>0.750</td>
</tr>
<tr>
<td>Rainfall</td>
<td>21</td>
<td>0.156</td>
</tr>
<tr>
<td>Total Inflow</td>
<td>122</td>
<td>0.906</td>
</tr>
<tr>
<td>Loss to Evapotranspiration</td>
<td>90</td>
<td>0.670</td>
</tr>
<tr>
<td>Net Recharge</td>
<td>32</td>
<td>0.236</td>
</tr>
</tbody>
</table>

Golf Course Irrigated by Caprock Aquifer Wells

(1) The irrigation application rate will average 5000 gallons per day per acre.

(2) Evapotranspiration from turfgrass will be 70 percent of the pan evaporation rate.

(3) Computed recharge to the limestone aquifer is as follows:

<table>
<thead>
<tr>
<th>Flow Component</th>
<th>Inches per Year</th>
<th>MGD/100 Ac.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflow:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irrigation Application</td>
<td>67</td>
<td>0.500</td>
</tr>
<tr>
<td>Rainfall</td>
<td>21</td>
<td>0.156</td>
</tr>
<tr>
<td>Total Inflow</td>
<td>86</td>
<td>0.656</td>
</tr>
<tr>
<td>Loss to Evapotranspiration</td>
<td>63</td>
<td>0.469</td>
</tr>
<tr>
<td>Net Recharge</td>
<td>23</td>
<td>0.187</td>
</tr>
</tbody>
</table>

Parks Dedicated to the City and County

(1) Irrigation will be by limestone aquifer wells at 4000 GPD per acre.

(2) All other parameters are the same as for golf courses.

(3) Computed recharge is as follows:

<table>
<thead>
<tr>
<th>Flow Component</th>
<th>Inches per Year</th>
<th>MGD/100 Ac.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflow:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irrigation Application</td>
<td>54</td>
<td>0.400</td>
</tr>
<tr>
<td>Rainfall</td>
<td>21</td>
<td>0.156</td>
</tr>
<tr>
<td>Total Inflow</td>
<td>69</td>
<td>0.556</td>
</tr>
<tr>
<td>Loss to Evapotranspiration</td>
<td>63</td>
<td>0.469</td>
</tr>
<tr>
<td>Net Recharge</td>
<td>6</td>
<td>0.087</td>
</tr>
</tbody>
</table>
Multi-Family Development with Caprock-Irrigated Landscaping

(1) Irrigation will be by limestone aquifer wells at 3000 GPD per irrigated acre; half of each MF site will be landscaped and irrigated.

(2) Evapotranspiration for the range of plant materials will average 0.6 times the pan evaporation rate.

(3) Computed recharge is as follows:

<table>
<thead>
<tr>
<th>Flow Component</th>
<th>inches per year</th>
<th>MGD/100 Gross Ac.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflow: Irrigation Application</td>
<td>20</td>
<td>0.150</td>
</tr>
<tr>
<td>Rainfall</td>
<td>21</td>
<td>0.156</td>
</tr>
<tr>
<td>Total Inflow</td>
<td>42</td>
<td>0.306</td>
</tr>
<tr>
<td>Loss to Evapotranspiration</td>
<td>27</td>
<td>0.201</td>
</tr>
<tr>
<td>Net Recharge</td>
<td>15</td>
<td>0.105</td>
</tr>
</tbody>
</table>

Single-Family Residential and Other Urban Land Uses

(1) All other urban land uses will be irrigated through the BWS potable water system.

(2) Net recharge will be small but will definitely occur. Data from Dames & Moore test holes in the Seibu/Myers golf course site and from testing of the Puuloa Golf Course well, all next to existing Ewa beach residential development, confirm this.

(3) Recharge is estimated using “Land Use Effects on the Water Balance of a Tropical Island” by Thomas W. Glambellucca, National Geographic Research 2(2):125-151 (1986) as follows:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Inches/Year</th>
<th>MGD/100 Ac.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF Residential</td>
<td>7.7</td>
<td>0.057</td>
</tr>
<tr>
<td>Commercial</td>
<td>2.5</td>
<td>0.019</td>
</tr>
<tr>
<td>School</td>
<td>3.0</td>
<td>0.022</td>
</tr>
<tr>
<td>Industrial</td>
<td>2.5</td>
<td>0.019</td>
</tr>
<tr>
<td>Drainage Sumps</td>
<td>0.0</td>
<td>0.000</td>
</tr>
</tbody>
</table>
TO: Gentry Development Company

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct and test Well No. 2001-05 for multi-family common area landscape irrigation within Tax Map Key: 9-1-12 is approved subject to the following conditions:

1. The Division of Water and Land Development (DOWALD), Geology-Hydrology Section, shall be notified at 548-7619, before any work covered by this permit commences.

2. The permit shall be for construction and testing only. No permanent pump may be installed and no water used from the well without the necessary water use and pump installation permits from the Commission.

3. The issuance of the well construction permit shall in no way prejudice any future consideration by the Commission on the issuance or non-issuance of a water use permit for the well.

4. The following shall be submitted to DOWALD within 30 days after completion of the well:
   a. Well Completion Report form.
   b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.
c. As-built sectional drawing of the well.

d. Plot plan and map showing the exact location of the well.

e. Complete pumping test record; including time, pumping rate, drawdown, chloride content, and water quality data.

5. Following drilling and testing of the well, the applicant shall develop and submit a water use plan summarizing the results of the testing, recommending possible measures preventing or minimizing saltwater contamination, and establishing courses of action to follow should the aquifer become too saline to use.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. This permit may be revoked if work is not started within six months of date of issuance or if work is suspended or abandoned for six months. The work shall be completed within two years of the date of issuance.

MAY 2 d 1989

WILLIAM W. PATY, Chairperson
Commission on Water Resource Management

Date of Issuance

cc: USGS
   Department of Health,
   Drinking Water Program
   Ground Water Protection Program
   Honolulu Board of Water Supply
TO: Gentry Development Company

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct and test Well No. 2001-04 for multi-family common area landscape irrigation within Tax Map Key: 9-1-12 is approved subject to the following conditions:

1. The Division of Water and Land Development (DOWALD), Geology-Hydrology Section, shall be notified at 548-7619, before any work covered by this permit commences.

2. The permit shall be for construction and testing only. No permanent pump may be installed and no water used from the well without the necessary water use and pump installation permits from the Commission.

3. The issuance of the well construction permit shall in no way prejudice any future consideration by the Commission on the issuance or non-issuance of a water use permit for the well.

4. The following shall be submitted to DOWALD within 30 days after completion of the well:
   a. Well Completion Report form.
   b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.
c. As-built sectional drawing of the well.

d. Plot plan and map showing the exact location of the well.

e. Complete pumping test record; including time, pumping rate, drawdown, chloride content, and water quality data.

5. Following drilling and testing of the well, the applicant shall develop and submit a water use plan summarizing the results of the testing, recommending possible measures preventing or minimizing saltwater contamination, and establishing courses of action to follow should the aquifer become too saline to use.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. This permit may be revoked if work is not started within six months of date of issuance or if work is suspended or abandoned for six months. The work shall be completed within two years of the date of issuance.

MAY 24 1989
Date of Issuance

cc: USGS
Department of Health,
Drinking Water Program
Ground Water Protection Program
Honolulu Board of Water Supply
TO: Gentry Development Company

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168, entitled "Water Use, Wells, and Stream Diversion Works", your application to construct and test Well No. 1902-02 for golf course irrigation within Tax Map Key: 9-1-12 is approved subject to the following conditions:

1. The Division of Water and Land Development (DOWALD), Geology-Hydrology Section, shall be notified at 548-7619, before any work covered by this permit commences.

2. The permit shall be for construction and testing only. No permanent pump may be installed and no water used from the well without the necessary water use and pump installation permits from the Commission.

3. The issuance of the well construction permit shall in no way prejudice any future consideration by the Commission on the issuance or non-issuance of a water use permit for the well.

4. The following shall be submitted to DOWALD within 30 days after completion of the well:
   a. Well Completion Report form.
   b. Elevation (referenced to mean sea level) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
d. Plot plan and map showing the exact location of the well.

e. Complete pumping test record; including time, pumping rate, drawdown, chloride content, and water quality data.

5. Following drilling and testing of the well, the applicant shall develop and submit a water use plan summarizing the results of the testing, recommending possible measures preventing or minimizing saltwater contamination, and establishing courses of action to follow should the aquifer become too saline to use.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. This permit may be revoked if work is not started within six months of date of issuance or if work is suspended or abandoned for six months. The work shall be completed within two years of the date of issuance.

WILLIAM W. PATY, Chairperson
Commission on Water Resource Management

MAY 24 1989

Date of Issuance

cc: USGS
Department of Health,
  Drinking Water Program
  Ground Water Protection Program
Honolulu Board of Water Supply
May 15, 1989

Gentry Development Company

Gentlemen:

The Commission on Water Resource Management will be acting upon your application for well construction permits for Ewa-Gentry Exploratory Caprock Wells at its meeting on May 17, 1989, at 2:00 p.m., in the Board Room, Honolulu. Your application will be included on the agenda as Item 6 (attached).

You, or your representative, are invited to attend the meeting.

Sincerely,

MANABU TAGOMORI
Deputy Director

ES:ko
Encl.
March 15, 1989

The Honorable William W. Paty, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii

Dear Mr. Paty:

SUBJECT: WELL CONSTRUCTION PERMIT APPLICATIONS
EWAGENTRY EXPLORATORY CAPROCK WELLS
STATE WELL NOS. 1902-02, 2001-03 TO 05, AND 2002-11 TO 13
EWA, OAHU

Thank you for the opportunity to review and comment on the subject applications.

Since the proposed wells are intended to be used only for irrigating a
golf course and common areas in a multi-family housing development, the
Department's Administrative Rules, Title 11, Chapter 20, "Potable Water
Systems," are not applicable. However, should the well's use be modified to
include domestic uses, then the source shall be regulated under Chapter 20.

If you should have any questions, please contact the Drinking Water
Program at

Very truly yours,

JOHN C. LEWIN, M.D.
Director of Health
Mr. Manabu Tagomori  
Deputy Director  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  

Dear Mr. Tagomori:

Subject: Your Letter Dated February 21, 1989 Regarding the Well Construction Permit Applications for State Well Nos. 1902-02, 2001-03 to 05, 2002-11 to 13

We have no objections to the construction of the caprock wells to provide irrigation water. The development and use of non-potable water for irrigation is in accordance with our directives to the developer to install a dual water system to conserve potable water supplies in that area.

If you have any questions, please contact Chester Lao at [redacted].

Very truly yours,

KAZU HAYASHIDA  
Manager and Chief Engineer
Honorable John C. Lewin  
Director of Health  
Department of Health

ATTENTION: Mr. Tom Arizumi, Drinking Water Program

Dear Dr. Lewin:

Well Construction Permit Applications

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-168-12(c), enclosed are the following well construction permit applications with maps for your review and comments:

Ewa-Gentry Exploratory Caprock Wells, State Well Nos. 1902-02, 2001-03 to 05, 2002-11 to 13.

Please submit any comments to us, orally or in writing, within three weeks from the date of this letter. If you have any questions, please contact Nanabu Tagomori at [contact information].

Very truly yours,

WILLIAM V. PATY

MT:ES:ko  
Enc.
February 21, 1989

Mr. Kazu Hayashida
Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu

Dear Mr. Hayashida:

Well Construction Permit Applications

We would appreciate your review and comments of the following well construction permit applications:

Ewa-Gentry Exploratory Caprock Wells, State Well Nos. 1902-02, 2001-03 to 05, 2002-11 to 13.

Please submit any comments to us, orally or in writing, within three weeks from the date of this letter.

Sincerely,

MANABU TAGOMORI
Deputy Director

ES:ko
Enc.
February 21, 1989

Mr. Randolph K. Ouye, Manager
Engineering & Industrial Development
Gentry Pacific, Ltd.

Dear Mr. Ouye:

We acknowledge receipt of your applications and filing fees for well construction permits for seven Ewa-Gentry Exploratory Caprock Wells in the Pearl Harbor Ground Water Management Area.

My staff is reviewing the applications and will contact your staff should there be any questions.

Sincerely,

Makabu Tagomori
Deputy Director

ES:ko
cc: Belt Collins & Associates (Tom Nance)
<table>
<thead>
<tr>
<th>FROM:</th>
<th>DATE:</th>
<th>FILE IN:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Review &amp; Comment</td>
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<td>F. Ching</td>
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PLEASE: Take Action By __
Route to Your Branch
Review & Comment
Draft Reply
Acknowledge Receipt
Xerox ___ copies
File
Mail
For Information

S. Kokubun
D. Hamada
L. Nanbu
F. Ching

Copy sent? Date?
The enclosed map shows Gentry's land use plan. BWS requires that non-potable sources be used for irrigation to preserve limited potable resources. Single family residential development is the only allowed exception. Gentry will develop the irrigation systems independently, each via a well pump. The project also includes a golf course for which permits for two wells have been submitted.
Mr. William Paty, Chairman  
Commission on Water Resource Management  
Division of Water Resource Management  
Department of Land and Natural Resources

Dear Mr. Paty:

Well Construction Permit Applications for Ewa by Gentry

Enclosed are seven well construction permit applications and a check for $175.00 for the filing fees. All wells are expected to be brackish. The five wells which are to be used for multi-family irrigation will be developed to meet the Board of Water Supply's requirement to install a dual water system, thereby preserving the limited supply of potable water. Pumping capacities have been tentatively set at four times the expected average irrigation rate to allow automated, night time irrigation. The other two wells will be used to irrigate the golf course. The combined draft of all seven wells is expected to be approximately 1.39 MGD.

Development of the portion of Ewa by Gentry on the west side of Fort Weaver Road will displace 470 acres of sugar cane. The 150 acres of cane land below Geiger Road are irrigated with caprock water (fields mauka of Geiger are irrigated with basalt aquifer sources). Reduction of sugar's caprock water use will be 1.3 to 1.4 MGD, offsetting Gentry's proposed use. In the future when Ewa by Gentry develops 400 acres of caprock-irrigated sugar cane land on the east side of Fort Weaver Road, the net reduction of caprock use may approach three million gallons per day.

If there are any questions, please call Mr. Tom Nance at Belt Collins & Associates at [number].

Thank you for your consideration.

Sincerely,

GENTRY PACIFIC, LTD.

[Signature]

Randolph K. Ouye, Manager

Engineering and Industrial Development

RKO:sacm

Enclosures: (7) Applications and Check

cc: Belt Collins & Associates (Tom Nance)

/wellprmt-ewa

Gentry-Pacific, Ltd.
DIVISION OF WATER RESOURCE MANAGEMENT

FROM: [Signature]

DATE: 2/10

FILE IN: 

TO: [Signature]

INITIAL: 

PLEASE: See Me

Take Action By

Route to Your Branch

Review & Comment

Draft Reply

Acknowledge Receipt

Xerox ____ copies

File

Mail

For Information

REMARKS:

[Handwritten notes]:

- Request Water
- Review & Comment
- Draft Reply
- Acknowledge Receipt
- Xerox copies

[Handwritten notes]:

2001-02: Requested "fast track" per Nanobe's instruction.

[Handwritten notes]:

Analysis on the report for the water management plan.
APPLICATION FOR

WELL CONSTRUCTION PERMIT
PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water and Land Development. Application must be accompanied by a non-refundable filing fee of $15.00 payable to the Department of Land and Natural Resources. If necessary, phone 548-7543, Hydrology/Geology Section for assistance.

1. WELL LOCATION

Island Oahu
Tax Map Key 9-1-12:5
Address Ewa, Oahu; to be Well No. 1902-02

(Attach a USGS map (scale 1"=2000') and property tax map showing well location referenced to established property boundaries.)

2. WELL OWNER

Firm Name Gentry Development Company
Contact Person Mr. Norman Dyer

LANDOWNER

Firm Name Gentry Development Company
Contact Person Mr. Norman Dyer

3. PROPOSED CONTRACTOR FOR:

Well Drilling Pump Installation
Name Will Be Competitively Bid
Phone
Address
Contractor's License No.

4. PROPOSED WORK

- Drill New Well
- Deepen
- Alter
- Install New Pump
- Seal
- Replace Pump
- Redrill
- Abandon
- Replace Pump
- Modify Pump

(Briefly describe the proposed work and fill in the diagram on the back of this form.)

5. PROPOSED USE

- Municipal (including hotels, stores, etc.)
- Military
- Domestic (individual, noncommercial water systems)
- Industrial
- Irrigation (specify) Golf Course
- Other (specify)

6. PROPOSED AMOUNT OF WITHDRAWAL 500,000 gallons per day

7. PROPOSED PUMP INFORMATION

Pump Type: Vertical Turbine Submersible Centrifugal
Motor: Diesel Gas Electric: 20 Rated Horsepower
Rated Pump Capacity 500 gallons per minute (gpm)

GENTRY DEVELOPMENT COMPANY
a Hawaii limited partnership
By Gentry-Pacific, Ltd.
Well Owner (print) Its General Partner
Signature Date JAN 31 1989

GENTRY DEVELOPMENT COMPANY
a Hawaii limited partnership
By Gentry-Pacific, Ltd.
Landowner (print) Its General Partner
Signature Date JAN 31 1989

For Official Use Only:
Field Checked By
Latitude
Longitude
Hydrologic Unit
State Well No. 1902-02

FEE DEPOSITED @ 7/11/89

Revised: 11/29/89
Briefly describe the proposed work:

PROPOSED SECTION OF WELL

Elevation at top of casing 33.0 ft., msl.

Cement Grout 32 ft.

Hole Dia. 16 in.

Total Depth 47 ft.

Rock Packing 0 ft.

Ground Elev. 32.0 ft., msl

Solid Casing:
Material PVC
Length 33 ft.
Diameter 12 in.
Wall thickness 0.687 in.

Casing: /X/Perforated / /Screen
Material PVC
Length 15 ft.
Diameter 12 in.
Wall thickness 0.687 in.
Openings 60 sq. in./L.F.

Open Hole:
Length 0
Diameter 0 in.

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.
APPLICATION FOR

WELL CONSTRUCTION PERMIT
PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send completed application with attachments to the Division of Water and Land Development. Application must be accompanied by a non-refundable filing fee of $15.00 payable to the Department of Land and Natural Resources. (Filing fee waived for government agencies.) If necessary, phone Hydrology/Geology Section for assistance.

1. WELL LOCATION

Island: Oahu  Tax Map Key: 9-1-12:5
Address: Ewa, Oahu; to be Well No. 2001-04.05

(Attach a USGS map (scale 1"=2000') and property tax map showing well location referenced to established property boundaries.)

2. WELL OWNER

Firm Name: Gentry Development Company
Contact Person: Mr. Norman Dyer

LANDOWNER

Firm Name: Gentry Development Company
Contact Person: Mr. Norman Dyer

3. PROPOSED CONTRACTOR FOR:

[ ] Well Drilling  [ ] Pump Installation

Name: Will Be Competitively Bid
Phone:
Address:
Contractor's License No.

4. PROPOSED WORK

[ ] Drill New Well  [ ] Deepen
[ ] Alter  [ ] Seal
[ ] Install New Pump  [ ] Replace Pump
[ ] Redrill  [ ] Abandon
[ ] Modify Pump

(Briefly describe the proposed work and fill in the diagram on the back of this form.)

5. PROPOSED USE

[ ] Municipal (including hotels, stores, etc.)  [ ] Military
[ ] Domestic (individual, noncommercial water systems)  [ ] Industrial
[ ] Irrigation (specify)  [ ] Multi-Family Common Area
[ ] Other (specify)

6. PROPOSED AMOUNT OF WITHDRAWAL

68,000 gallons per day

7. PROPOSED PUMP INFORMATION

Pump Type:  [ ] Vertical  [ ] Submersible
Motor:  [ ] Diesel  [ ] Gas  [ ] Electric: 15
Rated Pump Capacity: 200 gallons per minute (gpm)

GENTRY DEVELOPMENT COMPANY
a Hawaii limited partnership
By Gentry-Pacific, Ltd.
Its General Partner

Well Owner (print)
Signature:
Date: JAN 31 1989

Landowner (print)
Signature:
Date: JAN 3 1989

For Official Use Only:
Field Checked By:
Latitude:
Longitude:
Hydrologic Unit:
State Well No. 2001-05
Briefly describe the proposed work:

PROPOSED SECTION OF WELL

Elevation at top of casing 34 ft., msl.

Cement Grout 33 ft.

Hole Dia. 16 in.

Total Depth 48 ft.

Rock Packing 0 ft.

Ground Elev. 33 ft., msl

Solid Casing:
- Material: PVC Schedule 80
- Length: 33 ft.
- Diameter: 12 in.
- Wall thickness: 0.687 in.

Casing: /X/Perforated / /Screen
- Material: PVC
- Length: 15 ft.
- Diameter: 12 in.
- Wall thickness: 0.687 in.
- Openings: 60 sq. in./L.F.

Open Hole:
- Length: 0
- Diameter: 0 in.

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.
APPLICATION FOR

X. WELL CONSTRUCTION PERMIT
   PUMP INSTALLATION PERMIT

INSTRUCTIONS: Please print or type and send complete application with attachments to the Division of Water and Land Development. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Department of Land and Natural Resources. (Filing fee waived for government agencies.) If necessary, phone Hydrology/Geology Section for assistance.

1. WELL LOCATION
   Island Oahu   Tax Map Key 9-1-12:1
   Address Ewa, Oahu; to be Well No. 2001-01-01
   (Attach a USGS map (scale 1"=2000') and property tax map showing well location referenced to established property boundaries.)

2. WELL OWNER
   Firm Name Gentry Development Company
   Contact Person Mr. Norman Dyer
   LANDOWNER
   Firm Name Gentry Development Company
   Contact Person Mr. Norman Dyer

3. PROPOSED CONTRACTOR FOR: [ ] Well Drilling [ ] Pump Installation
   Name Will Be Competitively Bid
   Phone
   Address
   Contractor's License No.

4. PROPOSED WORK
   [ ] Drill New Well [ ] Deepen [ ] Redrill
   [ ] Alter [ ] Seal [ ] Abandon
   [ ] Install New Pump [ ] Replace Pump [ ] Modify Pump
   (Briefly describe the proposed work and fill in the diagram on the back of this form.)

5. PROPOSED USE
   [ ] Municipal (including hotels, stores, etc.) [ ] Military
   [ ] Domestic (individual, noncommercial water systems) [ ] Industrial
   [ ] Irrigation (specify) [ ] Multi-Family Common Area
   [ ] Other (specify)

6. PROPOSED AMOUNT OF WITHDRAWAL 48,000 gallons per day

7. PROPOSED PUMP INFORMATION
   Pump Type: [ ] Vertical Turbine [ ] Submersible
   Motor: [ ] Diesel [ ] Gas [ ] Electric: 10 [ ] Centrifugal
   Rated Pump Capacity 130 gallons per minute (gpm)

GENTRY DEVELOPMENT COMPANY
a Hawaii limited partnership
By Gentry-Pacific, Ltd.
Its General Partner

Well Owner (print)
Signature ___________________ Date JAN 31, 1988

Landowner (print)
Signature ___________________ Date JAN 31, 1988

For Official Use Only:
Field Checked By ___________________ Latitude ___________________ Hydrologic Unit ___________________
Date ___________________ Longitude ___________________ State Well No. 2001-01-01
Briefly describe the proposed work:

PROPOSED SECTION OF WELL

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<th>Elevation at top of casing</th>
<th>34 ft., msl</th>
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<tr>
<td>Ground Elev.</td>
<td>33 ft., msl</td>
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<tr>
<td>Cement Grout</td>
<td>33 ft.</td>
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<tr>
<td>Hole Dia. 16 in.</td>
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<tr>
<td>Total Depth</td>
<td>48 ft.</td>
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<td>Rock Packing</td>
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<td>Solid Casing:</td>
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<tr>
<td>Material</td>
<td>PVC Schedule 80</td>
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<tr>
<td>Length</td>
<td>33 ft.</td>
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<tr>
<td>Diameter</td>
<td>12 in.</td>
</tr>
<tr>
<td>Wall thickness</td>
<td>0.687 in.</td>
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<td>Casing:</td>
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<td>Openings</td>
<td>60 sq. in./L.F.</td>
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<td>Open Hole:</td>
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<td>Length</td>
<td>0</td>
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<tr>
<td>Diameter</td>
<td>0 in.</td>
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</table>

*Approximate elevation at time of filing application. Final elevation (msl) by a surveyor licensed by the State must be submitted at start of construction.