

ORIGINAL



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

APPLICATION FOR SURFACE WATER USE PERMIT
FOR EXISTING USE IN THE NA WAI EHA, MAUI, SURFACE WATER
MANAGEMENT AREAS

FORM SWUPA-E (NA WAI EHA, MAUI)

RECEIVED
For COMMISSION ON WATER
RESOURCE MANAGEMENT
2009 APR 29 AM 10:55
SWUP NO. 96
Event ID: SWUP.2298.6

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

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

1. APPLICANT'S NAME: John Varel
Applicant's Contact: John Varel
2. SOURCE LANDOWNER'S NAME: John Varel
Source Landowner's Contact: John Varel
Applicant's Mailing Address, or Principal Place of Business:
Source Landowner's Mailing Address, or Principal Place of Business: P.O. 1468, Wailuku, HI 96793

EXISTING SOURCE INFORMATION

The following must be attached before this application is accepted as complete:
• Portion of 7.5-Minute Series USGS topographic map (scale 1:24,000) labeled with stream and diversion locations and quad map name.
• Property Tax Map Key (TMK), showing stream or diversion location, and location of water use referenced to established property boundaries.
• Photograph(s) of the surface water diversion works and end use.

3. SURFACE WATER HYDROLOGIC UNIT AND CODE: [X] Waihee/6022 [ ] Waiehu/6023 [ ] Iao/6024 [ ] Waikapu/6001

4. DIVERSION LOCATION: Choose the appropriate category and enter information in either 4a or 4b.

4a. TMK OF STREAM DIVERSION LOCATION: Zone Sector Plat Parcel
4b. TMK OF DITCH DIVERSION LOCATION: Zone Sector Plat Parcel

5. STREAM DIVERSION: How is water diverted from the stream to your property? Check all that apply.
[ ] Pipe [ ] Pump [ ] Ditch/auwai [X] Other Describe: Leaks from current ditch system
Is the diverted water returned to the stream or ditch? [X] Yes. [ ] No. If yes, how much water is returned? Unknown

6. FLOW MEASUREMENT INFORMATION:
Does the stream diversion have a flowmeter with totalizer or other device to measure diverted amounts?
[ ] Yes. Enter the installation date:
Describe the device and enter measured amounts in Table 1.
[X] No. Explain how you are measuring flow to justify amounts shown in Table 1 in the space below

EXISTING USER INFORMATION

7. APPURTENANT RIGHT: Do you claim an appurtenant right for your water use? [ ] Yes [X] No
If yes, has the appurtenant right been established by the courts or the Commission? [ ] Yes [ ] No

8. END USER INFORMATION: Are you an end user on an existing water system? [ ] Yes [X] No
If yes, who is the operator of the water system?

9. REGISTRATION AND DECLARATION OF WATER USE: Do you have a Registration and Declaration of Water Use with the Commission?
[ ] Yes. List the file reference name(s):
[X] No

10. STREAM DIVERSION WORKS PERMIT (SDWP):
Have you ever been issued a SDWP by the Commission?
[ ] Yes. List the permit number(s):
[X] No

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

11. APPLICANT: Signature: John Varel, Date: 4/28/09
12. SOURCE LANDOWNER: Signature: John Varel, Date: 2/28/09

FILE ID: SWUP.2298.6
DOC ID: 3339

**SURFACE WATER USE PERMIT APPLICATION  
EXISTING USE (NA WAI EHA, MAUI)**

**TABLE 1: 12-MONTH AVERAGE DAILY USE**  
 Measured or Calculated Use of Water at the Source: (Check one)  Stream  Ditch  Auwai  
 As of the Effective Date of Designation, April 30, 2008 Leak

MONTH / YEAR	AVERAGE DAILY USE FOR THE MONTH IN GALLONS PER DAY (GPD)	Check one item per box				OTHER Please describe
		METERED	ESTIMATED	ACTIVE BUT UNKNOWN	INACTIVE	
May 2007	25,500 plus unknown over months	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
June 2007	25,500	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
July 2007	25,500	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
August 2007	25,500	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
September 2007	25,500	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
October 2007	25,500	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
November 2007	25,500	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
December 2007	25,500	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
January 2008	25,500	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
February 2008	25,500	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
March 2008	25,500	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
April 2008	25,500	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>SUM OF AVERAGE DAILY USE FOR THE MONTH</b>	25,500					GPD
<b>AVERAGE DAILY USE (Average of the above)</b>	25,500					GPD

**SURFACE WATER USE PERMIT APPLICATION  
EXISTING USE (NA WAI EHA, MAUI)**

**TABLE 2: LAND USE CONSISTENCY/EFFICIENCY**  
(Attach additional copies of Table 2 if necessary)

LAND USE CONSISTENCY					EFFICIENCY OF USE				
1. PURPOSE/ WATER USE CATEGORY	2. USE TMK ATTACH THE FOLLOWING: • Property tax map, showing use location in reference to established property boundaries • Photograph of the area of use	3. STATE LAND USE DISTRICT	4. CDUP REQ'D Enter either: Yes and Date approved, or Yes and not acquired, or No	5. COUNTY ZONING CODE	6. SMAP REQ'D Enter either: Yes and Date approved, or Yes and not acquired, or No	7. REQUESTED QUANTITY OF USE Gallons per Day (GPD)	8. SUB- METERED? (Yes or No)	9. UNITS OR NET ACREAGE	10. APPLICANT'S JUSTIFICATION FOR REQUESTED QUANTITY OF USE FOR ITEM 7. If applicable, attach sheets to show how this number was calculated. For irrigation uses, fill in Table 3.
<b>Uses that require potable (drinking) water</b>									
	Zone - Sector - Plat - Parcel								
	Zone - Sector - Plat - Parcel								
	Zone - Sector - Plat - Parcel								
	Zone - Sector - Plat - Parcel								
<b>TOTAL POTABLE USE</b>							<b>GPD</b>		
<b>Uses that do not require potable water</b>									
AGRCP	3 - 2 - 001 : 001 <small>Zone Sector Plat Parcel</small>	AG		AG		12,500	No	5 ac	
AGRON	3 - 2 - 001 : 001 <small>Zone Sector Plat Parcel</small>	AG		AG		10,000	No	2 ac	
Dom	3 - 2 - 001 : 001 <small>Zone Sector Plat Parcel</small>	AG		AG		3,000	No	5 Households	
AGRCP	3 - 2 - 001 : 001 <small>Zone Sector Plat Parcel</small>	AG		AG				340 ac	(will be submitting under a SWUPA-N application)
<b>TOTAL NON-POTABLE USE</b>							<b>GPD</b>		
<b>TOTAL USE REQUESTED</b> (Sum of Total Potable Use and Total Non-Potable Use above) =							<b>GPD</b>		
If total use requested is not equal to the total monthly average in Table 1, please explain.									
In accordance with §174C-51(5), please explain if there are any limitations (legal, contractual, etc.) on the use(s) of water described above.									

**SURFACE WATER USE PERMIT APPLICATION  
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**TABLE 3: IRRIGATION INFORMATION**

List all crops as separate line items and include landscape and golf course irrigation, grown in the 12 months prior to April 30, 2008. Attach additional copies of Table 3 if necessary.

1. USE TAX MAP KEY (TMK) Attach map outlining area and photo.	2. CROP	3. TOTAL ACREAGE	4. NET IRRIGATED ACREAGE	5. BEGIN ROWTH PERIOD (Month)	6. END GROWTH PERIOD (Month)	7. IRRIGATION SYSTEM (Refer to instructions.)	8. IRRIGATION PRACTICE (Refer to instructions.)
3 - 2 - 001 : 001 <small>Zone Sector Plat Parcel</small>	<del>Honolulu</del> Diversified Ag Fruit trees	983.807	5	Jan	Dec.	trickle-drip	field capacity
3 - 2 - 001 : 001 <small>Zone Sector Plat Parcel</small>	Nursery	983.807	2	Jan	Dec.	Sprinkler Container Nursery	field capacity
3 - 2 - 001 : 001 <small>Zone Sector Plat Parcel</small>							
- - - - - <small>Zone Sector Plat Parcel</small>							
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- - - - - <small>Zone Sector Plat Parcel</small>							

**SURFACE WATER USE PERMIT APPLICATION  
EXISTING USE (NA WAI EHA, MAUI)**

**TABLE 4: ALTERNATIVES ANALYSIS**

	<b>Potable Alternatives</b> Attach additional sheets if necessary.	<b>Non-Potable Alternatives</b> Attach additional sheets if necessary.
Municipal sources	N/A	see attached addendum
Wastewater reuse	N/A	see attached addendum
Ditch system	N/A	see attached addendum
Desalinization	N/A	see attached addendum
Ground water	N/A	see attached addendum
Other (specify)	N/A	see attached addendum

**PUBLIC INTEREST**

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

Explain below how the uses in your application are consistent with the public interest as described above. Attach additional sheets if necessary.

John Varel

TMK # 3-2-001:001

SWUPA-E Addendum

Exhibits

Table 1; other

For the last 5 years I have been getting all of the my water from 2 major leaks in the Waihee ditch system. Each leak is at minimum a million gallons a day and more consistently 2 million gallons a day, the flow fluctuates with the adjustment of the amount of water flowing through the Waihee ditch. There are no meters on these leaks and up until I acquired the property, the waters were running freely on my property. I have redirected much of the water to my fields and allowed excess water that I did not use in my fields, nursery, and diversified ag crops to flow back to the lower ditch, (Spreckles.)

Table 2: Column 10

The water diversions have supplied all of the water for 550 acres of ag land since I have acquired the property 6 years ago. My existing needs for crops currently in production are: 1,474,500 gallons for 340 tree acres currently in macadamia nuts. (4,400 gallons per acre per day ) per the Water Commission's 1992 Hawaii Water Plan, Oahu Water Management Plan.

I estimate water demand of 12,500 gallons per day for my 5 acres of diversified ag: bananas, papaya, orange, mango, tangerines, grapefruit, lime, lemon and other plants like taro and sugar cane. 2500 per acre which I understand the Water Commission applied for diversified ag in the Waiahole case.

(5 acres x 2500 gal= 12,500 gpd)

I estimate water demand of 10,000 gallons per day for my 2-acre nursery, where I grow starter plants, including about 12 varieties of Native Hawaiian plants and about 30 varieties of landscape plants like ti and hibiscus, based on the water requirements for nursery foliage plants

(5,000 gallons per day) used in the aforementioned Hawaii Water Plan of 1992. ( $2 \times 5,000 \text{ gal} = 10,000 \text{ gpd}$ )

I estimate water usage to be 3,000 gallons a day for domestic use: my wife and I and our parents, and the folks who live and work on the property: 600 gallons per single family home, with 5 homes on my property: ( $5 \times 600 \text{ gpd} = 3,000 \text{ gpd}$ )

Table 4: Non- Potable Alternatives

**Municipal sources:** The county is not providing any new water meters for agricultural use in Waihee. I have two domestic water meters: one is a mile and a half from our homes, and the second does not have adequate pressure to make it up to our homes. The cost of tying into the county lines and installation of lengthy laterals to our homes is cost-prohibitive.

**Wastewater reuse;** Wastewater is also impractical, while I intend to recycle domestic effluent for use in our personal gardens, we will not generate enough water from our domestic uses to irrigate 2 acres of trees much less 550 acres of ag.

Waihee does not have a wastewater treatment plant. Effluent is simply not available.

**Ditch system:** Although Spreckles and Waihee ditches both run through my property, deed restrictions prohibit me from directly accessing any of the water flowing in the ditches. In addition Wailuku Agribusiness reserved appurtenant water rights when it sold the property to me in 2003. As a result, my rights may have been extinguished, although I reserve the right to claim appurtenant rights in the future based on new information. The most cost effective, lowest cost solution to all parties, is if I could instead of getting from the leaks alone take it directly from the ditch and or ditch transmission and then into my irrigation system.

**Desalinization:** Desalinization of brackish water is also not practical.

**Ground Water;** Ground water is my most viable alternative to water from the ditch system. In fact, I have requested this Commission's permission to use groundwater (see GWUPA-N 825, filed August 28, 2008). Upon advice of Commission staff, however I intend to file an amended GWUPA-N. My initial GWUPA-N was contested, and I have been granted a temporary ground water permit for only 3000 gallons per day pending resolution of the in stream flow proceedings. This is sufficient but not cost effective. Power and infrastructure cost are prohibitive if only for domestic use. I am submitting this SWUPA-E as an alternative to my ground water application.

Other; I currently use exclusively the aforementioned leaks, storing in 4000 gallon water tanks and transmitting via pipes laid in the line of the flow of the leaks from Waihee Ditch.

Public Interest

1. Use will maximize beneficial use and is in the public interest

Generally, "water use for the diversified agriculture on land zoned for agriculture is consistent with the public interest." As stated in the Wailahole Ditch Combined Contested Case. My water use is consistent with the public interest because the majority of the water I need is to sustain and continue the ag use designated for this land for hundreds of years. I have a base of crop of macadamia nut trees, but also a very diversified crop of Native Hawaiian reforestation, landscape, hundreds of fruit trees, dryland taro, as well as sustainable vegetable crops. Haw. Rev. Stat. 174C-2(c) declares that the protection of agriculture and the maintenance of proper ecological balance and scenic beauty is in the public interest. Thus current use is in the public interest. My use of the water also keeps water in the watershed of origin and will help maintain recharge of the watershed.

My use is also reasonable-beneficial. "Reasonable-beneficial use" is defined as " the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is consistent with the state and county land use plans and public interest. " HRS 174C-3. My current use fulfills state polices in favor of reasonable- beneficial uses of water, diversified and local agriculture, and the use of agricultural lands for bona fide agricultural purposes. Moreover, I take steps to make my water use more efficient. I am using micro-drip irrigation, and use mulch and green manure to protect the soil from erosion and minimize the use of water.

2. My use will not interfere with any existing legal uses

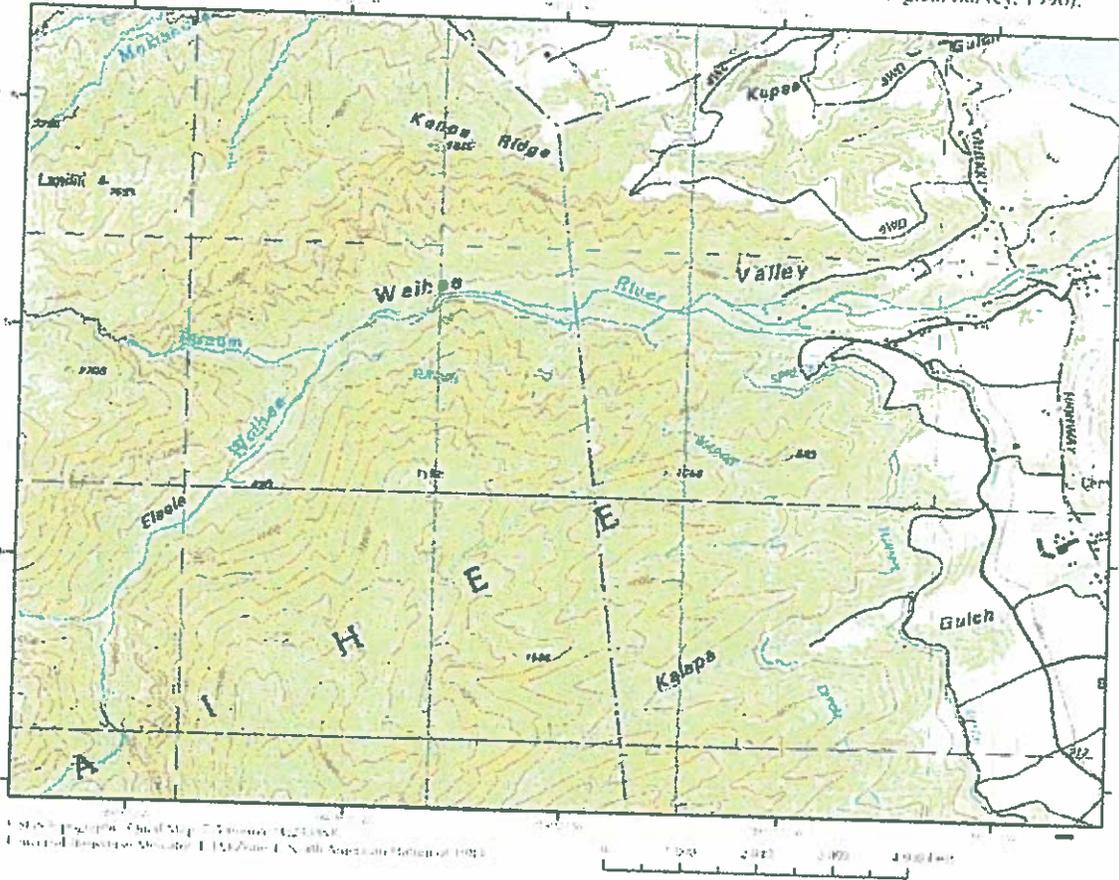
I do not believe that my use will interfere with existing legal uses as stated above.

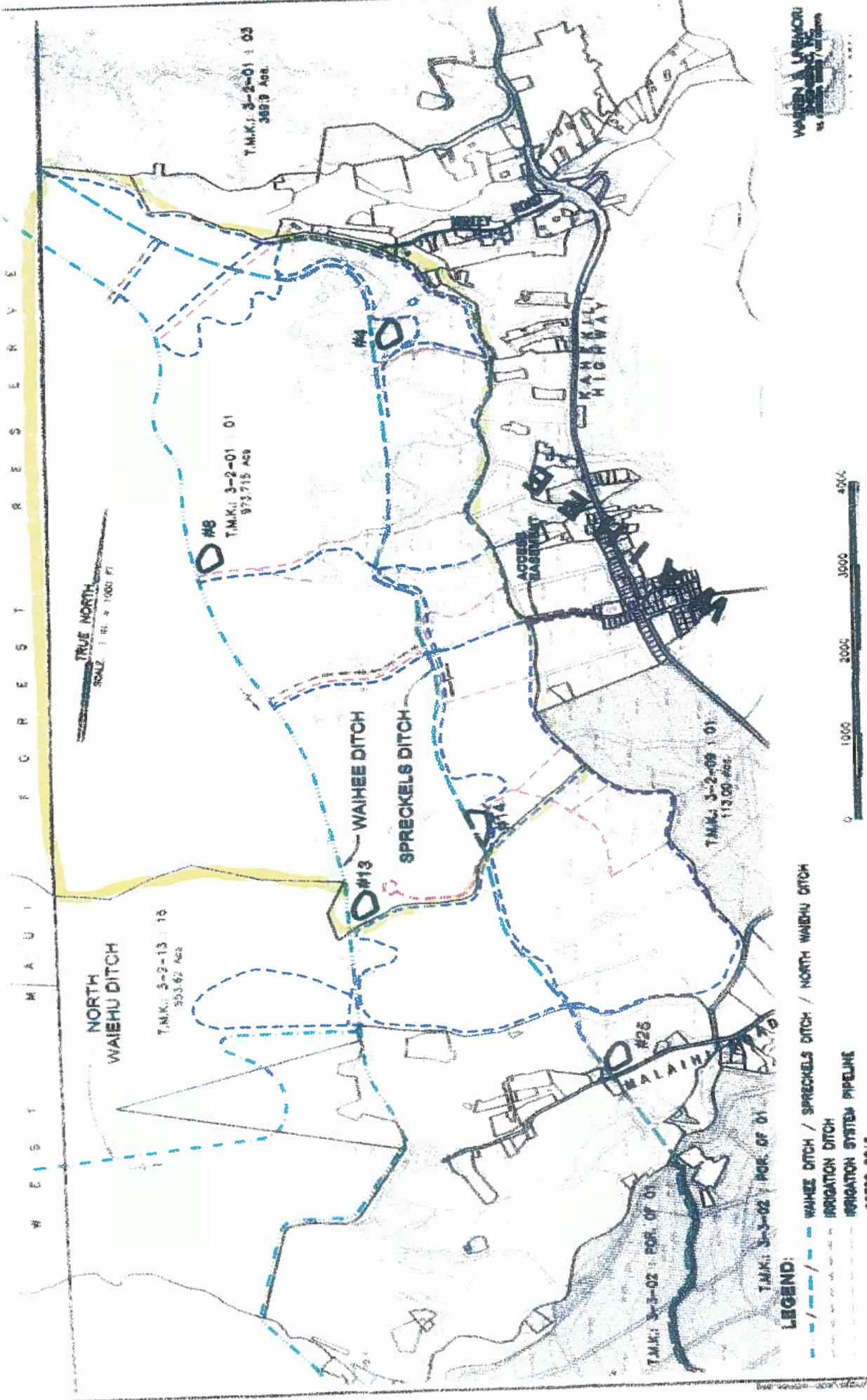
3. My use will not interfere with the rights of DHHL

I am not aware of any DHHL lands using water from Waihee Stream or the ditch system that currently diverts most of the water. To the best of my knowledge, DHHL has not filed an application to use water from this source. While I am aware that DHHL has outstanding reservations for municipal water meters in Central Maui, our use will not and do not interfere with those reservations, which are largely served by ground water sources.

**Exhibit A:**

Topographic map of the Waihe'e ahupua'a in central Maui, Hawai'i (Source: U.S. Geological Survey, 1996).





HAWAIIAN TERRITORY

TRUE NORTH  
SCALE: 1" = 1000 FT

NORTH WAIEHU DITCH

T.M.K. 3-2-13: 16  
503.67 Acs

#8  
T.M.K. 3-2-01: 01  
973.715 Acs

T.M.K. 3-2-01: 03  
348.9 Acs

#13 WAIEHEE DITCH

SPRECKELS DITCH

ADDRESS BASEMENT

WAIKALIHI HIGHWAY

#26  
WALAINA

T.M.K. 3-3-02: FOR. OF 01

T.M.K. 3-2-09: 01  
113.00 Acs

T.M.K. 3-3-02: FOR. OF 01

LEGEND:

- WAIEHEE DITCH / SPRECKELS DITCH / NORTH WAIEHU DITCH
- - - IRRIGATION DITCH
- IRRIGATION SYSTEM PIPELINE



**Exhibit C: Photographs of End Uses: Nursery**

These are true and correct copies of photographs accurately depicting portions of my nursery.



**Exhibit D: Photographs of End Uses: Diversified Agriculture and Macadamia Nuts**

These are true and correct copies of photographs accurately depicting portions of my diversified agriculture, including dryland kalo (top), bananas, and other fruits trees.



John Varel

TMK No. 3-2-001:001

Addendum and Exhibits

**Exhibit D continued:**

These are true and correct copies of photographs accurately depicting portions of my macadamia nut orchard, the top photo includes some of my bananas in the foreground.



**Exhibit E: Photographs of End Uses: Domestic Uses**

These are true and correct copies of photographs accurately depicting portions of our domestic uses, including our yard, bananas, and flowers.

