



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

ORIGINAL

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

For Official Use Only:  
**RECEIVED**  
**COMMISSION ON WATER**  
**RESOURCE MANAGEMENT**  
**2009 APR 30 AM 8:37**  
 SWUP NO. 84  
 Event ID: SWUP.2316.6

**FORM SWUPA-E (NA WAI EHA, MAUI)**

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.

<b>1. APPLICANT'S NAME</b> Gordon Apo (landowner) Lester Nakama (lessee)		Applicant's Contact Lester Nakama (Aloha Poi Inc.)		<b>2. SOURCE LANDOWNER'S NAME</b> Wailuku Water Co. LLC		Source Landowner's Contact Avery Chumbley	
Applicant's Mailing Address, or Principal Place of Business Aloha Poi Factory, Inc. 800 Lower Main Street Wailuku, HI 96793				Source Landowner's Mailing Address, or Principal Place of Business 255 East Waiko Road Wailuku, HI 96793			
Applicant's Phone	Applicant's Fax	Applicant's E-mail	Source Landowner's Phone	Source Landowner's Fax	Source Landowner's E-mail		

**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:**  Wahee/6022  Waiehu/6023  Iao/6024  Waikapu/6001

**4a. TMK OF STREAM DIVERSION LOCATION:** 3 - 2 - 014 : 001  
Zone Sector Plat Parcel

**4b. TMK OF DITCH DIVERSION LOCATION:** 3 - 2 - 006 : 008  
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  Other Describe: See Attachment 1

Is the diverted water returned to the stream or ditch?  Yes.  No. If yes, how much water is returned? See Attachment 1

**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.

No. Explain how you are measuring flow to justify amounts shown in Table 1 in the space below

See Attachment 1

**EXISTING USER INFORMATION**

**7. APPURTENANT RIGHT:** Do you claim an appurtenant right for your water use?  Yes  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  No

If yes, who is the operator of the water system? Wailuku Water Company

**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): Murakami CA

No

**10. STREAM DIVERSION WORKS PERMIT (SDWP):**

Have you ever been issued a SDWP by the Commission?

Yes. List the permit number(s):

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

Gordon K. Apo  
 Print

4/19/09  
 Date

**12. SOURCE LANDOWNER**

Signature

Print

Date

LES NAKAMA

FILE ID: SWUP.2316.6  
 DOC ID: 3448 ✓

**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 or End Use  
As of the Effective Date of Designation, April 30, 2008**

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	62,000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
June 2007	62,000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
July 2007	62,000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
August 2007	62,000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
September 2007	62,000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
October 2007	62,000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
November 2007	62,000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
December 2007	62,000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
January 2008	62,000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
February 2008	62,000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
March 2008	62,000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
April 2008	62,000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>SUM OF AVERAGE DAILY USE FOR THE MONTH</b>	744,000	<b>GPD</b>				
<b>AVERAGE DAILY USE (Average of the above)</b>	62,000	<b>GPD</b>				

**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>0</b>	<b>GPD</b>		
<b>Uses that do not require potable water</b>									
AGRCP	3 - 2 - 006 : 010 Zone Sector Plat Parcel	AG	NO	AG	NO	58,280	NO	0.67	see Attachment 1
AGRCP	3 - 2 - 006 : 011 Zone Sector Plat Parcel	AG	NO	AG	NO	3720	NO	0.06	see Attachment 1
	____ - ____ - ____ : ____ Zone Sector Plat Parcel								
	____ - ____ - ____ : ____ Zone Sector Plat Parcel								
<b>TOTAL NON-POTABLE USE</b>						<b>62,000</b>	<b>GPD</b>		
<b>TOTAL USE REQUESTED (Sum of Total Potable Use and Total Non-Potable Use above) =</b>						<b>62,000</b>	<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. To the best of my knowledge, there are no limitations on the use of water described above.									

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

**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 - 006 : 010 <small>Zone Sector Plat Parcel</small>	TARO (WETLAND)	1.34	0.67	YEAR ROUND	YEAR ROUND	FLOOD (TARO)	IRRIGATE TO FIELD CAPACITY
3 - 2 - 006 : 011 <small>Zone Sector Plat Parcel</small>	TARO (WETLAND)	0.06	0.06	YEAR ROUND	YEAR ROUND	FLOOD (TARO)	IRRIGATE TO FIELD CAPACITY
- - - - : <small>Zone Sector Plat Parcel</small>							
- - - - : <small>Zone Sector Plat Parcel</small>							
- - - - : <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		See Attachment 1
Wastewater reuse		See Attachment 1
Ditch system		See Attachment 1
Desalinization		See Attachment 1
Ground water		See Attachment 1
Other (specify)		N/A

**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.

See Attachment 1

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

## INSTRUCTIONS FOR FILLING OUT **FORM SWUPA-E**

This application form is to be used for actual existing uses as of the effective date of designation, April 30, 2008, for the Na Wai Eha Surface Water Management Areas. Based on the State Water Code, Section 174C, Part IV Regulation of Water Use, a completed application must be filed with the Commission on Water Resource Management (CWRM) no later than April 30, 2009, to qualify as an existing use. Failure to meet the filing deadline may cause your application to be considered a new use and require you to file an Application for Surface Water Use Permit for New Use.

If you are applying for a new surface water use, which are proposed uses after the date of designation, please use the Application for Surface Water Use Permit for New Use, **Form SWUPA-N**.

Information about surface water management areas and the current application forms are available at our website: <http://www.hawaii.gov/dlnr/cwrm/>; by contacting the Stream Protection and Management Branch at 587-0234; or sending an email to: [dlnr.cwrm@hawaii.gov](mailto:dlnr.cwrm@hawaii.gov).

**REQUIREMENTS FOR A COMPLETE APPLICATION** Information must be legible. Therefore, please type or clearly print all information in ink.

- a. Fill in the most recent application form.
- b. Fill in every line on the application.
- c. Enclose a check for the non-refundable filing fee of \$25 payable to: Department of Land and Natural Resources.
- d. Pay for the cost of publishing any required public notices related to your application.
- e. Mark the source and end use locations on the appropriate USGS quad map and TMK map and attach to your application.
- f. Attach photos showing your existing diversion, measuring device (if applicable) and end use areas.
- g. Sign the application form. Both the applicant and the landowner of the source must sign the application form.
- h. Submit one original and 15 copies of the application form; one original and 15 copies of the attachments (instructions, maps, photos and any additional attachments) and filing fee to: Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96809.

The applicant must establish that the existing use of water is a reasonable and beneficial use. According to §174C-3 of the State Water Code: *"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 both reasonable and consistent with the state and county land use plans and the public interest.*

Furthermore, public interest is described in §174C-2(c) of the State Water Code which states that: *(t)he 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.*

## **LINE BY LINE INSTRUCTIONS FOR COMPLETING THE APPLICATION FORM**

### **APPLICANT INFORMATION**

1. **APPLICANT'S NAME:** Fill in the information for the applicant. This should be the entity that will be responsible for all conditions of the water use permit.
2. **SOURCE LANDOWNER'S NAME:** Fill in the information for the landowner of the property where the existing surface water diversion works is located. **Note:** in accordance with §174C-51(1)(B), *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.*

### **EXISTING SOURCE INFORMATION**

3. **SURFACE WATER HYDROLOGIC UNIT AND CODE:** Check the appropriate box for the hydrologic unit name and hydrologic code where the source is located. The "source" is the stream, ditch, or conduit from which water is diverted to the user. For information on hydrologic unit names and unit codes please refer to the *Surface-Water Hydrologic Unit: A Management Tool for Instream Flow Standards* report available on the CWRM website at: <http://www.hawaii.gov/dlnr/cwrm/>, or contact CWRM staff at (808) 587-0234. You may also contact CWRM toll-free from Maui at: 984-2400, ext. 70234.
- 4a. **TMK OF STREAM DIVERSION LOCATION:** Fill in the current Tax Map Key (TMK) number of the parcel where the stream diversion is located if applicable. To find out your TMK number, call Maui County Real Property Tax Division at: (808) 270-7297, or check online at: [www.mauipropertytax.com/](http://www.mauipropertytax.com/)
- 4b. **TMK OF DITCH DIVERSION LOCATION:** Fill in the current Tax Map Key (TMK) number of the parcel where the ditch diversion is located, if applicable.
5. **STREAM DIVERSION:** How is water diverted from the stream to your property? Check the appropriate box(es). Is the diverted water returned to the stream or ditch? Check "Yes" or "No." If yes, enter the amount of water returned.
6. **FLOW MEASUREMENT INFORMATION:** Check "Yes" or "No". If you have a working flowmeter with a totalizer, answer "Yes" to this question, and fill in the date that the flowmeter was installed and any other information you may have (manufacturer, serial number, etc.). A totalizer directly measures the total use for the source (similar to a car's odometer). Otherwise, answer "No" and explain how stream diversion is measured or estimated to justify amounts requested in Table 1

### **EXISTING USER INFORMATION**

7. **APPURTENANT RIGHT:** An appurtenant water right is a legally recognized right to a specific amount of surface freshwater – usually from a stream – on the specific property that has that right. This right traces back to the first time the land was converted to fee simple title; i.e., the Great Mahele and the issuance of either a Land Commission Award or Royal Patent. The quantity of water under the appurtenant right is the amount that was being used on the land shortly before or at the time of the Mahele.  
Do you claim an appurtenant right for your water use? Check "Yes" or "No."  
If yes, has your appurtenant right been established by the courts or the Commission? Check "Yes" or "No."
8. **END USER INFORMATION:** Are you an end user on an existing water system? Check "Yes" or "No". If yes, please list the name of the water system operator.
9. **REGISTRATION AND DECLARATION OF WATER USE:** Do you have a Registration and Declaration of Water Use from the Commission? Check "Yes" or "No". If yes, please list the name of the registrant(s).
10. **STREAM DIVERSION WORKS PERMIT (SDWP):** Have you ever been issued a SDWP by the Commission? If yes, please list the permit number(s). Otherwise, check "No."
11. **APPLICANT:** Please sign and print your name, and date your application.
12. **LANDOWNER:** Please sign and print your name, and date your application. The landowner shall be the joint applicant in the event the applicant is 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. §174C-51(1)(B)

## 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 or end use as of the effective date of designation, April 30, 2008.**

Please fill out Table I to calculate your existing use as of the effective date of the designation, April 30, 2008, of the Na Wai Eha Surface Water Management Areas. The effective date of designation is the date of the publication of the public notice of the Commission designation action. The qualifying dates have been filled in for this application. Fill in as completely as possible.

The 12-month average is the average daily use<sup>a</sup> of 12 months of consecutive use<sup>b</sup> from the last month<sup>c</sup> of the period.

- a. Average daily use. This is the average daily use for one month in gallons per day (GPD). To calculate this average, take the total use (in gallons) for the month, and divide this amount by the number of days in the month.
- b. 12 months of consecutive use. To calculate the average monthly withdrawal for 12 consecutive months of use, add the average daily use for all 12 months and divide that amount by 12.
- c. Last month. The last month of the period is the effective date of designation, April 30, 2008.

Check only one of the following boxes per row in Table I:

- Metered – data is based on an operational meter with a totalizer.
- Estimated – data is based on some indirect measurement technique (e.g. measured flow rate multiplied by time of operation).
- Active but unknown – source is active, but there is no means to measure or estimate flow coming from source.
- Inactive – source was not pumped or diverted for the month.
- Other - describe how water use was measured or calculated in this box.

**TABLE 2: LAND USE CONSISTENCY/EFFICIENCY**

1. **PURPOSE / WATER USE CATEGORY:** Choose one of the following purpose or category codes listed below for each row in Table 2. There may be several purpose/categories on a single TMK, and each purpose or category must be listed in a separate row. Attach additional copies if necessary.

<b>AGRICULTURE</b>	
AGRAQ	Aquatic Plants & Animals
AGRCP	Crops & Processing
AGRLI	Livestock & Processing, and Pasture
AGRON	Ornamental & Nursery Plants
AGROTH	Other
<b>DOMESTIC</b>	
DOM	Single & Multi Low-Rise & High-Rise Household
DOMN	Domestic (Non-residential)
DOMNCB	Commercial Businesses
DOMNRI	Religious Institutions
DOMNHOS	Hospitals
DOMNHOT	Hotels
DOMNOB	Office buildings
DOMNOTH	Domestic Non-Residential – Other
DOMNSC	Schools
<b>INDUSTRIAL</b>	
INDEL	Geothermal, Thermoelectric Cooling, Power Development
INDFP	Fire Protection
INDMI	Mining, Dust Control
INDOTH	Industrial – Other
<b>IRRIGATION</b>	
IRRGC	Golf Course
IRRHM	Habitat Maintenance
IRRHOT	Hotel
IRRILA	Landscape/Water Features
IRROTH	Other
IRRPCA	Parks
IRRSC	Schools
<b>MILITARY</b>	
MIL	Military
<b>MUNICIPAL</b>	
MUNCO	County
MUNPR	Privately owned and operated but defined as a public system by the Department of Health
MUNST	State

2. **USE TMK:** The Tax Map Key number of the parcel over which the water is applied. There should only be one parcel for each line. Also, attach a TMK map(s) for the lots showing the boundaries of irrigated acreage, etc., as well as a photograph of the area of use.
3. **STATE LAND USE DISTRICT:** To find out the current Land Use District, contact the Land Use Commission at 587-3822.
4. **CDUP REQUIRED:** If a Conservation District Use Permit (CDUP) is required, enter either: "Yes" and the date the CDUP was approved if you have a CDUP applicable to this project; or "Yes" and "not acquired" in this box. If a CDUP is not required, enter "N" for no in this box. To check if your parcel is in the Conservation District, contact the Land Use Commission at 587-3822. If your parcel is in a Conservation District, contact the Department of Land and Natural Resources Office of Conservation and Coastal Lands at 587-0328 to find out if a CDUP is required.
5. **COUNTY ZONING CODE:** To find out the Zoning Code for your property, call Maui County Planning Department at 270-6279, or 270-7253
6. **SMAP REQUIRED:** If a Special Management Area Permit (SMAP) is required for this project, enter either: "Y" and the date SMAP was approved; or "Y" and "not acquired" in this box. If a SMAP is not required, enter "N" for no in this box. To find out if your property is in a Special Management Area and requires an SMAP, call Maui County Planning Department at 270-8205.
7. **QUANTITY OF USE:** Enter the quantity of use in gallons per day (GPD). Justification for the quantities requested may depend on your answers to items 8 and 9, and you should describe the justification in item 10.
8. **SUBMETERED? (Y/N):** If the specific use is submetered, enter "Y" for yes here. If it is not submetered, enter "N" for no. Submetering is specific to each line item.
9. **UNITS OR ACREAGE:** This is the value and category as the basis for calculating the duty. "Duty" is the amount of water used or requested for a "unit" over a specific time period, e.g. gallons per acre per day, or gallons/acre/day. "Unit" can mean dwelling units, or number of people, or animals. Examples to fill in for this category are: 400 dwelling units, 500 people, 3.74 acres.
10. **APPLICANT'S JUSTIFICATION FOR REQUESTED QUANTITY OF USE FOR ITEM 7:** Explain how you are justifying the amount you are requesting. Attach additional sheets if necessary.

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

**TABLE 3: IRRIGATION INFORMATION**

If you have grown crops in the year prior to the date of designation, please list all the crops (including landscape and golf course irrigation) that you have grown. Enter a single crop and single TMK per line. If you have multiple crops, list them all as separate line items. Attach additional copies of Table 3 if necessary.

1. USE TAX MAP KEY (TMK): Enter the parcel number where the crop is being grown. Attach a map outlining irrigated area(s) and photos.
2. CROP: Enter the crop type.
3. TOTAL ACREAGE: Enter the total acreage of the parcel listed.
4. NET IRRIGATED ACREAGE: Enter the acreage for the specific crop grown.
5. BEGIN GROWTH PERIOD (MONTH): This is the month of the start of the growth cycle. For perennial crops, list the 12<sup>th</sup> month prior to the date of designation.
6. END GROWTH PERIOD (MONTH): This is the month of the end of the growth cycle. For perennial crops, list the month of the date of designation.
7. IRRIGATION SYSTEM: Enter one of the following:
  - TRICKLE, DRIP
  - TRICKLE, SPRAY
  - MULTIPLE SPRINKLERS
  - SPRINKLER, CONTAINER NURSERY
  - SPRINKLER, LARGE GUNS
  - SEEPAGE, SUBIRRIGATION
  - CROWN FLOOD
  - FLOOD (TARO)
  - OTHER – Please describe.
8. IRRIGATION PRACTICE: Enter one of the following:
  - IRRIGATE TO FIELD CAPACITY
  - APPLY A FIXED DEPTH PER IRRIGATION
  - DEFICIT IRRIGATION
  - OTHER – Please describe.

**TABLE 4: ALTERNATIVES ANALYSIS**

Please address every alternative listed in Table 4 and whether or not they are available, for both potable and non-potable needs. Other alternatives on the last line may include stormwater reclamation, rainwater catchment, etc.

Surface water is defined in §174C-3 as *both contained surface water - that is, water upon the surface of the earth in bounds created naturally or artificially including, but not limited to, streams, other watercourses, lakes, reservoirs, and coastal waters subject to state jurisdiction - and diffused surface water - that is, water occurring upon the surface of the ground other than in contained waterbodies. Water from natural springs is surface water when it exits from the spring onto the earth's surface.*

### **PUBLIC INTEREST**

Explain how the uses in your application are consistent with the public interest as described in §174C-2(c): *(t)he 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.*

## ATTACHMENT 1

**EXHIBITS:** Appended hereto as **EXHIBIT 1** is a copy of the 7.5 minute-series USGS topographic map with the Waihe`e Ditch and Spreckels Ditch diversions labeled. **EXHIBIT 2** is a TMK map showing the location of our property, `auwai diversion, and area of use. **EXHIBIT 3** contains copies of photographs of our `auwai intake and area of use. **EXHIBIT 4** is described below.

### ADDITIONAL INFORMATION FOR SWUPA-E BOXES:

#### 2. Source Landowner:

Not applicable pursuant to HRS § 174C-51(1)(B), because applicant does not have a terminable interest in the land which is the source of the permitted water. According to the Water Commission's records, which have not been verified, Wailuku Water Company claims to be the source landowner.

#### 5. Stream Diversion:

We are kuleana users along the kuleana `auwai that runs to the south of Waihe`e River. Water is diverted from Waihe`e River at the Waihe`e and Spreckels diversions (see attached USGS topo map). All the water from the Spreckels diversion enters the Spreckels Ditch, as does some water from the Waihe`e diversion. The South Waihe`e kuleana `auwai receives water via a pipe in the Spreckels Ditch. The pipe empties into an open `auwai on the south side of Waihe`e River. The water continues makai in the ditch and pipes until we divert some water via a pipe that runs to our property. The water flows in open ditches through our lo`i kalo, and any water that does not evaporate or seep into the soil flows in an open ditch and into a pond just south of the Waihe`e River.

6. Flow Measurement Information: See explanation for Table 2 Box 10, below.

#### 7. Appurtenant Rights:

Our property has appurtenant rights because it was in kalo cultivation at the time of the Māhele of 1848. In fact, almost all of the stream water we currently use is for ancient lo`i kalo that we have restored. Attached hereto as **EXHIBIT 4** are true and correct copies of Māhele records for TMK 3-2-006:010 for Land Commission Award No. 4063; Royal Patent No. 3429, including testimony indicating the land was in kalo. This land has been in our family for at least 70 years, and based on our knowledge of the history of this kuleana and our family we have no evidence, indication, or any other reason to believe that our appurtenant rights have been extinguished. This application should be granted pursuant to HRS § 174C-63.

#### Table 2. Justification for Requested Quantity:

Our existing water use is not gauged. But we measured our use by using the "bucket method." See 'Onipa'a Nā Hui Kalo, Guidelines for Grassroots Lo'i Kalo Rehabilitation 70. We measured the amount of time it took to fill a five-gallon bucket five times at our intake pipe,

and the average time was 7 seconds. Then, using the table on page 70 of Guidelines for Grassroots Lo'i Kalo Rehabilitation, we calculated our existing use as 62,000 gallons per day. This approximates the amount we were using on the date of designation.

**Table 4: Alternatives Analysis**

Because our land has an appurtenant right to stream water, which is in the nature of an easement that was conveyed with the land at the time of the Māhele, we do not need to demonstrate that we have no practicable alternative source of water. Our appurtenant right is for stream water, not for water from some other source, and our exercise of this appurtenant right enjoys maximum protection and first priority under the law. Similarly, our traditional and customary right as Native Hawaiians is to cultivate kalo on our land in the traditional manner, not in some other manner using alternative, non-traditional sources, and this traditional and customary right is constitutionally protected.

Moreover, even if we did not have protected rights to stream water, there is no potentially available alternative source that is economically practicable. We have leased our land to Aloha Poi Factory since the 1970s to grow kalo in the traditional manner in the ancient lo'i on our land. Aloha Poi makes poi out of the kalo they grow to provide the local community with a nutritious and culturally significant food source. Our family also cultivates wetland kalo in some of the ancient lo'i on our land for subsistence purposes. An alternative water source that would require us or Aloha Poi to pay for the volumes of constantly flowing water in our lo'i necessary to keep temperatures cool and support healthy kalo would make our `ohana's and Aloha Poi's wetland kalo cultivation using traditional methods economically impossible. We would effectively be denied our appurtenant right and the opportunity to grow kalo on our land. As shown below, each potentially available alternative water source is impracticable and imposes a cost on exercising our protected right.

**Municipal Sources.** Our domestic water service is a typical residential service and does not have the capacity to deliver the volumes of water we require. Even if the Maui County Department of Water Supply were willing to provide municipal water for wetland kalo cultivation by installing a larger water meter, the cost of using municipal water for such purposes would be prohibitive. Additionally, water from the Maui County Department of Water Supply is chlorinated, which is detrimental and unsuitable for wetland kalo.

**Wastewater reuse.** Reusing wastewater is impracticable because we would still be required to pay for large volumes of flowing water. Additionally, the closest wastewater treatment plant is in Kahului. As a small user engaged in wetland kalo cultivation using traditional irrigation methods, we do not have the means to hookup to and use that water.

**Ditch system.** We are currently using water from an existing `auwai, although water is not available consistently and in sufficient amounts to support the existing uses on our system, including our own uses. Getting water from a different ditch system other than the existing system that already services our land is not practicable or efficient. First, the other ditch

systems in Nā Wai 'Ehā do not consistently have enough water to support additional users. Second, we lack the property, access, permissions and funding necessary to permit and construct an additional ditch diversion and irrigation system. As a small user engaged in wetland kalo cultivation, the cost of taking water from or constructing another ditch is not practicable.

**Desalinization.** Desalinization of brackish water is not a practicable alternative because we are not aware of any such plant having been built on Maui. According to the County's estimates, a plant is expected to be built in 2013 at the earliest.

**Ground Water.** Even if we were able to secure the permits necessary to drill a well and pump ground water for our uses, installing and operating such a well to provide flowing water for kalo cultivation would be unprecedented and extremely burdensome. As a small user engaged in wetland kalo cultivation using traditional methods, we do not have the means to install and maintain such infrastructure.

#### **Table 4: Public Interest**

##### **Our Existing Use is Consistent with the Public Interest**

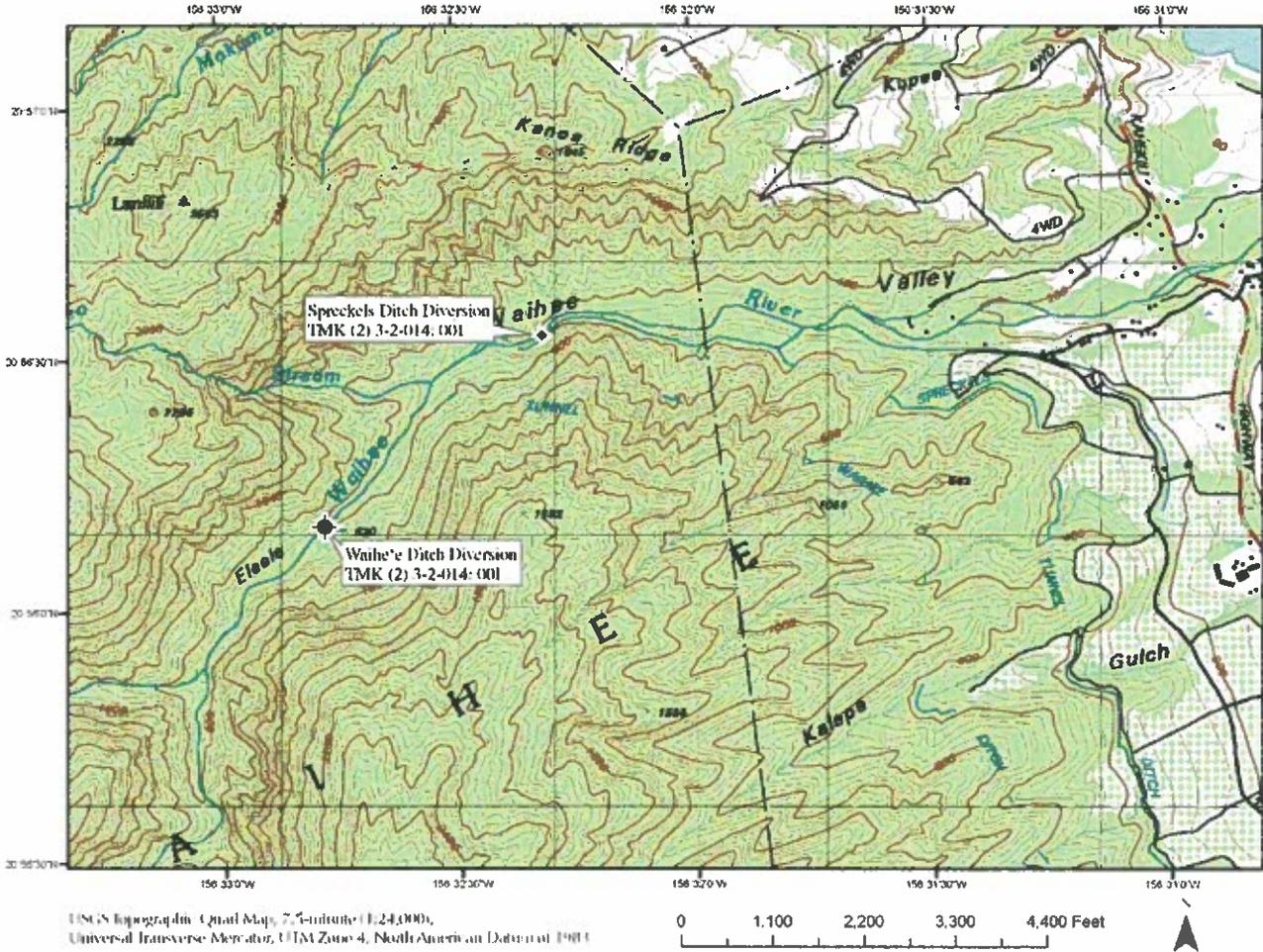
Generally, "water use for diversified agriculture on land zoned for agriculture is consistent with the public interest." In re Waiāhole Ditch Combined Contested Case, 94 Hawai'i 97, 162, 9 P.3d 409, 474 (2000) ("Waiāhole I"). Further, HRS § 174C-2(c) provides that the protection of traditional and customary Hawaiian rights, agriculture, and the maintenance of proper ecological balance and scenic beauty are "in the public interest." The water we use is for wetland kalo cultivation. We grow kalo in traditional ways and use it to make poi for sale in local stores and for our `ohana's subsistence. Our lo`i kalo help maintain ecological balance and scenic beauty and allow the perpetuation of the Native Hawaiian culture. As such, our existing use of stream water is consistent with the public interest. Additionally, the exercise of appurtenant rights is a protected public trust purpose. Waiāhole I, 94 Haw. at 137 n.34, 9 P.3d at 449 n.34.

##### **Our Existing Use is a "Reasonable-Beneficial Use"**

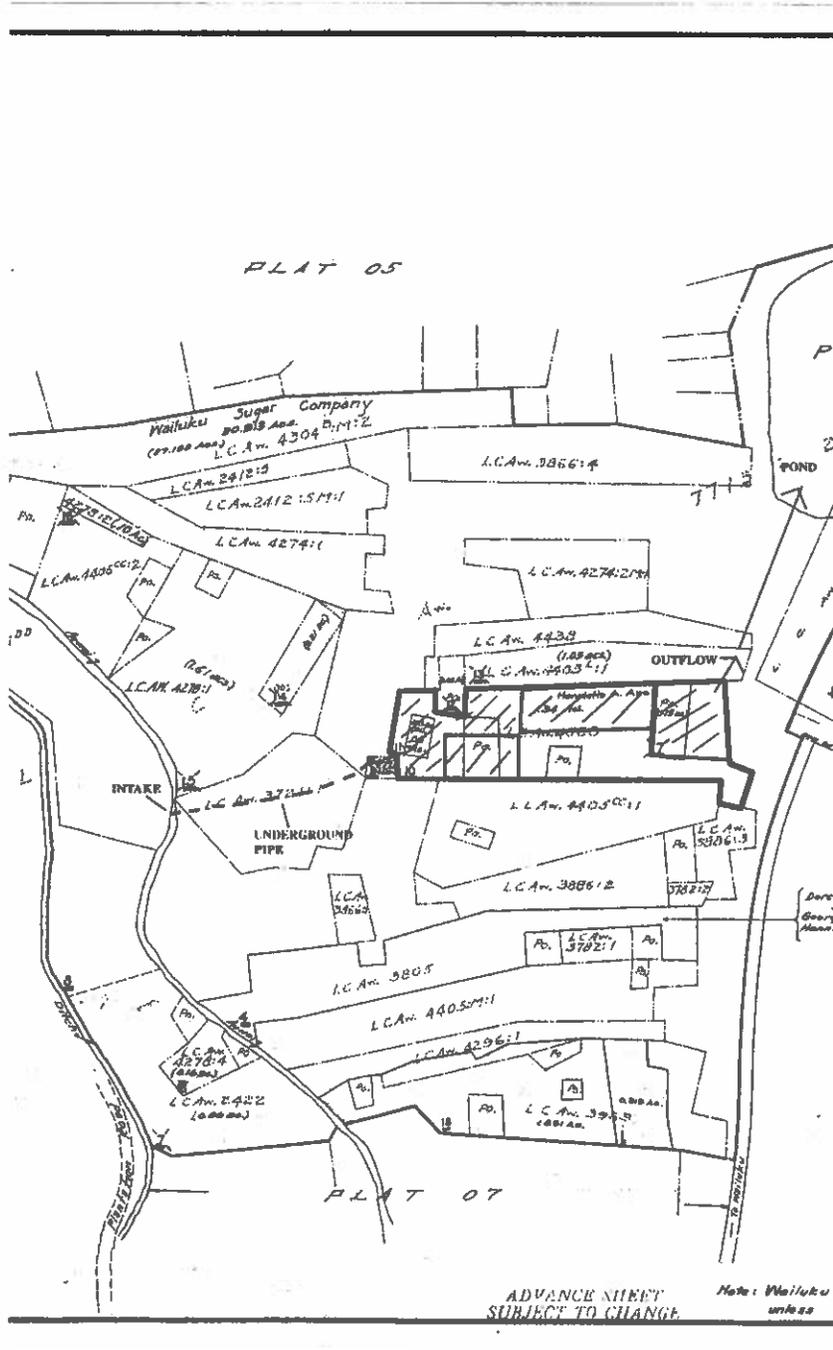
"Reasonable-beneficial use" is defined as "the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is both reasonable and consistent with the state and county land use plans and public interest." HRS § 174C-3. As indicated, our existing use of stream water is consistent with state and county land use plans and the public interest. It is also "economic and efficient" because we only use the amount we need. We take steps to make our water use efficient. For instance, we use pipes where appropriate to minimize water loss. Therefore, the water we use is for a "reasonable-beneficial use."

# EXHIBIT 1

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



**EXHIBIT 2:** TMK map depicting the 'auwai intake and outflow locations. The area of existing lo'i kalo cultivated by Aloha Poi and Gordon Apo's 'ohana is marked with hatch marks.



**EXHIBIT 3A**



**Above is a photograph of our intake pipe.**



**Above is a photograph of a portion of our lo'i kalo.**

### **EXHIBIT 3B**



**Photographs of our lo'i kalo**



**EXHIBIT 3C**



**Photographs of our lo'i kalo**



### EXHIBIT 3D

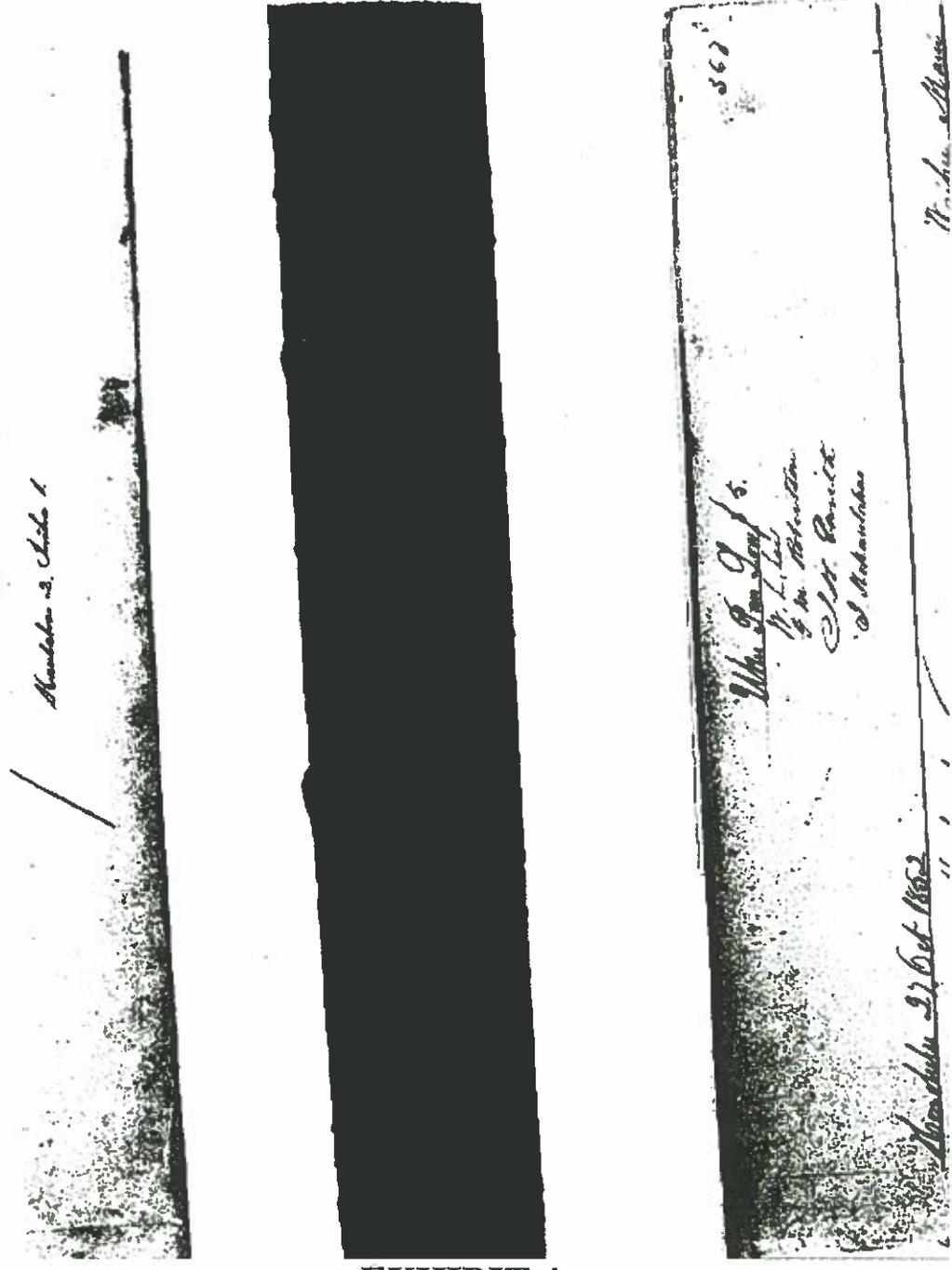


**Photographs of Aloha Poi's lo'i kalo and portion of currently fallow lo'i kalo.**









**EXHIBIT 4**

651  
 651

HELE 1927  
**PALAPALA OIA HUI.**  
 A KE ALII, MANUHI O KA OLELO A KA POE HOONA KULEANA.

NII KA MEA, ua hachala an Leste Hovea i ka huna hooona oia i ka olelo, ka hooona oia ho  
*Kanehekili* *Kuleana Kuleana*  
 ma ke AHO AHOHE Haha a hahi i olelo mahe.

Mahe, ua hooona oia hui, ke hooona oia o Kamohana IV, ke AIA oia o ka AIA  
 i huna hooona oia i hooona oia mahe a ka hooona oia, i ka hooona oia, i ka hooona oia, o  
 ka hooona oia hooona oia, ka hooona oia oia ma ke AHO AHOHE  
 i ka hooona oia oia, ka hooona oia oia ma ke AHO AHOHE  
 ka hooona oia oia, ka hooona oia oia ma ke AHO AHOHE

*Maui* *Kanehekili*  
*Maui* *Kanehekili*  
 E hooona oia ma ke hui hui a hui ana ma ke Alanui

No. 71	No. 60	Pralima
No. 7	62	
No. 68	54	Papohaku
No. 162	80	Pralima
No. 70	69	
No. 68	No. 82	
No. 21	No. 106	Papohaku
No. 70	142	Pralima
No. 70	83	
No. 21	No. 144	
No. 62	No. 133	Papohaku
No. 81 1/2	53	Kuahauna
No. 71	85	
No. 15	70	Pralima
No. 67 1/2	No. 92	Kuleana
No. 24 1/2	60	Pralima
No. 31	57	
No. 22 1/2	No. 71	
No. 17	No. 143	Papohaku
No. 10 1/2	113	Pralima
No. 70	92	
No. 70	117	
No. 70	90	
No. 32 1/2		
No. 14 1/2		
No. 7		

EXHIBIT 4



No. 4009 - HOKII Waihee, Dec. 29, 1847 Page 144  
'Illi of Waupupua, 59 lo'i which I received from Kahune, /and/ 2 kula.  
'Illi of Honuakua, 1 lo'i, /at/ Kainanni 'Illi, 6, /at/ Wailua, 1.  
I received them from Kauhohu.  
HOKII

No. 4010 - HINAIABLE Waihee, Dec. 30, 1847  
A claim for my lo'is in Hono. There are 25 lo'i which were from  
Kuepuu's, and one kula. Here are these 13 lo'i and three stream  
branches /at/ Faukailla, which I received from Koolualua.  
Farewell to you all.  
HINAIABLE

No. 4049 - KANILOLO January 14, 1848  
Greetings to the Land Commissioners: I hereby state my claim for  
land at Waiehu. They are in Oha at the 'Illi of Polea. I have 25  
lo'i there also a small kula.  
KANILOLO

No. 4050 - KALEO January 14, 1848 Page 145  
Greetings to the Land Commissioners: Here is my claim for land  
at Kula and at Waiehu which I cultivated with my own hands: 1 mala  
of sugar cane, 1 mala of bananas, 1 mala of potatoes, 1 mala of taro,  
and 4 mala of potatoes.  
AT UKIKI in the 'Illi of Kahua, I have 4 lo'i. At Alahakaka I  
have 4 lo'i. At Waiohuli I have 1 mala of potatoes. It is finished.  
Kamouli in Kula  
KALEO

No. 4063 - KANEHEKILI Waihee, Dec. 30, 1847  
A claim for my 28 lo'is in Hono, and one house. I received them  
from Mekaale.  
KANEHEKILI

No. 4064 - KANOAA /sawp/ Waieoo, Dec. 29, 1848  
'Illi of Waipukua, 60 lo'i which I received from Kuakamauna.  
Waipukua II, 2 lo'i which I received from Kana. 9 kula are upland.  
KANOAA

No. 4065 - KAHIKI Honolulu, Jan. 19, 1848  
Greetings to the Land Commissioners: I hereby petition for my claim  
for a kou tree, a hala tree, and four potato mo'o in Honolulu.  
KAHIKI

EXHIBIT 4

22

C. 9256. Kawaha.

The Tenant appeared and said that she says she had no title to the land named as she found it in 1923 she thought otherwise when she entered her claim.

---

C. 1013. Nihoa.

The land consist of one piece of land it is a large piece in the is. of Nihoa, Nihoa, Nihoa.

The Tenant acquired it from A. in 1922. His title has never been disputed. There are 5 lots portions in it.

It is bounded, to the north by the portion land of A. Nakama, to the south by the land of B. Nakama, by the land of C. Nakama, by the land of D. Nakama, by the land of E. Nakama.

---

C. 3471. Nihoa.

The land consist of two pieces in the is. of Nihoa, Nihoa, Nihoa.

N.1 is a section of land and land.

N.2 is a section of land.

He acquired them from A. in 1922. His title has never been disputed. There are 2 portions in it.

N.1 is bounded to the north by the land of B. Nakama, to the south by the land of C. Nakama, by the land of D. Nakama, by the land of E. Nakama.

N.2 is bounded to the north by the land of B. Nakama, to the south by the land of C. Nakama, by the land of D. Nakama, by the land of E. Nakama.

---

C. 10550. Nihoa.

The land consist of two pieces in the is. of Nihoa, Nihoa, Nihoa.

N.1 is a section of land

EXHIBIT 4

No. 2112 Keahi (cont.)

Section 1 - 1 Taro patches at Ihukolea  
 Mauka and Kahakuloa Stream  
 Makai Paahi  
 Wailuku Stream

Section 4 - 3 Taro patches at Waipaa 2  
 Mauka Kaaiepo  
 Kahakuloa Land enclosure  
 Makai Kalkinohopono  
 Wailuku Kaaiepo

Section 5 - Taro Moo at Pualolo  
 Mauka Peahs patch  
 Kahakuloa Mookahi ili  
 Makai Kahana  
 Wailuku Kahanevul

First section from Kuhia

Section 2 from E. Kaemwai

Section 3 from Anadara in 1813

Section 4 from Kawahala

Section 5 from Kapawa in 1813

Keahi's illness incapacitated him from Pualolo work.

Page 259

No. 2654 Kahalewai Wailuku, July 25, 1819

E. Kanuwa'i sworn He has seen 1 section in Punana 1 ili at Waihee, 4 taro moos are there. Land from Kuaiki in 1839, no objection. Kahalewai died in 1818, his wife Kanihi is his heir.

Mauka Land enclosure  
 Kahakuloa Wn. Kokehi  
 Makai Prisoners' patch  
 Wailuku Kuaiki

No. 8366 Kapua July 25, 1819

Keahi sworn He has seen 2 sections at Makoleka ili in Waihee. Land from Waihee-Pr. 260 in long ago at the time of Kam II, two poalinas in section 2, no objection.

Section 1 - Taro pauka and pasture  
 Mauka Land enclosure  
 Kahakuloa Kamahaku  
 Makai Punona  
 Wailuku Palea

Section 2 - Taro pauka and pasture  
 Mauka, Kahakuloa and makai Palea  
 Wailuku Kalua

No. 9256 Kawaha July 25, 1819

Kawaha has no claim in this grant 9256.

No. 14063 Kamehekili July 25, 1819

Makaala sworn He has seen 1 taro section in ili of Waiakamaona in Waihee. Land from Kase in 1832, no objection. 3 Poalinas in Kamehekili's moo.

Mauka Kaen's poalina  
 Kahakuloa Kawahakili  
 Makai Land enclosure  
 Wailuku Stone wall

EXHIBIT 4

No. 3721 Makaele July 25, 1849

Kuhea sworn He has seen 2 sections in Waiakeonana ili in Waihee. Land from Naes in 1832, no objection, 3 poalimas in section 1.

Section 1 - Taro pauku and pasture

Mauka	Pahi
Kahakuloa	Kuahewa
Makai	Stone wall
Wailuku	Puhanoiu ili

Section 2 - 8 Taro patches and pasture

Mauka	Psulana ili
Kahakuloa, makai, Wailuku	Pahi

No. 40550 Hailuelua July 25, 1849 Page 261

Kouunui sworn He has seen 2 sections in Waipukua ili in Waihee. Land from Eleoleloho at the time of Kaahumahu I, no objection. 4 Poalimas in section 1

Section 1 - Taro pauku

Mauka	Stream
Kahakuloa	Kaaukelehonua
Makai	Stream
Wailuku	Zapo

Section 2 - Wauke pasture

Mauka	Kaauponi
Kahakuloa	Pali
Makai	Pu
Wailuku	Pali

No. 4389 Kahookola Jly 25, 1849

Maone sworn He has seen 2 sections at Waialohe and Kapoho in Waihee. Land from father at the time of Kam II, no objection. 4 Poalimas in the first section.

Section 1 - Taro pauku at Waialohe

Mauka	Land enclosure
Kahakuloa	Kaapu
Makai	Uahalau
Wailuku	Kane

Section 2 - 1 Taro patch at Kapoho

Mauka	Zane
Kahakuloa, makai	2. Kaauwai's land/Konohiki
Wailuku	Pa'ea

No. 4389 B Kanoua July 25, 1849

The same as the above grant fro Kahookola. Keahi sworn He has seen 2 sections in the ili of Waipukua in Waihee. \*Land from Eleoleloho at the time of Kaahu- Pg. 262 manu I, no objection. 5 poalimas there.

Section 1 - 4 Taro noo's

Mauka	Stream ditch
Kahakuloa	Puhanoiu ili
Makai	Psulima
Wailuku	Hokii

Section 2 - 1 Taro patch

Mauka	Stream ditch
Kahakuloa	Psulima
Makai	Kainiolua/Psalima
Wailuku	Kapa

**EXHIBIT 4**