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Ref. No. P-13839

January 17, 2013

2013 JAN 17 P 3:35
LAND USE COMMISSION
STATE OF HAWAII

To: Daniel Orodener, Executive Officer
State Land Use Commission

From: Jesse K. Souki, Director

Subject: DR12-48, Petition to Designate Important Agricultural Lands
Petitioner: Grove Farm Company, Inc.
Location: Haupu and Lihue, Kauai, Hawaii
Acreage: Approximately 11,026.2 Acres

The Office Planning (OP) appreciates the Petitioner's participation in the voluntary process for the designation of important agricultural lands (IAL). The designation of the most productive agricultural lands in Hawaii will help to realize the vision expressed in the Administration's New Day Plan, which calls for an agricultural renaissance in Hawaii.

Having reviewed the petition after consulting with other agencies and applying the available information to the applicable IAL law, OP recommends that the Land Use Commission (LUC) designate the Haupu lands as IAL in its entirety, and designate a portion of the proposed Lihue lands as IAL. The following is provided in support of this recommendation.

Applicable Law. The State law for important agricultural lands is contained within Hawaii Revised Statutes (HRS) §§205-41 through 205-44. Lands being considered for IAL designation must meet the definition of IAL, pursuant to HRS §205-42(a), which provides that IAL lands:

- “(1) Are capable of producing sustained high agricultural yields when treated and managed according to accepted farming methods and technology;
- (2) Contribute to the State's economic base and produce agricultural commodities for export or local consumption; or
- (3) Are needed to promote the expansion of agricultural activities and income for the future, even if currently not in production.”

HRS §205-44(c) lists eight (8) standards and criteria for the identification of IAL, which will be assessed as part of OP's review. OP recognizes that lands identified as IAL need not meet every standard and criteria listed; however, HRS §205-44(a) also requires that “the

designation of important agricultural lands shall be made by weighing the standards and criteria with each other to meet the constitutionally mandated purposes in article XI, section 3, of the Hawaii Constitution and the objectives, policies, standards, and criteria for important agricultural lands in sections 205-42 and 205-43.”

Summary of key elements of the petition. The Petitioner is requesting that the LUC issue a declaratory order designating 11,026.2 acres of land at Haupu and Lihue, Kauai, Hawaii, as IAL. (Refer to the attached Figure 1 for the petition area). The petition area consists of two land areas: (1) an area owned by Grove Farm Company, Inc., and (2) an area owned by Haupu Land Company, LLC. The Petitioner, Grove Farm Company, Inc., has been authorized by Haupu Land Company, LLC to file this petition on its behalf. The Petitioner represents that if the petition is approved, it and Haupu Land Company waive all rights to any credits that may be earned under HRS §205-45(h). A general description of the petition area is as follows:

- a. The Lihue lands owned by Grove Farm Company, Inc., consist of 10,266.2 acres of land divided into eight Tax Map Key (TMK) parcels. The area contains approximately 5,999.6 acres of land under lease for agricultural purposes and 4,266.6 acres of reservoirs, ravines, gulches, and other land features not conducive to arable agriculture operations. Of the total land area, 58.4% are leased lands with twenty (20) tenants using the area for ranching, biomass production, diversified agriculture, and livestock operations.
- b. The Haupu lands owned by Haupu Land Company, LLC, consist of a total of 760 acres. Six (6) tenants lease 344.8 acres, mostly for ranching operations, and 415.2 acres constitutes the Waita Reservoir, the State’s largest manmade reservoir.

Basis of review and comments. OP’s review is based on the petition, petition exhibits, and public data available on the proposed lands. In addition, OP received comments on the petition from the following entities:

- **U.S. Department of Agriculture’s Natural Resource Conservation Service (USDA-NRCS), Pacific Islands Area Office** (Refer to the attached Exhibit A). The USDA-NRCS letter confirms the Petitioner’s Agricultural Lands of Importance to the State of Hawai‘i (ALISH) designation and elaborates upon the soil agricultural capacities. The USDA-NRCS acknowledges the area does not meet the State ALISH or federal criteria for important agricultural lands, however, they recognize the benefits of preserving the proposed lands as a large contiguous land area.
- **Hawaii State Energy Office** (Refer to the attached Exhibit B). The attached State Energy Office letter substantiates that the proposed lands would be suitable for

energy producing crops, and that the preservation of contiguous agricultural lands are important for bioenergy projects.

- **University of Hawaii, College of Tropical Agriculture and Human Resources (UH-CTAHR)** (Refer to the attached Exhibit C). The attached UH-CTAHR letter provides insight on soil quality and productivity ratings, rainfall and irrigation, and solar radiation. The letter provides an assessment of the agricultural suitability and supports consideration of the lands for IAL status.

Assessment of petition lands. The following assesses the proposed IAL areas relative to the eight (8) standards and criteria for the identification of IAL established in HRS §205-44(c).

§205-44(c)(1), Land currently used for agricultural production. Based on the Petitioner's information, 6,000 acres (58%) of the Lihue lands and 285 acres (38%) of Haupu lands proposed for designation meet this criterion. The tables below summarize the current uses as provided by the Petitioner's information in Exhibit A and C, Figure 2, "Current and Future Agricultural Operation."

Table 1	
Agricultural Use of Lihue Lands Petition Area	
Current Use	Approximate Acres
Biomass	398.0
Biomass and Ranching	930.0
Ranching	4,505.0
Diversified Agriculture	79.7
Ranching & Diversified Agriculture	72.6
Livestock & Diversified Agriculture	14.3
Total Acres Used	5,999.7
<i>Total Proposed IAL Area</i>	<i>10,266.2</i>

Table 2	
Agricultural Use of Haupu Lands Petition Area	
Current Use	Approximate Acres
Ranching	285.2
Waita Reservoir	400.0
Total Acres Used	685.2
<i>Total Proposed IAL Area</i>	<i>760.0</i>

§205-44(c)(2), Land with soil qualities and growing conditions that support agricultural production of food, fiber, or fuel- and energy-producing crops. The proposed lands are mostly of poor soil quality. As illustrated in Table 3 below, Land Study Bureau (LSB)

overall productivity ratings show only 14% of the soils of the Lihue lands are rated B and C (no A-rated lands), and only 21% of the soils of the Haupu lands are rated B and C (no A-rated lands). Of the Lihue lands, 85% are rated D and E, and of the Haupu lands 79% are rated D and E. Both petition areas receive a sufficient amount of annual rainfall ranging between 100 inches at the higher elevations to 65 inches in the lower lands.

The attached Figure 2, illustrates the slopes associated with the proposed Lihue lands. Of the 10,266 acres, approximately 3,510 acres (34%) have slopes equal to or greater than 20%. This is relevant to agricultural productivity in that steep slopes typically hinder machinery and labor operations due to geographic features such as ravines, gulches, and steep terrain and poorer soil quality. Figure 2 also maps the prior cultivation of sugarcane in relation to slope, which demonstrates a historical inverse relationship between slope and agricultural cultivation or productivity. There were approximately 3,239 acres planted in sugar cane, comprising approximately 32% of the proposed Lihue lands.

§205-44(c)(3), Land identified under agricultural productivity rating systems, such as the Agricultural Lands of Importance to the State of Hawai'i (ALISH) system adopted by the Board of Agriculture on January 28, 1977. The petition provides ALISH and LSB data in Petitioner Exhibits A and C of Figures 3 and 5. The petition's ALISH and LSB information is summarized in Tables 3 and 4 below. LSB ratings were described in the previous section. Of the Lihue lands, 34% are classified as Prime or Other Important Agricultural Lands under the ALISH system, while 66% are not classified under ALISH. Of the Haupu lands, 75% are classified as Prime or Other Important Agricultural Lands while 25% are not classified under ALISH.

Table 3				
LSB Rating of Petition Area				
LSB Rating	Lihue Lands		Haupu Lands	
	Acres	Percent	Acres	Percent
A (Very Good)	-	-	-	-
B (Good)	31.3	0.3%	71.9	20.9%
C (Fair)	1,387.7	13.5%	1.3	0.4%
D (Poor)	2,978	29%	121.9	35.3%
E (Very Poor)	5,789.7	56.4%	149.7	43.4%
Not in LSB	79.6	0.8%	*	*
Total:	10,266.2	100%	344.8	100%

* Haupu Area figures do not account for 415 acres Waita Reservoir.

Table 4				
ALISH Rating of Petition Area				
ALISH Rating	Lihue Lands		Haiku Lands	
	Acres	Percent	Acres	Percent
Prime	1,768.1	17.2%	142.6	41.4%
Other	1,676.9	16.3%	115.8	33.6%
Not in ALISH	6,821.2	66.4%	86.3	25%
Total:	10,266.2	100%	344.7	100%

§205-44(c)(4), Land types associated with traditional native Hawaiian agricultural uses, such as taro cultivation, or unique agricultural crops and uses, such as coffee, vineyards, aquaculture, and energy production. The proposed Lihue lands have the potential to be used for energy producing crops. The petition states that future biomass growing operations may occur within the proposed land area. Hawaii BioEnergy, LLC (HBE) has an option agreement with Grove Farm Company, Inc. to lease up to 9,890 acres to implement a Biomass to Energy project. HBE has until August 2015 to exercise this lease option with a term of 30 years. The Hawaii State Energy Office in its letter dated January 7, 2013 (Exhibit B), states in reference to energy producing crops, “the identified lands have areas with soil qualities and growing conditions suitable for the cultivation of these crops.” OP notes that this is an option to lease and not a lease agreement; no commitments have been made to pursue cultivation.

§205-44(c)(5), Land with sufficient quantities of water to support viable agricultural production. The proposed lands appear to meet this criterion. The entire petition area includes a network of streams, irrigation ditches, and reservoirs that provide the needed infrastructure to irrigate lower elevation lands. Higher elevation lands are naturally irrigated by rainfall, receiving 80 to 100 inches annually. (Refer to Figure 6 in Exhibits A and C of the petition).

§205-44(c)(6), Land whose designation as important agricultural lands is consistent with general, development, and community plans of the county. The proposed lands partially meet this criterion. The Kauai County 2000 General Plan designates the proposed land areas as either Agriculture or Open. Exhibit A, Figure 7 of the Petition is attached as OP Figure 4, and indicates a large portion of the Lihue lands is not designated. Further clarification of this by the petitioner or the County of Kauai would be helpful. The proposed Haupu lands fall entirely within the County’s Agriculture designation and approximately half of the proposed Lihue lands is classified as Agriculture with the remainder classified as Open. A large portion of the Lihue lands is not classified, as indicated by the petition map in Exhibit A, Figure 7. Intensive agricultural use of these lands would not be consistent with the General Plan policies for Open lands as set forth in Section 5.3.1 of the Kauai General Plan.

§205-44(c)(7), Land that contributes to maintaining a critical land mass important to agricultural operating productivity. This criterion is not fully met because of extensive fragmentation of productive areas within the Lihue lands due to steep terrain, gulches, and poor soil qualities as indicated in Sections B and C and illustrated in Figure 2 (attached).

§205-44(c)(8), Land with or near support infrastructure conducive to agricultural productivity, such as transportation to markets, water, or power. The proposed lands appear to meet this criterion with respect to the availability of water for irrigation and proximity and access to roads, markets, harbors, and power.

Summary and Recommendation

Based on available information and Petitioner representations, and having weighed the IAL standards and criteria in consideration of the constitutionally-mandated purposes in Article XI, Section 3, of the Hawaii Constitution, and the objectives and policies for important agricultural lands in HRS §§205-41 through 205-44, OP recommends that the LUC approve the designation of the Haupu lands in its entirety. OP recommends that a portion of the proposed Lihue lands, consisting of approximately 3,957 acres, be designated as IAL as illustrated in the attached Figure 3. OP further recommends that a condition of approval be imposed on the petition waiving any and all rights to credits under HRS §205-45(h), as represented by the Petitioner in its petition.

OP does not support designating all of the proposed 10,265 acres of the Lihue lands as IAL. Large areas of this property are considered less productive agricultural lands due to steep land slopes over 20%, consisting of ravines and gulches (refer to attached Figure 2), and overall poor soil qualities under the ALISH and LSB systems (refer to Tables 3 and 4 and attached Figure 1). As defined in HRS §205-42(a)(1), important agricultural lands, “are capable of producing sustained high agricultural yields when treated and managed according to accepted farming methods and technology.” Portions of the Lihue lands would not be capable of producing sustained high agricultural yields given the terrain and soil quality. While OP supports the use of the lands for bio-fuel crops, there is presently no commitment to such use, only an option to lease. As noted earlier, past sugar cane production acreage has totaled only 3,239 acres of the Lihue lands.

As illustrated in Figure 3, OP supports the designation of that portion of Lihue lands that lies downslope of the Upper Lihue Ditch and Kamooloa Stream, an area of approximately 3,957 acres. These lands contain a majority of the ALISH Prime lands and lands with the higher LSB ratings of the Lihue lands, all the reservoirs within the Lihue lands, and are served by the ditch system. The recommended IAL area would be situated mostly on slopes with a gradient of 20%

Daniel Orodener
Page 7
January 17, 2013

or less. OP's recommendation for designation of recommendation portion of the Lihue lands would reduce the Petitioner's total request of 11,026.2 acres to 4,717 acres of IAL.

Thank you for the opportunity to comment on the Petition. If you have any questions, please contact me at 587-2833.

Attachments

United States Department of Agriculture



Natural Resources Conservation Service
P.O. Box 50004 Rm. 4-118
Honolulu, HI 96850
808-541-2600

January 4, 2013

Jesse K. Souki, Director
Office of Planning
PO Box 2359
Honolulu, Hawaii 96804

Dear Mr. Souki,

Thank you for providing the NRCS the opportunity to review the Petition for Declaratory Order to Designate Important Agricultural Lands for the Petitioner Grove Farms Co., Inc., Island of Kauai'i, Hawai'i. We have confined our comments to issues within the purview of NRCS, specifically those related to soil properties that are typically used to assess the quality of land for agricultural use.

After analysis of the data provided by the petitioner, we agree with the petitioner in the respective designations of the lands as "Prime" or "Other Important Agricultural Land" under the Agricultural Lands of Importance to the State of Hawaii (ALISH; map provided in Exhibits "A" and "C"). Additionally, over half of these areas have proven potential for biomass production, livestock grazing, and diversified agriculture (described in Petitioner Exhibit "A"). Exclusion of the areas as ALISH within the petition parcel is likely due to soil areas within the parcel being categorized as extremely stony, which limits traditional mechanized agriculture. The inclusion of the Wiata Reservoir – the largest man-made reservoir in the state providing valuable water for agricultural operation – in the Hau'pu lands is considered to be a key functional part of the agrarian landscape therein.

The ALISH system includes three categories of Important Farmlands: Prime, Unique, and Other Important Agricultural Lands. In considering their quality as agricultural lands, the areas that are currently classified as ALISH within the area petitioned are dominantly identified as "Other Important Agricultural Lands". The remaining petitioned areas not currently classified as ALISH are generally areas that have extremely stony soils with a few small areas that are very steep. Although they are not classified as prime, important or unique under the current ALISH system, most of the extremely stony soil areas have the potential for livestock grazing or for protection of watershed integrity. The presence of stony areas does not significantly impair the use of the land for grazing or for managed forest. These soils could potentially be classified as Unique Agricultural Lands based on their forage/biomass production if the criteria included in the ALISH guidelines are verified through further investigation.

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Grove Farms IAL petition
January 4, 2013
Page 2 of 2

Even though all of the land included in the area submitted by the petitioner does not meet either the state (ALISH) or federal (USDA Prime Farmland) criteria for important agricultural lands, USDA-NRCS recognizes the potential benefits of preserving the petitioned IAL as a large block of contiguous land area. Such a contiguous designation could be conducive to integrated management activities or both agricultural production and environmental protection.

If you have any questions concerning the soils and related quality and suitability ratings for this project area, please contact, Cynthia A. Stiles, Assistant State Soil Scientist, by phone (808) 541-2600 x129 or email, Cynthia.Stiles@hi.usda.gov.

Sincerely,



ACTING FOR:

ANGEL FIGUEROA

Director

Pacific Islands Area

Cc: Daniel Cahill, Acting District Conservationist, Lihue, HI
Tony Rolfes, Assistant Director – Soil Survey and Natural Resource Assessment,
Honolulu, HI
Cynthia A. Stiles, Assistant State Soil Scientist, Honolulu, HI
Cheryl Morton, Administrative Assistant, Honolulu, HI

**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

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Ref. No. P-13814

January 7, 2013

To: Jesse K. Souki, Director
Office of Planning

From: Mark B. Glick, Administrator
State Energy Office

Subject: Comments on Petition for Declaratory Order to Designate Important Agricultural Lands
(DR 12-48)

The State Energy Office has the following comments on criteria relevant to our expertise, land and crops for fuel and energy, in accordance with Hawai'i Revised Statutes §205-44.

Hawai'i Bioenergy, LLC (HBE) plans to use approximately 9,890 acres of the petitioned important agricultural lands to grow and harvest biomass feedstocks for conversion into biofuel and/or power at a processing facility to be constructed by HBE. Crops identified by HBE as primary candidates include trees (e.g., eucalyptus) and grasses (e.g., banagrass). Both trees and grasses have been identified as "strong candidates for energy crops for sugar and fiber production¹" and the identified lands have areas with soil qualities and growing conditions suitable for the cultivation of these crops. These lands would also be suitable for cultivation of other food, fiber, fuel, and energy-producing crops.

HBE has entered into a 20-year contract, subject to approval by the Hawai'i Public Utilities Commission, to supply Hawaiian Electric Company (HECO) with 10 million gallons of biofuel per year for 20 years. HECO considers this contract a "major milestone" in HECO's strategy to meet its clean energy goals.² It has been our impression that the team of experts retained by HBE in the course of its project development has credibility in relevant areas, including bioenergy, local agriculture, and forestry.

We appreciate the opportunity to comment on the subject petition. The preservation of contiguous agricultural areas is important for bioenergy projects.³ If you have any questions, please contact me or Veronica Rocha, Renewable Energy Projects Manager, at veronica.rocha@dbedt.hawaii.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark B. Glick".

Mark B. Glick
Administrator, State Energy Office

¹ Hawai'i Natural Energy Institute, *Hawai'i Bioenergy Master Plan*, 2009.

² Hawaiian Electric Company, Inc., *Application for Approval of the Biofuel Supply Contract with HBE and to include the Biofuel Supply Contract's Costs in Hawaiian Electric's Energy Cost Adjustment Clause*, Docket No. 2011-0369.

³ Department of Business, Economic Development & Tourism, *Biofuels Study - Final Report to the Legislature in Accordance with Act 203*, 2012.



UNIVERSITY
of HAWAII®
MĀNOA

14 January 2013

Mr. Scott Forsythe
Hawaii DBEDT
Office of Planning
235 South Beretania St.
Hawaii, 96831

Dear Mr. Forsythe,

I received a request to review a petition for IAL designation for 11,026 acres of Grove Farm Co. lands on Dec. 11, 2012. I apologize for submitting this review after the requested deadline and hope that it may still be of use. I have reviewed the petition submitted by the attorneys Matsubara – Kotake on behalf of Grove Farm as well as USDA Soil Surveys for these sites on Kauai and provide my comments below.

The petition is well written and organized, with relevant information on the two parcels of land, 10,266 acres of "Lihu'e Lands" and 760 acres of "Ha'upu Lands" (which include the 415 acre Waita Reservoir). Much of this land was used or was adjacent to land used for sugarcane production by Lihue Plantation, Grove Farm, McBryde Sugar Company, or their predecessors. The Lihu'e and Ha'upu land parcels are quite different and are assessed separately below.

The Lihu'e Lands, include about 6000 acres which are in "active or future agricultural production". These lands, as indicated in the petition were farmed in sugarcane for over 100 years. While irrigation is available, mainly from surface waters, reservoirs, and ditches, rainfall is quite high (ranging from 60-100 inches per year) and is adequate for rainfed production of many crops. The soils are highly weathered clays, of low to moderate fertility, which probably explains the relatively low productivity ratings by the Land Study Bureau. These soils do have good physical properties and with proper fertilization can be productive for a wide range of crops. Solar radiation is moderately low on these Lihu'e lands and while adequate for the growth of many crops, these areas could not be as highly productive as sunnier, leeward lands. The lands are also highly dissected with gullies and ravines, which the petition indicates "facilitates drainage and are essential for agricultural production". These areas in ravines are not farmed and it is not entirely convincing that they should be considered Important Agricultural Lands. However, they are contiguous to the agricultural fields and in addition to drainage, they can be considered as conservation land, wildlife habitat and agricultural buffers. I recommend that these lands be approved as Important Agricultural Lands. The agricultural fields are suitable for producing a wide range of tree crops, pasture, vegetable and fruits and while not the most productive of lands (due to relatively low soil

fertility and solar radiation) they can be managed to produce many agricultural products sustainably.

The Ha'upu Lands are dominated by the 415 acre Waita Reservoir, which the petition indicates is the largest in the state, with a 2.1 billion gallon capacity. As indicated, it is an important water source for about 3,700 acres of land in southern Kauai, including 1,533 acres of land already designated as IAL in Mahaulepu. (I had also provided a review for that IAL petition). The other of the Ha'upu lands are currently mainly used for ranching, but were previously used in part for sugarcane production. These additional 345 acres are also predominantly deep clay soils, which are inherently slightly higher in fertility and have slightly higher solar radiation, than the Lihu'e Lands. I also recommend that these lands be approved as Important Agricultural Lands, although I don't know the appropriate status of a large reservoir in this regard. Waita Reservoir certainly supports adjacent agricultural lands by providing large volumes of irrigation water.

I hope these brief comments are useful for your assessment of this petition.

Sincerely,

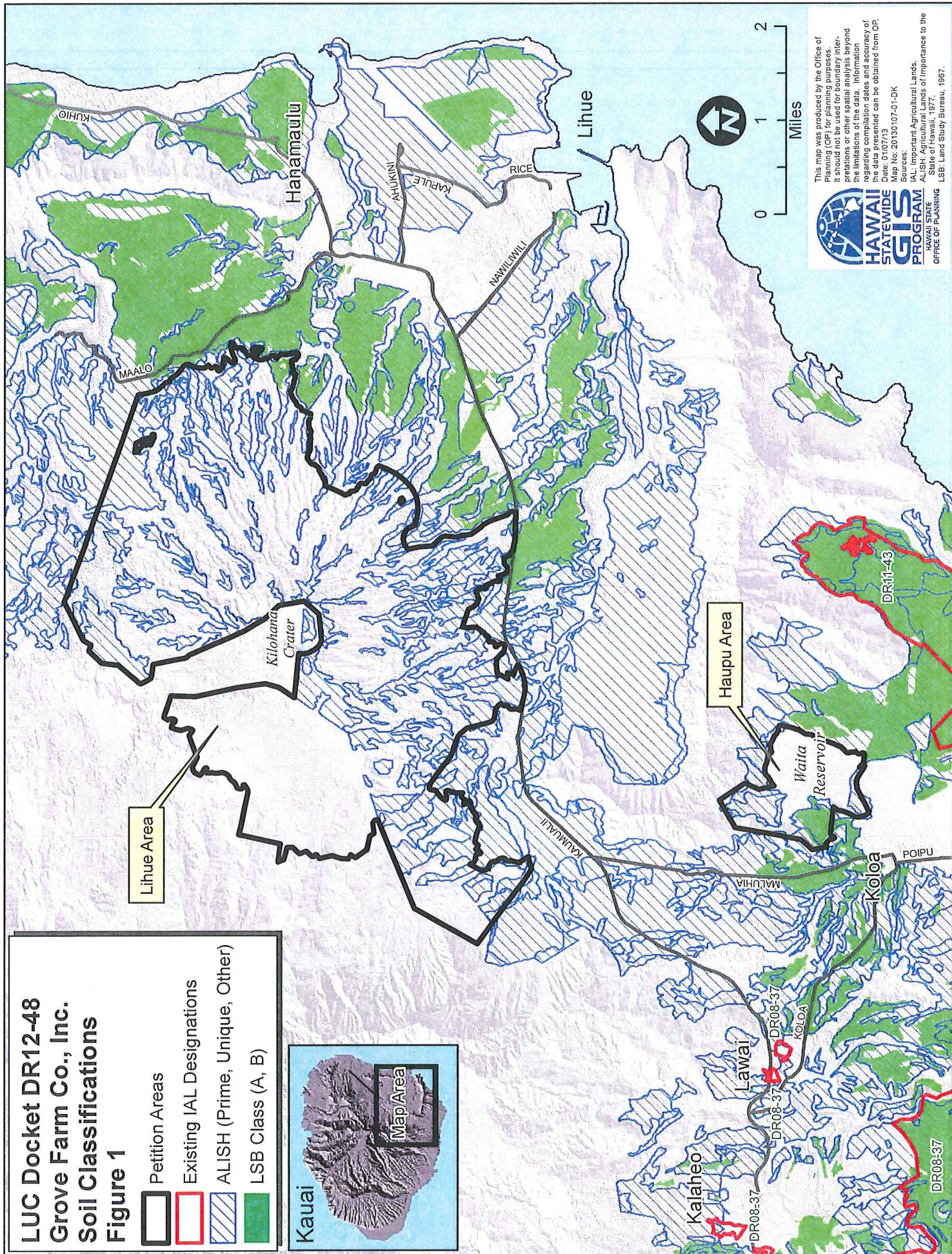
A handwritten signature in black ink, appearing to read "Carl I. Evensen". The signature is fluid and cursive, with the first name "Carl" being more prominent and the last name "Evensen" written in a more compact, flowing style.

Carl I. Evensen, Ph.D.
Interim Associate Dean/Associate Director of Cooperative Extension
College of Tropical Agriculture and Human Resources

LUC Docket DR12-48 Grove Farm Co., Inc. Soil Classifications

Figure 1






-  Petition Areas
-  Existing IAL Designations
-  ALISH (Prime, Unique, Other)
-  LSB Class (A, B)

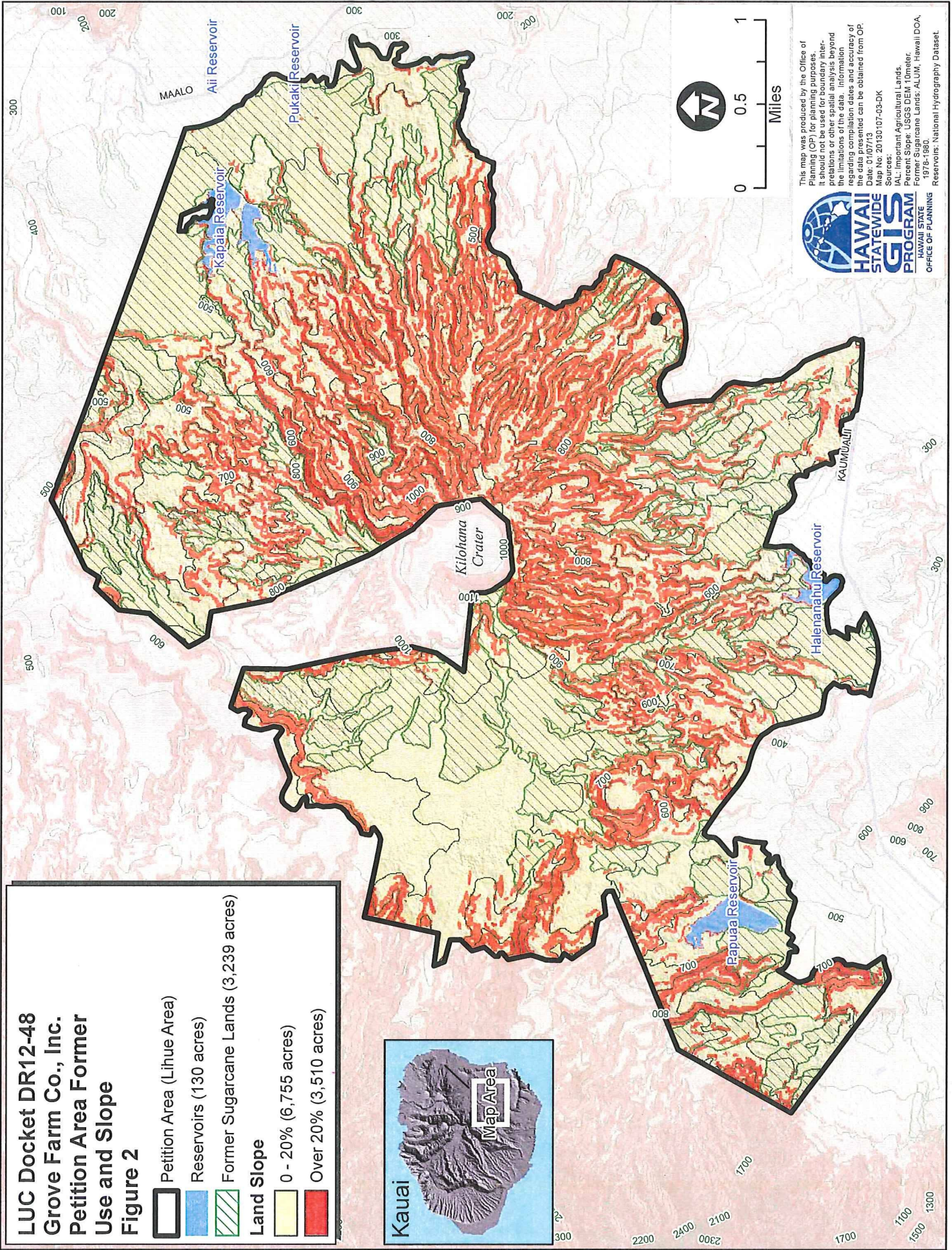


This map was produced by the Office of Planning (OP) for planning purposes. It should not be used for boundary interpretations or other spatial analysis beyond the limitations of the data. Information regarding compilation dates and accuracy of the data presented can be obtained from OP.

Date: 01/07/13
Map No: 20130107-01-DK
Sources:
AL: Important Agricultural Lands.
ASL: Agricultural Lands of Importance to the State.
LSB: Land Study Bureau, 1987.

**LUC Docket DR12-48
Grove Farm Co., Inc.
Petition Area Former
Use and Slope
Figure 2**

-  Petition Area (Lihue Area)
-  Reservoirs (130 acres)
-  Former Sugarcane Lands (3,239 acres)
- Land Slope**
-  0 - 20% (6,755 acres)
-  Over 20% (3,510 acres)






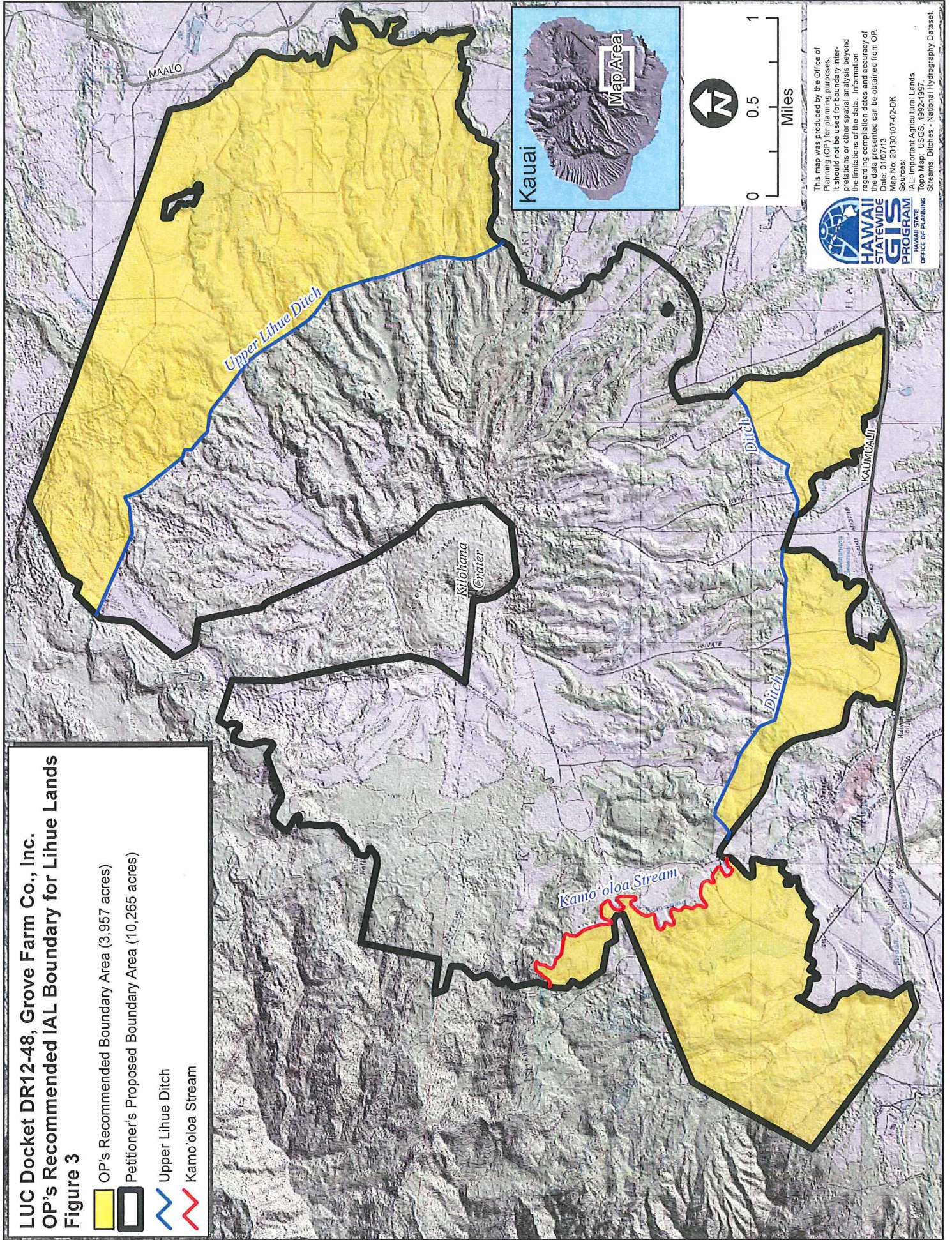
This map was produced by the Office of Planning (OP) for planning purposes. It is not intended for use in legal proceedings or other spatial analysis beyond the limitations of the data. Information regarding compilation dates and accuracy of the data presented can be obtained from OP.

Date: 01/07/13
Map No: 20130107-03-DK

Sources:
IAL: Important Agricultural Lands.
Percent Slope: USGS DEM 10mder.
Former Sugarcane Lands: ALUM, Hawaii DOA, 1978-1980.
Reservoirs: National Hydrography Dataset.

**LUC Docket DR12-48, Grove Farm Co., Inc.
OP's Recommended IAL Boundary for Lihue Lands
Figure 3**

-  OP's Recommended Boundary Area (3,957 acres)
-  Petitioner's Proposed Boundary Area (10,265 acres)
-  Upper Lihue Ditch
-  Kamo'o'loa Stream



OP - Figure 4

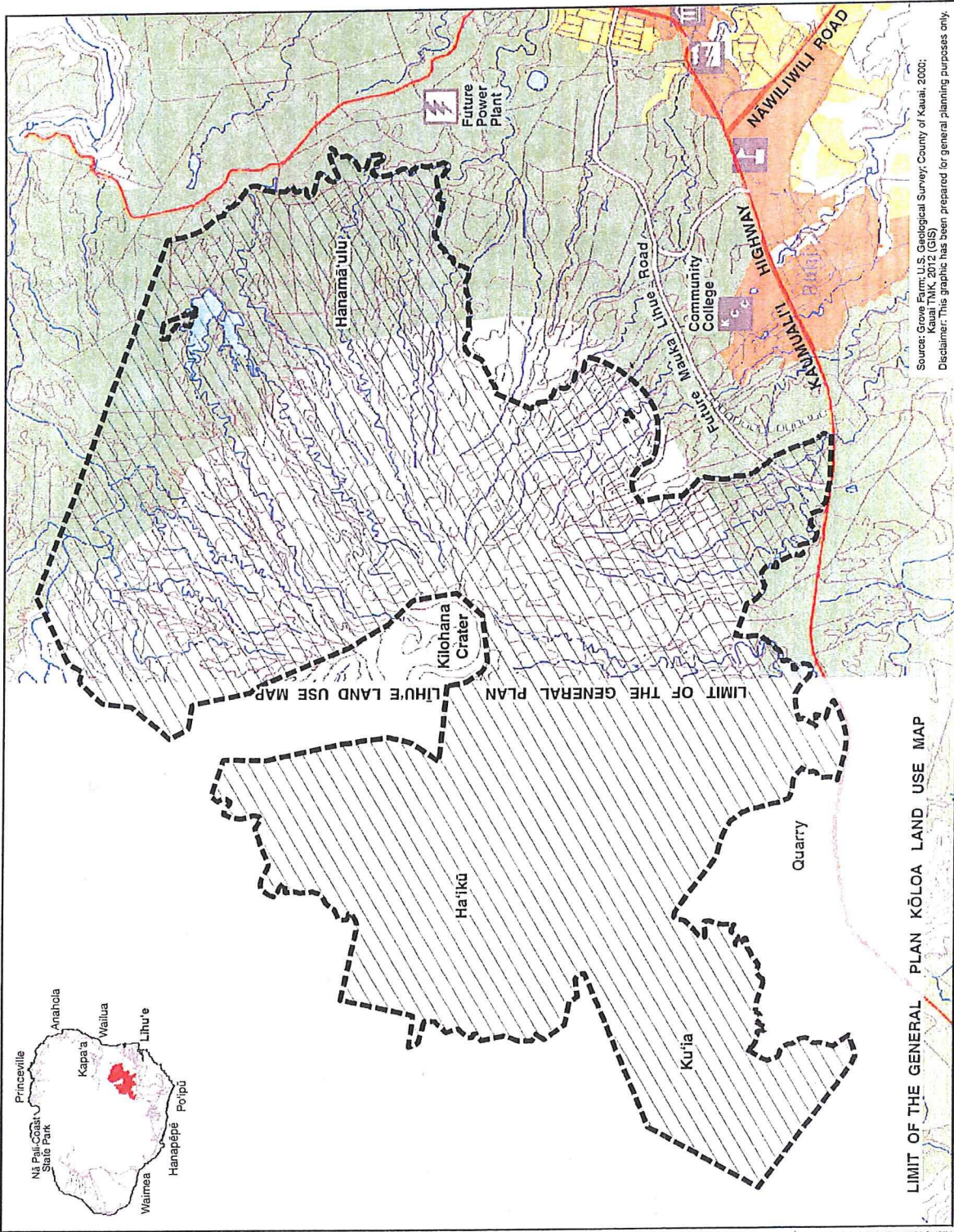
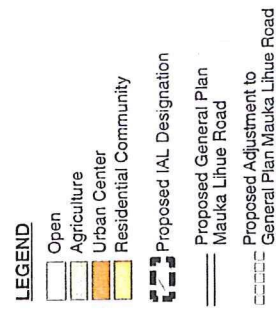


FIGURE 7

DATE: 11/6/2012

Kaua'i General Plan

LĪHU'E IAL

