

BEFORE THE LAND USE COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Petition of	)	DOCKET NO. BR93-693
	)	
THE OFFICE OF STATE PLANNING,	)	HEARING OFFICER'S
STATE OF HAWAII	)	PROPOSED FINDINGS OF
	)	FACT, CONCLUSIONS OF
To Amend the Agricultural Land	)	LAW, AND DECISION AND
Use District Boundary into the	)	ORDER
Conservation Land Use District	)	
for Approximately 4,470.22 Acres	)	
at Moaula and Kaalaiki-Ninole,	)	
Kau, Island of Hawaii, State of	)	
Hawaii, Tax Map Key Nos.: 9-6-06:9,	)	
10, 15 & 18 and 9-7-01:14, 15,	)	
16, 17 & 20	)	
_____	)	

HEARING OFFICER'S PROPOSED FINDINGS OF FACT,  
CONCLUSIONS OF LAW, AND DECISION AND ORDER

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Hearing Officer

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HEARING OFFICER'S PROPOSED FINDINGS OF FACT,  
CONCLUSIONS OF LAW, AND DECISION AND ORDER

The Office of State Planning, State of Hawaii ("Petitioner"), filed a Petition for Land Use District Boundary Amendment on October 13, 1993, and a First Amended Petition on January 27, 1994, pursuant to Sections 205-4 and 205-18, Hawaii Revised Statutes ("HRS"), and Chapter 15-15, Hawaii Administrative Rules ("HAR"), to amend the State land use district boundary by reclassifying approximately 4,470.22 acres of land situated at Moaula and Kaalaiki-Ninole, Kau, Island of Hawaii, State of Hawaii, identified as Tax Map Key Nos. 9-6-06:9, 10, 15 & 18 and 9-7-01:14, 15, 16, 17 & 20 ("Property"), from the Agricultural Land Use District to the Conservation Land Use District.

The duly appointed Hearing Officer of the Land Use Commission ("Commission"), having heard and examined the testimony, evidence, and argument of the parties presented during the hearing, the Stipulated Proposed Findings of Fact, Conclusions of Law, and Decision and Order between Petitioner and the County of Hawaii Planning Department ("Planning Department"), hereby makes the following findings of fact and conclusions of law:

#### FINDINGS OF FACT

##### PROCEDURAL MATTERS

1. On October 13, 1993, Petitioner filed a Petition for Land Use District Boundary Amendment ("Petition"). On January 27, 1994, Petitioner filed a First Amended Petition.

2. On December 20, 1993, the Planning Department filed its Statement of Position in Support of the Petition.

3. A prehearing conference on the Petition was held on February 3, 1994, in Honolulu, Hawaii, at which time Petitioner presented its lists of exhibits and witnesses. The Planning Department was not present at this conference.

4. The Commission's hearing officer, Vice Chairperson and Commissioner, Karen S. Ahn, held a hearing on the Petition on March 15, 1994, pursuant to a public notice published in the Hawaii-Tribune Herald, the Honolulu Advertiser, and West Hawaii Today on January 14, 1994.

(TR 3/15/94, p. 32, lns. 1-3.)

5. The Planning Department was duly notified of the proceedings but was not present at the hearing on the Petition. (TR 3/15/94, pp. 6-7.)

6. The Commission's hearing officer entered into evidence, without objection, the following:

- a. Opposition letter from Mr. Lunakanawai Hauanio dated January 25, 1994;
- b. Support letter from Ms. Shanti Devi dated February 13, 1994;
- c. Memorandum from Mr. Keith Ahue, Department of Land and Natural Resources ("DLNR"), dated March 1, 1994; and
- d. Support letter from Mr. Hugh R. Montgomery, Na Ala Hele, dated March 4, 1994.

(TR 3/15/94, p. 32.)

7. The hearing officer also admitted into evidence, with objections by Petitioner, a Memorandum from Mr. Keith Ahue, DLNR, dated March 10, 1994, stating that DLNR concurred with Petitioner's proposed reclassification of the Property with the exception of TMK No.: 9-6-06: 9. Petitioner objected to the memorandum citing that it was untimely and vague. The hearing officer informed Petitioner that DLNR would have one week to supplement the record to clarify whether DLNR's memorandum was a withdrawal of authorization by DLNR to reclassify a 68-acre portion of the Property (TMK No.: 9-6-06:9). By Memorandum dated March 29, 1994, DLNR clarified that it had no objection to the reclassification of the 68-acre

parcel identified as TMK No. 9-6-06:9. (TR 3/15/94, pp. 10-12; DLNR memorandum, 3/29/94.)

8. Mr. Douglas Blake and Mr. Lunakanawai Hauanio testified as public witnesses. (TR 3/15/94, pp. 34, 45.)

9. Mr. Lunakanawai Hauanio orally requested to intervene in the proceedings. The request was denied by hearing officer, Karen S. Ahn, and by a written order filed on March 29, 1994. (TR 3/15/94, pp. 47-48.)

#### DESCRIPTION OF THE PROPERTY

10. The Property consists of approximately 4,470.22 acres of land located within the Kau Judicial District. The portion of the Property identified as Moaula involves four parcels, TMK No.: 9-6-06:09, 10, 15, and 18. The parcels are bounded by Paauau Gulch on the north, by Moaula Gulch on the southwest, and by the Kau Forest Reserve on the west. The parcel identified by TMK No.: 9-6-06:15 is bounded on the northwest and northeast by flumes. These flumes are identified as parcels 16 and 17 and are excluded from this Petition. (Petitioner's Exhibit No. 6, pp. 3 and 4; Petitioner's Exhibit B, p. 5; Petitioner's Exhibit 3; Petitioner's Exhibit No. 7.)

11. The portion of the Property identified as Kaalaiki-Ninole involves five parcels, TMK No.: 9-7-01: 14, 15, 16, 17, and 20. The parcels are bounded on the northeast by Enuhe Ridge, on the west by Mountain House Trail and the eastern boundary of the Kau Forest Reserve, and by the Ninole-Wailau Homesteads on the northeast, and the Kaunamano

Homestead on the southeast. (Petitioner's Exhibit No. 6, p. 4; Petitioner's Exhibit B, p. 5; Petitioner's Exhibit 3.)

12. All parcels within the Property are unencumbered, except for TMK No.: 9-6-06: 9 that is leased for pasture under a revocable permit (Document No. 05256) to the Richard Smart Trust. (Petitioner's Exhibit No. 6, p. 5.)

13. The State of Hawaii is the owner of the Property. The Land Management Division of DLNR is authorized to manage, administer, and control State land, including the Property described herein. (Petitioner's Exhibit No. 6, p. 7; Petitioner's Exhibit No. 3.)

14. The Property is located on the eastern slopes of Mauna Loa between the 2,000 and 2,900-foot level. The topography of the Property is gently sloping throughout, rising 500 feet from the 2,400-foot level at its eastern boundary, to 2,900 feet at its western boundary. The Property receives an annual median rainfall of approximately 90-100 inches per year. The average temperature for the Property is 65°F and ranges from a low of 50°F to a high of 70°F. (Petitioner's Exhibit No. 6, p. 9; Petitioner's Exhibit No. 9, p. 2.)

15. The Soil Survey of the Island of Hawaii, State of Hawaii, prepared by the U.S. Department of Agriculture, Soil Conservation Service ("SCS") (1973), classifies the soil within the Property as follows:

a. Hilea (HIC), 0 to 35 percent slopes, is characterized by a surface layer of very dark, grayish-brown

silty clay loam approximately 8 inches thick. The subsoil is dark-brown silty clay loam approximately 11 inches thick. Permeability is rapid, runoff is medium, and the erosion hazard is slight. This soil is used for sugarcane, pasture, and woodland. (Petitioner's Exhibit No. 6, p. 13; Petitioner's Exhibit B, p. 6.)

b. Alapai (AIC, AID, and AIE), 10 to 35 percent slopes, is characterized by surfaces which consist of very dark brown and dark reddish-brown silty clay loam approximately 15 inches thick. These soils dehydrate irreversibly into fine gravel-size aggregates and are extremely stony in places. The Alapai soil (ApD) consists of extremely stony silty clay loam and is 20 to 30 inches deep. Permeability is rapid, runoff is medium, and the erosion hazards range from slight to moderate to severe. These soils are used for sugarcane and woodland. (Petitioner's Exhibit No. 6, p. 15; Petitioner's Exhibit B, p. 6.)

c. Kiloa (rKXD), 6 to 20 percent slopes, is characterized by a surface layer of very dark brown, extremely stony muck approximately 10 inches thick. It is underlain by fragmental Aa lava. Permeability is rapid, runoff is very slow, and the erosion hazard is slight. This soil is used for woodland and pasture. (Petitioner's Exhibit No. 6, p. 15; Petitioner's Exhibit B, p. 6.)

d. Keel (rKGD), 6 to 20 percent slopes, is characterized by a surface layer of dark brown muck

approximately 10 inches thick over Pahoehoe lava bedrock. The soil above the lava is rapidly permeable. The lava is very slowly permeable but water moves rapidly through the cracks. Runoff is medium and the erosion hazard is slight. This soil is used for pasture. (Petitioner's Exhibit No. 6, p. 15; Petitioner's Exhibit B, pp. 6-7.)

e. Hydrandep-Tropofolist association (rHP), 6 to 20 percent slopes, is characterized by thin, organic soils on lava flows. These soils dehydrate irreversibly into aggregates of fine gravel size. They are smeary and more than 20 inches deep. They have only 4 to 12 inches of organic materials over fragmental Aa or Pahoehoe lava. The main limitation of the soil is the risk of erosion unless close-growing plant cover is maintained. These soils have very severe limitations that make them unsuited to cultivation and restrict their use largely to pasture or range, woodland or wildlife. (Petitioner's Exhibit No. 6, p. 14; Petitioner's Exhibit B, p. 7.)

f. Rough broken (Rb) land, 35 to 70 percent slopes, is characterized by very steep, precipitous land broken by many intermitted drainage channels and found primarily in gulches. This land type has very severe limitations that make it unsuited to cultivation. This land type is used for pasture, woodland, wildlife habitat, and recreation. (Petitioner's Exhibit No. 6, p. 14.)



16. The University of Hawaii Land Study Bureau's ("LSB") Detailed Land Classification-Island of Hawaii overall suitability (master rating) for the Property ranges from "D" to "E" or poor to very poorly suited for agricultural productivity. (Petitioner's Exhibit No. 6, pp. 18, 19, and 37.)

17. The Agricultural Lands of Importance to the State of Hawaii ("ALISH") system has identified soils within the Property as Prime Agricultural Land, Other Important Agricultural Land, and Unclassified. (Petitioner's Exhibit No. 6, p. 19.)

18. The Federal Emergency Management Agency's Flood Insurance Rate Maps indicate that the Property is within Zone X, which represents areas determined to be outside the 500-year floodplain. (Petitioner's Exhibit No. 6, p. 28.)

19. The U.S. Geological Survey has identified "zones of relative risk" associated with volcanic activity on the island. These zones consider direct elements of volcanic activity (lava flow inundation, rock fragments, and gases) and indirect hazards (subsidence, surface rupture, earthquakes, and tsunamis). There are six zones ranging from "A" to "F" with "F" being the zone of highest risk. The Property is located in the "F" zone indicating relatively high degree of risk from volcanic activity. (Petitioner's Exhibit No. 6, p. 28.)

20. Although the entire island is susceptible to earthquakes originating in the fault zones under and adjacent

to it, the most seismically active area on the Big Island is the southern half of the island. Seismicity records from 1962 to 1985 for the island of Hawaii show that the Property may experience earthquakes between the magnitude of 5.5 to 6.6. Based on eyewitness accounts of the earthquake's effects and reports of damage, the biggest earthquake measured in the Kau District occurred in 1868 approximately five miles southeast of the Property near Honuapo and could have had a magnitude of 7.5 to 8.1 on the Richter scale. (Petitioner's Exhibit No. 6, p. 29.)

21. The Property is located in Lava Flow Hazard Zone 3. Only 1 to 5 percent of this zone has been covered since 1800 and 15 to 75 percent has been covered in the last 750 years. (Petitioner's Exhibit No. 6, p. 29.)

PROPOSAL FOR RECLASSIFICATION

22. The Property has been identified in Petitioner's State Land Use District Five-Year Boundary Review Report as a Priority No. 1 recommendation for reclassification from the Agricultural to Conservation District because it contains large stands of native ohia forests, which would enhance the existing native bird habitat and watershed resources of the Kau Forest Reserve. (Petitioner's Exhibit No. 6, pp. 1-2.)

23. The owner (State of Hawaii) proposes to develop and implement a comprehensive management program to protect and enhance native forest bird and plant habitats, watershed values, public hunting of game mammals and birds and other

forest recreation opportunities, and commercial forestry management. (Petitioner's Exhibit No. 6, p. 9.)

PETITIONER'S FINANCIAL CAPABILITY TO UNDERTAKE THE PROPOSED RECLASSIFICATION

24. Pursuant to LUC Rules, §15-15-50(c)(8), HAR, as an agency of the State of Hawaii, Petitioner is not required to submit a statement of current financial capability.

(Petitioner's Exhibit B, p. 10.)

STATE AND COUNTY PLANS AND PROGRAMS

25. The Property is located within the State Land Use Agricultural District as reflected on the Commission's Official Maps, H-41 (Punaluu) and H-42 (Naalehu). The Property adjoins the existing Kau Forest Reserve and the State Land Use Conservation District. (Petitioner's Exhibit No. 6, p. 5; TR 3/15/94, p. 5, lns. 15-18.)

26. The Property is designated Orchards, Extensive, and Intensive Agriculture by the Hawaii County General Plan. (Petitioner's Exhibit No. 6, pp. 3 and 43.)

27. The Property is zoned A-20 Agriculture. (Petitioner's Exhibit No. 6, pp. 3 and 43.)

28. The Property is outside the Special Management Area delineated on the County of Hawaii maps drawn pursuant to §205A-23, HRS. (Petitioner's Exhibit No. 6, p. 47.)

NEED FOR THE PROPOSED RECLASSIFICATION

29. Act 82, Session Laws of Hawaii ("SLH") 1987, states that the Legislature finds Hawaii has several rare

species of plants, animals, and fish that are found nowhere else in the world, and sizable areas of high quality native forests which are not in the Conservation District.

(Petitioner's Exhibit No. 6, p. 1.)

30. Act 82, SLH 1987, requires that high quality native forests be placed within the Conservation District and calls for reclassifying high quality native forests and the habitat of rare native species of flora and fauna into the Conservation District. (Petitioner's Exhibit No. 6, p. 1.)

31. Petitioner has represented that maintaining native forest ecosystems is essential in contributing to the survival of endangered species and for generating groundwater resources upon which development is dependent. (Petitioner's Exhibit No. 6, pp. 30, 34.)

32. Only 46 species of birds native to Hawaii remain from the 70 species that were present when Captain Cook arrived in the islands in 1778. Of the 46 remaining, 30 species are now threatened and endangered with extinction. Seven of these endangered species are found on the Big Island. (Petitioner's Exhibit No. 6, p. 30.)

33. The Property provides essential habitat to maintain three of these endangered species: the Hawaii Akepa, the Hawaii Creeper, and the Hawaiian Hawk. (Petitioner's Exhibit No. 6, pp. 2, 34; TR 3/15/94, p. 15, lns. 5-17.)

34. The two species of the Hawaiian Honeycreeper (the Hawaii Akepa and the Hawaii Creeper) belong to a family of

birds which have been determined by the U.S. Fish and Wildlife Service ("USFWS") to be endangered within their native habitat range. These species are entirely dependent upon the limited remaining native Hawaiian forest ecosystems for food, shelter and nesting sites. Species that are dependent upon a particular habitat are unable to adapt to portions of the forest where there have been major alterations of their habitat and introduction of exotic plants. (Petitioner's Exhibit No. 6, p. 30.)

35. The Hawaiian Honeycreeper now occupies only between 5 percent and 15 percent of their original range. Petitioner has represented that destruction of the limited remaining native forest will cause further reduction and/or elimination of these endangered birds. Petitioner has represented that restoration, maintenance, and protection of their habitat is essential for their survival. (Petitioner's Exhibit No. 6, p. 30.)

#### SOCIO-ECONOMIC IMPACTS

36. The reclassification of the Property to the Conservation District will not have any direct or indirect impact on employment. (Petitioner's Exhibit No. 9, p. 11.)

37. The reclassification of the Property to the Conservation District will not have any impact on State or County revenues. (Petitioner's Exhibit No. 9, p. 11.)

IMPACTS UPON RESOURCES OF THE AREA

Agricultural Resources

38. The Soil Survey of the Island of Hawaii, State of Hawaii, prepared by the U.S. Department of Agriculture, SCS (1973), identifies the soils on the Property as having capability class ratings of III, IV, and VI (moderate to severe limitations that reduce the choice of plants and/or require very careful management or make it unsuited to cultivation), and capability class VII (soils that have very severe limitations that make them unsuited for cultivation). (Petitioner's Exhibit No. 6, pp. 13 to 15; Petitioner's Exhibit B, pp. 5 to 7; Petitioner's Exhibit No. 9, pp. 2-3.)

39. The University of Hawaii LSB's Detailed Land Classification-Island of Hawaii classifies the soils on the Property as "D" and "E" which are not highly productive for cultivated agriculture. (Petitioner's Exhibit No. 6, pp. 18 and 19; Petitioner's Exhibit No. 9, p. 3.)

40. The ALISH system classifies the soils on the Property as Prime Agricultural Land, Other Important Agricultural Land, and Unclassified. (Petitioner's Exhibit No. 6, p. 19.)

41. All lands except TMK No.: 9-6-06:9 within the Property are unencumbered. Petitioner has represented that existing uses on parcel 9 related to ranching will be allowed to continue, however, their expansion may be limited. The reclassification of the Property to the Conservation District

will remove 1.8 percent of lands unsuitable for cultivation from the Agricultural District in the Kau District and is therefore not anticipated to have a major effect.

(Petitioner's Exhibit No. 6, pp. 5, 48.)

#### Flora

42. The Property's location on the slopes of Mauna Loa between the 2,000 and 3,200-foot level places it within the lower rain forest region of Kau consisting of a mesic and wet ohia forest. Koa here does not grow on Pahoehoe or shallow Aa laid over Pahoehoe as the koa requires deep rooting space. This area, however, contains stands of native ohia forests. The area is part of the expansive middle forest zone of the mesic and wet koa-ohia forests on the windward slopes of Mauna Loa. (Petitioner's Exhibit No. 6, p. 24.)

43. The following descriptions identifying the types of vegetation found on the Property have been taken from the USFWS Vegetation Maps, prepared by James Jacobi. The coding used by the USFWS follows each area description.

Four types of forested areas have been identified in the Moaula portion of the Property:

a. Open canopy of ohia trees, 30 to 75 feet in height, dominant over a middle story of other native trees, 15 to 30 feet, within a wet understory of tree ferns and native shrubs [o3 Me, 2nt (W:tf, ns)]. (Petitioner's Exhibit B, p. 7; Petitioner's Exhibit No. 6, p. 24.)

b. Closed canopy of ohia trees, 30 to 75 feet in height, dominant over a middle story of other native trees, 15 to 30 feet, within a wet understory of tree ferns and native shrubs [c3 Me, 2nt (w:tf, ns)]. (Petitioner's Exhibit B, p. 7; Petitioner's Exhibit No. 6, p. 24.)

c. Vegetation in the northwestern corner of the Property is the same (ohia and other native trees within a wet understory of tree ferns and native shrubs) except that here the ohia trees are scattered [s3 Me, 2nt (W:tf, ns)]. (Petitioner's Exhibit B, p. 7; Petitioner's Exhibit No. 6, p. 24.)

d. The southeastern portion of the parcel consists of closed canopy forest of non-native trees, 30 to 80 feet in height, dominant over native trees, 15 to 30 feet, within a wet understory of native and non-native shrubs [c3 xt, 2nt (W:ns-xs)]. (Petitioner's Exhibit B, p. 7; Petitioner's Exhibit No. 6, p. 24.)

44. Five types of forested areas have been identified in the Kaalaiki-Ninole portion of the Property:

a. Open canopy of ohia trees, 30 to 80 feet in height, dominant over a middle story of other native trees, 15 to 30 feet, within a wet understory of tree ferns and native shrubs [o3 Me, 2nt (W:tf, ns)]. (Petitioner's Exhibit B, p. 7; Petitioner's Exhibit No. 6, p. 25.)

b. Closed canopy of ohia trees, 30 to 80 feet in height, dominant over a middle story of other native trees, 15



to 30 feet, within a wet understory of tree ferns and native shrubs [c3 Me, 2nt (w:tf, ns)]. (Petitioner's Exhibit B, p. 7; Petitioner's Exhibit No. 6, p. 25.)

c. Open canopy stands of ohia, 15 to 30 feet tall, dominant over other native trees, within a wet understory consisting of an equal mix of mat ferns, native, and non-native shrubs [o2 Me, nt (W:mf-ns-xs)]. (Petitioner's Exhibit B, p. 8; Petitioner's Exhibit No. 6, p. 25.)

d. Closed canopy stands of ohia, 15 to 30 feet tall, dominant over native trees, within a wet understory of native and non-native shrubs [c3 xt, 2nt (W:ns-xs)]. (Petitioner's Exhibit B, p. 8; Petitioner's Exhibit No. 6, p. 25.)

e. Ohia and native trees, 15 to 30 feet tall, codominant within a wet understory of mat ferns and native shrubs [s2 Me-nt (W:mf-ns)]. (Petitioner's Exhibit B, p. 8; Petitioner's Exhibit No. 6, p. 25.)

45. USFWS records indicate that the Property contains two proposed endangered plant taxa. They are Cyanea stictophylla and Northoestrum breviflorum. (Petitioner's Exhibit No. 9, p. 8; Exhibit No. 6, p. 2.)

#### Fauna

46. The Property provides several types of forested habitat for at least 10 species of native forest birds of which three are endangered. Various portions of the Property provide essential habitat for the Hawaii Creeper (Oreomystis mana), the

Akepa (Loxops coccineus), and the Io or Hawaiian Hawk (Buteo solitarius), which is found fairly widespread throughout the island. (Petitioner's Exhibit No. 6, pp. 25, 34, 36, 42; Petitioner's Exhibit No. 9, pp. 8, 12.)

47. The relatively intact native forested areas within the Property provide habitat for three endemic subspecies: Omao (Phaeornis obscurus obscurus), Hawaiian Elepaio (Chasiempis sandwichensis sandwichensis), and the Common Amakihi (Hemignathus virens virens). Other native subspecies which use the Property include the Iiwi (Vestiaria coccinea) and the Apapane (Himatione sanguinea). (Petitioner's Exhibit No. 6, p. 25; Petitioner's Exhibit No. 9, p. 8.)

#### Archaeological/Historical Resources

48. The proposed reclassification of the Property will not negatively impact archaeological and/or historical resources which might be on the Property. The proposed reclassification of the Property to the Conservation District will protect any undiscovered archaeological and/or historical resources from being lost until such time that surveys may be conducted. (Petitioner's Exhibit No. 9, p. 10.)

#### Groundwater Resources

49. The Property is in the Naalehu aquifer system which is within the southeast Mauna Loa hydrologic sector. The Naalehu aquifer system has a sustainable yield of 117 mgd. The Property is located over an area where the groundwater is perched on ash and underlain with basal. At lower levels and

from the 3,000-foot level to approximately the 6,000-foot level, abundant basal water floating on saltwater underlies the area; however, it is too deep for recovery. Groundwater is the predominant source of water supply in the Kau District.

(Petitioner's Exhibit No. 9, pp. 9 and 10; Petitioner's Exhibit No. 6, p. 13.)

50. Potable water is difficult to obtain on the arid western coast of Kau. Petitioner has represented that the reclassification of the Property will protect areas to be managed as watershed and will result in the improved quality of Hawaii's groundwater resources. (Petitioner's Exhibit No. 6, p. 13.)

#### Recreational, Scenic, and Cultural Resources

51. The proposed reclassification of the Property will preserve the natural scenic and open space resources within the area and complement the scenic resource values of Mauna Loa and Puu Enuhe, which provide scenic backdrops to the area. Hawaii's native plant and animal species are important components of Hawaiian culture and provide many recreational opportunities such as bird watching, hiking, or hunting. The proposed reclassification will provide opportunities for visitors and residents to enjoy passive recreation activities while experiencing Hawaii's mauka scenic natural resources through the wilderness experience. (Petitioner's Exhibit No. 9, p. 9.)

Coastal/Aquatic Resources

52. The proposed reclassification of the Property will preserve the vegetative undercover provided by the relatively intact forest and understory and lessen the hazards from flooding and soil erosion to coastal areas. (Petitioner's Exhibit No. 9, p. 10.)

ENVIRONMENTAL QUALITY

Noise

53. The proposed reclassification of the Property to the Conservation District will preserve the low noise levels associated with the rural, agricultural, and wilderness nature of the Property. (Petitioner's Exhibit No. 9, p. 10.)

Air Quality

54. The proposed reclassification of the Property to the Conservation District will not adversely affect air quality inasmuch as no development of the Property is proposed. (Petitioner's Exhibit No. 9, p. 10.)

Water Quality

55. The proposed reclassification of the Property to the Conservation District will preserve the quality of the existing surface and groundwater supplies in the area by preserving forested areas and thereby protecting watershed areas and lessening hazards from flooding and soil erosion. Groundwater especially needs to be preserved because it is the predominant source of water supply for the Kau District. (Petitioner's Exhibit No. 9, p. 10.)

#### ADEQUACY OF PUBLIC SERVICES AND FACILITIES

56. The availability or adequacy of public services and facilities such as schools, sewers, parks, water, sanitation, drainage, roads, and police and fire protection will not be affected or unreasonably burdened by the proposed reclassification of the Property. Water, sewage, roads, and drainage facilities neither exist nor will be needed for the proposed reclassification of the Property to the Conservation District. (Petitioner's Exhibit No. 9, p. 11; Petitioner's Exhibit No. 6, p. 48.)

#### COMMITMENT OF STATE FUNDS AND RESOURCES

57. The public agency which may be most affected is the DLNR since additional effort may be required to administer and enforce regulations in the newly added Conservation District lands. (Petitioner's Exhibit No. 9, p. 11.)

#### CONFORMANCE TO THE CONSERVATION DISTRICT STANDARDS

58. The Property contains stands of native ohia forests. The area is part of the expansive middle forest zone of the mesic and wet koa-ohia forest on the windward slopes of Mauna Loa. (Petitioner's Exhibit No. 6, p. 35.)

59. The Property lies on either side of Puu Enuhe, which contains the oldest exposed rocks of Mauna Loa visible in the walls of the valley next to it. The 1,000-foot wall composed of basalt interstratified with Pahoehoe lava, with a 12-foot bed of vitric tuff 500 feet below the top, has been included in the Hawaii County General Plan as an example of

natural beauty in the Kau District. The landscape is a contrast between open lava land with little or no vegetation and dense ohia forests. The proposed reclassification of the Property will enhance the value of these resources.

(Petitioner's Exhibit No. 6, pp. 31 and 36.)

60. The Property adjoins the existing Kau Forest Reserve and the Conservation District and includes lands necessary for preserving wilderness and for conserving natural ecosystems of endemic plants and wildlife, for forestry, and other related activities. Areas of relatively undisturbed forest and understory serve as valuable watershed areas. The Property has been identified as part of the Kau forest bird essential habitat for the Akepa (Loxops coccineus) and the Hawaii Creeper (Oreomystis mana) in the Hawaii Forest Bird Recovery Plan, prepared by the USFWS, U.S. Department of the Interior. (Petitioner's Exhibit No. 6, p. 36.)

61. The Soil Survey of the Island of Hawaii, State of Hawaii, prepared by the U.S. Department of Agriculture, SCS (1973), has identified six major soil groups on the Property: Hilea soil series (Hilea silty clay loam, 2 to 12 percent slopes), Alapai soil series (Alapai silty clay loam, 10 to 35 percent slopes), Kiloa soil series (Kiloa extremely stony muck, 6 to 20 percent slopes), Keei soil series (Keei extremely rocky, 6 to 20 percent slopes), Hydrandep-Tropofolist association soil series (organic soils, 6 to 20 percent slopes), and Rough broken land (miscellaneous land type, 35 to

70 percent slopes). (Petitioner's Exhibit No. 6, pp. 13-15, 36; Petitioner's Exhibit B, pp. 5-7; Petitioner's Exhibit No. 9, p. 2.)

62. The Hilea soil has a capability class IV, meaning the soil has very severe limitations which require very careful management practices and/or may limit the choice of plants. The Alapai soil has a capability class rating of III, IV, and VI, which indicates the soil has moderate to severe limitations that reduce the choice of plants, and/or requires very careful management or make it generally unsuited for cultivation. The Kiloa soil has a capability class rating of VII, indicating the soil has severe limitations that make it unsuited for cultivation. This type of soil is used for woodland and pasture. The Keei soil also has a capability class rating of VII. Hydrandep soils have a capability rating of class IV. Tropofolist soils have a capability class rating of VII. Rough broken land has a capability class rating of VII. (Petitioner's Exhibit No. 6, pp. 13-15, 36; Petitioner's Exhibit B, pp. 6-7.)

63. The LSB classifies the soils on the Property as "D" and "E" (poor to very poor). Therefore, the soils are not suitable for cultivation. (Petitioner's Exhibit No. 6, p. 37.)

64. Approximately 51 percent of the Moaula portion of the Property has slopes of 10 to 20 percent, while 10 percent has slopes over 20 percent. Forty-two percent of Kaalaiki-Ninole has slopes of 10 to 20 percent, while 3 percent has

slopes over 20 percent. The topography of the area, lack of public facilities, and distance from urban centers over graded and ungraded dirt roads make the Property unsuitable for urbanization. (Petitioner's Exhibit No. 6, p. 37.)

CONFORMANCE WITH THE GOALS, OBJECTIVES AND POLICIES OF HAWAII STATE PLAN; RELATIONSHIP WITH APPLICABLE PRIORITY GUIDELINES AND FUNCTIONAL PLANS

65. The proposed reclassification of the Property is generally consistent with the objectives, policies, and priorities of the Hawaii State Plan and Functional Plans as follows:

a. In conformance with §226-4(2), HRS, the proposed reclassification of the Property to the Conservation District will maintain the stability of the native ecosystem in its natural state and thereby provide opportunities to enhance the mental and physical well-being of the people through passive and active recreational activities. (Petitioner's Exhibit No. 6, p. 31.)

b. In conformance with §226-11(a)(2), HRS, the proposed reclassification of the Property to the Conservation District will protect the unique and fragile native ohia forests. (Petitioner's Exhibit No. 6, p. 31.)

c. In conformance with §226-12(a), HRS, the proposed reclassification of the Property to the Conservation District will protect the Puu Enuhe and its surrounding area and enhance Hawaii's scenic assets and natural beauty. (Petitioner's Exhibit No. 6, p. 31.)



d. In conformance with §226-13(b)(2) and (b)(3), HRS, the proposed reclassification of the Property will promote the proper management of watershed areas and result in the improved quality of Hawaii's groundwater resources.

(Petitioner's Exhibit No. 6, pp. 31, 34.)

e. In conformance with §226-104(b)(10), HRS, the proposed reclassification of the Property to the Conservation District will protect critical environmental areas including watershed and recharge areas, wildlife habitats, areas with endangered species of wildlife, recreational resources, open space and natural areas, areas particularly sensitive to reduction in water quality, and scenic resources.

(Petitioner's Exhibit No. 6, p. 34.)

f. In conformance with §226-104(b)(13), HRS, the proposed reclassification of the Property to the Conservation District will protect and enhance Hawaii's open space and scenic resources. (Petitioner's Exhibit No. 6, p. 34.)

66. The proposed reclassification of the Property is in conformance with the objectives of the State Conservation Lands Functional Plan, which outlines specific strategies and implementing mechanisms to carry out the long-range objectives of the State, in the following areas: watersheds, terrestrial habitat, areas with endangered species, open space, natural areas, water quality sensitive areas, and scenic resources.

(Petitioner's Exhibit No. 9, p. 14; Petitioner's Exhibit No. 6, pp. 34-35.)

CONFORMANCE WITH COASTAL ZONE MANAGEMENT OBJECTIVES

67. The proposed reclassification of the Property generally conforms to the following Coastal Zone Management Program objectives:

a. In conformance with §205A-2(b)(1), HRS, the proposed reclassification of the Property will provide opportunities for the public to enjoy inland and mauka wilderness recreational activities such as hiking, hunting for game birds and mammals, and bird watching. (Petitioner's Exhibit No. 6, p. 44.)

b. In conformance with §205A-2(b)(3), HRS, the proposed reclassification of the Property will contribute to and protect the quality of scenic and open space resources such as Puu Enuhe and the native ohia forests. (Petitioner's Exhibit No. 6, p. 45.)

c. In conformance with §205A-2(b)(4), HRS, the proposed reclassification of the Property will protect fragile and rare natural resources and maintain the stability and survival of both the native forest and birds, which are linked by the co-dependence of each for their reproduction and food. (Petitioner's Exhibit No. 6, p. 45.)

d. In conformance with §205A-2(b)(6), HRS, the proposed reclassification of the Property will protect watershed areas on the slopes of Mauna Loa and preserve vegetation, which maintains the soil and serves to reduce

flooding and erosion to properties along the coast.

(Petitioner's Exhibit No. 6, p. 46.)

e. In conformance with §205A-2(b)(7), HRS, the proposed reclassification of the Property will protect the Property from development and uses not compatible with the area's forest bird habitat, watershed, and recreational resource values. (Petitioner's Exhibit No. 6, p. 46.)

CONFORMANCE WITH HAWAII COUNTY GENERAL PLAN GOALS, OBJECTIVES AND POLICIES

68. The County of Hawaii General Plan states that the County shall encourage appropriate State agencies to review and designate forest and watershed areas into the Conservation District during the State Land Use District Comprehensive Boundary Review. (Petitioner's Exhibit No. 9, p. 16; Petitioner's Exhibit B, p. 12.)

69. The Property contains attributes consistent with the Hawaii County General Plan goals, policies and standards for environmental quality, natural beauty, natural resources and shoreline, land use, flood control, and drainage. (Petitioner's Exhibit No. 9, p. 16; Petitioner's Exhibit B, pp. 11 and 12.)

RULING ON PROPOSED FINDING OF FACT

Any of the proposed findings of fact submitted by any of the parties in this proceeding not adopted by the Commission herein, or rejected by clearly contrary findings of fact herein, are hereby denied and rejected.

Any conclusion of law herein improperly designated as a finding of fact shall be deemed or construed as a conclusion of law; any finding of fact herein improperly designated as a conclusion of law shall be deemed or construed as a finding of fact.

#### CONCLUSIONS OF LAW

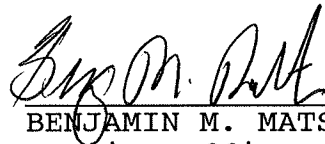
Pursuant to chapter 205, HRS, and the Hawaii Land Use Commission Rules under chapter 15-15, HAR, and upon consideration of the Land Use Commission decision-making criteria under §205-17, HRS, this Commission finds upon a clear preponderance of the evidence that the reclassification of the Property consisting of approximately 4,470.22 acres of land at Moaula and Kaalaiki-Ninole, Kau, Island of Hawaii, State of Hawaii, identified as Tax Map Key Nos. 9-6-06:9, 10, 15, and 18 and 9-7-01:14, 15, 16, 17, and 20, from the State Land Use Agricultural District to the State Land Use Conservation District, is reasonable, conforms to the standards for establishing the conservation district boundaries, is non-violative of §205-2, HRS, and is consistent with the Hawaii State Plan as set forth in chapter 226, HRS.

#### PROPOSED ORDER

IT IS HEREBY ORDERED that the Property, being the subject of this Docket No. BR93-693 filed by Petitioner Office of State Planning, consisting of approximately 4,470.22 acres of land located at Moaula and Kaalaiki-Ninole, Kau, Island of Hawaii, State of Hawaii, identified as Tax Map Key Nos.:

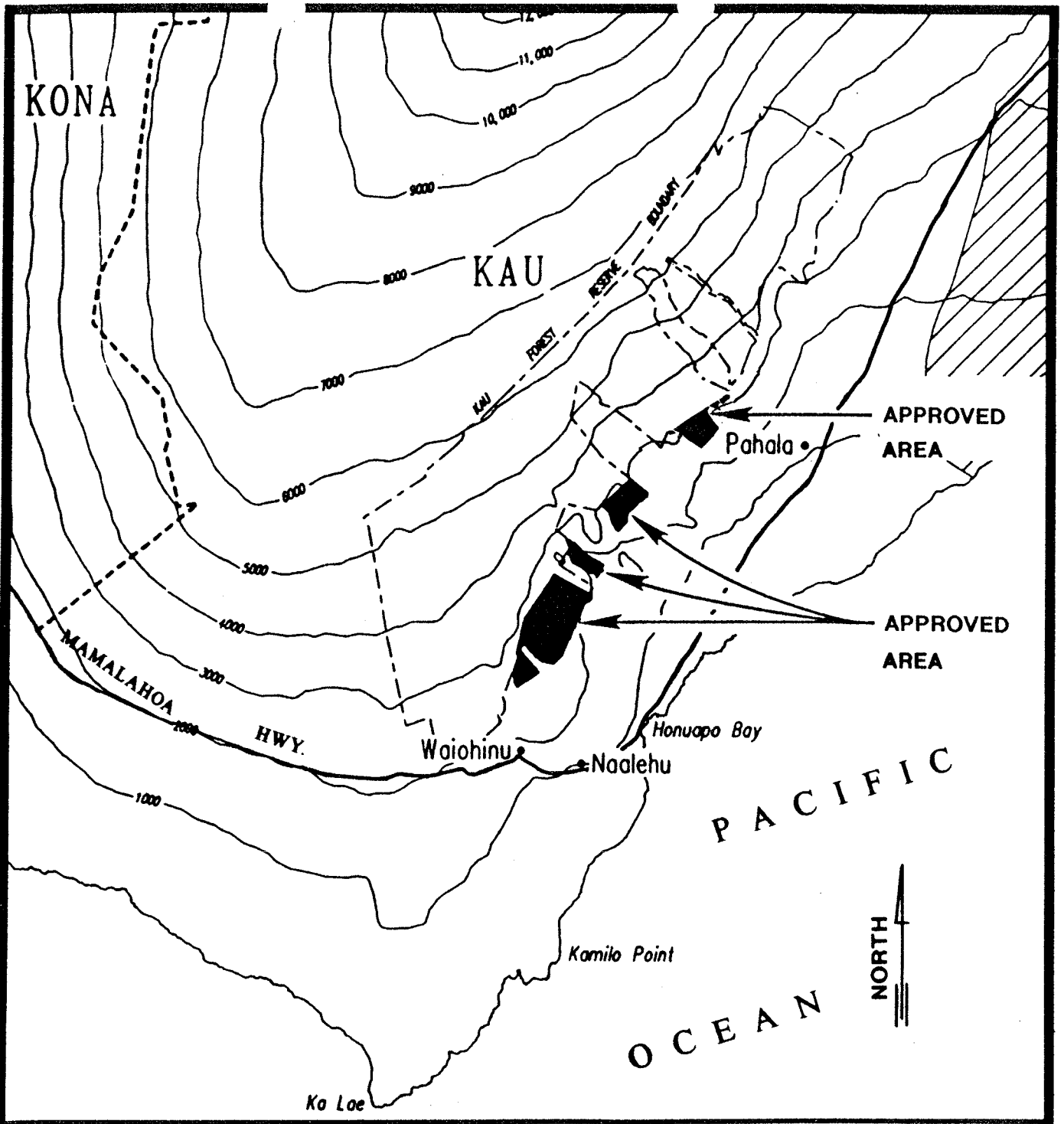
9-6-06:9, 10, 15, and 18 and 9-7-01:14, 15, 16, 17, and 20, and approximately identified on Exhibit "A" attached hereto and incorporated by reference herein, is hereby reclassified from the State Land Use Agricultural District to the State Land Use Conservation District, and that the State Land Use District Boundaries are amended accordingly.

Dated: Honolulu, Hawaii this 2nd day of June 1994.



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BENJAMIN M. MATSUBARA  
Hearing Officer



**LOCATION MAP**

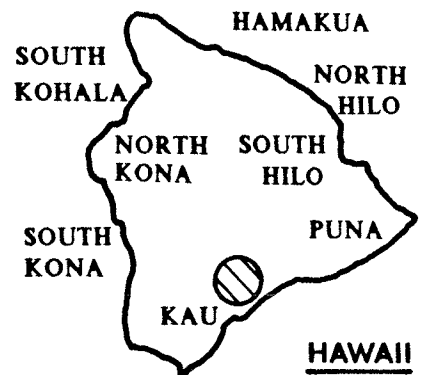
BR93-693 / OFFICE OF STATE PLANNING,  
STATE OF HAWAII

T.M.K.: 9-6-06: 9, 10, 15, & 18; 9-7-01: 14, 15, 16, 17, & 20

MOAULA and KAALAIKI - NINOLE, KAU, HAWAII



APPROX. SCALE IN MILES



**HAWAII**

BEFORE THE LAND USE COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Petition of )  
 ) DOCKET NO. BR93-693  
 )  
THE OFFICE OF STATE PLANNING, )  
STATE OF HAWAII ) CERTIFICATE OF SERVICE  
 )  
 )  
To Amend the Agricultural Land )  
Use District Boundary into the )  
Conservation Land Use District )  
for Approximately 4,470.22 Acres )  
at Moaula and Kaalaiki-Ninole, )  
Kau, Island of Hawaii, State of )  
Hawaii, Tax Map Key Nos.: 9-6-06:9, )  
10, 15 & 18 and 9-7-01:14, 15, )  
16, 17 & 20 )  
 )  
 )

CERTIFICATE OF SERVICE


I hereby certify that a copy of the Hearing Officer's Proposed Findings of Fact, Conclusions of Law, and Decision and Order was served upon the following by either hand delivery or depositing the same in the U. S. Postal Service by certified mail:

HAROLD S. MASUMOTO, Director  
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CERT. VIRGINIA GOLDSTEIN, Planning Director  
Planning Department, County of Hawaii  
25 Aupuni Street  
Hilo, Hawaii 96720

DATED: Honolulu, Hawaii, this 2nd day of June 1994.

  
BENJAMIN M. MATSUBARA  
Hearing Officer