

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of)	DOCKET NO. BR93-694
)	
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 5,914.96 Acres)	
at Honuaula Tract 3 Extension,)	
Honuaula Tract 3, Honuaula)	
Tract 2, and Makaula-Ooma Mauka)	
Tract, North Kona, Island of)	
Hawaii, State of Hawaii, Tax Map)	
Key Nos: 7-3-01:2, 7-4-01:2 and)	
3, and 7-5-13:22)	
)	

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,
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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 5,914.96 acres of land situated at Honuaula Tract 3 Extension, Honuaula Tract 3, Honuaula Tract 2, and Makaula-Ooma Mauka Tract, North Kona, Island of Hawaii, State of Hawaii, Tax Map Key Nos.: 7-3-01:2, 7-4-01:2 and 3, and 7-5-13:22 ("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, 1993, 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, at which time Petitioner presented its lists of exhibits and witnesses. The Planning Department was not present at this conference.

4. The Commission's presiding 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. Memorandums from Mr. Keith Ahue, Department of Land and Natural Resources ("DLNR") dated March 1, 1994, and March 10, 1994; and
- d. Support letter from Mr. Hugh R. Montgomery, Na Ala Hele dated March 4, 1994.

(TR 3/15/94, p. 32, lns. 5-10.)

7. The oral testimony of public witnesses Mr. Douglas Blake and Mr. Lunakanawai Hauanio given for the hearing on LUC Docket No. BR93-693 was incorporated into the record for LUC Docket No. BR93-694 by the hearing officer. (TR 3/15/94, pp. 34, 39.)

8. Mr. Lunakanawai Hauanio orally requested to intervene in the proceedings. The request was denied by the 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

9. The Property consists of approximately 5,914.96 acres located on the northwestern and southwestern slopes of Hualalai and involve four parcels, all of which are located

within the North Kona Judicial District. (Petitioner's Exhibit No. 6, pp. 5 to 6.)

10. The parcel identified as Honuaula Tract 3 Extension, TMK No.: 7-5-13:22, is located within the Hienaloli 1st ahupuaa, approximately a quarter of a mile east of Keopu cemetery and Mamalahoa Highway. (Petitioner's Exhibit No. 6, p. 3; Petitioner's Exhibit No. 4a; Petitioner's Exhibit No. 5a.)

11. The parcel identified as Honuaula Tract 3, TMK No.: 7-4-01:2, comprises all of Honuaula Tract 3 and is located approximately 1-1/4 mile mauka of Palani Road. (Petitioner's Exhibit No. 6, p. 3; Petitioner's Exhibit No. 4b; Petitioner's Exhibit No. 5b.)

12. The parcel identified as Honuaula Tract 2, TMK No.: 7-4-01:3, comprises all of Honuaula Tract 2 and is located adjacent to and east of Honuaula Tract 3. (Petitioner's Exhibit No. 6, p. 3; Petitioner's Exhibit No. 4b; Petitioner's Exhibit No. 5c.)

13. The parcel identified as Makaula-Ooma Mauka Tract, TMK 7-3-01:2, comprises all of Makaula-Ooma Mauka Tract and is located adjacent to and south of the Kau ahupuaa, mauka of Hawaii Belt Road, and bounded north to south on the west by Haleohiu Homesteads, Hamanamana Homesteads, Kalaoa Homesteads, and Kalaoa-Ooma Homesteads. (Petitioner's Exhibit No. 6, p. 3; Petitioner's Exhibit No. 4c.)

14. The State of Hawaii is the owner of the Property. The DLNR, Land Management Division, is authorized to

manage, administer and control State land, including the Property described herein. (Petitioner's Exhibit No. 3; Petitioner's Exhibit B, p. 7.)

15. The parcels identified as Honuaula Tract 3 Extension, Honuaula Tract 3, and Honuaula Tract 2 are presently vacant. (Petitioner's Exhibit No. 6, p. 11.)

16. The parcel identified as Makaula-Ooma Mauka Tract is leased under Revocable Permit No. 05930 to Huehue Ranch for pasture use. (Petitioner's Exhibit No. 6, p. 11.)

17. The Property includes areas with slopes over 20 percent. Approximately 8.8 percent of the Honuaula Tract 3 Extension parcel, 34.4 percent of the Honuaula Tract 3 parcel, 86.6 percent of the Honuaula Tract 2, and 17.4 percent of the Makaula-Ooma Mauka Tract have slopes over 20 percent. The Property is characterized by lava flows and poorly defined, normally dry natural waterways, which originate on the slopes of Hualalai but vanish before reaching the coastal area. (Petitioner's Exhibit No. 6, pp. 49, 61, and 67; Petitioner's Exhibit No. 8, pp. 2, 15.)

18. Sea to land breezes become the dominant influence because the tradewinds are deflected by the mountain masses of Mauna Kea, Mauna Loa, and Hualalai. In this void of tradewinds, a warm, localized, daytime land-sea breeze pattern develops (Kona sea breeze) resulting in an up-slope air flow and the transportation of rainfall in a comparatively narrow belt between 1,000 to 4,000 feet in elevation. This breeze

meets tradewind flows which cross the saddle and a precipitation cloud band forms, accounting for a wet strip mauka of the Hawaii Belt Road. (Petitioner's Exhibit No. 6, pp. 12 and 13.)

19. The area is characterized by sunny mornings and cloudy and rainy afternoons. Average rainfall for the North Kona district's coastal area ranges from 9 inches a year in the drier coastal area to 50 inches annually at its upper regions along Mamalahoa Highway. A high rainfall pocket which extends from 1,200 feet above sea level to 3,000 feet elevation in the Keauhou area registers a high of 79 inches a year. The parcel identified as Honuaula Tract 3 Extension located 1,520 feet above sea level and between the 50" and 75" isohyet receives more rainfall than the other parcels. (Petitioner's Exhibit No. 6, pp. 12 and 13.)

20. The amount of rainfall decreases with elevation. Research has shown that fog interception on vertical hung screens (to simulate the role of trees in fog-mist collection) on the summit of Hualalai collected an average of 1-1/2 times more water (per unit area) than a standard rain gauge over a 17-month period. At higher elevations, fog interception by trees contributes more water than rainfall and during times of drought may be 9 to 17 times greater than rainfall. (Petitioner's Exhibit No. 6, p. 13.)

21. The mean annual rainfall for the area recorded at the Honuaula gauge station over a 35-year period is 38.65

inches, with a minimum annual rainfall of 14.52 inches and a maximum of 63.20 inches. (Petitioner's Exhibit No. 6, p. 18.)

22. Average maximum and minimum temperatures at Kailua Village are approximately 83°F and 67°F, respectively. In the upper areas along Mamalahoa Highway at Holualoa, the average maximum and minimum temperatures are 77°F and 60°F, respectively. (Petitioner's Exhibit No. 6, p. 13.)

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

a. Kahaluu (rKAD), 6 to 20 percent slopes, is characterized by a surface layer of very dark brown muck approximately 5 inches thick. It is underlain by Pahoehoe lava bedrock. The soil is rapidly permeable while the bedrock is very slowly permeable. There is little or no erosion hazard. Most of this soil type is found in native woodlands. (Petitioner's Exhibit No. 6, pp. 21, 23-24.)

b. Kiloa (rKXD), 6 to 20 percent slopes, is characterized by a surface layer of very dark brown and extremely stony muck approximately 10 inches thick and 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, pp. 23-25.)

c. Kona (rKYD), 6 to 20 percent slopes, is characterized by a surface layer of very dark muck approximately 5 inches thick. It is underlain by Pahoehoe lava bedrock. Permeability is rapid in the soil and water moves rapidly through the cracks in the lava. Runoff is medium and the erosion hazard is slight. This soil is used mostly for pasture and watershed. (Petitioner's Exhibit No. 6, pp. 25-26.)

d. Puna (rPXE), 3 to 25 percent slopes, is characterized by a layer of very dark brown and extremely stony muck approximately 5 inches thick and is underlain by fragmental Aa lava. Permeability is rapid, runoff is slow, and the erosion hazard is slight. This soil is used for woodland, pasture, and orchards. (Petitioner's Exhibit No. 6, pp. 21, 23-25.)

e. Punaluu (rPYD), 6 to 20 percent slopes, is characterized by a surface layer of black peat approximately 4 inches thick, and is underlain by Pahoehoe lava bedrock. The peat is rapidly permeable. Runoff is slow and the erosion hazard is slight. This land type is used for pasture. (Petitioner's Exhibit No. 6, pp. 25-26.)

f. Apakuie (ASD), 12 to 20 percent slopes, is characterized by a surface layer of very stony, sandy, dark reddish brown and dusky-red loam approximately 15 inches thick and very fine sandy loam with loose stones. The depth to Aa lava averages 30 inches. This soil is used for pasture or

range, woodland or wildlife. (Petitioner's Exhibit No. 6, pp. 24-25.)

g. Hanipoe (HCD), 12 to 20 percent slopes, is characterized by a surface layer of dark reddish-brown to very dark well-drained silt loam formed in volcanic ash, 20 to 30 inches deep, over fragmented lava. Runoff is slow and the erosion hazard is slight. This soil is used for pasture, range, woodland, and wildlife. (Petitioner's Exhibit No. 6, p. 24.)

h. Hanipoe (HFD), 6 to 20 percent slopes, is characterized by a surface layer of dark reddish-brown to very dark, well-drained rocky silt loam formed in volcanic ash, 20 to 30 inches deep over fragmented Aa lava. Runoff is slow and the erosion hazard is slight. This soil is used for pasture, woodland and wildlife. (Petitioner's Exhibit No. 6, p. 24.)

i. Honaunau (HND), 6 to 20 percent slopes, is characterized by a surface layer of very dark silt loam 6 inches thick and subsoil that is dark brown to dark reddish-brown silt loam approximately 20 inches thick. Permeability is rapid, runoff is slow, and the erosion hazard is slight. This land type is used for pasture. (Petitioner's Exhibit No. 6, pp. 20-21, 24.)

j. Honaunau (HRD), 6 to 20 percent slopes, is characterized by a surface layer of extremely rocky, very dark silty loam approximately 6 inches thick. The subsoil is dark brown to dark reddish-brown silt loam approximately 20 inches

thick, underlain by Pahoehoe lava bedrock at a depth of approximately 26 inches. Permeability is rapid, runoff is slow, and the erosion hazard is slight. This soil is used for pasture, woodland, and wildlife habitat. (Petitioner's Exhibit No. 6, pp. 20-21.)

k. Honuaulu (HVD), 12 to 20 percent slopes, is characterized by a surface layer of very dark silty clay loam approximately 9 inches thick. The subsoil is dark brown, cobbly, and stony silty clay loam approximately 28 inches thick. The substratum is Aa lava. Stones cover 3 to 15 percent of the surface. Permeability is rapid, runoff is slow, and the erosion hazard is slight. This soil is suitable mostly for coffee and pasture. Small areas are suitable for macadamia nuts, bananas, citrus fruits, and avocados. (Petitioner's Exhibit No. 6, pp. 20-21.)

l. Kealakekua (KPD), 12 to 20 percent slopes, is characterized by a surface layer of dark silty clay loam approximately 8 inches thick, underlain by Pahoehoe bedrock. Permeability is rapid, runoff is slow, and the erosion hazard is slight. This soil is used mainly for pasture and woodland. (Petitioner's Exhibit No. 6, pp. 21-22.)

m. Kealakekua (KRD), 6 to 20 percent slopes, is characterized by a surface layer of dark silty clay loam approximately 8 inches thick with stones covering approximately 1 to 3 percent of the surface and is underlain by Pahoehoe bedrock. Permeability is rapid, runoff is slow, and the

erosion hazard is slight. This soil is used for pasture, woodland, coffee, and macadamia nuts. (Petitioner's Exhibit No. 6, pp. 21-22.)

n. Kealakekua (KSD), 12 to 20 percent slopes, is characterized by a surface layer of dark silty clay loam approximately 8 inches thick, with stones covering approximately 3 to 15 percent of the surface. It is underlain by Pahoehoe lava bedrock and in some areas the soil is less than 30 inches deep over fragmented Aa lava. Permeability is rapid, runoff is slow, and the erosion hazard is slight. This soil is used for pasture and woodland. (Petitioner's Exhibit No. 6, pp. 21-22.)

o. Manahaa (MMD), silt loam, 6 to 20 percent slopes, is characterized by a surface layer of dusky-red loam approximately 6 inches thick, with a subsoil of dark reddish-brown silt loam approximately 19 inches thick underlain by Pahoehoe lava bedrock. Permeability is moderately rapid. Runoff is slow and the erosion hazard is slight. (Petitioner's Exhibit No. 6, pp. 21, 23-24.)

p. Manahaa (MND), 6 to 20 percent slopes, is similar to Manahaa (MMD), except that stones cover 3 to 15 percent of the surface. This soil is used for pasture and woodland. (Petitioner's Exhibit No. 6, pp. 21, 23-24.)

q. Puukala (PSC), 6 to 12 percent slopes, is characterized by a surface layer of very dark brown and extremely stony silt loam approximately 6 inches thick. The

subsoil is very dark brown and dark reddish-brown stony silt loam approximately 12 inches thick. The subsoil dehydrates irreversibly into fine sand aggregates. Permeability is rapid, runoff is slow, and the erosion hazard is slight. This soil is used for woodland and pasture. (Petitioner's Exhibit No. 6, pp. 21-22, 24.)

r. Kaimu (rKED), 6 to 20 percent slopes, is characterized by a surface layer of very dark brown, extremely stony peat approximately 3 inches thick. It is underlain by fragmental Aa lava. Permeability is rapid, runoff is slow, and the erosion hazard is slight. Most of this soil is in native woodland. Small areas are used for pasture, macadamia nuts, papaya, and citrus fruits. (Petitioner's Exhibit No. 6, p. 25.)

s. Lalaau (rLLD), 6 to 20 percent slopes, is characterized by a surface layer of very dark brown and extremely stony muck approximately 3 inches thick and underlain by fragmented lava. Permeability is rapid, runoff is slow, and the erosion hazard is slight. This type of soil is used mainly for woodland, watershed, and wildlife habitat. Small areas are used for pasture. (Petitioner's Exhibit No. 6, pp. 21, 24-25.)

t. Rock land (rRO) is a miscellaneous land type that consists of Pahoeheoe lava bedrock covered in places by a thin layer of soil material 6 to 8 inches thick. The hazard of water erosion is slight. Rock land is used for pasture, wildlife habitat, and watershed. (Petitioner's Exhibit No. 6, p. 25.)

u. Very stony land (rVS) is a miscellaneous land type consisting of very shallow soil material and a high proportion of Aa lava outcrops. The dominant slope is between 10 and 15 percent. The erosion hazard is slight. This type of soil is largely used as pasture or range, woodland or wildlife. (Petitioner's Exhibit No. 6, p. 25.)

24. The University of Hawaii Land Study Bureau's ("LSB") Detailed Land Classification-Island of Hawaii overall suitability (master rating) for the Property ranges from "C" to "E" or fair to very poorly suited for agricultural productivity. (Petitioner's Exhibit No. 6, pp. 26-37, and 61.)

25. The Agricultural Lands of Importance to the State of Hawaii ("ALISH") system has identified portions of land within the Property as Other Important Agricultural Lands. Other lands within the Property are Unclassified. (Petitioner's Exhibit No. 6, pp. 37, 61.)

26. 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. 49.)

27. 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. Hualalai is regarded as having a lower risk than zone "E" on the flanks of Mauna Loa and Kilauea because Hualalai has had a much lower frequency of eruptions. It is, however, regarded as having a higher overall risk than zone "D" because Hualalai has erupted in historic time. But because it has erupted only once during that time, evaluation of its probability of eruption is highly speculative. The overall risk on Hualalai probably is, therefore, equivalent to the risk in parts of both zones ("D" and "E"). The Property is within an area judged to be potentially endangered by particle-and-gas clouds although these areas were not considered in defining the zones of overall risks. (Petitioner's Exhibit No. 6, p. 50.)

28. Although the entire island is susceptible to earthquakes originating in fault zones under and adjacent to it, the most seismically active area on the the Big Island is the southern half of the island. There are no visible or concealed faults in North Kona. The nearest fault is the Kealakekua fault scarp which forms the pali at Kealakekua Bay in South Kona. (Petitioner's Exhibit No. 6, p. 50.)

29. The Property is located in Lava Flow Hazard Zone 4, where the frequency of eruptions is lower than that for Kilauea or Mauna Loa. Lava coverage is proportionally smaller, approximately 5 percent since 1800, and less than 15 percent within the past 750 years. (Petitioner's Exhibit No. 6, p. 51.)

PROPOSAL FOR RECLASSIFICATION

30. The Property has been identified in the State Land Use District Five-Year Boundary Review Report by Petitioner as a Priority #1 recommendation for reclassification from the Agricultural to the Conservation District because it contains large stands of native ohia and Acacia-koa forests, which would enhance the existing native bird habitat and watershed resources of North Kona. (Petitioner's Exhibit No. 6, pp. 1, 2, and 53.)

31. The Property is within the Kona Watershed and Natural Resource Area, one of two areas identified in the Five-Year Boundary Review Report, Hawaii County, as an Area of Critical Concern. Areas of Critical Concern include high-water recharge areas which require attention and alternative methods of regulation or management to protect the resources that are present. (Petitioner's Exhibit No. 6, p. 2.)

32. The Alala Recovery Plan identifies portions of the Property as essential habitat for the endangered Alala. (Petitioner's Exhibit No. 6, pp. 2 and 12.)

33. The owner (State of Hawaii) proposes to maintain the relatively intact native forest within the Property for management as watershed, native bird habitat, public hunting areas for game mammals and birds, and other forest recreation opportunities and commercial forestry. (Petitioner's Exhibit No. 6, p. 11; Petitioner's Exhibit B, p. 7.)

34. The Division of Water and Land Development of DLNR has applied for a Well Permit at the parcel identified as Honuaula Tract 3 Extension and has future plans for a well and reservoir on the parcel identified as Makaula-Ooma Mauka Tract. (Petitioner's Exhibit No. 6, p. 12.)

PETITIONER'S FINANCIAL CAPABILITY
TO UNDERTAKE THE PROPOSED RECLASSIFICATION

35. Pursuant to Section 15-15-50(c)(8), HAR, Petitioner is a State agency and is not required to demonstrate financial capability. (Petitioner's Exhibit B, p. 8.)

STATE AND COUNTY PLANS AND PROGRAMS

36. The Property is located within the State Land Use Agricultural District as reflected on the Commission's Official Maps, H-2 (Keahole) and H-7 (Kailua). (Petitioner's Exhibit No. 6, pp. 4 and 53; TR 3/15/94, p. 33, lns. 1-2.)

37. The Property is designated Orchards and Extensive Agriculture by the Hawaii County General Plan. (Petitioner's Exhibit No. 6, pp. 4 and 66.)

38. The parcel identified as Honuaula Tract 3 Extension is zoned A-5A Agriculture. The remaining parcels comprising the Property, Honuaula Tract 3, Honuaula Tract 2, and the Makaula-Ooma Mauka Tract, are all zoned A-20A Agriculture. (Petitioner's Exhibit No. 6, pp. 4, 11, and 68.)

39. The Property is outside the Special Management Area delineated in the County of Hawaii maps drawn pursuant to §205A-23, HRS. (Petitioner's Exhibit No. 6, p. 76.)

NEED FOR THE PROPOSED RECLASSIFICATION

40. Act 82, Session Laws of Hawaii ("SLH") 1987, states that the Legislature finds that 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.)

41. 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.)

42. 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. 2 and 52.)

43. 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. 51.)

44. The Property provides essential habitat to maintain four of these endangered species: the Hawaii Akepa, Hawaii Creeper, Hawaiian Crow, and the Hawaiian Hawk.

(Petitioner's Exhibit No. 6, pp. 2, 44, 51, 59 and 60;
TR 3/15/94, pp. 37-38.)

45. The two species of the Hawaiian Honeycreeper (Hawaii Akepa and 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 forests where there have been major alterations of their habitat and introduction of exotic plants. (Petitioner's Exhibit No. 6, pp. 51 and 52.)

46. 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 would 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. 52.)

47. One of Kona's climatic features is the frequent development of fog and mist at mid to high elevations. The interception of fog by trees can contribute more water than rainfall. If protective measures are not taken to maintain and restore the forests on Hualalai, the potential for groundwater

recharge from fog interception will be lost. (Petitioner's Exhibit No. 6, p. 52.)

SOCIO-ECONOMIC IMPACTS

48. The reclassification of the Property to the Conservation District will not have any direct or indirect impact on employment. (Petitioner's Exhibit No. 6, p. 77; Petitioner's Exhibit No. 8, p. 13.)

49. The reclassification of the Property to the Conservation District will not have any impact on State or County revenues. (Petitioner's Exhibit No. 8, p. 13.)

IMPACTS UPON RESOURCES OF THE AREA

Agricultural Resources

50. 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 rankings of: IV (soils that have very severe limitations because of the risk of erosion unless close-growing plant cover is maintained), VI (soils with severe limitations which restrict their use because they are shallow, droughty, or stony and unsuitable for cultivation), and VII (soils that have very severe limitations that make them unsuitable for cultivation because they are shallow, droughty, or stony). (Petitioner's Exhibit No. 6, pp. 20-26, 61.)

51. The LSB's Master Productivity rating classifies the soils on the Property as "C," "D," and "E," which are not highly productive for cultivated agriculture. Most of the

soils on the Property are rated "D" and "E." Only very small pockets within the Honuaula Tract 3 Extension, Honuaula Tract 3, and Makaula-Ooma Mauka Tract parcels are rated "C."

(Petitioner's Exhibit No. 6, pp. 26-37, 61.)

52. The ALISH system classifies the soils on the Property as Other Important Lands and Unclassified.

(Petitioner's Exhibit B, p. 6; Petitioner's Exhibit 6, pp. 37, 61.)

53. The Property is not presently being cultivated and, with the exception of the Makaula-Ooma Mauka Tract, are presently vacant. The parcel identified as the Makaula-Ooma Mauka Tract is presently leased under Revocable Permit No. 05930 to Huehue Ranch for pasture use. Petitioner has represented that existing agricultural uses will be allowed to continue as non-conforming uses under the proposed reclassification. (Petitioner's Exhibit No. 6, pp. 11, 77; TR 3/15/94, p. 36, lns. 17-19.)

54. The reclassification of the Property to the Conservation District will remove 3.5 percent of lands unsuitable for cultivation from the Agricultural District in North Kona and is therefore not anticipated to have a major effect on agricultural resources. (Petitioner's Exhibit No. 6, p. 77.)

Flora

55. The Property falls mainly within the mixed mesic forest areas of North Kona. This is the most species rich of

the vegetative zones in the islands. The mixed mesic forests have the majority of endemic species in virtually all of the larger genera. (Petitioner's Exhibit No. 6, p. 37.)

56. USFWS Fish and Wildlife vegetation maps, prepared by James Jacobi, identify the forest types found on the Property. The coding used by the USFWS follows each area description:

Honuaula Tract 3 Extension

a. Non-native trees, ranging 30 to 75 feet tall, with open and closed canopies and native trees subdominant, 30 to 75 feet tall, within a moist species habitat of non-native shrubs [o/c 3xt, nt (M:xs) msc]. (Petitioner's Exhibit No. 6, p. 42.)

b. Open canopy stands of non-native trees dominant over native trees, with both native and non-native trees ranging 30 to 75 feet tall, within a moist species habitat of non-native grasses dominant over non-native shrubs [o3xt, nt (M: xg, xs) msc]. (Petitioner's Exhibit No. 6, p. 42.)

Honuaula Tract 3

a. Open canopy forest of stands of ohia, 30 to 75 feet tall, dominant over other native trees, 15 to 30 feet tall, and non-native trees, 30 to 75 feet tall, codominant within a moist species habitat of non-native shrubs and non-native grasses codominant [o3Me, 2nt-3xt (M:xg, ns-xs)]. (Petitioner's Exhibit No. 6, p. 42.)

b. Open canopy forest of non-native trees, 30 to 75 feet tall, dominant over native trees, within a moist species habitat of non-native grasses dominant over non-native shrubs [o3xt, nt (M: xg, xs) msc]. (Petitioner's Exhibit No. 6, p. 43.)

c. Open and closed canopies of non-native trees, 30 to 75 feet tall, dominant over native trees, within a moist species habitat of non-native shrubs [o/c 3xt, nt (M:xs) msc]. (Petitioner's Exhibit No. 6, p. 43.)

d. Closed forest canopy of non-native trees, 30 to 75 feet tall, within a moist species habitat of non-native shrubs [c3xt (M:xs)]. (Petitioner's Exhibit No. 6, p. 43.)

e. Closed forest canopy of ohia, 15 to 30 feet tall, dominant over taller stands of ohia and non-native trees, 30 to 75 feet tall, codominant within a wet species habitat of non-native grasses, dominant over native shrubs and non-native grasses [c2Me, 3Me-xt (M:xs, ns-xg)]. (Petitioner's Exhibit No. 6, p. 43.)

f. Open forest canopy of ohia, 30 to 75 feet tall, dominant over native trees, 15 to 30 feet tall, within a wet species habitat of tree ferns, native shrubs, and non-native grasses codominant [o3Me, 2nt (W:mf-ns-xg)]. (Petitioner's Exhibit No. 6, p. 43.)

g. Closed forest canopy of ohia, 30 to 75 feet tall, dominant over other native trees, 15 to 30 feet tall, within a wet species habitat of native shrubs, tree ferns, and

non-native shrubs [c3Me, 2nt (W: ns-tf-xs)]. (Petitioner's Exhibit No. 6, p. 43.)

Honuaula Tract 2

a. Open forest canopy of koa and ohia, 30 to 75 feet tall, codominant with other native trees, 15 to 30 feet tall [o3Ac-Me, 2nt (M:ns)]. (Petitioner's Exhibit No. 6, p. 43.)

b. Open canopy forest of ohia and Acacia-koa, 30 to 75 feet tall, codominant with other native trees, within a wet understory of native shrubs and tree ferns codominant [o3Me, Ac-2nt (M:xg, ns-xs)]. (Petitioner's Exhibit No. 6, p. 43.)

c. Closed canopy forest of non-native trees within a moist understory of non-native shrubs [c3xt (M:xs)]. (Petitioner's Exhibit No. 6, p. 43.)

d. Open canopy forest of Acacia-koa, 30 to 75 feet tall, and mamane, 15 to 30 feet tall, codominant with other native trees, within a moist species habitat of non-native grasses dominant, and native shrubs subdominant [o3Ac-2So, nt (M:xg, ns)]. (Petitioner's Exhibit No. 6, p. 43.)

e. Open canopy forest of naio, mamane, and non-native trees, 15 to 30 feet tall, codominant within a wet understory of non-native grasses [o2My-So-xt (M:xg)]. (Petitioner's Exhibit No. 6, p. 43.)

f. Scattered stands of Acacia-koa and ohia, 30 to 75 feet tall, with other native trees, 15 to 30 feet tall,

codominant within a moist species habitat of non-native grasses [s3Ac-Me-2nt (M:xg)]. (Petitioner's Exhibit No. 6, p. 44.)

Makaula-Ooma Mauka Tract

a. Open canopy forest of ohia, 30 to 75 feet tall, dominant over native trees, 15 to 30 feet tall, and non-native trees, 30 to 75 feet tall, codominant existing within a moist species habitat of non-native shrubs dominant over native shrubs [o3Me, 2nt-3xt (M:xs, ns)]. (Petitioner's Exhibit No. 6, p. 44.)

b. Scattered stands of ohia, 30 to 75 feet tall, codominant with native trees, 15 to 30 feet tall, and non-native trees, 30 to 75 feet tall, within a moist species habitat of non-native grasses [s3Me, 2nt-3xt (M:xg)]. (Petitioner's Exhibit No. 6, p. 44.)

c. Open canopy forest of ohia, 30 to 75 feet tall, dominant over native trees, 15 to 30 feet tall, within a wet species habitat of native shrubs, tree ferns, and non-native grasses codominant [o3Me,2nt (W:ns-tf-xs)]. (Petitioner's Exhibit No. 6, p. 44.)

d. Open and closed canopy forest of non-native trees, 30 to 75 feet tall dominant, and native trees subdominant, within a moist species habitat of non-native shrubs [o/c 3xt, nt (M:xs) msc]. (Petitioner's Exhibit No. 6, p. 44.)

e. Open and closed forest canopy of non-native trees, 30 to 75 feet tall dominant, and native trees

subdominant, within a moist species habitat of non-native grasses dominant over non-native shrubs [o3xt, nt (M:xg, xs) msc]. (Petitioner's Exhibit No. 6, p. 44.)

Fauna

57. The Property has been identified as containing essential forest bird habitat for the Hawaii Creeper (Oreomystis mana), Hawaii Akepa (Loxops coccineus), and the Hawaiian Hawk (Buteo solitarius) which is found throughout the region. (Petitioner's Exhibit No. 6, pp. 1, 44, 60; TR 3/15/94, pp. 37-38.)

58. The Property has also been identified as containing essential habitat for the Hawaiian Crow (Alala) (Corvus hawaiiensis), which is currently found in South Kona. (Petitioner's Exhibit No. 6, pp. 1, 44, 60; TR 3/15/94, pp. 37-38.)

59. The forested areas of the Property provide habitat for a high density of avifauna, such as the Short-eared Pueo, Elepaio, Common Amaki, Apapane, Iiwi, and the Omao. (Petitioner's Exhibit No. 6, pp. 2, 49, 60.)

Archaeological/Historical Resources

60. The 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 undiscovered archaeological and/or historical resources from

being lost until such time as surveys may be conducted.

(Petitioner's Exhibit No. 8, p. 12.)

Groundwater Resources

61. The Property is in the western and northwestern slopes of Hualalai within the Hualalai aquifer sector. This sector has two systems, the Keauhou and the Kiholo aquifer systems, each having a sustainable yield of 38 and 18 mgd, respectively. The sustainable yield for the Hualalai sector constitutes a sizable fraction of non-potable groundwater.

(Petitioner's Exhibit No. 6, p. 19.)

Recreational, Scenic, Cultural Resources

62. The reclassification of the Property will preserve plant and avian resources which are important components of Hawaiian culture, and 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. 8, p. 11.)

Coastal/Aquatic Resources

63. The 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. 6, pp. 74 and 76; Petitioner's Exhibit No. 8, p. 12.)

ENVIRONMENTAL QUALITY

Noise

64. The 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. 8, p. 12.)

Air Quality

65. The 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. 8, p. 13.)

Water Quality

66. The reclassification of the Property to the Conservation District will preserve forested areas, lessen hazards from flooding and soil erosion, protect watershed areas, and result in the improved quality of Hawaii's water resources. (Petitioner's Exhibit No. 6, p. 74; Petitioner's Exhibit No. 6, p. 12.)

ADEQUACY OF PUBLIC SERVICES AND FACILITIES

67. 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. 6, p. 77; Petitioner's Exhibit No. 8, p. 13.)

COMMITMENT OF STATE FUNDS AND RESOURCES

68. 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. 6, p. 77; Petitioner's Exhibit No. 8, p. 13.)

CONFORMANCE TO THE CONSERVATION DISTRICT STANDARDS

69. The Property serves as a groundwater recharge area. (Petitioner's Exhibit No. 6, pp. 2, 67.)

70. The Property contains large stands of native ohia, Acacia-koa and in some places, koa-mamane and mamane-naio within a mixed montane mesic forest zone on the slopes of Hualalai. The Property has been identified as forest bird habitat for the endangered Hawaii Akepa, the Hawaii Creeper, and the Hawaiian Crow in the Hawaii Forest Bird Recovery Plan and the Alala Recovery Plan, prepared by the USFWS, Department of the Interior. The endangered Hawaiian Hawk is also found through the area. (Petitioner's Exhibit No. 6, pp. 1, 2, 42, 44, 60, 78.)

71. Puus Laalaau and Lalakaukole and Craters Hinaka and Kaupulehu provide a scenic backdrop to the area. The proposed reclassification of the Property will enhance the scenic value of these resources. (Petitioner's Exhibit No. 6, pp. 58 and 60.)

72. The Soil Survey of the Island of Hawaii, State of Hawaii, prepared by the U.S. Department of Agriculture, SCS (1973), classifies the soils on the Property into three major groups: volcanic ash soils, organic soils, and young unweathered lava. Soils on the Property range from capability class IV to VII and are generally unsuitable for cultivation. These soils range from sea level to 7,000 feet and are used for grazing, wildlife, and woodland. (Petitioner's Exhibit No. 6, pp. 20-37; Petitioner's Exhibit No. 8, p. 9.)

73. The LSB classifies the soils on the Property as "C," "D," and "E" which are not highly productive for cultivated agriculture. Most of the soils on the Property are rated "D" and "E." Only very small pockets within the Honuaula Tract 3 Extension, Honuaula Tract 3, and Makaula-Ooma Mauka Tract are rated "C." (Petitioner's Exhibit No. 6, pp. 26-37, 61.)

74. Approximately 8.8 percent of Honuaula Tract 3 Extension, 34.4 percent of Honuaula Tract 3, 86.6 percent of Honuaula Tract 2, and 17.7 percent of Makaula-Ooma Mauka Tract have slopes over 20 percent. (Petitioner's Exhibit No. 6, p. 61; Petitioner's Exhibit No. 8, pp. 2, 15.)

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

75. 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 reclassification of the Property will maintain the stability of the natural ecosystems, native forests, native forest birds, and watershed areas 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, pp. 53, 58.)

b. In conformance with §226-11(a)(2) and (b)(6), HRS, the reclassification of the Property will protect relatively intact forests of native Acacia-koa, koa-ohia, and mamane-koa which provide forest habitat for at least 10 species of native forest birds including essential habitat for four endangered species. (Petitioner's Exhibit No. 6, p. 58.)

c. In conformance with §226-12(b)(3) and 226-104(b)(13), HRS, the reclassification of the Property to the Conservation District will protect and enhance Hawaii's open space and scenic resources provided by the native forests, puus, and craters. (Petitioner's Exhibit No. 6, p. 59.)

d. In conformance with §226-13(b)(2) and (b)(3), HRS, the 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, p. 58.)

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, pp. 58-59.)

76. 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: watershed, areas with endangered species, open space, natural areas, water quality sensitive areas, and scenic resources. (Petitioner's Exhibit No. 6, pp. 59 and 60.)

CONFORMANCE WITH COASTAL ZONE MANAGEMENT OBJECTIVES AND POLICIES

77. The proposed reclassification of the Property generally conforms to the following Coastal Zone Management objectives and policies:

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. 73.)

b. In conformance with §205A-2(b)(3), HRS, the proposed reclassification of the Property will protect and preserve native forests which contribute to and protect the quality of scenic and open space resources. (Petitioner's Exhibit No. 6, p. 74.)

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. 74.)

d. In conformance with §205A-2(b)(6), HRS, the proposed reclassification of the Property will protect watershed areas on the western slopes of Hualalai and preserve vegetation, which maintains the soil and serves to reduce damage from flooding and erosion to properties along the coast. (Petitioner's Exhibit No. 6, p. 75.)

e. In conformance with §205A-2(b)(7), HRS, the proposed reclassification of the Property will protect it from development and uses not compatible with the area's forest bird habitat, watershed, and recreational resource values. (Petitioner's Exhibit No. 6, p. 75.)

CONFORMANCE WITH HAWAII COUNTY GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES

78. 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. 6, p. 67; Petitioner's Exhibit No. 8, p. 18.)

79. The Property contain attributes consistent with the Hawaii County General Plan goals, policies and standards for environmental quality, natural beauty, natural resources, land use, and open space. (Petitioner's Exhibit No. 6, pp. 66-68; Petitioner's Exhibit No. 8, p. 18.)

RULING ON PROPOSED FINDINGS OF FACT

Any of the proposed findings of fact submitted by any of the parties in this proceeding not adopted by this 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 5,914.96 acres of land at

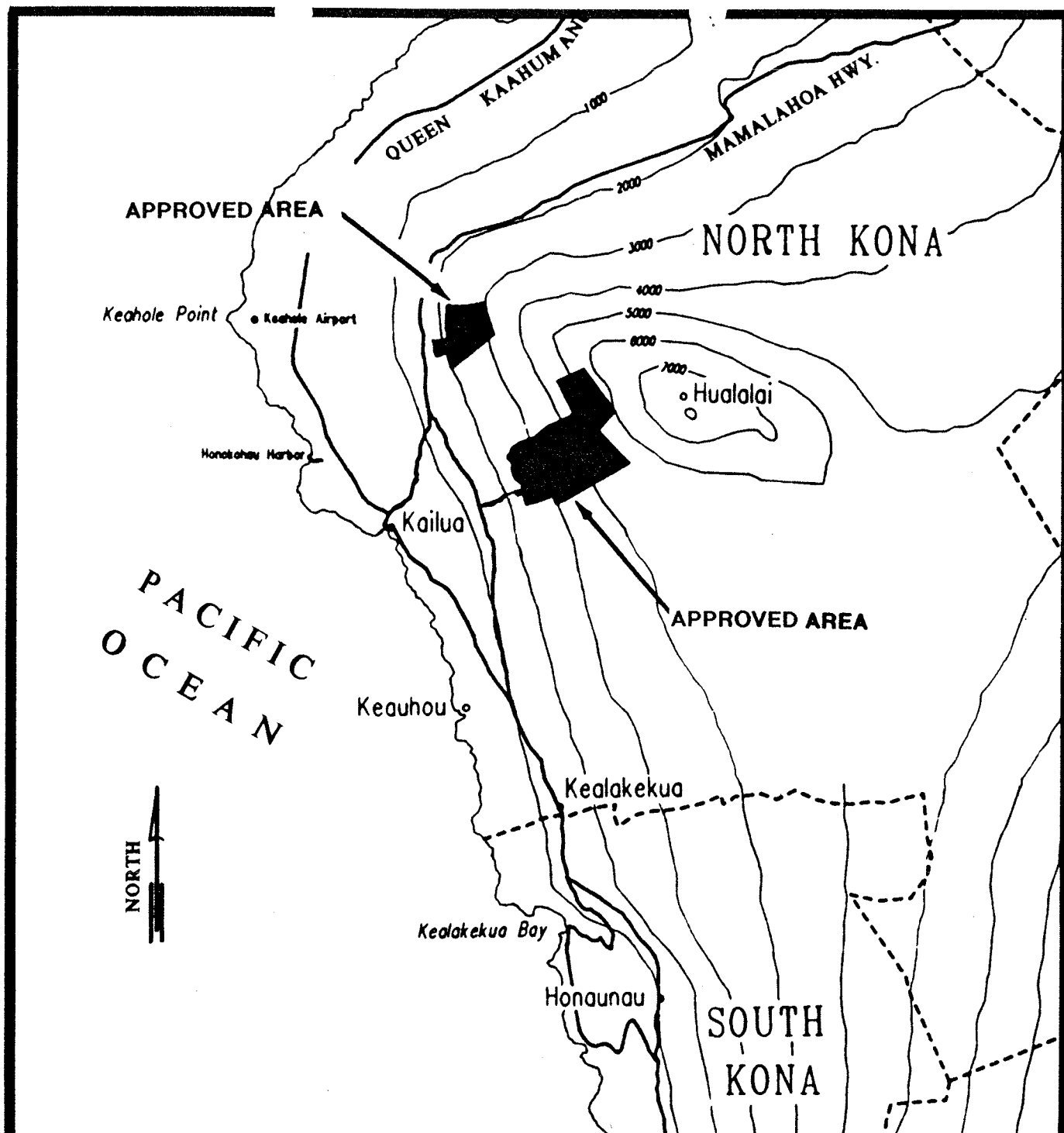
Honuaula Tract 3 Extension, Honuaula Tract 3, Honuaula Tract 2, and Makaula-Ooma Mauka Tract, North Kona, Island of Hawaii, State of Hawaii, identified as Tax Map Key Nos.: 7-3-01:2, 7-4-01:2 and 3, and 7-5-13:22, from the State Land Use Agricultural District to the State Land Use Conservation District, 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. BR93-694 filed by Petitioner Office of State Planning, consisting of approximately 5,914.96 acres of land located at Honuaula Tract 3 Extension, Honuaula Tract 3, Honuaula Tract 2, and Makaula-Ooma Mauka Tract, North Kona, Island of Hawaii, State of Hawaii, identified as Tax Map Key Nos.: 7-3-01:2, 7-4-01:2 and 3, and 7-5-13:22, and approximately identified on Exhibit "A" attached hereto and incorporated by reference herein, are 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.


BENJAMIN M. MATSUBARA
Hearing Officer

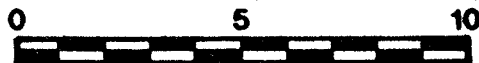


LOCATION MAP

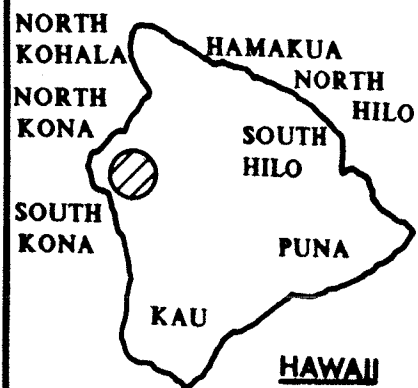
BR93-694 / OFFICE OF STATE PLANNING,
STATE OF HAWAII

T.M.K.: 7-3-01: 2, 7-4-01: 2, 3, & 7-5-13: 22

MAKAULA - OOMA MAUKA TRACT,
HONUULA TRACT 3 EXTENSION, AND
HONUULA TRACT 2 & 3, NORTH KONA, HAWAII



APPROX. SCALE IN MILES



BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of)	DOCKET NO. BR93-694
)	
THE OFFICE OF STATE PLANNING,)	CERTIFICATE OF SERVICE
STATE OF HAWAII)	
)	
To Amend the Agricultural Land)	
Use District Boundary into the)	
Conservation Land Use District)	
for Approximately 5,914.96 Acres)	
at Honuaula Tract 3 Extension,)	
Honuaula Tract 3, Honuaula)	
Tract 2, and Makaula-Ooma Mauka)	
Tract, North Kona, Island of)	
Hawaii, State of Hawaii, Tax Map)	
Key Nos: 7-3-01:2, 7-4-01:2 and)	
3, and 7-5-13:22)	
)	

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



BENJAMIN M. MATSUBARA
Hearing Officer