

RUSSELL S. KOKUBUN Chairperson, Board of Agriculture

> SCOTT E. ENRIGHT Deputy to the Chairperson

State of Hawaii DEPARTMENT OF AGRICULTURE

1428 South King Street Honolulu, Hawaii 96814-2512 Phone: (808) 973-9600 FAX: (808) 973-9613

December 3, 2013

Mr. Daniel Orodenker
Executive Officer
Land Use Commission
235 South Beretania Street
Suite 406
Honolulu, Hawaii 96813

Dear Mr. Orodenker:

Subject:

Petition for Declaratory Order to Designate Important Agricultural Lands

Docket No. DR13-50

Trustees of the Estate of Bernice Pauahi Bishop

(dba: Kamehameha Schools)

Area: approximately 190 acres (Lumahai Valley and Waipa, Hanalei,

Kauai)

Thank you for this opportunity to comment on this important petition. The Department of Agriculture expresses its appreciation to the petitioner for their interest in an effort to identify potential Important Agricultural Lands (IAL). We note that the petitioner is not seeking a reclassification of land pursuant to Section 205-45(b), in conjunction with this petition to designate IAL. The petitioner is also voluntarily waiving all rights to claim any credits pursuant to Section 205-45(h). This is the fourth IAL petition involving agricultural lands on the island of Kauai and the eighth IAL petition statewide.

The Department offers its support of the petitioner's request for IAL designation based on the information contained in the petition and additional information gathered by Department staff. The petitioned areas of Lumahai and Waipa meet each of the eight IAL identification criteria (see the attachment to this letter for details). We believe this is the first IAL petition to do so.

The Department notes that the Petitioner has developed a long-term strategic agricultural plan for management of its agricultural lands throughout the State. Among the Plan's goals are increasing the production of food products on its lands for the local market as well as KS campuses and facilities, and the restoration and revitalization of traditional agricultural systems. Investments to accomplish the stated goals include agricultural education and agricultural business planning for its farmers, improvements



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in pasture and grazing management, and the promotion of agriculture as an industry in Hawaii. The Petitioner states that "The proposed IAL designation for the Property furthers Kamehameha Schools' goals for its agricultural lands and is consistent with its statewide strategic agricultural plan." The overall direction and commitment to agricultural development by the Petitioner increases the likelihood that the proposed IAL will be put into productive agricultural use.

Sincerely,

Russell S. Kokubun

Chairperson, Board of Agriculture

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Attachment

c: Office of Planning

Kauai County Planning Department

ATTACHMENT

Lumahai and Waipa Petition for Important Agricultural Land Desigation (DR13-50)

In the following, the Department of Agriculture reviewed the petitioner's statements as to how the Lumahai (66.2 acres) and Waipa (123.6 acres) sites meet the eight criteria for identifying potential IAL (Section 205-44, HRS).

Lumahai Lands (66.2 acres) Lands used for agricultural production

Current agricultural production

According to the petition (page 8, and Exhibit E, pages 3-4) and additional information provided by PBR Hawaii (via email, dated November 26, 2013), the 66.2 acre area is currently under a five-year license. The licensee has put 41 acres of the 66.2-acre area into agricultural use – 37 acres of pasture with 27 horses, 2 acres of planted wetland taro lo'i, and 2 acres of vegetables, melons, and fruit trees. The 27 occupying the pasture area are used to control vegetative growth while the licensee installs fencing prior to the introduction of cattle. Most of the horses will be removed after the introduction of cattle. Of the 6 acres of available taro lo'i, two acres are currently planted and irrigated from Lumahai Stream. There is an additional two acres of irrigated row crops and fruit trees.

Past agricultural production

As noted in the petition (page 6 and Exhibit E, page 2), there was rice and taro production from 1860's to 1930's, ranching from the 1930's to the 1960's, and wetland taro from the 1990's. Prior to the 1860's, the Petitioner states that literature and archaeological surveys suggest that the Lumahai Valley likely was cultivated in taro.

Future agricultural production

According to the petition (page 8 and Exhibit E, pages 3-4), a total of 12 acres of wetland taro will be planted, along with an additional 17 acres of row crops, flowers, ornamental plants, and fruit trees. The wetland taro and row crops/fruit trees will be incrementally established.

Lumahai Lands (66.2 acres)

Land with soil qualities and growing conditions that support agricultural production of food, fiber, or fuel- and energy-producing crops, and

Lands identified under agricultural productivity ratings systems, such as the Agricultural Lands of Importance to the State of Hawaii (ALISH)

According to the Land Study Bureau's Detailed Land Classification for the Island of Kauai, 64 acres (97 percent) of the 66-acre Lumahai area is rated "C", or fair

productivity potential for most crops (Petition, page 10 and Exhibit E, page 6). There is no improvement to crop productivity of the "C" rated soils with the application of irrigation.

Ninety-three percent of the Lumahai site is classified as "Other Important" according to the Agricultural Lands of Importance to the State of Hawaii (ALISH) system (Petition, page 11 and Exhibit E, page 6). The remaining area is not classified..

Lumahai Lands (66.2 acres)

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

As noted in the petition (page 6 and Exhibit E, page 2), prior to the 1860's, the Petitioner states that literature and archaeological surveys suggest that the Lumahai Valley likely was cultivated in taro.

Lumahai Lands (66.2 acres) Lands with sufficient quantities of water to support viable agricultural production

The petition states that the Lumahai River and the existing ditch system will be the primary source of irrigation water (Petition, page 11 and Exhibit E, page 6). The minimum flow of the river is estimated at 13 million gallons per day. The "Hawaii Stream Assessment – A Preliminary Appraisal of Hawaii's Stream Resources; Hawaii Cooperative Park Service Unit/National Park Service, December 1990; page 36) does not identify any dams or diversions on the river. The current licensee expects to repair the existing ditch (auwai) system that enters the property along the western edge of the valley. Median annual rainfall is estimated to be 80 to 100 inches with a fairly even distribution of about 6 inches per month with less rainfall in January and more than 15 inches in March (Median Rainfall – Circular C88; Department of Land and Natural Resources, Division of Water and Land Development; June 1982).

Department staff conservatively estimates the full development of 19 acres of row crops and 12 acres of wetland taro will require about 800,000 gallons per day (3,700 gallons per acre per day for row crops and 60,000 gallons per acre per day for wetland taro). The actual amount will likely be less because of the rainfall.

Lumahai Lands (66.2 acres)

Land whose designation as Important Agricultural Lands is consistent with general, development, and community plans of the County

The property is entirely within the State Agricultural District (Exhibit E, Figure 8). The Kauai General Plan designates the entire property as "Open" (Exhibit E. Figure 7). The "Open" classification typically includes "...important landforms, wetlands, streams, steep slopes, and other environmentally-sensitive areas." (Kauai General Plan - 2000, Chapter 5, page 5-5, Development of Open Lands). According to the Kauai

Comprehensive Zoning Code, diversified agriculture, livestock and grazing are permitted uses in the Open zone (Section 8-8.2, page 215).

Kauai County has identified potential IAL lands, using the methodology and process established in 2009 that considers food and energy self-sufficiency issues. The petitioned area is largely consistent with the County's "25 Point Threshold" and a little less consistent at the "28 Point Threshold" (Exhibit E, Figures 9A and 9B).

Lumahai Lands (66.2 acres) Land that contributes to maintaining a critical land mass important to agricultural operating productivity

The Lumahai lands appear to represent the largest contiguous area suited for agricultural use in the valley.

Lumahai Lands (66.2 acres) Land with or near support infrastructure conducive to agricultural productivity, such as transportation to markets, water, or power

From the petition (Exhibit E, Figure 6), there are roadways along or through the western, southern, and southeastern parts of the property. Lumahai River is situated along the eastern border of the property. The petition (page 15) states that the Petitioner "...has planned infrastructural improvements and plans to build agricultural support facilities", but provides no further detail.

Waipa Lands (123.6 acres) Lands Used for Agricultural Production

Current agricultural production

According to the petition (pages 8-9, and Exhibit E, page 4) and additional information provided by PBR Hawaii (via email, dated November 26, 2013), the 123.6-acre area is currently leased to the Waipa Foundation until 2050. The lessee has put 60 acres of the property into agricultural use – 45 acres of pasture with 15 to 20 cattle, and 15 acres of planted wetland taro lo'i, vegetables, nurseries, and plant gardens. The Petitioner is partnering with the Foundation to expand agricultural, including taro, productivity and implement an "aina based learning program." Property makai of the petitioned area is improved with structures and facilities related to the activities on the petitioned lands.

Past agricultural production

As noted in the petition (page 7 and Exhibit E, pages 2-3), there was taro production prior to 1848 up until the 1860's when rice became the predominant agricultural crop until 1940. From 1945 to 1985, these lands were used for livestock pasture. In 1986, wetland taro production was reestablished by Hawaiian Farmers of Hanalei, and then by

the Foundation. In 2004, the Foundation completed a master plan (Exhibit E, Figure 1) that describes the agricultural uses proposed on the petitioned lands.

Future agricultural production

According to the petition (pages 8-9 and Exhibit E, page-4), the 45 acres of pasture will be retained. There will be an additional 34 acres of planted wetland taro lo'i, vegetables, nurseries, and plant gardens, bringing the total diversified cropland to 49 acres and total production area of 94 acres by 2050. There is about 30 acres of what the Petitioner describes as "...essential elements of active agricultural operation, such as stream buffers, drainage ways, ditches, and access roads."

Waipa Lands (123.6 acres)

Land with soil qualities and growing conditions that support agricultural production of food, fiber, or fuel- and energy-producing crops, and

Lands identified under agricultural productivity ratings systems, such as the Agricultural Lands of Importance to the State of Hawaii (ALISH)

According to the Land Study Bureau's Detailed Land Classification for the Island of Kauai, 76 acres (62 percent) of the 123.6-acre Waipa area is rated "C", or fair productivity potential for most crops (Petition, page 10 and Exhibit E, page 6). There is no improvement to crop productivity of the "C" rated soils with the application of irrigation.

Seventy-one percent of the Waipa site is classified as "Other Important" agricultural land according to the Agricultural Lands of Importance to the State of Hawaii (ALISH) system (Petition, page 11 and Exhibit E, page 6). There are about 10 acres each of "Prime" and "Unique" agricultural lands along the makai edge of the property. The remaining 16 acres are not classified.

Waipa Lands (123.6 acres)

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

As noted in the petition (page 7 and Exhibit E, pages 2-3), prior to the 1860's, the area alongside Waipa stream was in wetland taro production.

Waipa Lands (123.6 acres) Lands with sufficient quantities of water to support viable agricultural production

The petition states that the Waipa Stream, Kiwaa Stream, and the Kauai County water systems will be the primary sources of irrigation water (Petition, pages 11-12 and Exhibit E, page 6). The historic agricultural crops such as wetland taro and rice practiced field flooding and therefore a sufficient quantity of water. The Waipa Master Site Plan (Exhibit E, Figure 1) shows the Waipa stream channel in the middle of the

petition area with ditches (auwai) extending into the petition lands. Department staff has not been able to determine the minimum flow of the stream. The "Hawaii Stream Assessment – A Preliminary Appraisal of Hawaii's Stream Resources; Hawaii Cooperative Park Service Unit/National Park Service, December 1990; page 36) does not identify any dams or diversions on the river. The Petitioner states that "..the stream and related auwai irrigation system is in the process of being restored and utilized for irrigating the proposed IAL." (Petition, page 12 and Exhibit E, page 6). The Petitioner will be providing the Department with additional information on the efforts to restore the stream and the auwai irrigation system.

The median annual rainfall is estimated to be 80 to 100 inches with a fairly even distribution of about 6 inches per month with less rainfall in January and more than 15 inches in March (Median Rainfall – Circular C88; Department of Land and Natural Resources, Division of Water and Land Development; June 1982).

Department staff conservatively estimates the full development of 49 acres of row and wetland crops will require irrigation water sources capable of supplying 3,700 gallons per acre per day for row crops and 60,000 gallons per acre per day for wetland taro. The actual amount will likely be less because of the rainfall.

Waipa Lands (123.6 acres) Land whose designation as Important Agricultural Lands is consistent with general, development, and community plans of the County

The property is entirely within the State Agricultural District (Exhibit E, Figure 8). The Kauai General Plan designates the entire property as "Agriculture" (Exhibit E. Figure 7).

Kauai County has identified potential IAL lands, using the methodology and process established in 2009 that considers food and energy self-sufficiency issues. The petitioned area is largely consistent with the County's "25 Point Threshold" and mostly inconsistent at the "28 Point Threshold" (Exhibit E, Figures 9A and 9B).

Waipa Lands (123.6 acres) Land that contributes to maintaining a critical land mass important to agricultural operating productivity

The Waipa lands appear to represent the largest contiguous area suited for agricultural use in the valley. The Petitioner should explain the effect of the 5 or 6 private landowners scattered throughout the petitioned area on the development of agricultural activities in Waipa.

Waipa Lands (123.6 acres) Land with or near support infrastructure conducive to agricultural productivity, such as transportation to markets, water, or power

From the petition (Exhibit E, Figure 6), there are roadways throughout the property. Waipa Stream and other streams flow through the property. The petition (page 15) states that the Petitioner "...has planned infrastructural improvements and plans to build agricultural support facilities", but provides no further detail. The adjacent Waipa Foundation facility along Kuhio Highway offers a weekly farmers market.