

JOHN WAIHEE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P.O. BOX 621
HONOLULU, HAWAII 96809

WILLIAM W. PATY, CHAIRPERSON
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RECEIVED
FILE NO.: HA-2605

DOC. NO.: 2024

'93 JAN 15 A9.06

JAN 14 1993

MEMORANDUM

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

TO: Honorable Mr. Brian Choy, Director
Office of Environmental Quality Control

FROM: Honorable William W. Paty, Chairperson
Department of Land and Natural Resources

Subject: Negative Declaration for After-the-Fact Macadamia Nut Trees
at Hakalau, South Hilo, Hawaii
(TMK: 2-9-4: 14)

The Department of Land and Natural Resources has reviewed the comments received during the 30-day public comment period which began on December 8, 1992. We have determined that this project will not have significant environmental effect and have issued a negative declaration. Please publish this notice in the OEQC Bulletin as soon as possible.

We have enclosed a completed OEQC Bulletin Publication Form and four copies of the final EA. Please contact Cathy Tilton of our Office of Conservation and Environmental Affairs at 587-0377, if you have any questions.

cc: Mr. & Mrs. Castilloux

Enclosure

1993-02-08-HI-FA-Castilloux's Commercial Agricultural
Use After the fact Planting of Macadamia nut trees

FEB - 8 1993

Final Environmental Assessment for
After-the-Fact Macadamia Nut Trees at
Hakalau, South Hilo, Hawaii
TMK: 2-9-4: 14

Mr. & Mrs. Philip and Joyce Castilloux

CDUA HA-2605

JOHN WAIHEE
GOVERNOR



BRIAN J. J. CHOY
Director

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
220 SOUTH KING STREET
FOURTH FLOOR
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185

September 16, 1992

Mrs. Joyce Castilloux
P. O. Box 263
Hakalau, Hawaii 96710

SUBJECT: Environmental Assessment for After-the-Fact Macadamia Nut Trees at High Point Farm, Hakalau, Hawaii (TMK: 2-9-4: 14)

Dear Mrs. Castilloux:

The Department of Land and Natural Resources (DLNR) has forwarded your letter dated August 12, 1992 asking for assistance in preparing the above Environmental Assessment (EA).

Regarding your partially completed EA, we have the following comments. These items were found missing and should be included:

- A listing of agencies consulted, and
- A site and location map

If you have any questions regarding the EIS process or the contents of your EA, please call Karen Mau at 586-4185. Thank you for your cooperation.

Sincerely,

Brian J. J. Choy
Brian J. J. Choy
Director

BC:km

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 621
HONOLULU, HAWAII 96809

DEPARTMENT MASTER APPLICATION FORM

FOR DLNR USE ONLY

Reviewed by _____
Date _____
Accepted by _____
Date _____
Docket/File No. _____
180-Day Exp. _____
EIS Required _____
PH Required _____
Board Approved _____
Disapproved _____
Well No. _____

(Print or Type)

I. LANDOWNER/WATER SOURCE OWNER
(If State land, to be filled
in by Government Agency in
control of property)

Name Philip & Joyce Castilloux
Address P.O. Box 263
Hakalau, Hi.
96710
Telephone No. 963-6158

SIGNATURE *Philip & Joyce Castilloux*
Date 10-20-92

II. APPLICANT (Water Use, omit if applicant
is landowner)

Name Applicant is Landowner
Address same

Telephone No. _____
Interest in Property Landowner

(Indicate interest in property; submit
written evidence of this interest,

*SIGNATURE _____
Date _____

*If for a Corporation, Partnership,
Agency or Organization, must be signed
by an authorized officer.

III. TYPE OF PERMIT(S) APPLYING FOR

- () A. State Lands
() B. Conservation District Use
() C. Withdraw Water From A Ground
Water Control Area
() D. Supply Water From A Ground
Water Control Area
() E. Well Drilling/Modification

IV. WELL OR LAND PARCEL LOCATION REQUESTED

District South Hilo
Island Hawaii
County Hawaii
Tax Map Key 3/2-9-4-14
Area of Parcel 38.7 Acres
(Indicate in acres or
sq. ft.)
Term (if lease) N/A

PAGE 2-CUDA

V. ENVIRONMENTAL REQUIREMENTS

1) Identification of applicants:

Philip E Castilloux
Joyce G Castilloux
PO Box 263
Hakalau, Hi 96710

2) Identification of approving agency:

Department of Land and Natural Resources
P O Box 621
Honolulu, Hawaii 96809

In conjunction with Conditional Use Application

3) Identification of agencies consulted:

County Department of Health
25 Aupuni St
Hilo, Hawaii 96720

County Planning Department
25 Aupuni St
Hilo, Hawaii 96720

County Department of Public Works
25 Aupuni St
Hilo, Hawaii 96720

County Building Permit Department
25 Aupuni St
Hilo, Hawaii 96720

Department of Soil Conservation, UHH
1541 Waianuenue Ave Room 322
Hilo, Hawaii 96720

OCEA
P O Box 621
Honolulu, Hawaii 96809

4) The technical aspect of this activity has been to clear the land, build and occupy a single family dwelling and engage in subsistence farming via fruit trees, and nut trees.

There will be minimal effect on the economic and social aspects as related to this parcel and surrounding parcels.

TMK: 3:2-9-4-14 Castilloux, Philip

There are no economic impacts on the immediate community or the community at large. Property bordering this area are at present allowed to go fallow. There is no activity within 1/2 mile of our property of any type except for Akaka Falls State Park. Land surrounding this area was former sugarcane land, some properties have gone into small farms growing ginger and other crops but none of these farms are within 1 mile of this property.

Environmental: Fertilizer used is approximately 1 lb per 1 inch trunk size per year. (A tree with a 8" trunk would receive 8 lbs of Fertilizer in a one year period). The average tree trunk is now about 8". Fertilizer is applied approximately 6 times a year spreading it around the drip line of the tree and towards the trunk. Therefore a tree will receive only 1/6th of the yearly amount at any one time. So a tree with a 8" trunk would receive around 1 to 1 1/4 lb of Fertilizer every 2 months. This is done as much as possible during dry weather to allow the tree as much a chance to make use of the Fertilizer and prevent as much run off as possible. The ground under the trees is heavily grown over with grass and as a result, Fertilizer is generally absorbed by either the tree or the grass under the tree and has little chance of causing any problem as a result of run off into the streams. The natural contours of the land where the Macadamia Nut trees have been planted has been left undisturbed. The sloping land on which the trees are planted form a slight V in the middle of the trees. This is the area of drainage for the rain which follows along the peninsula to a point above Kuhuna Falls where it flows into a pool before going over the falls. The heavy rainfall cause both streams to flow cleanly most of the year.

There is no usage of pesticides on our land - either on the Ag portion or the Conservation acres. We allow the grass to grow under the Macadamia Nut trees and refrain from the use of Herbicides around them. Since these chemicals are not used, there can be no pollution problem to be considered from them.

The trees do not generate any air-pollution - other than during their blossoming periods and are very quiet - so as not to contribute to any noise level in the area. Since there is no access to this area for machinery of any kind and all labor is done manually, there is no traffic congestion in the area as a result of these trees.

5) Affected Environment: Please refer to attached Exhibits "A", "F", and "H" which include vegetation survey, plat map and site map.

This area was cleared of all native growth earlier in the century before it was designated a forest reserve and used for growing sugar cane. At this time, no machinery was used because of the location of the land across a deep gulch. Information given us from the residences in this area is that this land was allowed to go fallow approximately 50 years ago resulting in a regrowth of Vivi, Staghorn Fern and Melastroma trees. In recent years this area has not been utilized other

TMK: 3:2-9-4-14 Castilloux, Philip

than for its watershed value. The area was totally choked - walking was not possible, access was only possible by using a machete to cut a path, or by crawling thru pig trails. We have not completely removed all this growth and there is still about 3/4 of an acre that is as it was when we bought the land. What has been cleared and replanted looks like a park. The trees are nicely spaced with room between them so they can grow. The ground was left in its original contours, with grass planted and maintained.

The removal of the dense understory has resulted in a higher density of the Japanese White-eye and Cardinals. As many as 24 Cardinals have been seen on the grass at one time. The Macadamia Nut trees are heavily used by the birds for nesting. You can find a nest in almost every one. The open areas create a resulting environment with insects and *Vivi* more available to the bird population than the former growth allowed.

The Hawaiian Hawk or I'o is only found on the island of Hawaii. Several of the species nest and raise their young in the Eucalyptus grove on the adjoining property. These are frequently seen soaring about the area and resting in the tops of the Macadamia Nut trees as well as in the other trees on the property. They seem to be undisturbed by our presence and even a bit curious as they watch over this area.

The South American "cane toad" also seems to be undisturbed by our presence. They inhabit the general area and have done extremely well. They can be seen at night by the dozens.

6) The impact to the environment has been minimal due to the manner in which the land was cleared.

The negative impact in this area was due mainly to the early sugarcane usage. The removal of the regrowth and replanting resulted in an opening up of the area and a negative impact (if it would even be considered negative) would be mainly to the local pig population. This area was formerly used by the pigs and they have now moved to the part of the forest that has been undisturbed. However - these same pigs seem to find this area still to their liking and as a result - root up parts of it during their foraging. It is our understanding that the pig is highly undesirable due to the destruction it causes in the forests.

This area lies within a high rainfall zone and the steep-sided gulches have been left undisturbed to insure their stability. It is important to emphasize that the hand-clearing of the land proceeded incrementally over a 4 year period so that at no time was the entire site devoid of vegetative coverage. Natural drainage features were left undisturbed or obstructed and has been most effective during heavy rains. The soil is silty clay loam formed from volcanic ash. The surface layer is a dark reddish brown about 15 inches deep, strongly acid. Water moves thru the soil rapidly. The soil is usually moist due to the mean

TMK: 3:2-9-4-14 Castilloux, Philip

annual rainfall from 150" to 300" and cloud and fog are prevalent thought the year. Any erosion hazard seems to be non-existent due to the heavy grass coverage.

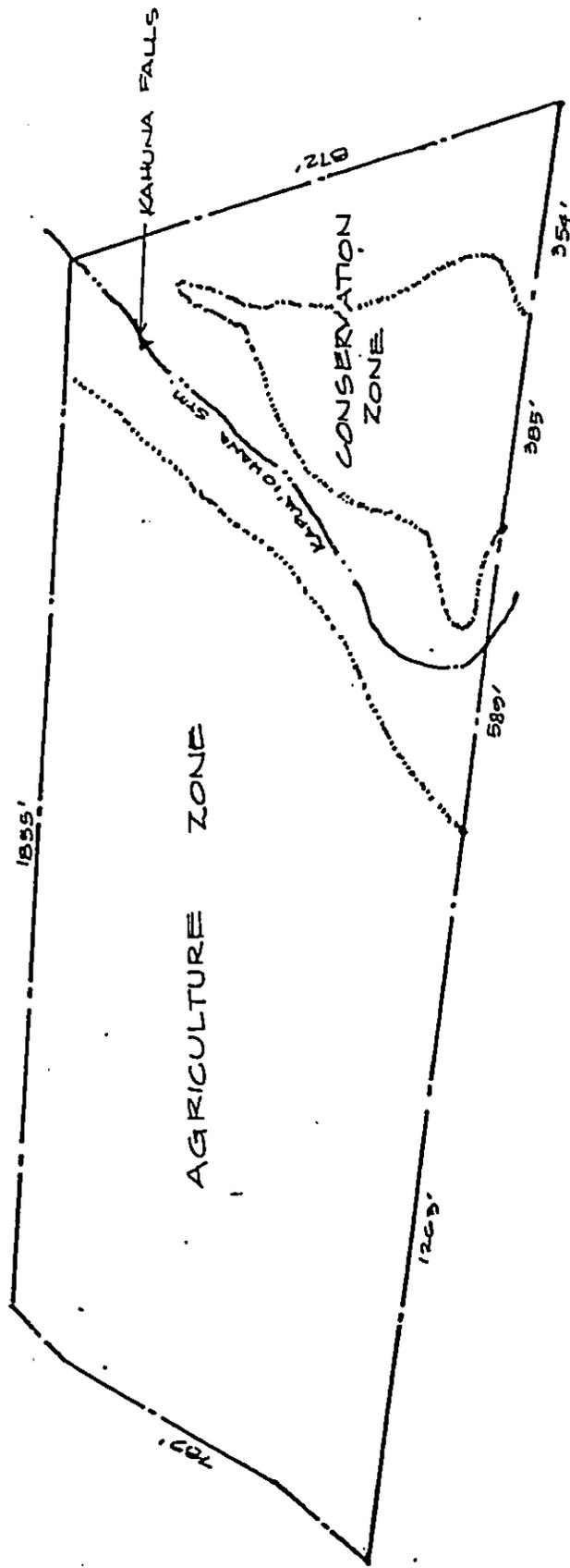
Since there is no access to this area for any kind of machinery, the nuts are hand picked by owners. These trees were planted in 1981. Production from the 19 trees started about 1986. First year total amounted to about 20 lbs of nuts. Production has increased yearly by about 50% each year over the previous year. Production from these trees has been very small. We have never figured out exactly why. The trees are very large, very healthy and yet have 1/2 the production of trees younger and smaller than they are. Two explanations come to mind - either the lack of bees for pollination causes a small production or the grass allowed to grow completely under the tree year round effects it in some manner. 1991 production was between 250 to 300 lbs. Present age of trees puts them close to their peak production. Estimated income from these trees since the first harvest is around \$400. You can see, we are not keeping these trees strictly for their commercial value. Present production and recent drop in wholesale price of Macadamia nuts has made keeping and maintaining of Macadamia Trees a break-even business at best.

No help is hired to do this work. We pick the nuts by hand ourselves. The nuts are then taken to the Ag portion of the property where they are husked, dried and bagged for delivery to Hilo Steel who is the local receiver for Hawaiian Holiday Company who purchases the nuts. The limited income from the nuts produced by the trees on the Conservation portion of the land would provide a very small tax payment to the State.

7) Mitigation Measures: The only alternative to the 19 Macadamia Nut trees would be to remove them. This would create another disturbance to the land resulting in a area devoid of trees. If removal of the Macadamia trees is necessary, it is suggested that native trees be planted in-between these trees and allowed to reach reasonable size before the removal of the Macadamia trees and thus preventing the area from being changed too rapidly.

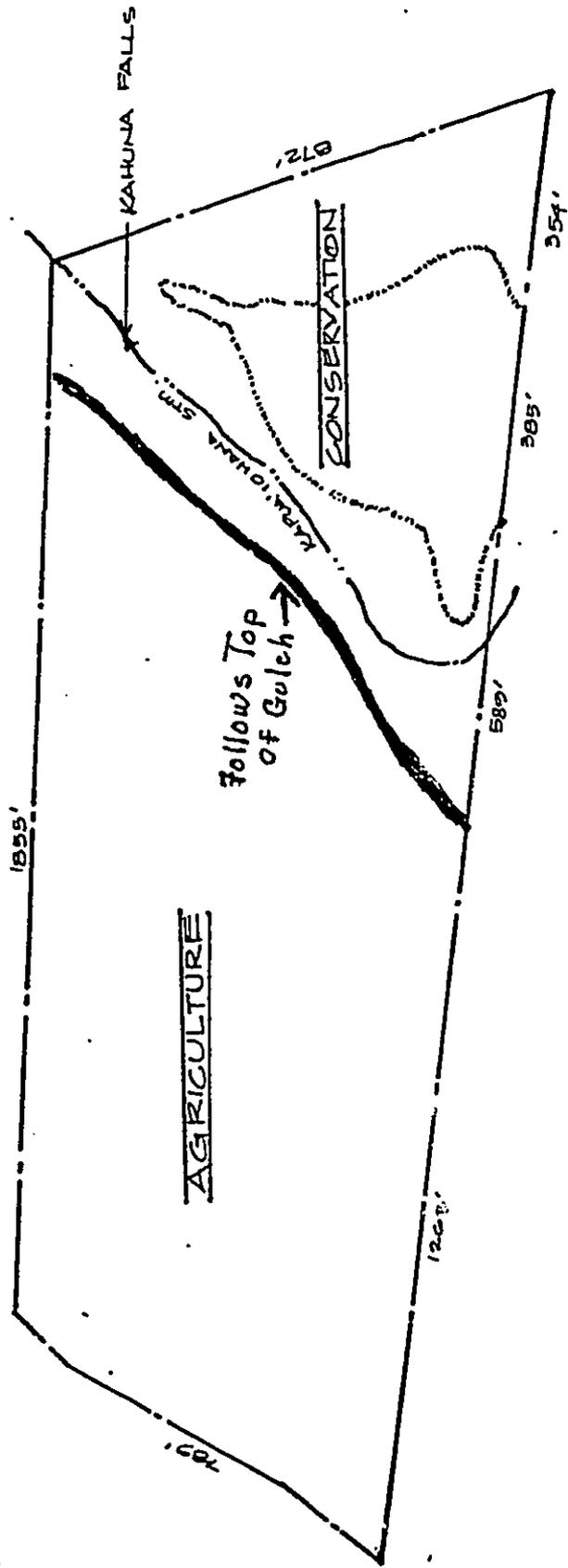
8) & 9) Findings and Determination: This applicant requests a Negative Declaration based on the foregoing. It is determined that the action taken has not had and will not have a significant effect on the environment and that an Environmental Impact Statement is not required.

10) Department of Land and Natural Resources
P O Box 621
Honolulu, Hawaii 96809



TRUE NORTH
 SCALE: 1" = 400'-0"

SITE MAP
 EXHIBIT A



BOUNDARY INTERPRETATION No. 9118
EXHIBIT B

Exhibit C

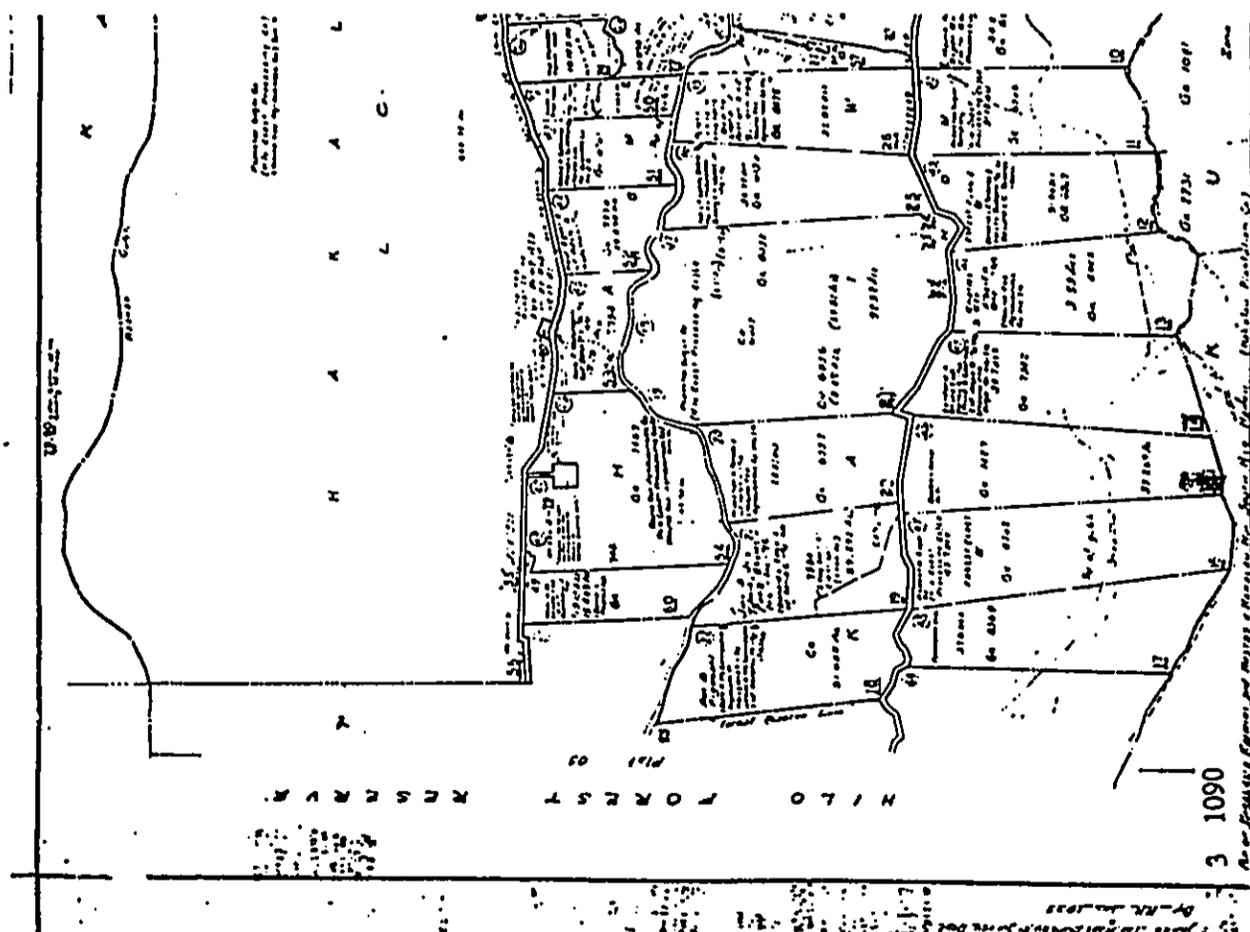
ADJOINING PARCEL OWNERS

3-2-97 4-12
 Owner: MARIAN KEM ASPINBUSINESS CO
 Tax Parcel: 01M ALBERT I ETAL
 Lot: Bill: 10 000000000 M. MILLS HI 30720 USA
 Assessed Value: 83,000
 Land: 22.90 acres
 Blot: 0 0 sq ft
 Features: L Semi-annual Tax
 Exemptions: 0 Zoning: 0
 Dwellings: 0 PITI: 0
 Use: 0 Nonres: 0

3-2-97 4-14
 Owner: CASTILLOON PHILIP E-JOICE G
 Tax Parcel: CASTILLOON PHILIP E-JOICE G
 Lot: Bill: 200 200 HIGHLAND HI 96710 USA
 Assessed Value: 20,000
 Land: 22.00 acres
 Blot: 0 0 sq ft
 Features: F Semi-annual Tax
 Exemptions: 2 Zoning: 0
 Dwellings: 0 PITI: 0
 Use: 0 Nonres: 0

3-2-97 4-15
 Owner: GALEY HIND N V
 Tax Parcel: GALEY HIND N V FOX 812
 Lot: Bill: 100 100 HIGHLAND HI 96710 USA
 Assessed Value: 20,000
 Land: 22.00 acres
 Blot: 0 0 sq ft
 Features: F Semi-annual Tax
 Exemptions: 0 Zoning: 0
 Dwellings: 0 PITI: 0
 Use: 0 Nonres: 0

3-2-97 4-21
 Owner: PERPETUO SIVAR CO
 Tax Parcel: MARIAN KEM ASPINBUSINESS CO
 Lot: Bill: 10 000000000 M. MILLS HI 30720 USA
 Assessed Value: 19,309
 Land: 22.90 acres
 Blot: 0 0 sq ft
 Features: F Semi-annual Tax
 Exemptions: 0 Zoning: 0
 Dwellings: 0 PITI: 0
 Use: 0 Nonres: 0



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