

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Land Division
Honolulu, Hawaii 96813

January 8, 2010

Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

PSF No.: 06HD-178

HAWAII

Re-Submittal Enforcement Action as to Steve's Ag Services, Ltd., Steve Baczkiewicz, Contract Milling, Wesley McGee, and Raymond McGee Involving Removal of Koa Timber Resources and Road Construction on State Unencumbered Lands, Alika and Papa 1st, South Kona, Hawaii, Tax Map Key: (3) 8-8-1:8

PURPOSE:

Enforcement action under unencumbered land rules for unauthorized removal of koa timber resources and road construction by Mr. Steve Baczkiewicz principal of Steve's Ag Services, Ltd., and Mr. Wesley McGee and Mr. Raymond McGee, general partners of Contract Milling, all of whom are collectively referred to as the "loggers."

LEGAL REFERENCE:

Section 171-6, Hawaii Revised Statutes (HRS), as amended.

LOCATION:

Portion of Government lands situated at Alika and Papa 1st, South Kona, Hawaii, identified by Tax Map Key: (3) 8-8-1:8, as shown on the attached map labeled Exhibit A.

AREA:

171.823 acres, more or less.

ZONING:

State Land Use District: Agriculture
County of Hawaii CZO: Unplanned (H)

TRUST LAND STATUS:

Section 5(b) lands of the Hawaii Admission Act
DHHL 30% entitlement lands pursuant to the Hawaii State Constitution: NO

INTRODUCTION:

This is a resubmittal of an enforcement action relating to unauthorized logging on State unencumbered land. The Board previously directed that loggers be assessed fines, costs, damages totaling \$1,500,614.68.

Loggers requested a contested case. The contested case and board action were dismissed without prejudice. The reasons for that and the reasons that we now come back to the board are discussed below.

BACKGROUND:

By letter dated July 22, 1992, the Estate of Samuel Mills Damon entered into an agreement with Steve's Ag Services, Ltd. to harvest "downed or severely distressed koa trees" on Kahuku Ranch lands (Exhibit B). Steve's Ag Services agreed to pay Damon Estate \$800 per thousand board feet for all koa milled and removed from the premises.

The government lands at issue lie to the west (makai) of the former Kahuku Ranch. Sometime between 1997 and 1999, loggers crossed over onto the government land and cut down all the koa trees – healthy, dead, and distressed. Many of the trees were cut down but not milled or used. These trees were simply left to rot on the ground.

On May 30, 2001, a Natural Area Reserve System (NARS) staff member reported to the Division of Conservation and Resource Enforcement (DOCARE) that unknown suspect(s) removed approximately 80 koa trees from Kipahoe NARS. Subsequently, upon a reconnaissance of the subject lands, it was discovered that koa trees had also been taken from the subject unencumbered State lands.

On June 28, 2001, DOCARE staff questioned Mr. Baczkiewicz about the case. Mr. Baczkiewicz admitted that he, aided by Contract Milling and the McGees had cut down the trees. Mr. Baczkiewicz claimed that he believed he was still within Kahuku Ranch. He did not explain why loggers destroyed healthy trees.

In September 2001, a team from the Division of Forestry and Wildlife (DOFAW) conducted field survey work to assess the impacts and resource removal incurred during the timber trespass operations on the subject land. This team estimated the koa lumber volume removed or destroyed on the subject parcel by measuring the quantity and stump sizes of trees cut down. Existing measures of koa tree architecture and quality from standing trees was then

used to model and predict wood volume in relation to stump size on a tree-by-tree basis. DOFAW concluded the following estimates:

- 1) 157 koa trees containing 74,791 net board feet of wood were harvested
- 2) 50 koa trees containing 4,974 net board feet of wood were felled only
- 3) kolea trees containing 357 net board feet of wood were harvested
- 4) approximately 0.2 miles of haul roads were constructed, removing approximately 0.8 acre of land from productive forest ecosystem and converting to road right-of-way
- 5) the total area of landing construction was approximately 0.5 acre

On October 9, 2001, DOCARE staff questioned Mr. Wesley McGee about the case. Mr. Wesley McGee stated that Mr. Baczkiewicz subcontracted with him to harvest koa timber and that he was not an employee of Steve's Ag Services, Ltd. Mr. Wesley McGee stated that he participated in determining the extent of the logging by marking the trees with surveyor's tape and that he listened to and followed Mr. Baczkiewicz in finding the points. Mr. Wesley McGee stated that he excavated the road and that Mr. Baczkiewicz did not have anything to do with the road. He also stated that Mr. Baczkiewicz would pay Damon Estate their stumpage fee, then he, Raymond McGee and Mr. Baczkiewicz would get one-third each from the balance.

On October 9, 2001, DOCARE staff questioned Mr. Raymond McGee about the case. Mr. Raymond McGee estimated that they removed approximately 15,000 board feet from the unencumbered State land.

From interviews with DOCARE, loggers admitted to cutting trees on the subject unencumbered State land. Their explanation is that they thought they were logging within Kahuku Ranch. They have not explained why they cut healthy trees or why they cut trees that they did not use. Loggers asserted that they attempted to locate the boundaries of the subject unencumbered parcel. These efforts included:

- 1) contacted Damon Estate Kahuku Ranch manager Carl Bredhoff, Jr. for assistance in fixing the boundary between Kahuku Ranch's land and the subject unencumbered parcel. Mr. Bredhoff could not provide any assistance and referred Mr. Baczkiewicz to Damon officer, Mr. Jim Whitman who could only provide the book and page number of the Kahuku Ranch deed. Mr. Baczkiewicz ordered a copy of the deed but found it was the original grant with no metes and bounds.
- 2) contacted the County of Hawaii, Real Property Tax Office who informed Mr. Baczkiewicz that there were no metes and bounds for Kahuku Ranch.
- 3) contacted a licensed surveyor, Mr. Niels Christensen, who informed Mr.

Baczkiwicz that no metes and bounds existed for Kahuku Ranch and that a survey to fix the boundary would probably cost one-half million dollars. Mr. Christensen did provide the latitude and longitude of the nearest point of reference which was on the seacoast miles away from the area in question.

- 4) contacted DOFAW's Hawaii District Office (Roger Imoto) who could only provide the McGees with 2 aerial maps that list the boundary as an "indefinite boundary."
- 5) purchased USGS topographic map of the area which lists the boundary as an "indefinite boundary."

William Chikasuye, loggers' attorney, stated "My clients next tried to establish the boundary by using the point of reference supplied by Mr. Christensen, the metes and bounds of an adjacent parcel and a global positioning system. This should have placed them in the approximate area of the boundary. My clients then spent days walking through the area to locate any reference points. Finally, they located a pin on an old fence line which seemed to coincide with the GPS reading. They then spent more days walking through the area and finally they located a second pin with a State of Hawaii Forestry Reserve plaque. They then flagged the line between the 2 pins and they stayed well clear of this line while logging. The flags were left in place and can still be seen."

Staff believes that loggers could have determined the approximate boundaries of the State land just from comparison of features on the ground with the USGS quadrangle map. Moreover, even at the time GPS information was available and could have provided accuracy to within ten feet. In contrast, loggers went some 1500 feet past the Kahuku boundary and even went onto private property makai of the State property.

In any event, it was loggers' responsibility to find the boundaries and staff does not consider their "mistake" if there was a mistake to be an excuse.

Loggers have admitted that they harvested koa from the subject unencumbered lands, the discrepancy is in the amount of board feet that were thought to have been removed. According to Mr. Raymond McGee, loggers removed approximately 15,000 board feet. According to the survey conducted by DOFAW staff, approximately 74,791 net board feet of koa was harvested. Given the difficulty and inaccuracies with which loggers located the boundary of the subject unencumbered lands, staff believes DOFAW's estimates to be much more reliable and will use this figure to calculate fines and damages. Particularly since the staff estimate is based on direct field measurements.

In August 2001, DOFAW conducted a survey of koa prices and concluded that the average retail price per board foot was \$13.85 per board foot. Using this figure and the estimated 74,791 net board feet harvested, loggers grossed about \$1,035,900 from koa trees harvested

on the subject unencumbered lands.

In November 2002, DOFAW surveyed local sawmills and koa forest owners on the island of Hawaii for koa stumpage values if: 1) the sawmill was located on the site, and 2) the koa trees were located on the adjacent property. The average koa stumpage value was \$2.85 per board foot. This figure is based on an average stumpage value (the value of standing timber, in terms of an amount per unit area, as viewed by a commercial cutter). Using this figure and the estimated 74,791 net board feet harvested, the State, had it authorized the harvesting via a land license, would have received approximately \$213,200 at a minimum (if an auction had been held, the price could have been bid up).

Based on the 74,791 net board feet harvested, Damon Estate would have been paid about \$60,000 (based on the \$800 per thousand board feet in the contract).

Therefore, staff recommended a fine of \$500 per violation or per tree removed. This would amount to 211 violations or \$105,500. For the magnitude of the unauthorized harvesting that took place and the ease with which the boundaries could have been properly located, staff believes a fine of \$500 per tree is appropriate.

The Land Board at its meeting of December 13, 2002, under agenda Item D-51, approved staff's recommendation to have this matter deferred. No explanation given for the deferral.

Subsequently, the Land Board at its meeting of June 27, 2003, under agenda Item D-16, approved and amended staff's recommendation as follows:

- 1) Find that the Alleged [as loggers were referred to in that submittal] violated HAR §13-221-28(a), §13-221-28(c) and §13-221-28(d).
- 2) Authorize a fine of \$105,500 to be assessed against the Alleged for the violations of Chapter 13-22, HAR.
- 3) Authorize damages of \$291,000 to be assessed against the Alleged for the violations of Chapter 13-221, HAR and 15 years of annual monitoring costs at \$3,050 per year of \$45,750.
- 4) Authorize administrative costs of \$22,464.68 to be assessed against the Alleged for the violations of Chapter 13-221, HAR.
- 5) Authorize damages of \$213,200 to be assessed against the Alleged for foregone land license proceeds.
- 6) Authorize takings of \$1,035,900 less \$213,200 or \$822,700. If the criminal case addresses this amount, then this paragraph shall be automatically rescinded.

THE CONTESTED CASE:

At the June 27, 2009 Board meeting, Mr. Chikasuye, attorney for loggers, requested a contested case hearing. The request was granted. Mr. Benjamin Matsubara was appointed hearing officer.

During the contested case, loggers' attorney focused on the fact that the State property had never been surveyed and was in fact a "gap" created by a survey error.

Even though this survey error took place over 100 years ago, the property has indisputably been in State possession since that time, and loggers themselves acknowledged and knew they were not entitled to log on the State property, the hearing focused on ownership of the State property.

The hearing officer eventually recommended that the contested case be dismissed without prejudice until the State confirmed title in a judicial quiet title action. The board, over the strenuous objection of staff's attorney agreed and the case was dismissed without prejudice by order filed June 9, 2005.

In 2005, the Department hired Engineers Surveyors Hawaii, Inc. to conduct a field survey of the subject unencumbered parcel. The work was completed in 2006. DAGS Survey Division reviewed Engineers Surveyors Hawaii, Inc. work and completed new map and description of the subject unencumbered parcel in 2007.

THE QUIET TITLE ACTION:

The State filed its quiet title action on January 26, 2007. Loggers vigorously contested the case, claiming that the State property was in fact part of Kahuku Ranch and been sold to the United States and The Nature Conservancy by Damon Estate.

The makai owner, Yee Hop, Ltd., claimed that it owned the State property.

The matter went to trial in federal court, the Honorable Judge Sam King presiding. Judge King ruled that the State owned the State property and entered his judgment on November 17, 2009.

DISCUSSION:

Now that a federal court has ruled that the subject unencumbered parcel is indeed State land, staff seeks to continue and resolve the Administrative process relating to damages caused by loggers to State land and resources.

Loggers have appealed the federal court judgment. Appeal does not affect the validity of the

judgment and does not stay this action. Staff believes that this enforcement proceeding should continue while the federal case is on appeal because 1) its attorney is confident the appeal will be denied; 2) the Department has a state law duty to pursue the enforcement action as expeditiously as possible; 3) the matter has been under review for more than 8 years at this point; 4) recollections continue to dim and some witnesses or participants may move or retire; 5) in the unlikely event the appeal is decided in favor of loggers, the fine will be rescinded.

Staff notes that its recommendation following is considerably less than the maximum amount that might be assessed which amounts would include a fine of \$1000 per tree and damages based on the amount grossed by loggers, \$1,035,900.

Staff believes its recommendation is appropriate under the circumstances but reserves the right to argue for the full amounts in the event of a contested case.

RECOMMENDATION: That the Board:

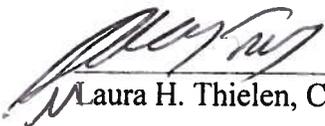
- 1) Find that loggers violated HAR §13-221-28(a), §13-221-28(c) and §13-221-28(d).
- 2) Authorize a fine of \$105,500 to be assessed against loggers, jointly and severally, for the violations of Chapter 13-22, HAR.
- 3) Authorize damages of \$291,000 for restoration to be assessed against loggers, jointly and severally for the violations of Chapter 13-221, HAR.
- 4) Authorize administrative costs of \$22,464.68 to be assessed against loggers, jointly and severally for the violations of Chapter 13-221, HAR.
- 5) Authorize damages of \$213,000 for value of lumber taken.

Respectfully Submitted,



Charlene E. Unoki
Assistant Administrator

APPROVED FOR SUBMITTAL:



Laura H. Thielen, Chairperson

EXHIBIT "A"

June 27, 2003 (D-16) Submittal

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Land Division
Honolulu, Hawaii 96813

June 27, 2003

Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Hawaii

RESUBMITTAL: Enforcement Action Involving Removal of Koa Timber on State Unencumbered Lands, Steve's Ag Services, Ltd. and Contract Milling, Alleged, South Kona, Hawaii; Tax Map Key: (3) 8-8-01:08.

PURPOSE:

Enforcement action under unencumbered land rules for unauthorized removal of koa timber by Mr. Steve Baczkiewicz dba Steve's Ag Services, Ltd., and Mr. Wesley McGee and Raymond McGee, general partners of Contract Milling, Alleged

LEGAL AUTHORITY:

Section 171-6, Hawaii Revised Statutes, as amended.

LOCATION AND AREA:

Portion of Government lands situated at Kipahoehoe, South Kona, Hawaii, identified by Tax Map Key: (3)8-8-01:08, consisting of approximately 169 acres, as shown on the attached map labeled Exhibit A.

ZONING:

State Land Use District: Agricultural
County of Hawaii CZO: Unplanned (H)

TRUST LAND STATUS:

Section 5(b) lands of the Hawaii Admission Act

DHHL 30% entitlement lands pursuant to the Hawaii State
Constitution: YES _____ NO X

BACKGROUND:

The Board deferred this submittal at its December 13, 2002 meeting based on a request by Mr. William Chikasuye, attorney for the Alleged. Mr. Chikasuye requested that his clients be given time to conduct

as amended
APPROVED BY THE BOARD OF
LAND AND NATURAL RESOURCES
AT ITS MEETING HELD ON *KK*

June 27, 2003

EXHIBIT "A"

ITEM D-16

their own survey and investigation. On March 21, 2003, a right-of-entry permit was issued to the Alleged to enter onto the subject property for the purpose of checking the boundaries and the figures of the number of harvested trees.

This submittal concerns the illegal harvesting of koa on State unencumbered lands. Staff notes that on April 11, 2003, the Board found the Samuel Damon Trust Estate (Damon Estate) violated Conservation District regulations when unauthorized koa logging occurred on Damon Estate's privately owned land. These Damon Estate lands abut the subject State unencumbered lands and both properties were logged by the Alleged under an agreement between Steve's Ag Services and Damon Estate as described next.

By letter dated July 22, 1992, the Damon Estate entered into an agreement with Mr. Steve Baczkiewicz of Steve' Ag Services, Ltd. to harvest koa trees on Kahuku Ranch lands (Exhibit B). Staff notes that there was no description of the lands where such harvesting would be allowed. Steve's Ag Services agreed to pay Damon Estate \$800 per thousand board feet for all koa milled and removed from the premises.

From information provided to us by the attorney for the Alleged, the unauthorized logging allegedly occurred from 1997 to 1999.

On May 30, 2001, a Natural Area Reserve System (NARS) staff member reported to the Division of Conservation and Resource Enforcement (DOCARE) that unknown suspect(s) removed approximately 80 Koa trees from Kipahoehoe NARS. Subsequently, upon a reconnaissance of the subject lands, it was discovered that Koa trees had also been taken from the subject unencumbered State lands.

On June 28, 2001, DOCARE staff questioned Mr. Baczkiewicz about the case. Mr. Baczkiewicz explained that he used the GPS reading that he had from two points, drew an imaginary line, and stayed above that line. He related that he was above the State unencumbered land where he made the road which he believes to be within Kahuku Ranch. Mr. Baczkiewicz confirmed that he made the road and harvested the koa trees above and below the road. Having walked the site with the DOCARE officer, Mr. Baczkiewicz admitted that he could see more clearly that he used one of the wrong points and further stated that when he walked in here to locate this point, the weather was bad with thick fog.

In September 2001, a team from the Division of Forestry and Wildlife (DOFAW) conducted field survey work to assess the impacts and resource removal incurred during the timber trespass operations on the subject land. (Refer to Exhibit C for photos.) This team estimated the koa volume cut down on the subject parcel by measuring the quantity and stump size of trees removed. Existing measures of koa tree architecture and quality from standing trees was then used to model and predict wood volume in relation to stump size on a tree-by-tree basis.

DOFAW concluded the following estimates (refer to Exhibit D for

report¹⁾ :

- 157 koa trees containing 74,791 net board feet of wood were harvested
- 50 koa trees containing 4,974 net board feet of wood were felled only
- Four kolea trees containing 357 net board feet of wood were harvested
- Approximately 0.2 miles of haul roads were constructed, removing approximately 0.8 acre of land from productive forest ecosystem and converting to road right-of-way
- The total area of landing construction was approximately 0.5 acre

On October 9, 2001, DOCARE staff questioned Mr. Wesley McGee about the case. Mr. Wesley McGee stated that Mr. Baczkiewicz subcontracted with him to harvest koa timber and that he was not an employee of Steve's Ag Services, Ltd. Mr. Wesley McGee stated that he helped Mr. Baczkiewicz find the boundary by tagging the trees with surveyor's tape and that he listened to and followed Mr. Baczkiewicz in finding the points. Mr. Wesley McGee stated that he excavated the road and that Mr. Baczkiewicz did not have anything to do with the road. He also stated that Mr. Baczkiewicz would pay Damon Estate their stumpage fee, then he, Raymond McGee and Mr. Baczkiewicz would get one-third each from the balance.

On October 9, 2001, DOCARE staff questioned Mr. Raymond McGee about the case. Mr. Raymond McGee estimated that they removed approximately 15,000 board foot from the unencumbered State land.

By letter dated March 20, 2002, Mr. C. William Chikasuye, attorney representing Mr. Steve Baczkiewicz dba Steve's Ag Services, Ltd., and Mr. Wesley McGee and Raymond McGee, general partners of Contract Milling, asserted that his clients "made every effort to insure that they were on privately owned land and not on State owned land."

VIOLATIONS:

Pursuant to Section 171-6.5, HRS: "Any person violating any of the rules regulating unencumbered public lands adopted by the department pursuant to this chapter shall be guilty of a violation and upon conviction thereof shall be fined not more than \$500 for each offense."

Pursuant to Section 171-6(15), HRS, the Board is authorized to "set, charge, and collect reasonable fines for violation of this chapter or any rule adopted thereunder. Any person violating any of the provisions of this chapter or any rule adopted thereunder, for which

¹The report dated May 15, 2003 attached as Exhibit C has one revision to the October 31, 2002 report that was attached to the December 13, 2002 Board submittal. On Page 13 of the report, under Section 10, Discussion, Paragraph 4 was revised as follows: "4. Model 2 is based on data collected from [347] 295 trees. Model 2 is strong where DBH can be used to explain [76%] 65% of the variability in predicting cubic foot volume of koa trees. . ."

violation a penalty is not otherwise provided, shall be fined not more than \$500 a day and shall be liable for administrative costs incurred by the department and payment for damages."

HAR §13-221-28(a) provides that no person shall destroy, deface, or remove any natural feature or natural resource within the premises.

HAR §13-221-28(c) provides that no person shall gather or collect natural products of renewable nature for the purpose of sale.

HAR §13-221-28(d) provides that no person shall destroy, dig, remove, or possess any tree, shrub or other plant, except for noxious weeds.

DISCUSSION:

Staff has confirmed with the State Abstractor and the State Surveyor that the subject lands are owned by the Department.

By interviews with DOCARE, the Alleged admitted to cutting trees on the subject unencumbered State land. The Alleged asserted that they attempted to locate the boundaries of the subject parcel. These efforts included:

- Contacting Damon Estate Kahuku Ranch manager Carl Bredhoff, Jr. for assistance in fixing the boundary between Kahuku Ranch's land and the subject parcel. Mr. Bredhoff could not provide any assistance and referred Mr. Baczkiewicz to Damon officer, Jim Whitman who could only provide the book and page number of the Kahuku Ranch deed. Mr. Baczkiewicz ordered a copy of the deed but found it was the original grant with no metes and bounds.
- Contacting the County of Hawaii Real Property Tax Office who informed Mr. Baczkiewicz that there were no metes and bounds for Kahuku Ranch.
- Contacting a licensed surveyor, Mr. Niels Christensen, who informed him that no metes and bounds existed for Kahuku Ranch and that a survey to fix the boundary would probably cost one-half million dollars. Mr. Christensen did provide the latitude and longitude of the nearest point of reference which was on the seacoast miles away from the area in question.
- Contacting DOFAW's Hawaii District Office (Roger Imoto) who could only provide the McGees with two aerial maps that list the boundary as an "indefinite boundary."
- Purchasing USGS topographic map of the area which lists the boundary as an "indefinite boundary."

According to Mr. Chikasuye, "My clients next tried to establish the boundary by using the point of reference supplied by Mr. Christensen, the metes and bounds of an adjacent parcel and a global positioning system. This should have placed them in the approximate area of the boundary. My clients then spent days walking through the area to locate any reference points. Finally, they located a pin on an old fence line which seemed to coincide with the GPS reading. They then spent more days walking through the area and finally they located a second pin with a State of Hawaii Forestry Reserve plaque. They then

flagged the line between the two pins and they stayed well clear of this line while logging. The flags were left in place and can still be seen."

While a metes and bounds survey would certainly assist in locating the boundary, other much less costly alternatives exist which, as loggers in the business of harvesting trees from remote locations, the Alleged should be aware of. Either similar survey methods could have been applied to a smaller segment of the boundary or the Alleged could have hired a GPS (global positioning system) consultant. For their assessment, DOFAW staff hired a GPS consultant to establish the boundary location. The consultant used boundary information from both the USGS and digital boundary data as the basis for his field work in establishing an approximate field boundary. This service, which located a portion of the boundary, required one day of field work and a consulting fee of \$1200. To complete the boundary, DOFAW staff estimates the cost would have totaled approximately \$2400. The GPS alternative would have provided accuracy to within ten feet. The Alleged breached the subject parcel (and even the neighboring property) by 1500 feet.

Furthermore, according to DOFAW staff who walked the subject site, there are several ahu, a road along one segment of the boundary, fence remnants, and lava flow/forest features that could have been used to estimate the boundary location to within tens of feet.

REMARKS:

While the Alleged have admitted that they harvested koa from the subject unencumbered lands, there is a discrepancy in the amount of board feet that were thought to have been removed. According to Mr. Raymond McGee, the Alleged removed approximately 15,000 board foot. (Staff notes that we have not been provided with the results of the survey recently conducted by the Alleged.) According to the survey conducted by DOFAW, approximately 74,791 net board feet of koa were harvested. Given the difficulty and inaccuracies with which the Alleged located the boundary of the subject parcel, staff believes DOFAW's estimate to be much more reliable and will use this figure to calculate fines and damages.

In August 2001, DOFAW conducted a survey of koa prices and concluded that the stumpage price per board foot was \$13.85 per board foot. Using this figure and the estimated 74,791 net board feet harvested, the Alleged grossed about \$1,035,900 from koa trees harvested on the subject lands.

In November 2002, DOFAW surveyed local sawmills and koa forest owners on the island of Hawaii for koa stumpage values if: 1) the sawmill was located on the site, and 2) the koa trees were located on the adjacent property. The average koa stumpage value was \$2.85 per board foot. This figure is based on an average stumpage value (the value of standing timber, in terms of an amount per unit area, as viewed by a commercial cutter). Using this figure and the estimated 74,791 net board feet harvested, the State, had it authorized the harvesting via

a land license, would have received approximately \$213,200 at a minimum (if an auction had been held, the price could have been bid up).

Based on the 74,791 net board feet harvested, Damon Estate would have been paid about \$60,000 (based on the \$800 per thousand board feet in the contract).

Fines:

Staff is recommending a fine of \$500 per violation or per tree removed. This would amount to 211 violations or \$105,500. For the magnitude of the unauthorized harvesting that took place and the ease with which the boundaries could have been properly located, staff believes a fine of \$500 per tree is appropriate.

Damages:

DOFAW prepared a report dated February 4, 2002 that outlined the ecosystem degradation caused by the illegal logging, proposed a mitigation plan to reestablish or enhance koa and associated native plant species, and provided a cost estimate for implementation of this plan (Exhibit E). DOFAW estimated that, initially, \$291,000 would be required to implement the reforestation efforts and, thereafter, \$3,050 per year for monitoring and maintenance activities. Staff is recommending damages of \$291,000 be assessed to allow for the restoration of the subject lands.

DOFAW also mentioned that transferring management control of the parcel to DOFAW as part of the Natural Area Reserve was considered prior to the illegal logging and that such a transfer could still be pursued if the mitigation measures were adopted.

Administrative Costs:

The Department's administrative costs for these violations total \$22,464.68 as itemized in Exhibit F. Staff notes that due to the Board's deferral of this submittal, we had additional time to better catalog the administrative costs for this case and have made revisions to our earlier figures. The column "Added Item?" identifies whether the item was added from the prior submittal.

RECOMMENDATION: That the Board:

1. Find that the Alleged violated HAR §13-221-28(a), §13-221-28(c) and §13-221-28(d).
2. Authorize a fine of \$105,500 to be assessed against the Alleged for the violations of Chapter 13-221, HAR.
3. Authorize damages of \$291,000 to be assessed against the Alleged for the violations of Chapter 13-221, HAR.

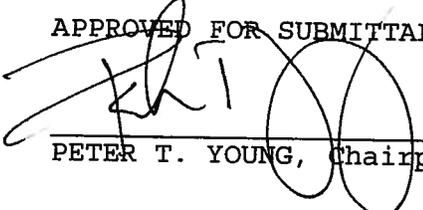
4. Authorize administrative costs of \$22,464.68 to be assessed against the Alleged for the violations of Chapter 13-221, HAR.

Respectfully Submitted,



DIERDRE S. MAMIYA
Administrator

APPROVED FOR SUBMITTAL:



PETER T. YOUNG, Chairperson

Approved as amended. The Board amended the Recommendation Section by:

- 1) Amending paragraph 3 to read as follows:

"3. Authorize damages of \$291,000 to be assessed against the Alleged for the violations of Chapter 13-221, HAR and 15 years of annual monitoring costs at \$3,050 per year of \$45,750."

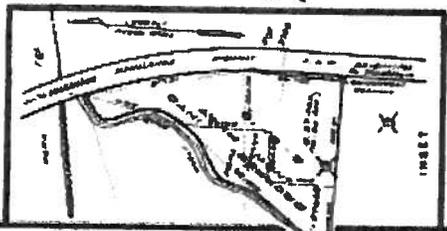
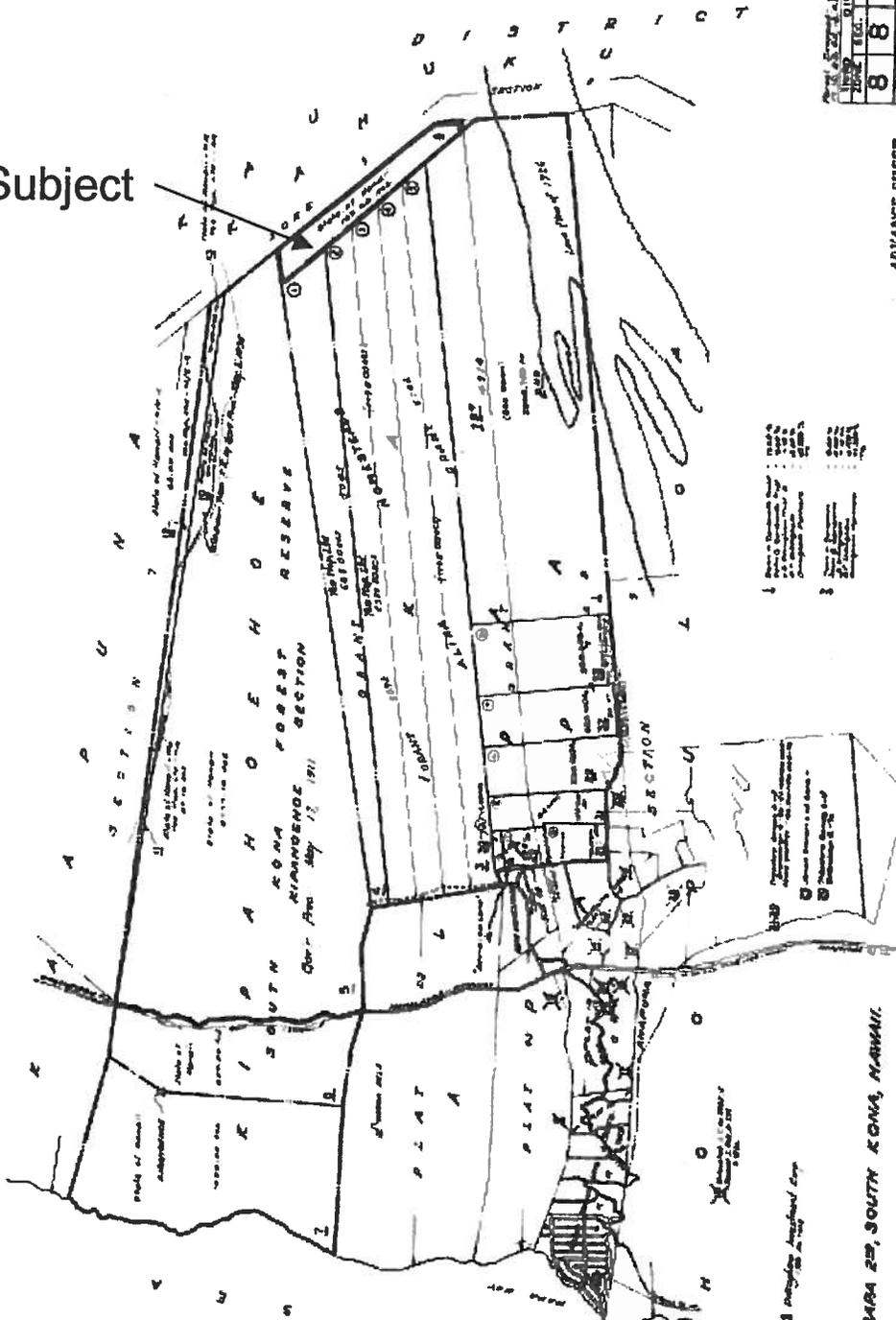
- 2) Adding a paragraph 5 to read as follows:

"5. Authorize damages of \$213,200 to be assessed against the Alleged for foregone land license proceeds."

- 3) Adding a paragraph 6 to read as follows:

"6. Authorize takings of \$1,035,900 less \$213,200 or \$822,700. If the criminal case addresses this amount, then this paragraph shall be automatically rescinded."

Subject



KAHOLEHOLE - ROAD 23, SOUTH KONA, HAWAII.

- 1. Area of Reserve
- 2. Area of Section 7
- 3. Area of Section 8
- 4. Area of Road 23
- 5. Area of Building
- 6. Area of Plat
- 7. Area of Plat
- 8. Area of Plat
- 9. Area of Plat
- 10. Area of Plat
- 11. Area of Plat
- 12. Area of Plat
- 13. Area of Plat
- 14. Area of Plat
- 15. Area of Plat
- 16. Area of Plat
- 17. Area of Plat
- 18. Area of Plat
- 19. Area of Plat
- 20. Area of Plat

DISTRICT
 DIVISION
 8 8 0 1
 CONTAINING PARAS 1 & 2
 SCALE 1" = 100 FT.

ADVANCE SHEET
SUBJECT TO CHANGE

ESTATE OF SAMUEL MILLS DAMON

July 22, 1992

COPY

Mr. Steve Baczkiewicz
Steve's Ag Services, Ltd.
P.O. Box 701
Pahala, Hawaii 96777

RE: Koa Harvesting - Kahuku Ranch

This will serve to reaffirm our mutual understanding of the terms and conditions under which you will be permitted to harvest koa trees on Kahuku Ranch lands:

You will mill only downed or severely distressed koa trees. Distressed trees consist of standing koa trees with less than 40% crown and any tree so selected will be flagged and approved by the Trustees or their agent for cutting.

You will pay the Estate eight hundred dollars (\$800.00) per thousand board feet for all koa milled and removed from the premises, all shipments being verified by an authorized representative of the Estate. Payments for all koa shipped in any one calendar month will be made within thirty (30) days from the last day of such month. Stumps to be measured for yield and paid for on that basis.

You will be provided access over existing ranch roads and milling sites selected within various pastures for primary break-down of sawlogs by portable sawmill will be by mutual agreement. Skidding of logs will be permitted provided that pastures be restored after any such skidding. All logging slash will be lopped and pushed into piles or back into existing thickets by tractor. Stumps will remain in the ground unless sold. Sawmill waste will be pushed into piles and milling sites will be recontoured when the area is no longer in use. All nonorganic trash will be removed as generated. Damage to ranch water lines or fences will be your responsibility and, if repairs are required by ranch personnel, you will reimburse all costs incurred.

Firearms or hunting of any kind will not be allowed on the premises. Visitors will not be permitted on the premises. Neither the burning of trash nor use of cooking fires will be authorized.

EXHIBIT B

Mr. Steve Baczkiewicz
July 22, 1992
Page 2

The access gate above the ranch's Lumbermill Camp will be locked each night and arrangements for access through the gate will be coordinated with Ranch Manager Carl Bredhoff, along with all other activities on the ranch. The ranch manager will have sole discretion in determining whether roads are being maintained and mill sites are being restored in a satisfactory manner.

All equipment used in your operation will be thoroughly cleaned to the satisfaction of the ranch manager before delivery to Kahuku Ranch lands to avoid transmission of noxious weeds.

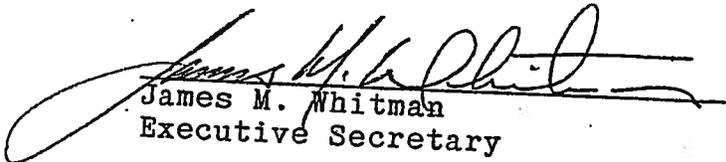
This agreement may be terminated by either party upon delivery of thirty (30) days written notice. However, the Estate reserves the right to suspend milling operations immediately upon discovery of any impropriety on your part or that of your operator.

You will deliver a certificate of liability insurance naming the Estate of Samuel M. Damon and Kahuku Ranch as additional insured. Any required permits will be secured by you at your own expense.

If the foregoing clearly reflects your understanding of the terms under which you may harvest koa trees on Kahuku Ranch, kindly so indicate in the space provided below.

Very truly yours,

ESTATE OF SAMUEL MILLS DAMON


James M. Whitman
Executive Secretary

Accepted and agreed to this
24th day of July, 1992.

STEVE'S AG. SERVICES LTD.

By: 
Steve Baczkiewicz

**PHOTO DOCUMENTATION OF TIMBER TRESPASS
ACTIVITY ON PARCEL 8-8-1-8, ISLAND OF HAWAII**

**Michael Constantinides
Survey Forester
Division of Forestry and Wildlife
Honolulu, Hawaii
June 18, 2003**

EXHIBIT C

Figure 1. Kipuka D: Boundary marker (arrow), fence remnants, scrub ohia forest.



Figure 2. Kipuka B: Standing koa with major crown dieback. Stump in foreground (arrow).

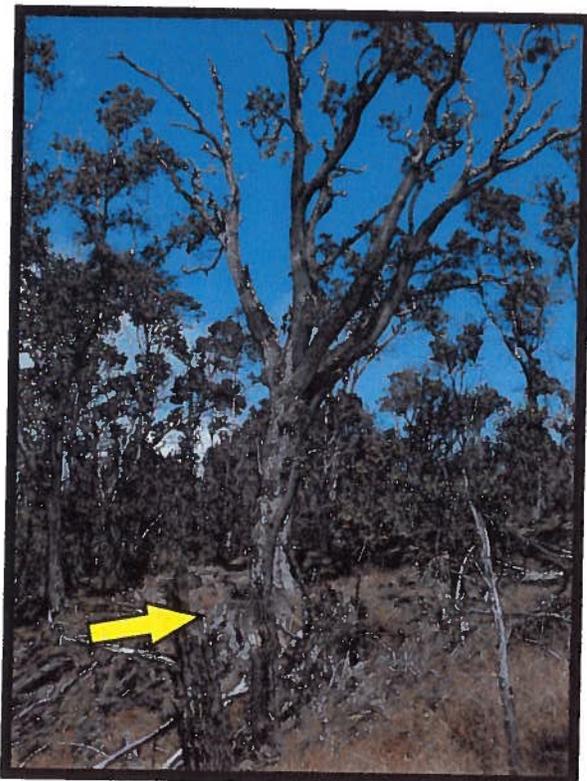


Figure 3. Kipuka B: New principal haul road right-of-way, approximately 33 feet wide, trees bull-dozed to sides.



Figure 4. Kipuka B: New principal haul road right-of-way.



Figure 5. Kipuka A: Landing (Approximately 0.2 acres graded). Koa slash suggests considerable live crowns at harvest.



Figure 6. Kipuka B: Landing (approximately 0.3 acres graded) and discarded koa log sections.



Figure 7. Kipuka B: Landing and discarded koa logs.



Figure 8. Kipuka B: Landing and discarded koa logs, some of which appear quite sound.



Figure 9. Kipuka A: Dense native understory vegetation cleared during primary skid road establishment.



Figure 10. Kipuka B: Primary skid road, partially harvested koa—stump diameter 45 inches.



Figure 11. Kipuka B: Harvested koa with little defect—minimum diameter 29 inches.



Figure 12. Kipuka A: Harvested koa. Stump diameter 57 inches.



Figure 13. Kipuka B: Felled-only koa tree. Stump diameter 28 inches.



Figure 14. Kipuka B: Felled-only koa tree.



Figure 15. Kipuka C: Felled-only tree. Stump diameter 34 inches, 21 foot trunk length to first fork.



Figure 16. Kipuka B: Discarded top of harvested koa tree—many sound branch logs wasted.



Figure 17. Kipuka D: Harvested koa with little defect. Stump diameter 35 inches.



Figure 18. Kipuka D: Felled-only koa, stump diameter 24 inches. Primarily sound, considerable wastage.

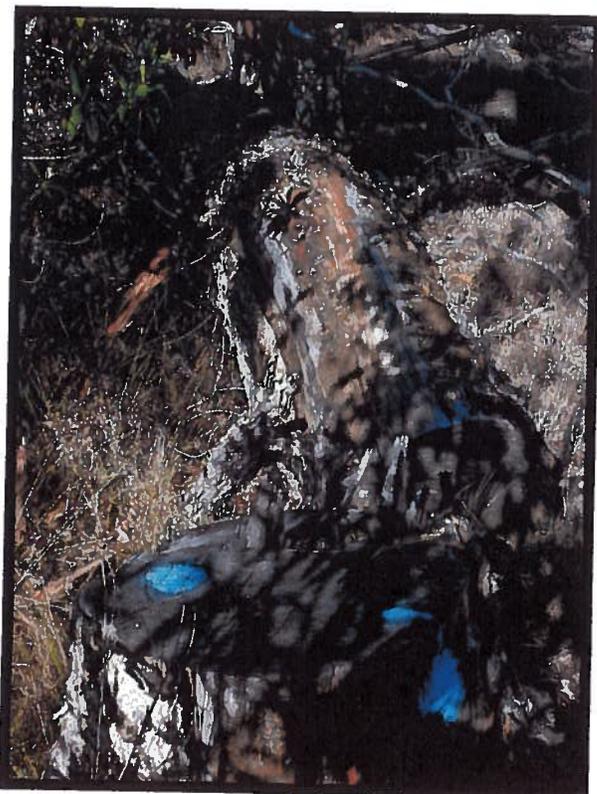


Figure 19. Kipuka C: Standing live koa, undisturbed forest. Approximate diameter 3 feet

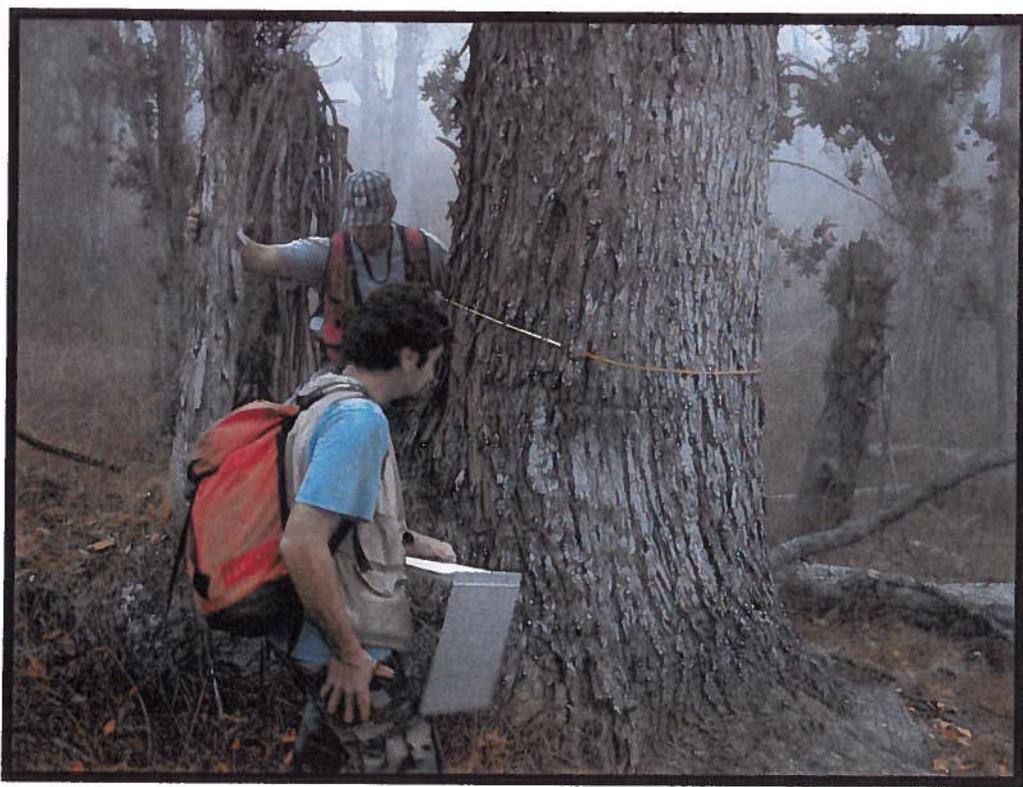


Figure 20. Kipuka C: Standing live koa, undisturbed forest. Approximate diameter 4 feet.



Additional descriptions for photo figures– all photos taken 9/10/01 to 9/13/01.

- Fig. 1. This photo was taken from an unimproved road along the mauka boundary of the ahupua‘a of Papa 1. The road is depicted on the U.S. Geological Survey Papa Quadrangle map. The boundary marker is an ahu, or cairn composed of piled rocks. This ahu marks the boundary between the ahupua‘a of Alika Homesteads, and Papa 1, at the makai boundary of TMK parcel 8-8-1-8. Because fence line remnants and a mapped road that both parallel the boundary of parcel 8-8-1-8 are present, the ahu is both very easy to find, and extremely useful for accurately orienting oneself in the field. In combination with the boundary marker at the northwest corner of parcel 8-8-1-8, enough information is available to readily establish a makai boundary for the parcel using a variety of methods. The forest type in the area of this photo is scrub ohia, containing few mature koa trees.
- Fig. 2. This photo provides an accurate depiction of what a senescent mature koa looks like. The fact that no small dead twigs and branches remain in the crown provides an important indication that the tree has been in decline for an extended period, and is not likely to recover. A July 22, 1992 letter from the Estate of Samuel Mills Damon to Steve Baczkiewicz stipulates that only downed or severely distressed koa containing less than 40% crown should be harvested and milled. The tree in this image would fall into such a category. The tree has less than 10% live crown remaining, and the wood is probably characterized by considerable rot and defect – so much so that the tree was left undisturbed during the logging operation while other trees in the area were taken.
- Fig. 3-4. Aerial photography from September 1993 shows that this area of Kipuka B was undisturbed. No road grades or right-of-ways are visible either in the forested area of Kipuka B nor the adjacent lava flows. This principal haul road was established to allow access for the heavy equipment required to cut, process, and transport koa lumber. Heavy grading was employed to establish the principal haul road. All trees and other vegetation in the right-of-way was destroyed the process. The destruction of native trees during this process was probably greatly underestimated in the timber survey assessment because the survey was not designed to specifically sample intensive impacts occurring in a narrow linear area.
- Fig. 5. Located near the makai end of Kipuka A, this landing represents the terminus of the new principal haul road. A primary skid road departs from the back of the landing and traverses uphill through the mauka boundary of parcel 8-8-1-8, continuing into the lands of Kahuku – a distance of more that 1,000 feet.
- Fig. 6-8. Located along the principal haul road in Kipuka B, this is the larger of two landings established on parcel 8-8-1-8. Many log sections that were skidded out of the forest to this landing were later discarded as cull or non-merchantable. While many of the logs contained considerable defect and rot, modern mill equipment designed to maximize log utilization is available. If used, such equipment would have resulted in tremendous increased in koa wood utilization and less wastage.

- Fig. 9. Primary skid road traversing Kipuka A in parcel 8-8-1-8. Many sections of primary skid roads throughout the parcel were graded to facilitate heavy equipment movement.
- Fig. 10. The first two 8-foot logs of this tree contained significant center rot, and were immediately discarded during the logging operation. The remainder of the tree top starting at a diameter of 32 inches was removed from the site for milling.
- Fig. 11. The pen is stuck in a type of defect known as “ring shake” in the forest industry. If the ring shake existed pre-harvest, it probably did not occur far up into the tree stem. This tree was otherwise very sound. It is possible that the ring shake developed as the stump dried out after harvest.
- Fig. 12. Defect visible on the stump face of this koa was estimated at 30%, so considerable net wood volume was clearly recovered from this tree. The retail value of the wood milled from this single tree could easily have ranged from \$15,000-25,000.
- Fig. 13-15. This logging operation employed a technique of cutting down koa trees of questionable quality, apparently to insure that no high value logs were missed. Based on tree health and visible defects, many of these “felled-only” trees clearly would have appeared to have little potential to yield salable board feet as they stood in the forest. Had they been left undisturbed, they would have continued to provide important ecosystem functions such as providing forage and habitat for native species, as well as a source of koa seed.
- Fig. 16. An example of poor recovery and utilization of branch logs from a harvested koa tree.
- Fig. 17. Most areas of Kipuka D were either scrub ohia (little or no koa) forest and/or burned in a fire that occurred around 1992. This photo shows an area of Kipuka D that contained some koa, and had probably been burned.
- Fig. 18. A koa of such high quality it seems probable that the tree was felled and then missed during skidding and hauling operations.
- Fig. 19-20. An area of Kipuka C that was not disturbed, providing a direct proxy of what harvested zones of Kipuka A, B and C looked like prior to logging operations. Many koa here retained significant live crown percentages, and would not fall under the description of “down or severely distressed.” This is a relatively dry region. A significant amount of moisture input into this ecosystem occurs through fog drip, or the capture of cloud mist condensation on vegetation canopies. Clouds typically move into the site by mid-day, as shown in these two photos. The removal of large koa during logging operations has probably resulted in an impact on the cloud mist capture potential of forests in parcel 8-8-1-8.

**SURVEY ASSESSMENT OF TIMBER TRESPASS
ACTIVITY ON STATE UNENCUMBERED LAND IN
SOUTH KONA, ISLAND OF HAWAII**

Conducted on TMK parcel 8-8-1-8 by:

**The Department of Land and Natural Resources:
Division of Forestry and Wildlife**

In cooperation with

**The Department of Land and Natural Resources:
Land Division
Division of Conservation and Resource Enforcement**

**Michael Constantinides
Survey Forester
Division of Forestry and Wildlife
Honolulu, Hawaii
May 15, 2003**

EXHIBIT D

Executive summary

The following resource removal and associated impacts were estimated following quantitative field survey and statistical analyses for TMK parcel 8-8-1-8, island of Hawaii. Each component is discussed in detail below.

1. Koa trees harvested: 157 trees, containing 74,791 net board feet of wood volume.
2. Koa trees felled only: 50 trees containing 4,974 net board feet of wood volume.
3. Kolea trees harvested: 4 trees cut containing 357 net board feet of wood volume.
4. High intensity land surface impacts: 1.3 acres of haul road construction (1,100 linear feet) and log landings denuded of mature forest vegetation.

1. Introduction

In August, 2001, the Land Division and Division of Conservation and Resource Enforcement (Department of Land and Natural Resources) requested assistance from the Division of Forestry and Wildlife (DOFAW) in assessing the impacts and resource removal incurred during timber trespass operations on State land in South Kona. The parcel of concern is unencumbered State land, zoned Agricultural District, currently managed by the Land Division. This report details the design, implementation and results of field survey work conducted by a team from DOFAW during the week of September 10, 2001. Kahuku Ranch granted DOFAW permission to access the parcel of concern across Kahuku lands.

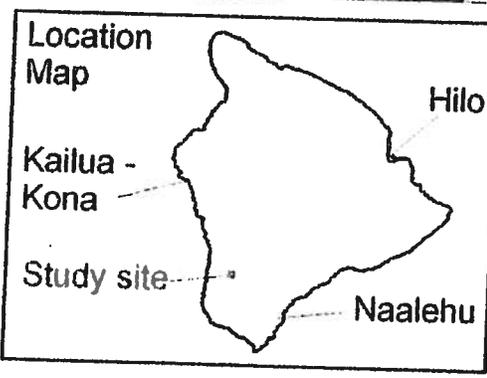
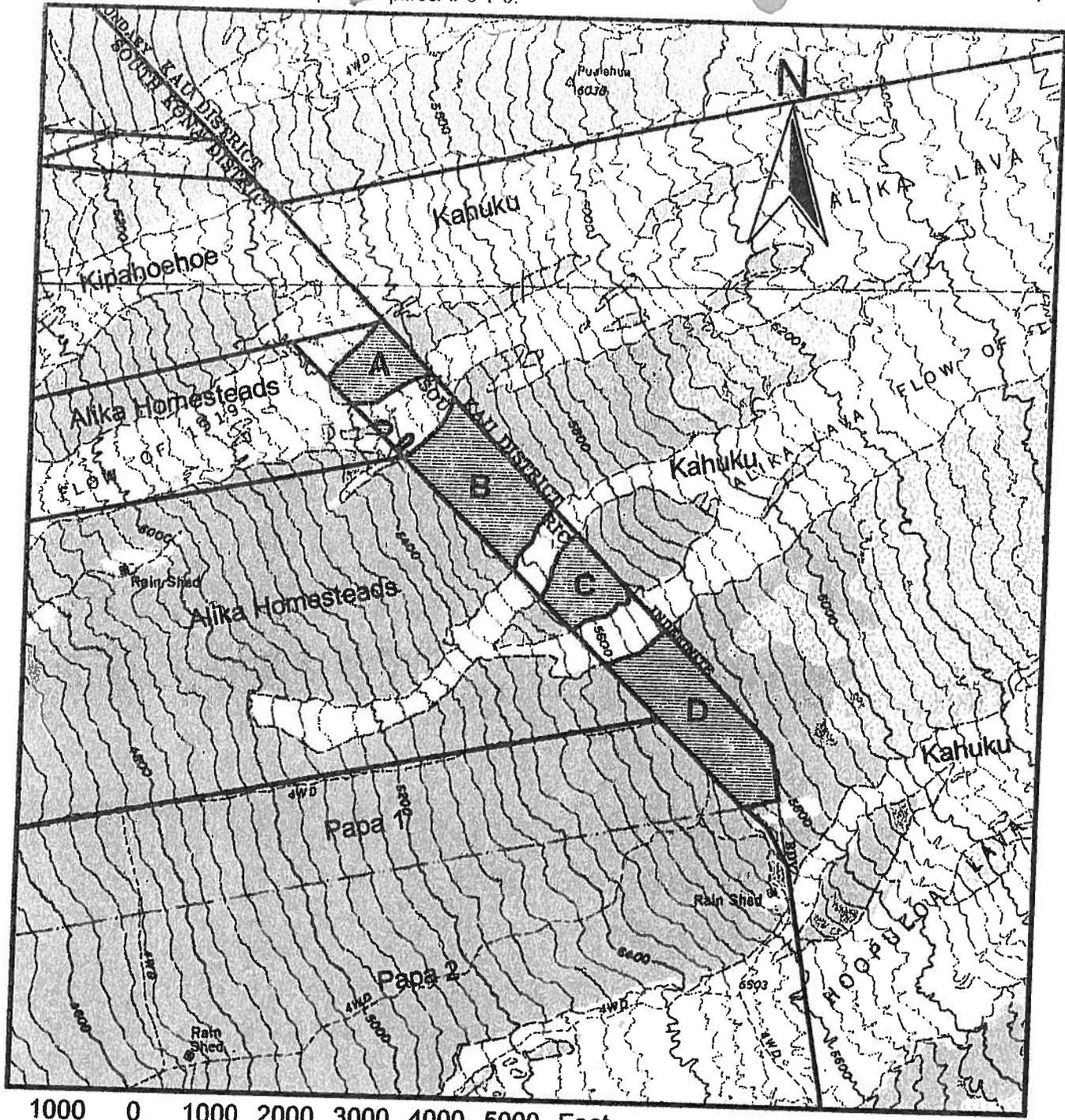
2. Parcel description

Tax Map Key (TMK) Parcel 8-8-1-8 is roughly rectangular in shape, lying in a northwest-to-southeast orientation at the mauka (uphill) end of the ahupuaa of Alika Homesteads and Papa 1. The TMK area for this parcel is listed as 169 acres. Calculation of acreage using boundaries digitized from tax map plats (GDSI Hawaii, September 2000) returns a value of 181 acres – 7% larger than the TMK value. Parcel 8-8-1-8 is bordered by lands in several ahupuaa: Kahuku to the northeast and east; Alika Homesteads and Papa 1 to the southwest; Papa 2 to the south; and Kipahoe to the north.

The incident area is comprised of four principal kipuka, i.e. forested areas isolated by surrounding lava flows (Figure 1). These kipuka were assigned a letter code designator, A-D, and collectively comprise 73% of the parcel area (Table 1). The remaining areas are primarily bare aa lava flows. Elevation within the parcel ranges from approximately 5400-5800 feet.

The removal of koa resources from State land was first noticed on 5/30/01 by a DOFAW crew operating out of Hilo and working in the adjacent Kipahoe Natural Area Reserve. Immediately upon detecting timber trespass, the crew conducted a rapid reconnaissance of parcel 8-8-1-8, which revealed that logging had occurred at a significant scale within the parcel. During this reconnaissance, the crew did not have the opportunity to precisely quantify the extent of timber trespass activity because of time limitations and the unanticipated need of bringing boundary and survey control into the area of concern.

Figure 1. Principal forested kipuka of parcel 8-8-1-8.



Map produced by Michael Constantinides
 Division of Forestry and Wildlife
 808-587-4186 October, 2001

Background USGS 1:24,000 quadrangle
 map, 1995

-  Parcel 8-8-1-8
-  Parcel boundaries from GDSI Hawaii, September 2000
-  Principal forested kipuka



Table 1. Land cover summary for parcel 8-8-1-8.

Land cover	Acres	Percent of total parcel
Forested kipuka A	17.0	10
Forested kipuka B	41.1	24
Forested kipuka C	18.0	11
Forested kipuka D	46.6	28
Two minor forested kipuka	1.0	*
Lava flows	45.3	27
Total	169.0	100

*less than 1%

The crew also indicated that prior to logging disturbance, general forest conditions in parcel 8-8-1-8 were as follows: mature koa (*Acacia koa*) and ohia (*Metrosideros polymorpha*) forest in Kipuka A, B and C; while kipuka D had less koa, considerable pockets of relatively pure scrub ohia forest, and appeared to have been burned. This burn was probably part of a fire event that occurred at the mauka end of Papa 1 and Papa 2 ahupuaa in 1991.

3. Rationale of survey design

The process of designing a survey methodology to assess koa and other resource take from this logging incident was subject to several limitations:

1. The location of the parcel is remote, each workday requiring three hours of commute time from a DOFAW cabin near Naalehu.
2. There are no surveyed fences or boundary lines, and only three corner marks exist in the field. This fact created a need to invest significant time confirming that daily survey work was conducted in the correct location, within the parcel boundaries.
3. Terrain in the parcel is rough, requiring a slow pace for safe field survey work.
4. No detailed advanced information existed for the extent of the timber trespass activity.
5. The Survey Forester for DOFAW did not have the chance to conduct a thorough on-ground reconnaissance to assist in survey design due to time and funding constraints.
6. Prior to the start of field survey, a majority of the logging evidence had been removed from the site in the form of logs. Most if not all of these logs have probably been milled and sold already, confounding the ability to directly assess what was taken.

Given these constraints, two principal approaches to estimating the volume of koa removed from the site were considered. The first approach involves surveying undisturbed koa forests in adjacent or nearby forestlands to develop a proxy of forest conditions that existed in 8-8-1-8 prior to timber trespass. This approach was not practical because of the fact that almost all nearby koa forestlands sustained one or more recent koa harvests and/or long-term cattle grazing.

In addition, most adjacent and nearby koa forest areas are privately owned. The second method estimates koa volume cut down on parcel 8-8-1-8 by measuring the quantity and stump size of trees cut down during timber trespass operations. Existing measures of koa tree architecture and quality from standing trees would then be used to model and predict wood volume in relation to stump size on a tree-by-tree basis. The latter approach was employed in this study.

4. Base map

The survey base map was developed using geographic information system (GIS) technology, and was based on digital parcel boundaries developed by GDSI Hawaii, September 2000. Kipuka boundaries were derived from forest boundaries depicted on the U.S. Geological Survey (USGS) 1995 Papa Hawaii quadrangle map, 1:24,000 scale. The GDSI and USGS parcel boundaries were nearly identical. Because of the discrepancy in GIS and TMK acreage, all GIS (based on GDSI data) area calculations were reduced by 7% to emulate the target TMK acreage value of 169 acres.

X-Y coordinate pairs were then determined for many points along the boundary of this map in the Universal Transverse Mercator zone 5N coordinate system. These coordinate pairs were essential in supporting field assessments of survey control by the survey team using handheld Garmin GPS units. Parcel corners and forest-lava flow interfaces at parcel boundaries comprised a majority of the coordinate pairs used for orientation by the survey team in the field.

5. Field survey design

Field sampling was conducted using transects established with the following guidelines:

1. For parcel 8-8-1-8 the boundary with the most reliable field survey control is the southwest, or makai (downhill) edge. This edge included the only three corner marks known to exist in the field at that time. The makai edge was therefore used as the baseline from which all survey transects departed.
2. All transects were oriented at 45 degrees from true north, an angle selected because it was roughly perpendicular to both the makai baseline and the topographic gradient (slope) within the parcel.
3. Each transect extended from the makai to the mauka parcel boundaries. To insure that all data were collected on State land, both ends of each transect line were buffered. The buffer distance was determined by doubling the horizontal error accuracy of the base map and that of GPS field units. In this case, the base map boundaries were created from GDSI data that appeared to emulate USGS boundaries. USGS quadrangle map standards have a horizontal accuracy standard of 40 feet. The field survey team used GPS for field navigation without real-time correction (17 foot horizontal accuracy). Summing and then doubling these two values was used to define a 114 foot buffer at both the beginning and end of each transect.
4. A significant time investment was required to locate the starting point of each transect in the field. Once located, traversing the landscape was a time-consuming proposition due to rough terrain. Finally, the pre-fieldwork goal of this survey

- design was to sample a minimum of 10% of the area of each kipuka. For these reasons, few wide transects were deemed more efficient than many narrow transects in order to achieve the 10% sampling goal.
5. Using a transect width of 132 feet, one to three transects were initially selected within each kipuka to meet the 10% sampling goal. These transects were located at regular intervals along the makai baseline within each kipuka. This resulted in the definition of 1, 2, 1, and 3 initial transects in kipuka A, B, C, and D, respectively.
 6. Half way through the week of field survey work, it became apparent that there was time to measure additional transects, thus strengthening the overall sample. Since kipuka A, B & C were more heavily forested, a new sampling goal of 20% was set, while 15% was selected for kipuka D. These new goals resulted in the addition of two transects to kipuka B, and one each to kipuka A, C & D.

6. Modeling approach

DOFAW has data from field measurements of tree architecture for 347 koa trees spread over five locations on the island of Hawaii. These data were specifically obtained to support wood volume estimates. Data from four locations (323 trees) were collected prior to knowledge of timber trespass activities on parcel 8-8-1-8. Because the need to model tree volume based solely upon stump diameter was not anticipated when collecting data from these trees, stump diameter was not measured. Instead, the lowest tree diameter measurement was taken 4.5 feet above ground, a position known as diameter at breast height (DBH) in the forest industry. DBH is the standard bottom diameter index recorded for trees measured during most timber surveys. Field data for trees at the fifth location included two sub-sites, and were collected within or near the Alika Homesteads incident site (24 trees). An identical protocol was used in collecting data for trees at all five locations with one exception: stump diameter measurement was added to the protocol for the Alika Homesteads data set.

The primary assumption employed for volume estimation modeling in this study is that cubic foot volume can be predicted from stump diameter for koa trees on a tree-by-tree basis. Because a majority of tree data in the DOFAW koa database only allowed correlation analyses between DBH and wood volume, a conversion factor between stump diameter and DBH was required. During field survey operations, 72 stump diameter-DBH pairs were collected to support such modeling. Simple linear regression analysis of this data set showed that the relationship between stump diameter and DBH was remarkably consistent ($p = 0.000$, Figure 2). Model 1 suggests that a known measure of stump diameter alone accounts for more than 94% of the variability in predicting DBH. Stump height was not insignificant ($p = 0.582$) when added as a second predictor variable of DBH during multiple regression analysis, and was not used.

The next step in model development was to conduct regression analyses between DBH and total wood volume both within each koa data set for the five Hawaii locations, and for the five locations combined. DBH and the sum of total volume from bole, fork and branch log sections were defined as the independent and dependent variables, respectively. The modeled relationship between DBH and total wood volume for the Alika Homesteads dataset did not differ from each of the four other locations except in one case. In this latter case, the Alika

Figure 2. Model 1 showing relationship between stump diameter and DBH (n = 72, r-sq. = 0.94).
 $DBH = 0.169318 + 0.893595 \times \text{stump D}$

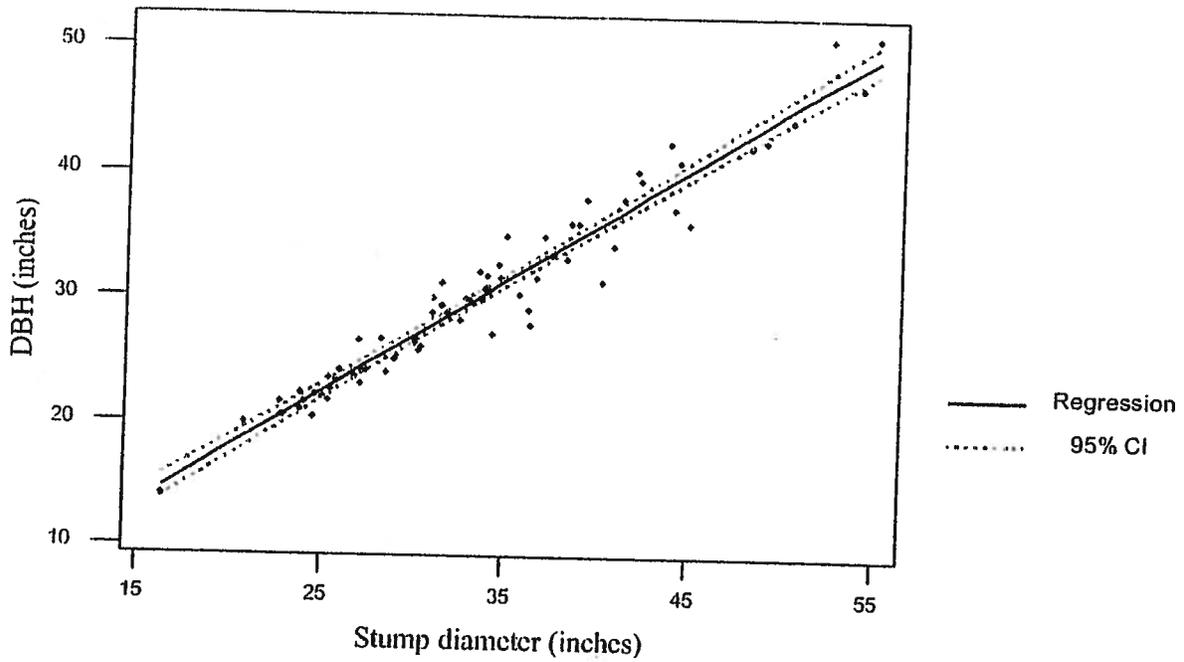
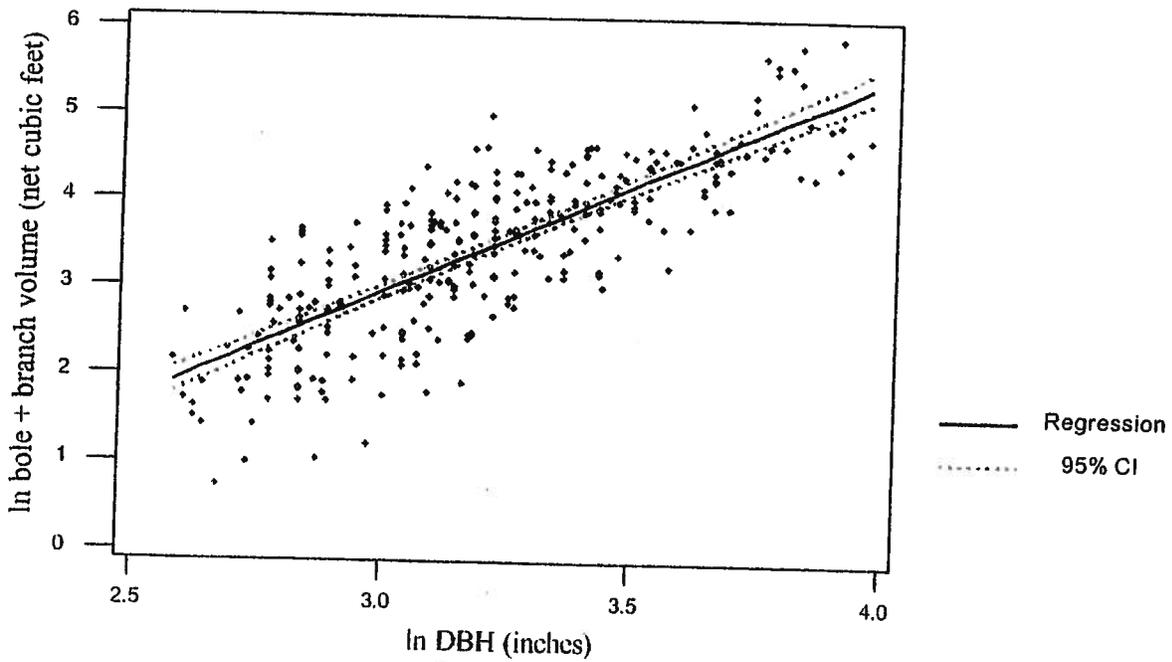


Figure 3. Model 2 showing relationship between tree DBH and net volume in bole and branch log sections (n = 295, r-sq. = 0.65). Natural log transformation applied to both axes.
 $\ln(\text{net bole} + \text{branch volume}) = -4.42551 + 2.46259 \times \ln \text{DBH}$



Homesteads data returned higher predictions for tree volume at any given DBH. Accepting the fact that including data from the “lower” volume site would cause slight decreases in volume predictions, data from all five sites were combined to provide a model based on the largest number of field observations. Diameter and total wood volume data were log-transformed prior to analysis in order to stabilize variance and support the assumption of homogeneity of residuals – a common practice in regression analyses. The resulting model showed a distinct linear relationship between DBH and total wood volume ($p = 0.000$, Figure 3). Model 2 was used to predict net cubic foot volume for trees cut on parcel 8-8-1-8 during timber trespass operations.

7. Data collection methods

The following data collection goals and associated field methods were employed in this study:

1. Count stumps within survey transects to support estimates of total trees cut and associated wood volume taken from the State. For each transect, all stumps with a center lying within 66 feet of the transect centerline were tallied.
2. Find non-harvested koa trees in the study area where stump diameter, stump height and DBH could be measured. Stump diameter and DBH were measured to the nearest 0.1 inch. Stump height was measured to the nearest 0.1 foot. These data were used to develop model 1, and were collected from areas both within and adjacent to survey transects.
3. Find koa trees in or near the study area that were intact enough to provide tree architecture data for use in developing model 2. Collection of tree architecture data was conducted by visually partitioning each tree into main stem or “bole” sections, fork sections upper branches sections. Measurements for each section included bottom and top diameter in inches, and length in feet (Table 2). For cut faces that were distinctly oval, diameter was calculated as the average of longest- and shortest-dimensions.

Table 2. Minimum size specifications applied to section measurements during field survey work.

Log specification	Tally criteria	Notes
Minimum top D	10"	Occasional 9" top permitted
Minimum L	6' 1'	Bole and branch sections (4' allowed if small-end diameter $\geq 24"$) Fork sections

8. Data analyses

For koa trees in DOFAW databases cubic foot volumes of bole, fork and branch sections were individually estimated using the Two-End Conic Rule for log scaling. All diameter data were reduced by an assumed bark thickness of one inch. Total cubic foot volume for each tree was then determined by summing all section volumes for that tree.

Predicted net board foot volume for each tree cut during timber trespass operations in parcel 8-8-1-8 was determined in a three-stage process. For each tree, stump diameter was first used to predict DBH using model 1. The resulting DBH value for that tree was then used to predict net cubic foot volume using model 2. The third step was a simple conversion to board feet, assuming that one cubic foot equals six board feet.

The proportion of acreage sampled in transects was used to develop an expansion factor for cut-tree counts and wood volume estimates by kipuka (Table 3). For example, consider a theoretical kipuka with surveyed transects covering exactly 20% of the total kipuka acreage. The expansion factor in this kipuka would be exactly 5.0 ($100\% / 20\% = 5.0$). If a total of 10 stumps were observed in the combined transect area, the estimate for total trees cut in this kipuka would be $5.0 \times 10 = 50.0$ trees.

Table 3. Expansion factors used to determine tree counts and wood volume by kipuka in parcel 8-8-1-8.

Land cover	Total Acres	Acres in Transects	Percent surveyed	Expansion factor
Forested kipuka A	17.021	4.939	29.0	3.446
Forested kipuka B	41.055	9.061	22.1	4.531
Forested kipuka C	17.955	4.061	22.6	4.422
Forested kipuka D	46.601	7.364	15.8	6.329
Total	122.632	24.879		

9. Field survey results

Extent of logging activity: Mapping of actual logging boundaries was not a primary focus of the field survey employed. The following sentences provide generalized verbal descriptions of timber trespass activity within parcel 8-8-1-8. Logging occurred throughout kipuka A, with the exception of the south-central portion. Logging appears to have been conducted throughout all of kipuka B. Logging within kipuka C occurred only in a narrow strip between the mauka (northeast) parcel boundary and the mauka end of the surveyed transects. Logging in kipuka D appeared to be concentrated in the north and southwest portions of the kipuka.

During field survey work, it became apparent that timber trespass activity occurred not only near the border of parcel 8-8-1-8 and Kahuku Ranch lands, but also occurred near the makai boundary of State land. For this reason, the extent of logging activity was quantified in one area. Based on this analysis, evidence of logging activity was observed completely throughout kipuka B of parcel 8-8-1-8, and extended beyond the makai boundary of kipuka B into adjacent private lands of Alika Homesteads.

GPS data were collected at the lowest elevation extent of logging activity in this area. This lower boundary corresponded with a line of flagging that the logger had placed in the field as his interpretation of the Kahuku Ranch boundary with the mauka boundary of State parcel 8-8-1-8 (figure 4). The logger told members of the DOFAW field survey team of this flagged line. This loggers flag line is approximately 1500 feet (over ¼ mile) below the actual boundary between State parcel 8-8-1-8 and lands of Kahuku. This loggers flag line is also approximately 540 feet below the boundary between State parcel 8-8-1-8 and private lands of Alika Homesteads.

Positional accuracy of survey transects: The practice of buffering the beginning and ending points of survey transects appeared to be highly effective. GPS data collected for these points showed that all transects fell within the GDSI parcel boundaries (Figure 5). In addition, no stump tallied in this survey fell within 57 feet (maximum horizontal error of boundary data and GPS combined) of the GDSI boundaries.

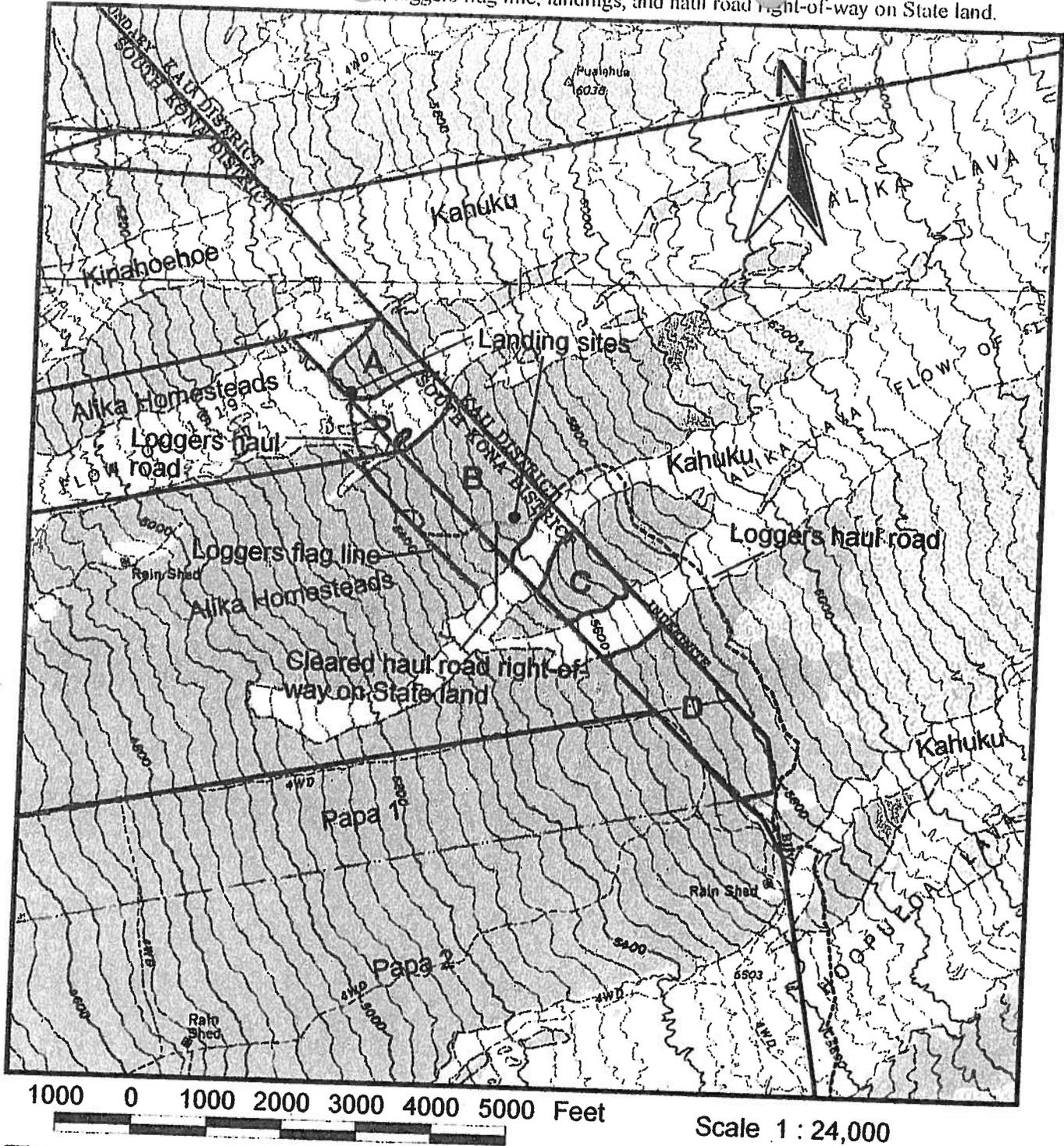
Harvest tree count and wood volume estimates: *Based on field survey data, an estimated 157 koa trees containing 74,791 net board feet of wood were cut down and harvested during timber trespass operations on parcel 8-8-1-8* (Table 4). DBH values for koa *harvest* trees ranged from 15.2 to 51.5 inches, where 88% of the *harvest* trees tallied in transects had measured or predicted DBH values of 24.0 inches or higher.

Table 4. Tree count and net wood volume estimates for koa *harvest* trees in parcel 8-8-1-8 during timber trespass operations. Tree count and board foot figures rounded to nearest whole number.

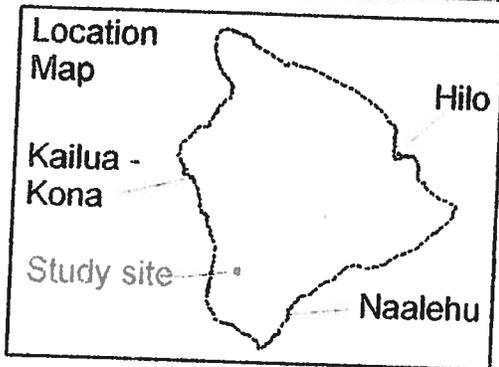
Kipuka	-- tallied in transects --			---- total in kipuka ----	
	Number of trees	Net board feet	Expansion factor	Number of trees	Net board feet
A	3	1,795	3.446	10	6,185
B	31	14,649	4.531	140	66,376
C	0	0	4.422	0	0
D	1	352	6.329	6	2,230
Total in parcel 8-8-1-8				157	74,791

Felled-only tree count and wood volume estimates: *Based on field survey data, an estimated 50 koa trees were felled by the logger and left whole in the field in parcel 8-8-1-8 during timber trespass operations* (Table 5). These “*felled-only*” trees were typically less desirable from a timber utilization perspective due to rot and defect. From 10 out of 11 *felled-only* trees tallied in survey transects, the logger did not utilize at least one log section that contained sound, merchantable wood. *This wastage totals 4,974 net board feet and is not included in wood volume estimates for harvest trees presented in Table 4.* DBH values for *felled-only* trees ranged from 21.0 to 50.6 inches, where 82% of the *felled-only* trees tallied in transects had measured or predicted DBH values of 24.0 inches or higher.

Figure 4. GPS locations for haul road, loggers flag line, landings, and haul road right-of-way on State land.



Scale 1 : 24,000



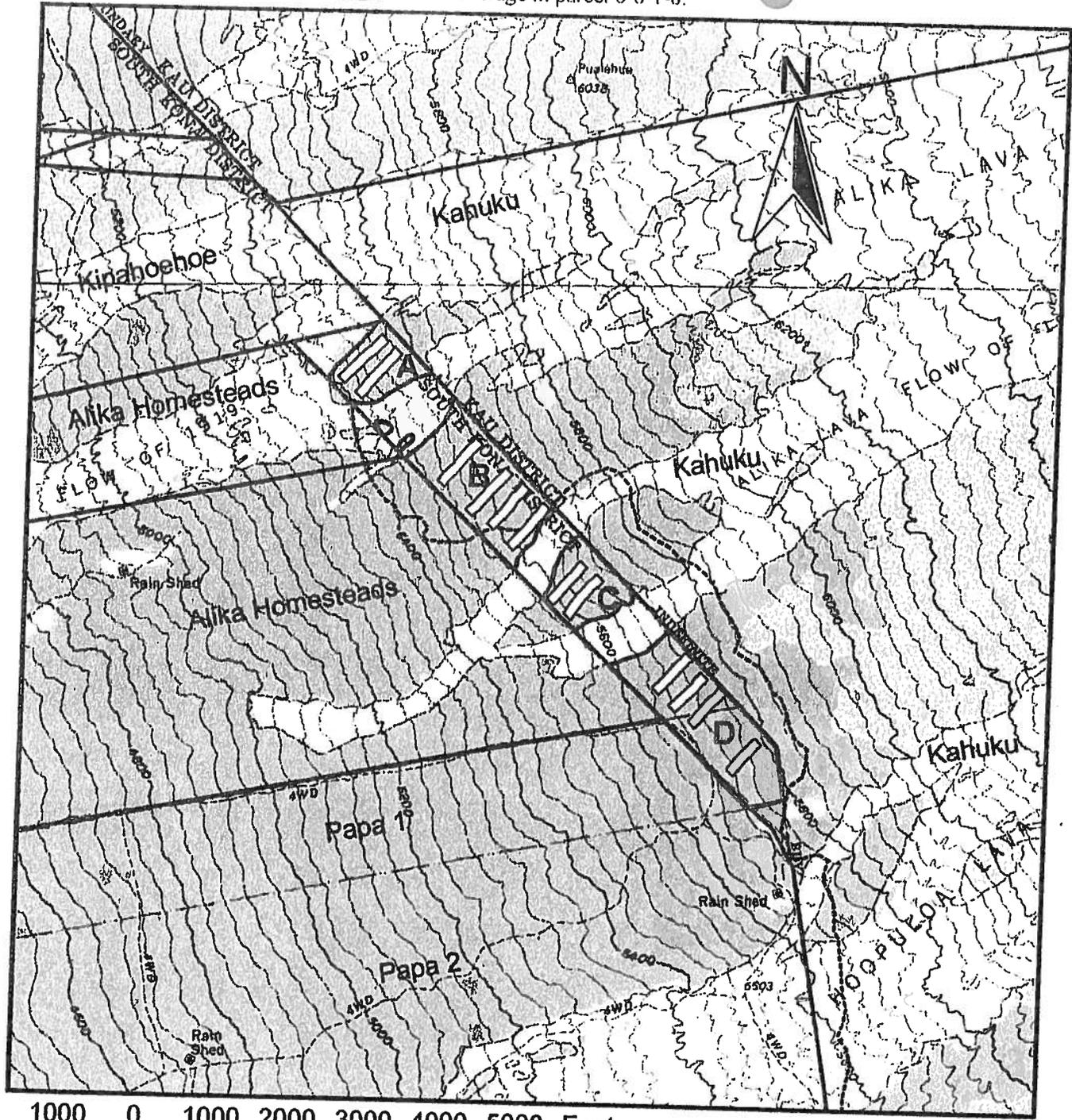
Map produced by Michael Constantinides
 Division of Forestry and Wildlife
 808-587-4186

Background USGS 1:24,000 quadrangle
 map, 1995

-  Parcel 8-8-1-8
-  Parcel boundaries from GDSI Hawaii, September 2000
-  Haul road right-of-way
-  Loggers haul road
-  Loggers flag line

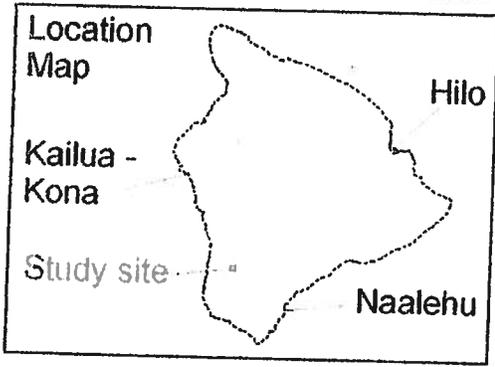


Figure 5. Survey transect GPS locations and coverage in parcel 8-8-1-8.



1000 0 1000 2000 3000 4000 5000 Feet

Scale 1 : 24,000



Map produced by Michael Constantinides
 Division of Forestry and Wildlife
 808-587-4186
 October, 2001

Background USGS 1:24,000 quadrangle
 map, 1995

-  Area surveyed in transects
-  Parcel 8-8-1-8
-  Parcel boundaries from GDSI Hawaii, September 2000
-  Principal forested kipuka



Table 5. Tree count and net wood volume estimates for koa *felled-only* trees in parcel 8-8-1-8 during timber trespass operations. Tree count and board foot figures rounded to nearest whole number.

Kipuka	-- tallied in transects --			---- total in kipuka ----	
	Number of trees	Net board feet	Expansion factor	Number of trees	Net board feet
A	3	302	3.446	10	1,042
B	5	342	4.531	23	1,548
C	1	136	4.422	4	602
D	2	282	6.329	13	1,783
Total in parcel 8-8-1-8				157	4,974

Other resource impacts:

Take of non-koa resources: In addition to koa, a small number of kolea (*Myrsine lessertiana*) trees were cut down. Insufficient data are available to accurately predict the associated volume removed for this species. The bole log of the single kolea tree that was tallied in kipuka B during the field survey was clearly cut and removed. The stump had a 24 inch diameter, while the diameter at the base of the remaining top branches was 12 inches. Both cut faces showed no evidence of defect. ***Assuming one-inch bark thickness and that a single log 8 feet in length was removed from this tree, a conservative estimate of kolea cut during timber trespass operations within parcel 8-8-1-8 would be four trees, containing a total of 357 net board feet.***

Road construction: The felling and removal of koa and kolea resources for milling from parcel 8-8-1-8 required the construction of a principal haul road by the logger. Such construction required clearing of forest vegetation and road surface grading by bulldozer. This road construction included one principal segment on parcel 8-8-1-8 in Kipuka B. The width of the road surface was approximately 14 feet, and the width of the right-of-way including this road surface was approximately 33 feet. ***The total length of the principal haul road through kipuka B was 1,100 feet. Based on these dimensions, 0.8 acres of land was removed from productive forest ecosystem and converted to road right-of-way.*** The area within the right-of-way is currently denuded of mature forest vegetation, and is likely to remain so for decades due to grading and soil compaction.

Landing construction: During timber trespass operations the logger constructed two principal landings in parcel 8-8-1-8: one each in kipuka A and B. Landings are areas that some loggers use as temporary staging and initial processing sites while removing trees and logs from forests. The approximate area of the landing in kipuka A is 0.2 acres. Dimensions of the landing in kipuka B were not measured, but this landing was considerably larger than the one in kipuka A, and is estimated to occupy an area of 0.3 acres. ***The total area of landing construction was approximately 0.5 acres.*** These landings are currently denuded of mature forest vegetation, and are likely to remain so for decades due to grading and soil compaction.

Non-quantified impacts: This survey did not quantitatively address other resource impacts that were incurred. Time, expense, and the difficulty of applying quantitative assessments and valuation to such impacts were the principal limiting factors. These impacts include but are not limited to the following:

1. Skid roads. Skid roads are the paths taken by mechanized equipment to remove trees and logs from internal forest areas to landings and haul roads. Thousands of feet of skid roads were pushed through forested areas of parcel 8-8-1-8 by mechanized equipment such as bulldozers or skidders. Use of skid roads typically caused less damage to forest vegetation than haul road construction, but many are still clearly visible today. Total skid road area would total several acres in magnitude.
2. Forest structure. Almost all of the areas where koa was cut in parcel 8-8-1-8 now contain few or no koa trees. Because of intense grazing pressure from feral ungulates in this area, natural regeneration of koa will not occur.
3. Habitat loss. Changes in forest structure have considerable potential for causing negative impacts on populations of native birds, mammals, or invertebrates. Such populations could include threatened or endangered species.

10. Discussion

An inherent component of forest sampling as applied in this study is potential error in cut-tree and wood volume estimates. In order to minimize bias and error that could unfairly favor the State, several measures or assumptions were incorporated into this survey design in order to formulate neutral or conservative estimates:

1. Starting points for the initial set of transects were systematically located at equal intervals along the makai (southwest) parcel boundary of each kipuka prior to initiation of field work.
2. When the ability to add transects to the sample was recognized half way through field survey operations, new transect starting points were selected at random from a set of points that were equidistant from completed transects within each kipuka.
3. Model 1 is based on data collected from 72 live trees. The model is strong, where stump diameter can be used to explain more than 94% of the variability in predicting DBH of koa trees.
4. Model 2 is based on data collected from 295 trees. Model 2 is strong where DBH can be used to explain 65% of the variability in predicting cubic foot volume of koa trees. The large number of observations used to create this model resulted in a very narrow (strong) 95% confidence interval (figure 3). One of the koa data sets included in the development of Model 2 caused the model to return slightly lower volume estimates for any given DBH. Despite this fact, this data set was included to insure that Model 2 was based on the greatest number of observations available.
5. No value exists as a fixed standard for conversion of cubic feet to board feet. Published values typically range between 4-8 board feet per cubic foot. Larger logs have a higher conversion rate, while small logs will require a smaller conversion rate.

- 87% of the koa cut down in parcel 8-8-1-8 were two to over four feet in diameter, providing relatively large logs. The conversion factor of 6 used in this study represents a DOFAW standard that has been used by the agency in practice for decades, and appears justified based on the large log sizes observed in this survey.
6. The GDSI acreage of 181 for parcel 8-8-1-8 is 7% larger than the TMK acreage of 169 acres. Though it is possible that the TMK acreage is inaccurate, all tree count and wood volume estimates based on GDSI acreage were reduced by 7% when converting per-acre indices to kipuka or parcel levels.
 7. The facts that survey transects included both cut- and no-cut zones and covered a significant percent of forested kipuka in the parcel are believed to provide the basis for strong estimates of the total resource take on a parcel-wide scale.

Extensive photographic documentation of logging and road building activities within parcel 8-8-1-8 are available at DOFAW. Contact Michael Constantinides, 808-587-4186.

**FIELD MANAGEMENT METHODS AND COST ESTIMATES FOR
MITIGATION OF DAMAGES RESULTING FROM TIMBER
TRESPASS ACTIVITY ON STATE UNENCUMBERED LAND
TMK PARCEL 8-8-1-8, SOUTH KONA**

**Michael Constantinides
Survey Forester
Division of Forestry and Wildlife
Honolulu, Hawaii
February 4, 2002**

EXHIBIT E

Introduction

Recent timber trespass activities in South Kona on State unencumbered lands (TMK parcel 8-8-1-8) resulted in multiple impacts to natural resources of the area. A comprehensive effort at reestablishing or enhancing koa and associated native plant species is required in order to mitigate these negative impacts. The principal components of the following mitigation plan include:

1. Prepare of an Environmental Assessment for the project
2. Survey the parcel boundary
3. Fence the parcel boundary
4. Remove residual feral ungulates
5. Plant a mixture of koa and other native species common to the project area
6. Establish an annual fence, road, and plant maintenance program

Ecosystem degradation resulting from timber trespass

The overstory of this parcel prior to timber trespass activity was dominated by koa and ohia, with koa typically obtaining the largest diameters, heights and crown area. As such, the felling and removal of large koa trees represents a notable impact on ecosystem function at many levels.

Hydrology: Precipitation input into this ecosystem comes from two principal sources: rainfall and cloud mist. Cloud mist inputs are likely to be significant. Removal of koa canopies via harvesting would result in reductions in mist capture, water availability to the ecosystem, and contribution of this land area to subsurface water flow.

Flora: Any reduction in the water balance of this ecosystem is likely to directly delay or possibly inhibit the recovery of vegetation within this parcel. Combined with intense grazing pressure from feral ungulates, there is currently no prospect for koa establishment via natural regeneration. The removal of mature koa overstory also has a negative impact on overall koa seed production and dispersion. The loss of overstory canopy due to harvesting activity is likely to have a negative impact on the survival, growth and natural regeneration of understory and groundcover plant species due to changes in moisture supply and microenvironment. If there is an increase in non-native grasses due to the timber harvesting disturbance and the concurrent increase in light on the forest floor, competition with native plants and fire hazard will also increase.

Fauna: The direct impacts of koa overstory removal on native insect, mammal, and bird populations include the loss of roosting sites, nesting sites, forage, and cover. Indirect impacts include reduction in habitat quality, and the potential for decline in ecosystem function. Native populations that are almost certainly effected include both endangered and non-endangered birds, insects, and endangered hoary bats. Non-native populations are also likely to be negatively effected of which game mammals are perhaps most notable. From a conservation standpoint, this could be both beneficial (less ecosystem degradation) and harmful (less control of fuel sources). From a hunting standpoint, this would represent a negative impact. It should be noted that until its recent removal from the wild, the endangered native crow's (*Corvus hawaiiensis*) range included this parcel.

The following table was prepared by DOFAW Natural Area Reserve Biologists in Hilo. It lists endangered species and species of concern (SOC) for Kipahoe Natural Area Reserve, which is adjacent to parcel 8-8-1-8. Many of the species in this table are former or current components of the ecosystem in parcel 8-8-1-8, and could have been subject to negative impacts due to timber trespass activities.

Rare Species of the Kipahoe Natural Area Reserve

Scientific Name	Common Name	Status
Plants		
<i>Bobea timonioides</i>	`ahakea	SOC
<i>Bidens campylotheca ssp. campylotheca</i>	ko`oko`olau	SOC
<i>Cyanea hamatiflora ssp. carlsonii</i>	haha	Endangered
<i>Cyanea stictophylla</i>	haha	Endangered
<i>Cyanea marksii</i>	haha	SOC
<i>Cyrtandra menzesii</i>	ha`iwale	SOC
<i>Flueggea neowawraea</i>	mehamehame	Endangered
<i>Fragaria chiloensis ssp. sandwicensis</i>	`ohelo papa	SOC
<i>Phyllostegia floribuna</i>	kiponapona	SOC
<i>Phyllostegia stachyoides</i>	kiponapona	SOC
<i>Pittosporum hawaiiensis</i>	ho`awa	SOC
<i>Pritchardia schattaueri</i>	lo`ulu	Endangered
<i>Ranunculus hawaiiensis</i>	makou	SOC
<i>Reynoldsia sandwicensis</i>	`ohe makai	SOC
<i>Rubus macraei</i>	`akala	SOC
<i>Sisyrinchium acre</i>	Mau`u La`ili	SOC
<i>Stenogyne macrantha</i>		SOC
<i>Trematolobelia grandifolia</i>	koli`i	SOC
Vertebrates		
<i>Asio flammeus sandwichensis</i>	Pueo	SOC
<i>Buteo solitarius</i>	`Io	Endangered
<i>Hemignathus munroi</i>	`Akiapola`au	Endangered
<i>Lasiurus cinereus semotus</i>	Hawaiian Hoary Bat	Endangered
<i>Loxops coccineus coccineus</i>	`Akepa	Endangered
<i>Oceanodroma castro</i>	Storm Petrel	SOC
<i>Oreomystis mana</i>	Hawaii Creeper	Endangered
<i>Pterodroma phaeopygia sandwicensis</i>	Dark-rumped Petrel	Endangered
Invertebrates		
<i>Coleotichus blackburniae</i>	Koa Bug	SOC
<i>Partulina honeri</i>	Hawaiian Tree Snail	SOC
<i>Partulina physa</i>	Hawaiian Tree Snail	SOC
<i>Philonesia spp.</i>	Hawaiian Land Snail	SOC
<i>Plagithmysus spp.</i>	Long horned Beetle	SOC
<i>Succinea spp.</i>	Hawaiian Land Snail	SOC

Environmental and Cultural Assessments

Preparation of an Environmental Assessment (EA) will be required prior to any field management activities aimed at mitigation of ecosystem degradation. The EA will be prepared by a DOFAW biologist at a cost of \$4,200. The Cultural Assessment portion of the EA would be sub-contracted at a cost of approximately \$6,000. Total costs for assessments are \$10,200.

Boundary Survey

An accurate boundary survey represents the first step in the actual mitigation work. The survey must incorporate high-order control information. During survey operations, boundary lines will be staked with semi-permanent markers to guide fencing crews, and will cost \$39,500. For portions of the parcel boundary that pass through existing forest areas, some low-level vegetation may need to be cleared along the survey line. In these cases, a DOFAW biologist and a DOFAW technician will be present to help clear the line and insure that no damage is incurred on important or sensitive species. The participation of DOFAW staff will be required for two weeks at a cost of \$3,550. Total survey costs are \$43,050.

Fence

One of the principal goals of mitigation efforts will be regenerating native forest, with and emphasis on koa. Koa and other young tree seedlings are highly coveted browse sources for feral ungulates, and there is intense grazing pressure from feral ungulates in and adjacent to parcel 8-8-1-8. Enclosing the parcel with fencing is a basic requirement for successful reforestation on a parcel-wide scale. The parcel perimeter is approximately 19,000 linear feet, and would require one gate to control human access and 5-7 interior gates to control ungulate access. The following cost estimates include materials and labor.

<u>Item</u>	<u>Cost</u>
19,000 foot boundary fence	171,000
1 entrance gate - security	2,000
5-7 interior gates - ungulate	3,000
Total	\$176,000

Once established, annual fence monitoring and maintenance would cost approximately \$1,700.

Ungulate removal

After the parcel has been fenced, removal of feral ungulates will be required prior to planting koa and other native species. The shape and size of parcel 8-8-1-8 both favor ungulate removal by driving any fenced-in animals to one end of the parcel for removal or disposal. This would require approximately 20 people to effectively sweep the area inside the fence, and could be accomplished in one day. Estimated cost for personnel and transportation for this operation is \$4,000. Once completed, monitoring to insure that ungulates have remained excluded should be conducted twice annually, at a cost of \$850.

Reforestation

Reforestation efforts using native vegetation will focus on planting of nursery-grown seedlings and subsequent maintenance. Koa will be the primary species planted, though other native tree and shrub species should comprise approximately 50% of the plantings. Assuming an establishment mortality rate of 50% and an end goal of reestablishing 50 plants per acre, 100 plants per acre will need to be initially planted. There are 125 acres of forest land in this parcel, so 12,500 seedlings will be required. It is recommended that this planting operation be conducted over a 3-4 year period. This would allow monitoring, maintenance, and additional plantings to be conducted simultaneously in each planting season after Year 1.

Cost estimates for implementing seedling planting and maintenance are based on figures used for similar operations near the DOFAW Hilo base yard, adjusted for the remote location and difficult access associated with parcel 8-8-1-8.

	\$ per plant	\$ for parcel
Nursery production	0.82	10,250
Planting	2.29	28,625
Fertilizing	0.49	6,125
Weeding	1.02	12,750
Totals	4.62	57,750

Roads and landings

During timber trespass activities, the logger created a new road for access, and two landings on State land to process felled trees. Road right-of-way and landings comprised approximately 0.8 and 0.5 acres, respectively. These areas are currently denuded of mature forest vegetation, and are likely to remain so for decades due to grading and soil compaction. They represent approximately 1% of the original forested area of the parcel.

Now that the road exists, one possible option is to retain it for access to this remote area. If such a scenario were followed, a small road maintenance budget would be required. However, only 1,100 feet of this new road exists on State land. A majority of the road exists on private lands of Kahuku, and a short section crosses privately owned lands of Alike Homesteads. Any proposal to maintain this road would require a cooperative arrangement between interested landowners. Because of the lava substrate that dominates surface soils in this area, erosion is minimal to non-existent so little road grading would be required. Weed control (perhaps once each year) and periodic removal of trees that fall across the road would be the primary maintenance concerns. The estimated cost for an annual road maintenance program is \$500.

Natural reforestation of landings is likely to proceed at a slower rate than relatively undisturbed sites within the enclosure. An intensive approach for reforesting these small areas is advised, including planting of tree seedlings. Another alternative would be to use one of the landings as a base camp location from which to conduct remote field operations.

Conversion to Natural Area Reserve

Prior to discovering that koa trespass activity had occurred on parcel 8-8-1-8, the Natural Area Reserve staff of DOFAW in Hilo had considered requesting transfer of the parcel from the Land Division to DOFAW as an addition to Kipahohoe Natural Area Reserve. As the proposed mitigation measures emulate those currently practiced by DOFAW elsewhere, a request to transfer management control from the Land Division to DOFAW could still be pursued if the measures are adopted.

Budget summary

<u>Item</u>	<u>Dollars</u>
Environmental Assessment	\$10,200
Boundary survey	\$43,050
Fencing	176,000
Ungulate control	4,000
Replanting	57,750
Total	291,000

Approximately \$69,500 (24%) of this budget represents reimbursable contributions of DOFAW staff time and materials. After the proposed mitigation measures have been conducted, annual costs for monitoring and maintenance activities are estimated at \$3,050 of DOFAW staff time and materials.

Summary of Administrative Costs

Category	Description	Added			Subtotal
		Item?	Value	Note	
Airline					
	Michael Constantinides	No	101.50	Week of 9/10/01	\$101.50
	Michael Constantinides	No	101.50	5/1/02 Boundary investigation	\$101.50
	Randy Hashimoto	No	101.50	5/1/02 Boundary investigation	\$101.50
	DLNR Chairperson	Yes	101.50	11/15/01 Helicopter site visit	\$101.50
Per Diem					
	Michael Constantinides	Yes	70.00	5/1/02 Boundary investigation	\$70.00
Subsistence					
	Nicholas Agorastos C22673	No	100.00	Week of 9/10/01	\$100.00
	Edward Brodie C22674	No	100.00	Week of 9/10/01	\$100.00
	Clement Chang C22675	No	100.00	Week of 9/10/01	\$100.00
	Ian Cole	Yes	100.00	Week of 9/10/01	\$100.00
	Michael Constantinides C22676	No	100.00	Week of 9/10/01	\$100.00
	Lisa Hadway C22677	No	100.00	Week of 9/10/01	\$100.00
	Irving Kawashima C22678	No	100.00	Week of 9/10/01	\$100.00
	Michael Constantinides C44095	No	120.00	Assigned to Kahuku Submittal	
Salary					
	Nicholas Agorastos	Yes	768.83	Week of 9/10/01	\$768.83
	Edward Brodie	Yes	864.81	Week of 9/10/01	\$864.81
	Clement Chang	Yes	626.31	Week of 9/10/01	\$626.31
	Ian Cole	Yes	716.10	Week of 9/10/01	\$716.10
	Michael Constantinides	Yes	1012.18	Week of 9/10/01	\$1,012.18
	Lisa Hadway	Yes	768.83	Week of 9/10/01	\$768.83
	Irving Kawashima	Yes	1057.75	Week of 9/10/01	\$1,057.75
	Michael Constantinides	Yes	202.44	5/1/02 Boundary investigation	\$202.44
	Michael Constantinides	Yes	9229.95	Research, data processing, data analyses, report writing 7/18/01 through 6/10/03	\$9,229.95
	Nicholas Agorastos	Yes	153.77	Site recon. approx. July 2001	\$153.77
	Bill Stormont	Yes	236.95	Site recon. approx. July 2001	\$236.95
	Irving Kawashima	Yes	211.55	11/15/01 Helicopter site visit	\$211.55
Overtime					
	Nicholas Agorastos	No	374.80	Week of 9/10/01	\$374.80
	Edward Brodie	No	421.60	Week of 9/10/01	\$421.60
	Clement Chang	No	305.33	Week of 9/10/01	\$305.33
	Ian Cole	Yes	349.10	Week of 9/10/01	\$349.10
	Michael Constantinides	Yes	493.44	Week of 9/10/01	\$493.44
	Lisa Hadway	No	374.80	Week of 9/10/01	\$374.80
	Irving Kawashima	No	515.65	Week of 9/10/01	\$515.65
Other					
	Helicopter rental C22653	No	1144.00	8/15-16/01	\$1,144.00
	Helicopter rental C38071	No	1460.50		\$1,460.50
	UH timber crew salaries C41596	No	3490.56	Assigned to Kahuku Submittal	
	GPS survey C43429	No	1125.00	Assigned to Kahuku Submittal	
TOTAL					\$22,464.68

EXHIBIT "B"

June 9, 2005 Recommended Findings
of Fact and Conclusions of Law,
Decision, and Order

BOARD OF LAND AND NATURAL RESOURCES

STATE OF HAWAII

In the Matter of a Contested Case)	DLNR File No. HA-04-01
Regarding a Petition Contesting the Board)	
of Land and Natural Resources' June 27,)	RECOMMENDED FINDINGS OF FACT
2003, Decision to Assess a Fine of)	AND CONCLUSIONS OF LAW,
\$1,372,650 for an Enforcement Action)	DECISION, AND ORDER
Involving the Removal of Koa Timber on)	
State Unencumbered Lands, South Kona,)	
Island of Hawai'i, TMK: (3) 8-8-01:08.)	
)	HEARING OFFICER: BENJAMIN M.
)	MATSUBARA

RECOMMENDED FINDINGS OF FACT AND CONCLUSIONS OF LAW, DECISION, AND ORDER

FINDINGS OF FACT

I. BACKGROUND

A. Nature of Proceeding

1. This contested case arises out of a civil administrative enforcement proceeding instituted by the Department of Land and Natural Resources ("DLNR") against Petitioners Steve Baczkiewicz, Raymond McGee, Wesley McGee, Steve's Ag Services, Ltd., and Contract Milling, LLC ("Petitioners") for the alleged removal of trees from State-claimed unencumbered public land and for otherwise violating rules relating to unencumbered State land. (D1)(Each finding of fact that is based upon a proposed finding submitted to the Hearing Officer by a party is identified with the letter "D" for DLNR and "P" for Petitioners, followed by the number of the proposed finding submitted by the respective party in their submissions. A finding of fact generated by the Hearing Officer is denoted with the letters "HO.")

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 STATE OF HAWAII

B. Parties

2. Petitioners Steve Baczkiewicz, Raymond McGee, and Wesley McGee are residents of the State of Hawai'i. (D2)

3. Steve's Ag Services, Ltd. is a Hawai'i corporation owned and operated by Steve Backiewicz. Contract Milling, LLC is a Hawai'i limited liability corporation owned and operated by Raymond McGee and Wesley McGee. (D3,4)

C. Petitioners' Agreement With Damon Estate

4. In July 1992, Petitioners entered into an agreement with Damon Estate, owner of Kahuku Ranch, to harvest "downed or severely distressed" koa trees, meaning koa trees with less than forty percent crown or leaf canopy. A subsequent agreement was reached with Damon Estate, permitting Petitioners to harvest ohia and sandalwood. (P4, modified)

II. PROCEDURAL HISTORY

5. In May 2001, based upon a report from a Natural Area Reserve System ("NARS") staff member, the State commenced parallel civil and criminal investigations into the alleged unauthorized logging of trees from a 169-acre parcel of property within the Kapua area that the State claimed title to (hereinafter referred to as, "the subject parcel"). (P5, modified)

6. The Division of Forestry and Wildlife ("DOFAW") conducted a site visit of the subject parcel and concluded that 157 koa trees had been harvested, 50 koa trees had been felled only, 4 kolea trees had been harvested, and 1.3 acres of haul road had been constructed. (P7, modified)

7. Civil administrative enforcement proceedings were commenced at a June 27, 2003 meeting of the Board of Land and Natural Resources Board ("the Board") meeting, where DLNR staff recommended that the Board (1) find that Petitioners committed 211 violations of Hawai'i Administrative Rules ("HAR"), Chapter 13-221, (2) impose a \$500 per violation fine pursuant to HRS §171-6.5 for a total of \$105,500 in fines, (3) impose restoration costs of \$291,000, and (4) impose administrative costs of \$22,464.68 against Petitioners. (P21, modified) (D5, modified)

8. At the June 27, 2003 meeting, the Board adopted DLNR's recommendations and additionally imposed monitoring costs of \$45,750, damages of \$213,200 for foregone license proceeds, and damages of \$822,700 for the value of timber taken. (P22, modified)

9. Petitioners requested and were granted a contested case hearing challenging the Board's decision. (D7)(P24)

10. Pursuant to HAR § 13-1-32, Benjamin M. Matsubara was appointed hearing officer to conduct the contested case hearing. (D8)

11. On November 14, 2003, a pre-hearing conference was held to establish prehearing deadlines. (P26)

12. At this prehearing conference, the hearing officer also provided the parties with disclosures regarding certain relationships with counsel for Petitioners in the event that DLNR had any concerns or objections. See Transcript, dated November 14, 2003, at p.4 (line 1) - p.5 (line 9). DLNR did not foresee any problems or potential conflicts and did not make any objections to the Hearing Officer's handling of this contested case proceeding. (P28, modified)

13. During a second prehearing conference, which was held on June 1, 2004, Petitioners indicated a need to retain additional expert witnesses in light of the withdrawal during the previous month of one of their expert witnesses from the case. (P30, 31, modified)

14. On June 18, 2004, DLNR submitted its Position Statement in this contested case. (P32)

15. DLNR's submission included the expert testimony of Randall M. Hashimoto, who previously held the position of land survey administrator for the State of Hawai'i. In that position, Mr. Hashimoto supervised the division whose main function is to survey government property and to determine its measurement, size, and location. (HO)

16. Mr. Hashimoto's prehearing testimony stated that the State property referred to as the subject parcel in this case was actually created by a surveying discrepancy. See Hashimoto written testimony, on page 3. (HO)

17. In his written testimony, Mr. Hashimoto acknowledged his authorship of a memorandum dated January 15, 2003 ("January memorandum") that was directed to Dierdre S. Mamiya, Administrator, DLNR, Land Division, that was included as Exhibit 16 with DLNR's submission. In his January memorandum, Mr. Hashimoto set out his view of the history of the subject parcel. In particular, in paragraphs F and G of his January memorandum, Mr. Hashimoto stated that an identified strip of land about 1000 feet wide between the Alika Homestead and the Kahuku Boundary was created due to land surveying actions. Further, Mr. Hashimoto stated in the January memorandum that although the intent had been to grant the ahupuaa of Papa I and the parcels of the Alika Homesteads to abut the Kahuku boundary, the outcome of certain land surveying actions

had resulted in the creation of an identified piece of land characterized as a "Government Remainder." In concluding his January memorandum, Mr. Hashimoto recommended that a Staff Abstractor review all of the current instruments of record covering the lands of Kahuku, Papa I and Alika for any claims of ownership to this strip of land identified as a Government Remainder. (HO)

18. On July 1, 2004, Petitioners filed a Motion to Continue the hearing and all prehearing deadlines based on (1) DLNR's failure to disclose requested documents, including the January 15, 2003 memorandum and CB No. 85, allegedly establishing State ownership of the subject parcel, (2) the untimely granting of reasonable access to Petitioners' business records that were seized as part of the criminal investigation, (3) the initial denials of access to Petitioners to the subject parcel for the purpose of conducting an investigation, (4) the withdrawal of Ernest Pung as an expert witness due to fear of retaliation, (5) delay in obtaining relevant DLNR records requested under the Uniform Information Practices Act, (6) the additional 1000 violations asserted in an untimely manner in DLNR's Position Statement, and (7) the unexpected unavailability of Petitioners' expert witness, Randy Senock, until after September 16, 2004. (P36)

19. On July 6, 2004, DLNR submitted its opposition to Petitioners Motion to Continue, and on July 7, 2004, Petitioners submitted their Reply Memorandum in support of their Motion to Continue. (P37)

20. On July 8, 2004, the Hearing Officer granted Petitioners' Motion to Continue the hearing and all prehearing deadlines, re-scheduling the hearing to begin on September 20, 2004 in Hilo, Hawai'i. (P38)

21. On August 6, 2004, Petitioners submitted their Position Statement. (P39, modified)

22. Petitioner's Position Statement included the expert testimony and report of Colleen Uahinui, Senior Title Officer and Manager of the Historic Title Services Department of Title Guaranty of Hawaii, Inc., who concluded that there were no recorded title documents of record establishing State ownership of the subject parcel. (P40, modified)

23. Petitioner's Position Statement included the expert testimony of Niels Christiansen, a licensed land surveyor, who, after completing a survey of the subject parcel, concluded that it was more likely than not that the subject parcel was located in the ahupua'a of Kahuku, meaning there was no "government remainder" and the subject parcel did not exist. (P41, modified)

24. Petitioner's Position Statement included the expert testimony of Lorrin Hirano, Vice President and Legal Counsel of Title Guaranty of Hawaii, Inc., who, after reviewing the testimony and report of Colleen Uahinui, the testimony and exhibits of Niels Christiansen, the testimony and exhibits of Randall Hashimoto, and Registered Maps Nos. 2468, 2171, and 1112, concluded that the subject parcel was located in the ahupua'a of Kahuku, that title to the subject parcel descended to Damon Estate, the successors in interest to C.C. Harris, and that consequently the State was not the fee owner of the subject parcel. (P42, modified)

25. On August 27, 2004, DLNR submitted its rebuttal, including the testimony of Glenn Kodani, Land Boundary Surveyor for the State of Hawai'i. (P43)

26. On September 1, 2004, a third prehearing conference was held. (P44)

27. At the September 1, 2004 conference DLNR agreed that proving ownership of the subject parcel was a threshold issue and that if the State did not carry its burden of proof then the case could not proceed. See Transcript, dated September 1, 2004, at p.13 (line 21-25)(P45, modified)(HO)

28. On September 3, 2004, Petitioners filed a Motion to Dismiss for Lack of Jurisdiction and a Motion to Dismiss the 1000 Untimely Asserted Violations. (P46, modified)

29. DLNR filed memoranda in opposition to both motions. (P49, modified)

30. A hearing on both of Petitioners' motions was held on September 15, 2004. (P50, modified)

31. At the September 15, 2004 hearing, after considering arguments from counsel, the Hearing Officer denied Petitioners' Motion to Dismiss for Lack of Jurisdiction, finding that the Board had jurisdiction over the matter pursuant to Hawaii Administrative Rules ("HAR") §13-221-28(a), (c), and (d). See Transcript, dated September 15, 2004, at p.26 (line 22) - p.27 (line 3). The Hearing Officer also based his decision on HAR §13-221-3, which the Hearing Officer noted contained a penalty provision, and on HRS §171-6(15), HRS, Chapter 91, and the Board's own rules of practice and procedure. (P52, modified) The Hearing Officer noted, in the order, that the Board did not have jurisdiction to adjudicate the imposition of criminal penalties and fines for penal offenses under HRS §171-6.5. See Order Denying Petitioners' Motion to Dismiss for Lack of Jurisdiction, received by DLNR on October 1, 2004. (P53)

32. At the September 15, 2004 hearing, the Hearing Officer granted Petitioners' Motion to Dismiss the 1000 Additional Claims on the basis that DLNR's assertion of the

additional 1000 violations for the first time in its position statement, filed on June 18, 2004, more than three years after DLNR began its investigation in this case, that did not provide Petitioners with reasonable notice under the standard set forth in Paul's Electrical Serv., Inc. v. Befitel, ___ Hawai'i ___, 91 P.3d 494 (2004). See Transcript, dated September 15, 2004, at p.28 (line 19) - p.29 (line 16), p.34 (lines 2-9); see also Order Granting Petitioners' Motion to Dismiss 1000 Untimely Asserted Violations, received by DLNR on September 24, 2004. (P54)

33. Pursuant to the hearing officer's prehearing orders, the contested case hearing commenced on September 20, 2004. (D9)

34. At the request of the hearing officer, the parties were instructed to and did provide witnesses and testimony initially on the issue of ownership of the subject parcel. This initial focus on this aspect of the case was due to the fact that that pursuant to Haw. Rev. Stat. § 91-10(5) (1993), the State has the burden of proof, including the burden of producing evidence as well as the burden of persuasion. The degree or quantum of proof applicable to the factual issue of ownership of the subject parcel is preponderance of the evidence. (D10,11)(P56, modified)(HO)

35. DLNR presented two witnesses on the threshold issue of ownership of the subject parcel: (1) Glenn Kodani; and (2) Randall Hashimoto. Both of these individuals were admitted as experts in surveying. DLNR did not present any expert testimony on the issue of legal title to the subject parcel. (P57, modified)

36. Mr. Kodani testified as to his procedure in surveying the subject parcel. See Transcript, dated September 20, 2004, at p.16 (line 8) - p.23 (line 15).

37. Mr. Hashimoto testified as to Exhibit 16, in which Mr. Hashimoto reviewed the documents regarding the subject parcel of land and wrote a memorandum dated January 15, 2003, to the administrator of land management which was a chronological listing of the events that led to the creation of the subject parcel. See Transcript, dated September 20, 2004, at p.34 (line 6-25); Written testimony of Randall Hashimoto pgs. 4-6; Exhibit 16.

38. Mr. Hashimoto, in his written testimony, testified that Exhibit 17 is the original deed to Papa 1 using Mr. Kananui's survey as the western boundary. Alika Homesteads was sold in 5 slices. Exhibits 18-20 are the deeds to the slices, each of which uses Mr. Wright's 1902 survey as the Western boundary. See Written Testimony of Randall M. Hashimoto, p.4 (paragraphs 5 & 6).

39. Mr. Hashimoto further testified that the significance of the Exhibits 17 to 20 is that the Kingdom conveyed Kahuku in 1861 and the boundaries of the grant were determined in 1876. The Territory conveyed Papa 1 and Alika Homesteads in the early 20th century by metes and bounds. The significance of this is that the boundaries of these ahupua'a did not match. The 1902 surveys set the eastern boundaries of Alika Homesteads and Papa 1 further west than they should have been. This left an approximately 1000-foot gap between the borders of these ahupua'a. The land in that gap is the State property at issue here. See Written Testimony of Randall M. Hashimoto, p.4 (paragraphs 7 & 8).

40. Mr. Hashimoto testified that in 1908, Mr. Wright re-surveyed a portion of the western boundary of Kahuku. At this time, he recovered Mr. Hitchcock's original 1875 ahu. He realized that Mr. Kananui erred in his 1902 survey. He also realized that by

using Mr. Kanakanui's 1902 ahu, he (Wright) and Mr. Kanaknui had created the gap in the metes and bounds description of Papa 1 and the Alika Homesteads in the various deeds. See Written Testimony of Randall M. Hashimoto, p.4-5 (paragraphs 9 & 10).

41. Mr. Hashimoto, in his January 15, 2003, memorandum to Diedre S. Mamiya, Administrator DLNR, Land Division stated in paragraph G. that:

In 1908, Wright resurveyed a portion of the western Kahuku Boundary and recovered most of D.H. Hitchcock's original ahus. Registered Map 2468 shows the ahus found and the strip of land created by earlier surveys. Although the intent was to grant the ahupuaa pf Papa 1 and the parcels of the Alika Homesteads to abut the Kahuku boundary, the outcome of the surveys by the Kanakanui and Wright, resulted in the creation of a Government Remainder. See Exhibit "16" page 2, paragraph "G")

42. Mr. Wrights re-survey in 1908 resulted in the creation of Registered Map 2468 which is the basis of DLNR's contentions of the existence of the subject property and the States ownership thereof. See Transcript, dated September 20, 2004, at p.42 (lines 2-4) (H.O.).

43. Mr. Hashimoto testified that CB No. 85, the 1876 adjudication of the boundary of the ahupua`a of Kahuku, is the only official government decision regarding the boundaries of the ahupua`a of Kahuku. See Transcript, dated September 20, 2004, at p.64 (line 21) - p.65 (line 4). (P59, modified)

44. Mr. Hashimoto testified that the government has never initiated any quiet title action to the subject parcel or recertification of the boundaries of the ahupua`a of Kahuku. See id. at p.104 (line 20) - p.105 (line 3). (P59, modified)

45. Mr. Hashimoto testified that for approximately 33 years, from 1875 through 1908, the government's official records recognized the western boundary of the ahupua`a of Kahuku to be contiguous at course no. 14 of CB No. 85 with the eastern boundaries of the Alika Homesteads Lots 1-5 and Papa 1, as evidenced by CB No. 85, Registered Map. No. 1112 (1875 survey by D.H. Hitchcock), Registered Map No. 2171 (1903 survey by George F. Wright), and Grant Nos. 4914, 5045, and 5092 (conveying the Alika Homesteads and Papa 1 parcels). (P60, modified) See Transcript, dated September 20, 2004, at p.65 (line 5) - p.71 (line 22). Note also FOF 15, 16, and 17 above.

46. Mr. Hashimoto testified that even after Registered Map. 2468 was prepared, the government continued to recognize that the western boundary of the ahupua`a of Kahuku was contiguous with the eastern boundary of the Alika Homesteads and Papa parcels. See id. at p.106 (line 9) - p.108 (line 18).

47. Mr. Hashimoto testified that official documents from the period 1875 to 1908 (specifically Registered Map 1112, Certificate of Boundary 85, Registered Map 2171, and Grants 4914, 5045 and 5092) indicated that the subject parcel was located in the ahupua`a of Kahuku. See id. at p.71 (line 23) - p.72 (line 3). (P60, modified)(HO)

48. On the issue of title, Petitioners presented three witnesses: (1) Niels Christiansen, admitted as an expert in surveying; (2) Colleen Uahinui, admitted as an expert in title abstracting; and (3) Lorrin Hirano, admitted as an expert in legal title. (P65, modified) Note also FOF 19-21 above.

49. The oral testimonies of Niels Christiansen, Colleen Uahinui, and Lorrin Hirano at the hearing echoed their previously submitted direct testimonies and reports, as noted in FOF 19-21 above, essentially reiterated their conclusions that the subject parcel

was located in the ahupua`a of Kahuku, that title to the subject parcel descended to the successors in interest of C.C. Harris, which in this case was Damon Estate, and consequently that the subject parcel was not owned by the State of Hawai`i. See Transcript, dated September 20, 2004, at p.159 (lines 3-15), p. 160 (line 22) - p.161 (line 1); Transcript, dated September 21, 2004, at p.93 (lines 12-20), p.102 (lines 11-18), p.110 (line 10) - p.111 (line 9), p.115 (line 4) - p.116 (line 17). (P66, modified)

50. On September 21, 2004, at the conclusion of the testimony regarding ownership of the subject parcel, the Hearing Officer instructed the parties to present argument on the issue of ownership, including the evidence presented at the hearing and the status of the case assuming ownership of the subject parcel did not rest with the State. (P67)

51. After hearing the oral arguments of the parties, the Hearing Officer recessed the hearing and instructed the parties to submit written briefs on the subject of State ownership of the subject parcel. (P69, modified)

52. On September 23, 2004, Petitioners submitted their brief regarding ownership of the subject parcel. (P70, modified)

53. On September 24, 2004, DLNR submitted its memorandum regarding State ownership of the subject parcel. (P71, modified)

54. On September 27, 2004, the contested case hearing resumed in Honolulu, Hawai`i and the parties presented additional argument to the Hearing Officer on the issue of State ownership of the subject parcel. (P72, modified)

55. Based on the evidence and argument presented at hearing, as well as their subsequent briefs and oral arguments, the findings in the following paragraphs numbered

56, 57, 58 and 59 have been agreed to by the parties during the course of the proceedings and are undisputed. (P73, modified)

56. It is undisputed that there are no legal documents of title reflecting the existence of the subject parcel. (P76) See Transcript, dated September 27, 2004, at p.10 (lines 12-13).

57. It is undisputed that there are no legal documents of title reflecting ownership of the subject parcel by the State of Hawai'i. (P77) See Transcript, dated, September 27, 2004, at p.10 (lines 13-15).

58. It is undisputed that when the western boundary of the ahupua`a of Kahuku and the eastern boundaries of the Alike Homesteads and Papa parcels were determined and conveyed, the intention was that the boundaries would abut each other, there was no conscious intent to create a gap between the boundaries of the two properties, and therefore no intent to leave a remainder parcel owned by the government between the ahupua`a of Kahuku and the Alike Homesteads and Papa parcels. (P78, modified) See Transcript, dated September 27, 2004, at p.10 (lines 15-20).

59. It is undisputed that if DLNR cannot establish by a preponderance of the evidence the State's ownership of the subject parcel, this civil administrative enforcement action cannot proceed against Petitioners. See Transcript, dated September 1, 2004, at p.13 (line 21-25).

60. It is DLNR's position that the subject parcel exists by "operation of law" based on mistakes in the boundary surveys and grants for the ahupua`a of Kahuku and the adjacent Alike Homestead and Papa parcels, and the subject parcel is owned by the State

by virtue of the boundary line established in Registered Map No. 2468. (P79, modified)
See Transcript, dated September 27, 2004, at p.11 (lines 3-18).

61. It is Petitioners' position that based on CB No. 85, Registered Map. No. 1112, Registered Map No. 2171, and the grants for Papa 1 and Alika Homestead Lots 1, 2, 3, 4, and 5, the subject parcel was owned by Damon Estate at the time of the alleged violation. (P80) See Transcript, dated September 27, 2004, at p.11 (line 19) - p.12 (line 5).

III. CONCLUSIONS OF LAW

1. For this action to proceed against Petitioners, the Hearing Officer would be required to make a finding that the State of Hawai'i has legal title to the subject property. See Transcript, dated September 27, 2004, at p.12 (lines 11-13).

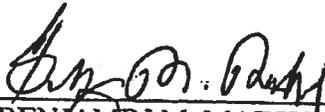
2. Based on the record in this case, the preponderance of the available evidence does not establish State ownership of the subject parcel and there is a genuine dispute as to the existence and legal ownership of the subject parcel. See Transcript, dated September 27, 2004, at p.12 (lines 6-10).

3. Given the existence of a genuine dispute as to the existence and legal ownership of the subject parcel, a determination that the State or some other third party has title to the subject parcel would be tantamount to a ruling quieting title. See Transcript, dated September 27, 2004, at p.12 (lines 13-16).

4. The Hearing Officer does not have the legal authority to make a ruling quieting title as to the subject parcel, inasmuch as HRS §603-36(2) (1993) vests jurisdiction over a quiet title proceeding with the circuit court in which the subject parcel is located. See Transcript, dated September 27, 2004, at p.12 (lines 16-19).

IV. RECOMMENDED DECISION AND ORDER

Based on the foregoing, the Hearing Officer recommends that this case be dismissed without prejudice until the appropriate authority has determined the question of legal ownership of the subject parcel. See Transcript, dated September 27, 2004, at p.12 (lines 19-24).



BENJAMIN M. MATSUBARA
HEARING OFFICER

(F)

BOARD OF LAND AND NATURAL RESOURCES

STATE OF HAWAII

In The Matter of a Contested Case Regarding)
A Petition Contesting the)
Board of Land and Natural Resources)
June 27, 2003 Decision to Assess a Fine of)
\$1,372,650 for an Enforcement Action)
Involving the Removal of Koa Timber on State)
Unencumbered Lands, South Kona, Island of)
Hawaii, TMK: (3) 8-8-01:08)

DLNR File HA-04-01

JUN 13 2005

CERTIFICATE OF SERVICE

The undersigned hereby certifies the BOARD OF LAND AND NATURAL RESOURCES' FINDING OF FACT, CONCLUSIONS OF LAW AND DECISION AND ORDER was duly served upon the following parties as indicated, by means of U.S. Mail, postage prepaid on June 9, 2005, addressed as follows:

C: William Chikasuye
P.O. Box 98
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Hearing Officer Benjamin Matsubara
Matsubara, Lee & Kotake
888 Mililani Street
Kendall Building 8th Floor
Honolulu, Hawaii 96813
808-538-3840

Dated: Honolulu, Hawaii, June 9, 2005


Dawn T. Hegger
Department of Land & Natural Resources
State of Hawaii

BOARD OF LAND AND NATURAL RESOURCES

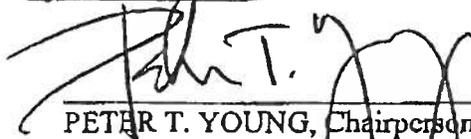
STATE OF HAWAII

In The Matter of a Contested Case)	DLNR File HA-04-01
Regarding A Petition Contesting the)	
Board of Land and Natural)	BOARD OF LAND AND NATURAL
Resources June 27, 2003 Decision to)	RESOURCES' FINDING OF FACT,
Assess a Fine of \$1,372,650 for an)	CONCLUSION OF LAW, AND
Enforcement Action Involving the)	DECISION AND ORDER
Removal of Koa Timber on State)	
Unencumbered Lands, South Kona,)	
Island of Hawaii, TMK: (3) 8-8-01:08)	

**BOARD OF LAND AND NATURAL RESOURCES' FINDING OF FACT,
CONCLUSIONS OF LAW AND DECISION AND ORDER**

The Board of Land and natural Resources, having reviewed the files in the case, and having considered the arguments and exceptions made by the parties in this case, hereby ADOPTS as its own, the Hearing Officer's RECOMMENDED FINDINGS OF FACT AND CONCLUSIONS OF LAW, DECISION, AND ORDER filed on January 27, 2005. (The foregoing findings of fact, conclusions of law, decision, and order may be signed in counterparts.)

Dated: Honolulu, Hawaii, June 9, 2005.



PETER T. YOUNG, Chairperson

TIMOTHY E. JOHNS, Member

KATHRYN WHANG INOUE, Member

TED K. YAMAMURA, Member

TOBY MARTYN, Member


RON AGOR, Member

GERALD DEMELLO, Member

BOARD OF LAND AND NATURAL RESOURCES

STATE OF HAWAII

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Dated: Honolulu, Hawaii, _____, 2005.

PETER T. YOUNG, Chairperson

TIMOTHY E. JOHNS, Member



KATHRYN WHANG INOUE, Member

TED K. YAMAMURA, Member

TOBY MARTYN, Member

RON AGOR, Member

GERALD DEMELLO, Member

BOARD OF LAND AND NATURAL RESOURCES

STATE OF HAWAII

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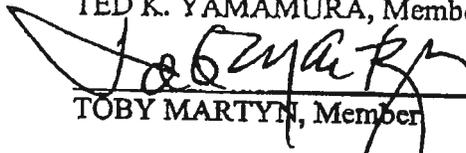
Dated: Honolulu, Hawaii, June 9, 2005.

PETER T. YOUNG, Chairperson

TIMOTHY E. JOHNS, Member

KATHRYN WHANG INOUE, Member

TED K. YAMAMURA, Member



TOBY MARTYN, Member

RON AGOR, Member

GERALD DEMELLO, Member

BOARD OF LAND AND NATURAL RESOURCES

STATE OF HAWAII

In The Matter of a Contested Case)	DLNR File HA-04-01
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**BOARD OF LAND AND NATURAL RESOURCES' FINDING OF FACT,
CONCLUSIONS OF LAW AND DECISION AND ORDER**

The Board of Land and natural Resources, having reviewed the files in the case, and having considered the arguments and exceptions made by the parties in this case, hereby **ADOPTS** as its own, the Hearing Officer's **RECOMMENDED FINDINGS OF FACT AND CONCLUSIONS OF LAW, DECISION, AND ORDER** filed on January 27, 2005. (The foregoing findings of fact, conclusions of law, decision, and order may be signed in counterparts.)

Dated: Honolulu, Hawaii, _____, 2005.

PETER T. YOUNG, Chairperson

TIMOTHY E. JOHNS, Member

KATHRYN WHANG INOUE, Member

TED K. YAMAMURA, Member

TOBY MARTYN, Member

RON AGOR, Member

Gerald De Mello

GERALD DEMELLO, Member

EXHIBIT "C"

October 22, 2009 Findings of Fact
And Conclusions of Law

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF HAWAII

STATE OF HAWAII BY ITS)	CIVIL NO. 07-00516 SPK-LEK
ATTORNEY GENERAL,)	
)	
Plaintiff,)	
)	
vs.)	
)	
THE NATURE CONSERVANCY;)	
YEE HOP, LIMITED; THE UNITED)	
STATES OF AMERICA; ET AL.,)	
)	
Defendants.)	
)	
and)	
)	
STEVE'S AG SERVICES, LTD., ET)	
AL.,)	
)	
Defendants-Intervenors.)	
_____)	

FINDINGS OF FACT AND CONCLUSIONS OF LAW

I. INTRODUCTION

This is a quiet title action regarding ownership of a parcel of land located in the South Kona area of the Big Island of Hawai'i. The Court conducted a non-jury trial in this case in late-February through early-March of 2009. After a period for preparation of transcripts, the parties filed post-trial briefing in April 2009.

William Wynhoff appeared at trial for Plaintiff State of Hawai'i. C. Michael Heihre appeared at trial for Defendant Yee Hop, Limited ("Yee Hop"). Ronald Self and C. William Chikasuye appeared at trial for Defendants-Intervenors Steve's Ag Services, Ltd., Steven Baczkiewicz, Contract Milling, Wesley McGee and Raymond McGee (collectively, "Steve's Ag"). Assistant United States Attorney Edric Ching appeared at trial for Defendant United States of America.¹ Tom Leuteneker had appeared earlier in the action for Defendant Nature Conservancy.²

Pursuant to Fed. R. Civ. P. 52(a), the following constitute the Court's Findings of Fact ("Findings") and Conclusions of Law ("Conclusions"). Although the Court has not labeled paragraphs specifically as Findings or Conclusions, such labels are not necessary; the nature of the Findings and Conclusions to follow is apparent. *See Tri-Tron Int'l. v. A.A. Velto*, 525 F.2d 432, 435-36 (9th Cir. 1975) ("We look at a finding or a conclusion in its true light, regardless of the label that

¹ The United States has consistently taken no position in this action, although it also has not affirmatively disclaimed interest in the subject parcel so as to divest this Court of federal jurisdiction under 28 U.S.C. § 2409a(e). Its position is that since there is "a colorable argument that the Subject Property is part of Kahuku [and thus now part of Hawai'i Volcanoes National Park], the United States does not believe it can disclaim an interest in the Subject Property." [Docket entry ("Doc.") 66, Position Statement of the United States of April 24, 2008, at 3].

² The Nature Conservancy has disclaimed "any and all right, title, claim, or ownership in and to the property" at issue, and has made no further appearances since February of 2008. [Doc. 46].

the district court may have placed on it. . . . the findings are sufficient if they permit a clear understanding of the basis for the decision of the trial court, irrespective of their mere form or arrangement.") (citations omitted); *In re Bubble Up Delaware, Inc.*, 684 F.2d 1259, 1262 (9th Cir. 1982) ("The fact that a court labels determinations 'Findings of Fact' does not make them so if they are in reality conclusions of law.").

II. FINDINGS AND CONCLUSIONS

A.

This is a quiet title action brought by the State of Hawai'i, and removed to this Court by the United States, regarding the ownership of a roughly trapezoidal-shaped parcel of land of approximately 171.813 acres ("the Parcel") located in the South Kona area of the Big Island of Hawai'i. Jurisdiction is based upon 28 U.S.C. § 2409a. Venue in this district is proper under 28 U.S.C. § 1402(d). The State of Hawai'i named and served known and unknown persons who might claim an interest in the Parcel pursuant to Haw. Rev. Stat. § 669-2. Default of unknown persons was entered by the State Circuit Court before the action was removed to this Court.

Years ago, the Parcel was given a Hawai'i tax map key number, which is TMK (3) 8-8-01-008. [Exhs. 29, 43]. For purposes of this trial, the TMK number

is used to reference the location of the Parcel, and not as the prior indication as to the correct ownership of the Parcel.

The adjacent landowners with potential claims to the Parcel's title (besides the State of Hawai'i) are the United States and the Nature Conservancy to the east (mauka), and Yee Hop to the west (makai). The Parcel is bounded on its east by the ahupua'a of Kahuku, which is now part of Hawai'i Volcanoes National Park (with the Nature Conservancy having a small interest in a relevant part of Kahuku). The Parcel is bounded on the west by the ahupua'a of Alika and Papa 1. Yee Hop now owns those portions of Alika.

The Court has spent considerable time since the trial reviewing the evidence and considering the arguments presented both before trial and in the post-trial briefing. Ultimately, the Court finds and concludes that the Plaintiff State of Hawai'i has met its burden of proof to demonstrate that it should be awarded title to the Parcel. *See, e.g., Hustace v. Jones*, 629 P.2d 1151, 1152 (Haw. App. 1981) ("in an action to quiet title, the burden is on the plaintiff to establish his title to the land.").

B.

Three basically different positions as to the title were asserted.

First, Defendant-Intervenor Steve's Ag, motivated by reasons set forth in

prior Court orders [*e.g.*, Doc. 63], asserted that the Parcel is (or always was) actually part of the ahupua'a of Kahuku. If so, the Parcel had (perhaps unknowingly) been conveyed in 2003 to the United States and the Nature Conservancy by the Damon Estate, which owned relevant portions of Kahuku at the time. Steve's Ag relied in part on a description of Kahuku in Certificates of Boundaries No. 85 ("CB85") [Exhs. 4, 5], which was based on a survey conducted by D.H Hitchcock in 1875 and his corresponding Registered Map ("R.M.") 1112. [Exh. 32]. The relevant area was surveyed (or re-surveyed) in 1902 or 1903, as set forth in R.M. 2171. [Exh. 33].

Second, Defendant Yee Hop asserted that the Parcel is part of Alika and was intended to have been conveyed or granted to others (predecessor owners) in the early-1900's as parts of leases and subsequent sales of five "Alika Homestead" lots from the Territory of Hawai'i to those predecessor owners. Those predecessor owners ultimately conveyed the Alika Homestead lots to Yee Hop (although it is unclear whether there were intermediate owners). If the Parcel is included within those Alika Homestead lots, then Yee Hop contends that it now should have title to most of the Parcel (but not including a small southern portion of the Parcel adjacent to "Papa 1," which is south of Alika). Yee Hop relies primarily on descriptions of the eastern boundary in those conveyances (descriptions reading "to

ahu on Kahuku boundary" and "along Kahuku to ahu"), and on what it claims was an intent by the Territory of Hawai'i to have conveyed property up to the actual border of Kahuku.

Third, the State contends that the Parcel is neither part of Kahuku, nor property that was conveyed to the predecessor owners. Rather, it contends that when the Territory of Hawai'i conveyed the Alike Homestead lots to those predecessor owners it only conveyed a specific amount of land as described by metes and bounds. There was a mistaken description of the eastern (mauka) borders. The parties thought the eastern borders were along the Kahuku border, but it was realized at some point later that the Kahuku border was actually about 1000 yards to the east. What was left (even if left inadvertently) is a government remainder that was never actually conveyed to anyone and thus belongs to the State by operation of law.

The existence of such government remainders are well-known in Hawai'i, and are perhaps an inevitable result of Hawai'i's unique land history, and the measurement and mapping techniques of the late-1800's and early-1900's. See *Hustace*, 629 P.2d at 1152 ("the original surveys of land commission awards are frequently inaccurate; sometimes overlap; and sometimes leave gaps between apparently adjoining properties."). If original Kingdom, governmental, Territorial,

or State land was never actually awarded or conveyed, such land is State land. *See, e.g., State by Kobayashi v. Zimring*, 566 P.2d 725, 731 (Haw. 1977) ("all land not awarded or granted remains public lands[.]").

In short,

- If the Parcel is (or was) in Kahuku, then the State's claim fails (and Steve's Ag's position is correct and thus the Parcel belongs to the United States and the Nature Conservancy);

- If the Parcel is (or was) in Alika and Papa 1 and was conveyed as part of the Alika Homestead lots in the early 1900's to predecessor landowners, then the State's claim fails (and Yee Hop's position is correct and Yee Hop should have title to the Alika portions of the Parcel);

- If, however, the Parcel is neither in Kahuku, nor is it property that was conveyed by the Territory of Hawai'i as part of conveyances of the Alika Homesteads, then the State's claim is correct and the Parcel is a government remnant belonging to the State.

C.

The Court gives no preclusive effect to the prior June 2005 administrative decision by the State Board of Land and Natural Resources, at least as to the merits of the present quiet title dispute. Although the issues regarding title of the Parcel

were presented to an administrative hearings officer [Exhs. 219, 220], the record reflects that the administrative hearings officer's ultimate decision was that he had no jurisdiction to decide title matters (and thus had no jurisdiction to make or recommend findings regarding the penalties then at issue against Steve's Ag). Even if that administrative decision was adopted and then reviewed by a State Circuit Court, the only administrative finding or conclusion that would bind this Court would be that finding of no jurisdiction to quiet title. Any other findings or conclusions by the hearings officer as to predicate facts or law are not necessarily binding on this Court. Exhibits 219 and 220 remain part of the record, but are useful only for procedural background purposes.³

D.

The ahupua'a of Kahuku was conveyed in 1861 by Royal Patent No. 2791 to C.C. Harris, according to its ancient boundaries. [Exhs. 3, 39]. The boundaries of Kahuku were certified in 1876 on CB85. Kahuku was eventually conveyed by the Damon Estate to the United States and the Nature Conservancy in 2003. [Exh. 6]. That conveyance from 2003 described Kahuku as the "Portion of land(s) described in and covered by Royal Patent Grant Number 2791 to C.C. Harris, being Tax Key

³ The Court notes and overrules the State's objection [Doc. 171] to Steve's Ag's post-trial submissions of State Circuit Court orders and other documents regarding the administrative proceedings.

designation (3) 9-2-001-002, and containing an area of 115,652.968 acres, more or less." [Exh. 6, at 5].

The Court finds that the descriptions in CB85 from 1876 (and R.M. 1112) are unreliable in establishing the precise metes and bounds geographic boundaries of the ahupua'a of Kahuku, at least as to the areas relevant to the Parcel (any *other* courses or descriptions on CB85 were not the subject of this action). If followed literally as measured by CB85's chains and sometimes imprecise compass headings, the boundaries do not close; they could be off by over 5000 feet. [*E.g.*, Exhs. 31, 41; Testimony of Kodani of March 5, 2009, Transcript ("Tr.") vol. 4, at 12-23]. However, CB85 remains useful for historical and other purposes. For example, most of the original Hitchcock ahu laid in 1875 are valuable even today in current surveys.

The ahupua'a of Alika and Papa 1 were retained by the King in the Great Mahele, and were listed as Government lands in 1848. [Exh. 39]. In 1903, the Territory of Hawai'i leased five Alika Homestead lots by right-of-purchase leases. [*Id.*; Exhs. 9, 12, 15]. It similarly leased Papa 1 in 1902. [Exh. 19]. Upon fulfillment of conditions, those parcels were then sold to the lessees from 1907 to

1914. [Exh. 39; Testimony of Collins of Feb. 24, 2009, Tr. vol. 1, at 61-66].⁴

Kanakanui and Wright most likely made mistakes in their settings in 1902 or 1903 of the six ahu marking the eastern (mauka) border of the Papa 1 and Alika Homestead lots as depicted on R.M. 2171 (and later also included on R.M. 2468). They probably thought they were marking course 14 of CB85. Wright realized the mistakes in his mapping or re-survey in 1908. [Exhs. 23, 318; Testimony of Siarot of March 3, 2009, Tr. vol. 2, at 46-58, 79-82].

As evidenced by markings on Wright's original R.M. 2468 from 1909⁵ and Siarot's testimony, the actual relevant Kahuku boundary is the line on R.M. 2468 that runs from elevation 5820⁶ to elevation 5387⁷ on R.M. 2468. This is the blue

⁴ Exhibit 39 (Report of Collins) mistakenly lists Alika Homestead lots 4 and 5 as being sold in 1905. [Exh. 39, at 3]. The record, however, reflects that those lots were sold in 1914. [Exh. 17; Tr. vol. 1, at 64-65].

⁵ See, e.g., Exh. 312 ("ahu *taken by Wright* in 1903 as being Hitchcocks") and Exh. 317 ("ahu *taken by S.M.K.* in 1902 as being Hitchcock's" and "ahu SMK") (emphases added).

⁶ Elevation 5820 is marked as "Hitchcock's ahu" on R.M. 2468 [Exhs. 34, 44] or as "Hitchcock's ahu Wright" on the original (1909) version of the map [Exhs. 210D-1, 316].

⁷ Elevation 5387 is marked as "Hitchcock's ahu" on R.M. 2468 [Exhs. 34, 44] or as "Hitchcock's ahu Wright" on the original (1909) version of the map [Exhs. 210D-1, 311].

line depicted on page 25 of Yee Hop's Written Closing Argument [Doc. 166].⁸ This is meant to be along course 14 of CB85. [See Exh. 312 and the "14" highlighted in the green box on page 39 of Yee Hop's Written Closing Argument [Doc. 166]]. In this regard, the Court favors the testimony and opinions of Plaintiff's witnesses Siarot and Kodani over that of Defendant-Intervenor's witness Christensen. The Court is convinced that R.M. 2468, and the survey work that went into its preparation, renders it reliable (at least for purposes of ascertaining the Kahuku border of the Parcel at issue here). [E.g., Exhs. 23, 24, 25]. Thus, the Parcel is not part of Kahuku. The Parcel was not conveyed to the United States and the Nature Conservancy in 2003. Steve's Ag's position fails.

E.

When the Alika Homestead lots were conveyed to J. Deniz (Grant 5045 of Alika lot 1, in 1907), to W.H.G. Arnemann (Grant 5092 of Alika lots 2 and 3, in 1908), and to R. von S. Domkowicz (Grant 6102 of Alika lots 4 and 5, in 1914), they were conveyed by metes and bounds and precise acreages (669.00 acres, 599.0 acres, 599 acres, and 1198 acres) as described in the prior 1903 right-of-purchase leases. Those 1903 leases were based on R.M. 2171 and the ahu placed

⁸ The Court commends Yee Hop's counsel for the manner and presentation of the many old maps and documents submitted in this case. The presentation at trial greatly assisted the Court's understanding of the evidence and issues.

by Kananui and Wright in 1902 or 1903. We now know that the descriptions of the eastern borders of the grants ("to ahu on Kahuku boundary" and "along Kahuku") were wrong. But they reflected the knowledge at the time in 1903; everyone *thought* that it was the Kahuku boundary. They were descriptions of the border of what was conveyed. But, even if the *descriptions* were wrong, this does not necessarily change the actual border of the acreage that was conveyed. (This is also true with Grant 4914 in 1905 of Papa 1, which concerns the portion of the Parcel not claimed by Yee Hop. [Exhs. 19, 21].)

While it is likely true that there was no intent to create a government remainder, a remainder was indeed created by operation of law. The descriptions could easily have read "to ahu on [*what we think* is] the Kahuku boundary" and that would also reflect the intent of the parties.

The Court gave much thought to the idea that – when the parcels in Alika Homesteads were conveyed to the predecessors-in-title of Yee Hop with the intent to convey up to the “border of Kahuku” – the intent was to convey land that is now included within the Parcel. The Court also considered whether, as a matter of equity under a theory of estoppel or mistake, the State should be somehow estopped from claiming that the remnant is now State land, considering that (1) the Territory may have originally intended to convey those portions of Alika to Yee

Hop's predecessors-in-title, and (2) any original error in 1902 and 1903 by Kanakanui and Wright in locating and placing ahu (as depicted on R.M. 2171) would have been the Territory's error. Perhaps the Territory "misrepresented" what it was conveying (especially the grant of Alika Homestead lots 4 and 5 to R. von S. Domkowicz in 1914 – which was *after* the Territory would have had at least constructive notice that the property descriptions in the Alika Homestead conveyances were partially incorrect). Maybe a theory akin to constructive fraud could have applied.

Ultimately, however, the Court is convinced that those predecessors (J. Deniz, W.H.G. Arnemann, R. von S. Domkowicz, F. Buchholtz) got what they thought they were getting and that the metes and bounds markings and area measurements (*e.g.*, "599.0 acres") control over the mistaken descriptions of one border (*e.g.*, "to the border of Kahuku"). The areas were fenced on the border marked with the "Kanakanui/Wright 1902/1903" ahu as described in the grants. Some form of that fence, and a replacement fence, apparently still exists today. [Exhs. 10, 13, 16, 223; Testimony of Constantinides of March 5, 2009, Tr. vol. 4, at 59-68]. *See State v. Hawaiian Dredging Co.*, 397 P.2d 593, 607(Haw. 1964) ("If considered ambiguous, the construction given a deed by the parties to it will be given effect unless it contravenes some rule of law") (citations omitted); *City &*

County of Honolulu v. Bennett, 552 P.2d 1380, 1387 (Haw. 1976).

Even if there could be an equitable basis for estopping the State because of a prior misrepresentation by the Territory, such an equitable claim would enure to the *predecessors*-in-ownership to Yee Hop, not to Yee Hop. There is no indication that any misrepresentation was made to *Yee Hop*. All indications are that Yee Hop got what it thought it was getting in 1946 [Exh. 18]; perhaps it only affirmatively asserted a possible interest in title in the Parcel after this quiet title action arose and after carefully reviewing the legal situation with wise counsel. No one from Yee Hop testified, for example, that it previously thought it owned the disputed Parcel when the koa trees were (or might have been) harvested by Steve's Ag. In any event, after due consideration, the Court ultimately rejects a claim based on equity.

The proposition that Yee Hop's border is "the Kahuku border" is logically different from the proposition that "the Kahuku border" is Yee Hop's border. If "the Kahuku border" was "re-marked" 1000 feet further away to the east, it does not necessarily change the location of Yee Hop's border. Yee Hop's border is fixed.

And so the Court falls back on the general principle in such survey matters that monuments control over descriptions. *See, e.g., Application of Sing Chong Co., Ltd.*, 617 P.2d 578, 580 (Haw. App. 1980). When the Alika Homestead

parcels were conveyed to the predecessors-in-title to Yee Hop, they were conveyed by metes and bounds and precise acreages. Again, the conveyance "to the Kahuku border" was "to [what we *think*] is the Kahuku border." In ascertaining the intent of the parties from 1903 in awarding the leases, and up to the last sale in 1914, the Court finds and concludes that the intent was to convey particular parcels up to the marked boundaries (even if the parties mistook those boundaries as being on the Kahuku boundary). The parties to those grants intended to convey set acreages just as much as they intended there not be a gap. A remnant was created, albeit inadvertently. The remnant is now State land. *See, e.g., Zimring, 566 P.2d at 731.* The State prevails. Title to the Parcel is awarded to the State.

III. CONCLUSION

The Plaintiff State of Hawai'i has proven that it should be awarded title to the Parcel. Defendant Yee Hop has not met its burden to prove that it should have title. Defendant-Intervenor has failed to prove that title belongs to the United States and the Nature Conservatory. Plaintiff State of Hawai'i is the prevailing party. The parties shall bear their own costs and fees.

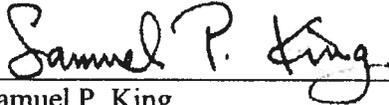
The Court assumes that Plaintiff State of Hawai'i might want a form of judgment suitable for purposes such as recording or otherwise providing proof of title. Therefore, Plaintiff State of Hawai'i is directed within 14 days to submit a

proposed form of judgment for Court review and approval, and to serve a copy of such a proposed form of judgment on the other parties appearing in the action. The Court will consider any objections to the proposed form of judgment filed within 7 days thereafter.

IT IS SO ORDERED.

DATED: Honolulu, Hawai'i, October 22, 2009.



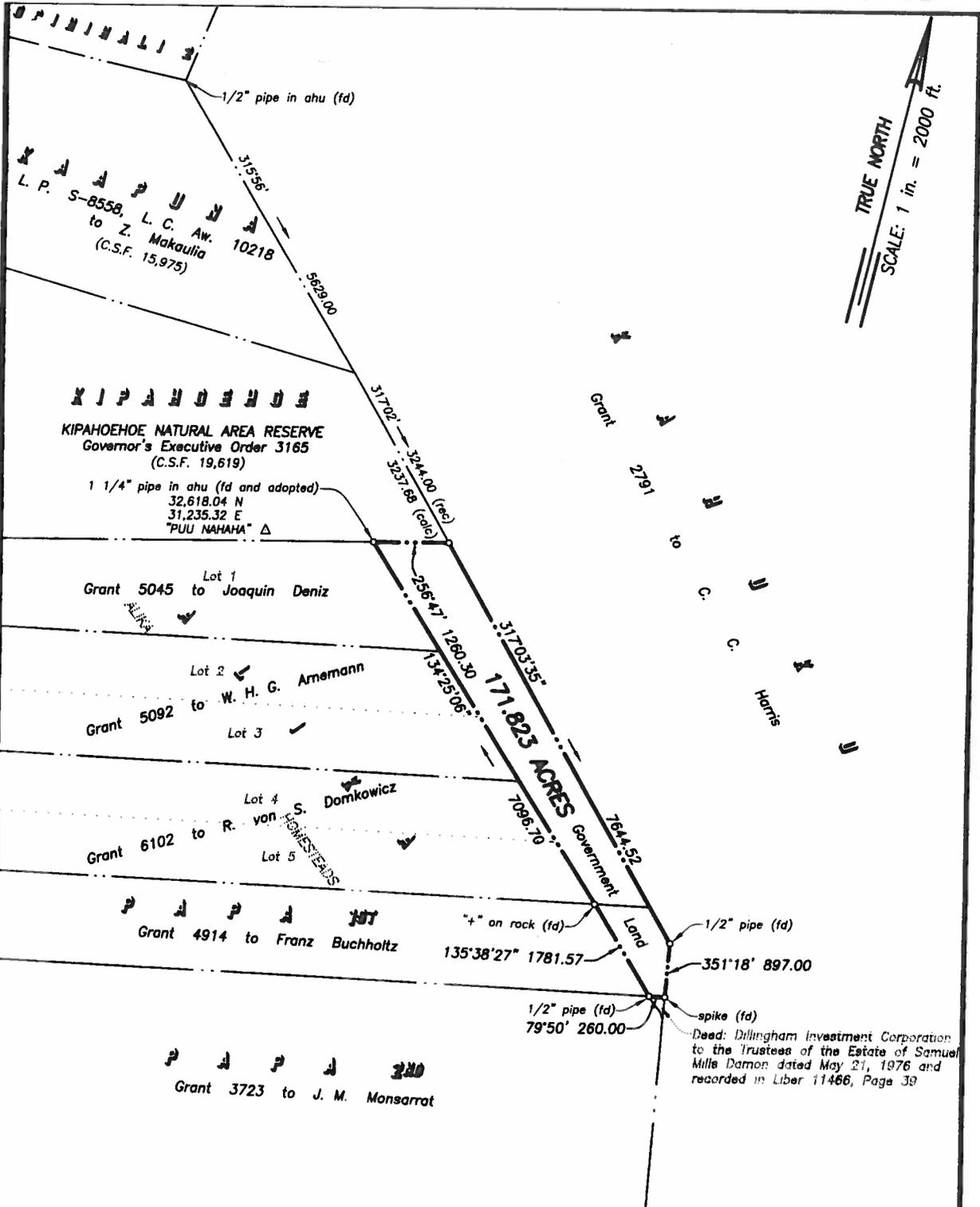


Samuel P. King
Senior United States District Judge

State v. Nature Conservancy et al., Civ. No. 07-00516 SPK-LEK, Findings of Fact and Conclusions of Law

EXHIBIT "D"

Map of State Property
TMK: (3) 8-8-1:8



**PORTION OF
 THE GOVERNMENT LANDS OF ALIKA AND PAPA 1st**
 Alika and Papa 1st, South Kona, Island of Hawaii, Hawaii

Scale: 1 inch = 2000 feet

Job H-347(06)
 C. BK.