

JOSH GREEN, M.D.
Governor

SYLVIA LUKE
Lt. Governor



SHARON HURD
Chairperson
Board of Agriculture & Biosecurity

DEAN M. MATSUKAWA
Deputy to the Chairperson

State of Hawai'i
DEPARTMENT OF AGRICULTURE & BIOSECURITY
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April 28, 2026

Board of Agriculture and Biosecurity
Honolulu, Hawaii

Subject: Request for:

1. Approval of the proposed HAR Chapter 4-8 Agricultural Loan Division Amended Rules bases on the March 8, 2026 Public Hearing.
 - Public Hearing Minutes and Testimony
 - HAR Chapter 4-8 Summary of Change including Public Hearing feedback
 - HAR chapter 4-8 Proposed Rules Amendments and Compilations
2. Authorization to finalize and post the amended rules on the Governor's HARPS portal for further review and comments.

I. Background

The Hawaii Department of Agriculture and Biosecurity, Agricultural Loan Division is proposing amendments to Chapter 4-8, Hawaii Administrative Rules for the Division to satisfy ACT 069 signed by the governor on May 19, 2025.

HAR Chapter 4-8 title is amended and compiled to address challenges and barriers that agricultural producers face in accessing capital necessary to cover the rising land and water costs, labor shortages, and infrastructure needs for farmers, ranchers, and to expand their current operations, The ACT 069 Session Laws 2025, provides for the department to modify the state agricultural loan program rules to ensure equitable access to capital for farmers of all scales, with a focus on enabling sustainable, community-based and diversified production by small and mid-sized farms is essential to further Hawai'i's food security, economic resilience and self-sufficiently. Most of the participants would meet the statutory definitions of small businesses.



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II. Summary

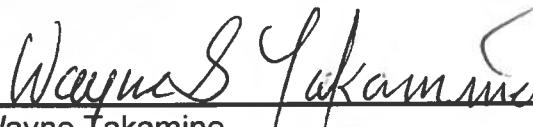
The Agricultural Loan Division program codifies rules for ancillary and to promote agricultural activities in support of local agricultural self-sufficiency by providing resources in all facets of agricultural production, manufacturing, and distribution in the State of Hawai'i.

III. Recommendation

That the Board of Agriculture and Biosecurity:


1. Approval of the proposed HAR Chapter 4-8 Agricultural Loan Division Amended Rules bases on the March 8, 2026 Public Hearing.
2. Allow the Chairperson to proceed in posting the HAR Chapter 4-8, HAR rules, on the governor's HARPS web portal for further review and comments to be finalized for the Governor's signature.

Respectfully submitted,



Wayne Takamine
Acting Agricultural Loan Officer VI
Agricultural Loan Division

Reviewed and Concurred:



Dean Matsukawa
Acting Agricultural Loan Administrator
Agricultural Loan Division

Attachment- Exhibit "A"

APPROVED FOR SUBMISSION



Sharon Hurd
Chairperson, Board of Agriculture and Biosecurity

Listed below is a summary of the specific proposed changes to:
 Chapter 4-8
 Hawaii Administrative Rules.

HAR chapter 4-8 title is amended to address challenges and barriers that agricultural producers face in accessing capital necessary to cover the rising land and water costs, labor shortages and infrastructure needs for farmers, ranchers, and to expand their current operations. The Act 069 (2025) provides for the department to modify the state agricultural loan program to ensure equitable access to capital for farmers of all scales, with a focus on enabling sustainable, community-based and diversified production by small and mid-sized farms is essential to further Hawaii's food security, economic resilience and self-sufficiency. Most of the participants would meet the statutory definition of small businesses.

The following are the changes under Chapter 4-8 Hawaii Administrative Rules are to be considered:

§4-8-1 "Definitions":

- "Cooperatives" definition is added
- "Department" adds biosecurity to department
- "Division" adds biosecurity to division
- "Food hub" definition is added
- "Import replacement loans" definition is added
- "Line of credit" definition is added
- "Loan officer" adds business loan officer and agricultural loan officer

§4-8-6 "Application for loans" Biosecurity is added to department. Address, Hilo office address is updated to "75 Aupuni Street #104," Maui office is deleted, Kauai office is deleted.

§4-8-8 "Letters of decline" requirement is updated to one (1) credit denial from private lenders, members of farm credit systems, and the Farm Service Agency. No denials for certain new farmers

§4-8-12 "Interest rates" are updated to a flat rate of four (4) per cent for most qualified classes and three (3) per cent for new farmers and others specified loan classes. Interest and conditions for emergency loans will be determined by the Department of Agriculture board.

§4-8-13 "Collateral" procedures are updated to change farmers home administration to Farm Service Agency.

§4-8-15 "Emergency loans" purpose is defined as providing relief and rehabilitation to distressed agricultural producers. The board of agriculture and biosecurity's authority is clarified.

§4-8-20 "Loans to farmers' cooperatives, corporations, food hubs, and food manufacturers" loans are defined including terms, limits, qualifications for farmers, ranchers, cooperatives or corporation. Also covered are facility loans, operating loans,

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exportation of crops and livestock. Food Hub definitions and requirements are added.

- §4-8-21 "Line of credit loans" has been added to provide agricultural producers with liquidity to cover working capital and operational needs with. Line of credits loans can be secured by sufficient crops, livestock, and facility assets or capital and real estate assets. Definitions and procedures have been added to further describe the line of credit purposes, procedures and usages including repayment, security, finance and charges, annual review. Also defined are requests that require approval by Chairperson of the Department of Agriculture and Biosecurity
- §4-8-22 "Import replacement loans" has been added to encourage farm expansion to grow import replacement crops. Crops are to be produced sufficient scale on a regional, island wide, or statewide markets. Applicants shall be a qualified farmer with sound credit and ability to repay the loan. Limit \$2,500,000 at 3 percent interest. Per year.
- §4-8-43 "Subchapter 3" is deleted since the North Kohala loan and Grant Program has sunset.



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**Minutes of the Department of Agriculture and Biosecurity (DAB)
Public Hearing
HAR Chapter 4-8 DAB Agricultural Loan Division
HAR Chapter 4-61 DAB Food Hub Grant Program
March 9, 2026**

CALL TO ORDER – The meeting of the Department of Agriculture and Biosecurity Public Hearing was called to order on March 9, 2026, at 6:00 pm by Department of Agriculture and Biosecurity Chairperson, Sharon Hurd. The meeting was conducted virtually via Zoom and in-person from:

*State of Hawaii, Department of Agriculture and Biosecurity Boardroom
1428 S. King Street, Honolulu*

Members Present In-Person:

- Sharon Hurd, Chairperson, Department of Agriculture and Biosecurity
- Wayne Takamine, Agricultural Loan Officer
- Dr. Joey Ooka, Quality Assurance Division
- Jason Azus-Richardson, IT Specialist
- Francis Duran, Administrative Assistant

Virtually Present: Roll call/alone

- Sumin Kim
- Zhan Cacho
- Sheila Ringor
- UA Alencastre-Galimba

INTRODUCTION

Chair Hurd welcomed everyone present and opened the meeting with a brief overview of the content of the meeting.

Meeting was to discuss the rules to add to the Statutes of the state as it involves food hubs and introducing new loan programs.

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1 Joey Ooka, Agricultural Marketing Specialist. He is present tonight to answer any
2 questions regarding (HAR Chapter 4-61, Food Hub Grant), and the Food Safety
Modernization Act.

3

4 Wayne Takamine, Agricultural Loan Officer, was introduced.
5 He will share the (HAR Chapter 4-8, Agricultural Loan Division), new rules approved last
6 year and
7 signed by the governor into Act 069 (2025).

8

9 Francis Duran, Administrative Assistant, taking minutes.

10

11 Jason Azus-Richardson, IT, facilitating online participation.

12

13 Chair opened it up for comments about the (HAR Chapter 4-61) Food Hub rules to our
14 online participants.

15

16 There were no comments.

17

18 Wayne shared the changes to the (HAR Chapter 4-8) loan program.

19

20 Agricultural Loan Act 069 (2025) was approved. Basically, updates the rules and statutes
21 for agricultural loans. It makes the loans easier to access for farmers. One of the major
22 changes is basically a flat rate of 4% for most agricultural producers and 3% for new farmers
23 loans and agricultural certified graduates.

24

25 We also have some new additions. The proposed HAR Chapter 4-61 Food Hub Grant
26 program introduces rules that actively manages the aggregation, distribution and marketing
27 agricultural products from local and regional producers and operations.

28

29 A new category of loans – “Import Replacement” loans – which means loans that provide
30 credit for qualified farmers to participate with crop expansion programs initiated by the
31 state on a large-scale basis with the specific intent to compete or replace import crops
32 into the state.

33

34 Instead of importing corn, for example, we start growing our own corn and that
35 eliminates shipping and makes it better for our economy that we have farmers working.

36

37 We also have added a “Line of Credit”: program which means a secure revolving loan
38 with a credit limit for farm operational expenses and improved farm operations.

39

40 These are some of the things we are adding to the (agricultural loan division) rules and
41 statutes.

42

43 Wayne opened it up for questions to our participants. There were no questions.

44

45 As a recap, the statutes were approved by the governor (2025). We’ve gone through the
46 process of having it reviewed by our Department of Agriculture and Biosecurity Board (BAB)
47 and it was approved. We also presented it to the Small Business Regulatory Review
48 Board (SBRRB), which reviewed and approved the rules that were posted vetted on the
49 governor’s HARPS website.

43 And now we are near the end of the rules changing phase. We are in the public hearing process. We now want to take comments from the public so we can further amend the rules as we go forward.

3

4 From there, we'll have it re-reviewed by the Board of Agriculture and Biosecurity (BAB) board, SBRRB, then back to the governor's HARPS office and portal. If it's all approved through this phase, the changes will be established as our new rules.

7

8 One of the major changes in the rules, is interest rates, in the past, to set our interest rate, we would take a prime lending rate of a local bank and discount it by one point. That would be our interest rate for six months. When interest rates were high at say 7 percent or 8 percent, we would be lending out at 6 percent or 7 percent. The new rule sets most of the categories of loans at a flat 4 percent rate. We do have loans for 3 percent for new farmers and selected programs.

13

14 Qualified farmers would have a flat rate of 4 percent. Limits have been raised for asset purchases and operating expenses to 1.5 million. Terms for operational loans are at 10 years, or asset purchases and capital improvement of up to 40 years.

17

18 A requirement for the loans is that you be a state resident for 3 years. In most cases, 3-years of experience is required for most loan programs.

19

20 For new farmer loans, you have a maximum loan amount of \$750,000 with an interest rate of 3 percent, the maximum term is 7, 10, 20 and 30 years depending on the purpose of the loan.

22

23

24 Farm Innovation loans have 3 percent interest and a maximum of \$75,000 with a term of 10 years.

25

26 The Line of Credit loan programs are introduced to help with working capital. One option is to secure the line with assets of the farm, including crops and receivables with a limit of 100,000, 4 percent interest at 5 years terms. The other line of credit option is secured by real estate or comparable, with 4 percent interest at 10 years.

30

31 The Chair commented:

32

33 The Ag Loan team really pushed hard for these changes, because our Ag Loan program was archaic. Credit limits were about 50,000 range, in a sense not really serving the industry, not serving the farmers and ranchers. They worked hard to get the credit limits up, like land purchases, the maximum was 800,000. Land in Hawaii is expensive. The amount now is up to 1.5 million.

38

39 Wayne added:

40

38 "Import Replacement Loans" – these are usually big projects that are able to take advantage of economy of scale. If we wanted to reduce the imports from popular crops like basil and sweet potato, we could loan up to 2.5 million. You'd have to have excellent credit and an excellent business plan, and the state will have to support it.

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AB

3

4 Chair commented we import so much of our dairy. Could we do a loan for that?

5

6 Wayne responded, last fiscal year, we did a dairy farm on the Big Island, they were
7 approved for a pretty good sized loan under Act 069.

8

9 Chair commented, this is the intent of that particular (Import Replacement) line-item loans
exists because we import so much of what we eat here, dairy being included, so now we
have this available.

11

12 The other reason to do Import Replacement Loans is because imports bring in bugs and
13 the more we can reduce the number of imports the better job we have of reducing the
14 biosecurity measures and we reduce the number of insects and pests that could
15 possibly be hitch hiking. So that's the intent behind the Import Replacement Loan and
16 the urgency that we should convey that we need more people to take advantage of this
17 because we understand lack of resources, lack of capital is why you go for the high
18 revenue plants and crops that you grow.

19

20 Basil is one. How much basil do we eat? Not much right? We have the best basil in the
21 world. So the basil farmers continually export, export, export. They supply pretty much
22 the whole USA with basil and Canada, where there's a lot of people that enjoy basil but
23 they are so cold for most of the year that they can't grow it. So that's the kind of crop
24 that really we're happy for, we support, we think it's really wonderful but cannot get this
25 loan because there's no need for importing replacement for basil.

26

27 If you're a grower of cucumbers, tomatoes, onions. Go to the supermarket and look
28 around and see which of those crops are from Chile. A lot of fruits come from Chile or
29 New Zealand or places that are not local. I'm not saying they bring in bugs, but the
30 potential is there.

31

32 We don't have to import mangos. We don't have to import lime, We don't have to import
33 oranges. We can grow them using this loan, you could certainly expand your farm
34 production and you have a pretty much guaranteed customer. So guess what, we
35 import it. So we should be buying local cause it matters.

36

37 Wayne continued...

38

39 We do have a lot more options now. We can lend out more money. We can lend out at
40 better interest rates. That are right now, we're better than the commercial prime market
rates.

41

42 Wayne asked Chair about the expansion and the growth of local purchasing. And its
43 there. We're doing a better job buying local probably because we are growing more of

1 the food that we eat. I think the pandemic taught us that you can grow the high revenue
2 stuff and its good. It's good for the farmer. While wild mushrooms are a good thing to
3 grow, not many of us eat mushrooms. Think of the schools. We're trying to get our local
4 produce into schools. There's a law that states that 30% of the food the school system
5 needs to buy should be locally sourced, locally grown by 2030. The DOE right now is
6 around 7%.

7
8 Do we really grow what the kids eat? I would love to replace the apples on the plate with
9 a banana. That would be really good. We don't grow apples enough. The other number
10 is we have to go 50% of what we buy by 2050. So the push to grow local is real. We
11 have to start buying more so we can feed our kids. The program is called "Nourish
12 Hawaii's Future" and we can do that by growing more food, buying local, and feeding
13 our students food that's grown here, that's fresher, healthier, and doesn't carry bugs
14 that might come in on the vessels.

15
16 Zhan Cacho from the Big Island had a question.

17
18 *Was there a target number of how many farmers will benefit from these loans you are*
19 *guys are looking at. Is this, based on the numbers, was it based on a specific model, or*
20 *how did you kind of figure out that these types of loans would get better access to*
21 *farmers?*

22 Wayne responded . . .

23 Back when they were creating the bill for these interest rate changes, the interest rate
24 was 6.5% and that is with our discounting of one point from the prime lending rate at the
25 time. Our program wasn't too popular because the interest rates were high even though we
26 discounted it by one percent. Does that answer your question?

27
28 Zhan responded yes.

29
30 Zhan: *Why did we do this?*

31
32 Chair added...

33 DAB felt the need, we weren't competitive. Very few banks, commercial lenders don't
34 really like to lend to agriculture and farmers because of the risk of a disaster or
35 pestilence or something happening was great in our industry. So we do this loan
36 program to make sure that farmers that are serious about farming get the support that
37 they can to take us to that 2030, double our food production. Is that OK Zhan?

38 *Yes. Thank you so much. Thank you for all your great answers and I also appreciate all*
39 *the work that you guys have been doing on this.*

40
41
42
43 Chair: I would like to give the people online a chance to say something.

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1 *I have just a general question. So what outreach is being done to insure that food hub*
2 *developers kind of know that these programs exist. And another thing I saw online was*
3 *that this program was meant to be quote unquote lender of last resort. So I'm wondering*
4 *if you guys would work with private lenders to help finance food infrastructure, is that*
5 *something on your radar?*

6
7 Wayne responded.

8
9 We have programs called loan guarantees, insured loans. That's similar to the Small
10 Business Administration's loan guarantee program. For example, a borrower could go to
11 a private lender, such as Feed the Hunger. Feed the Hunger may have a problem
12 lending out money to a particular borrower. DAB would step in and guarantee the loan.
13 We can guarantee up to 90% of the original loan amount. The lender does not have to
14 worry too much about a default or if the loan is foreclosed. We will guarantee that
15 amount.

16
17 We can also do partnerships. For example, if a farmer wants to purchase land that cost
18 1 million dollars, DAB would come in with 500,000 and FSA would come in with the
19 remaining 500,000. We try to work with other lenders to help the farmer achieve their
20 goals to produce more food.

21
22 As a lender of last resort, we reduced the number of loan denials from two to one. The
23 new farmer loan or emergency loans may not require a loan denial.

24
25 Does that answer your question?

26
27 Yes, thank you.

28
29 *My name is Sheila. I do have a question about the food hub. If the farmers do have the*
30 *capability to supply storage, does the department have an expectation or goals that the*
31 *food sold through these hubs can be more affordable to local consumers?*

32
33 Chair replied: The Department of Agriculture and Biosecurity does not get into the
commercial side, but I'm going to say if you have a food hub, you're probably going to be
less expensive only because the supply chain to the supermarket is farmer-wholesaler-
distributor-supermarket. So all those touch points probably add, they say it's 3%. So then, if
you do the food hub, it goes from the farmer to the food hub, to the consumer. It's like
buying something from the farmers' market, you only have the one touch point.

39
40 We don't get into the commercial side of your business because the liability is there.
41 The assumption, however, is that a food hub makes it easier for a farmer to become
42 food safety certified. At the food hub, they might have freezing capability, they might
43 have cut wrap chill, they might have a dehydrator.

1
2 Not to take away from the FPIN which Wayne was talking about. The FPIN is a "Food
3 Product Innovation Network" which is what the Wahiawa food product center is. And that
4 is a really good idea, Sheila. I'm going to say if you work with that chain, if you're the
5 farmer, and you grow a lot of fruits and vegetables, and you have an excess, you can
6 take it to the FPIN and dehydrate it and you have added value to it. And I can tell you
7 there's a big market for Hawaiian dried fruits. Not so much for vegetables, but dried
8 fruits is a huge market.
9
10 Chair asks Joey:
11
12 We know there's food safety produce on the farm. If I buy it and take it to a dehydrator
13 and I dehydrate it, does the original product need to have been food safety certified to
14 add value to it?
15
16 Joey:
17
18 It depends. It really depends on who the buyer is. So if you are entering a traditional
19 distributor channel, the distributor is going to look toward the end result of who your
20 product is going to, who essentially is going to put it on the shelf. The distributor is going
21 to ask the supermarket or large chain what requirements are to get this product on your
22 shelf? And that's going to get filtered back to the farm. And that is the requirement the
23 farm is going to have to meet.
24
25 It really is up to the end result of who is going to be stocking your product.
26
27 The Chair responds . . .
28
29 So that's a dotted line answer to you, Sheila, because food hub can be less expensive.
30 The state doesn't make any guarantee about that.
31
32 You can be a food hub that has food safety certified to the highest level, and you know
33 what, their market is not Hawaii. Their market is export. The export market is hungry for
34 USA products because we are food safety certified.
35
36 The food hub may make your food cheaper but if you really want to satisfy the ultimate
37 process, you would be food safety certified across all your distribution chains because
38 the export market will pay 35% more than anything you can sell here. Of course, the
39 cost is higher too, but that's the distributor, the importer, that picks up that cost.
40
41 Dubai is like Hawaii where they import 90% of what they eat. They will pay top dollar for
42 dried fruit.
43

All

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1 Joey Ooka spoke about food hubs.

2
3 Farms have different third party audit schemes than distributors and manufacturers. So
4 farms will have good agricultural practices. They grow the food. They harvest, pack and
5 hold.

6
7 For the distributors and manufacturers, its good manufacturing practices, its GMP audit,
8 its what its called. It's a different level. It focuses more like food defense so when chair
9 mentioned food safety all through the line, that is what you will see. If you're going to do
10 USDA Gap, GMP, these are nationally recognized. When you start hitting exports, the
11 international source is GSSI, which is the global food safety initiative, that is what is
12 recognized out of the country. GSSI is the international standard for exports.

13
14 The Chair shares . . .

15
16 One more chance for you, for anybody, to make comments that could possibly be
17 incorporated into the rules. Because the rules are not static until they are approved. So
18 you have that opportunity when these rules go in front of the board of Agriculture and
19 Biosecurity every fourth Tuesday of the month is when we have these board meetings
20 at 9:00am. You're welcome to make comments there. I believe that's pretty much your
21 final opportunity from the public to make testimony changes. Then the Small Business
22 Regulatory Review Board (SBRRB) has the chance to express how these rules would then
impact small business. And then we'll move on to the final stage.

24
25 So after this meeting, if you think I should have asked this question, or I should have
26 said this, a good change would be this, you still have another opportunity. You can
27 submit it as testimony or zoom in again when we have our Board of Ag meeting every
28 4th Tuesday at 9:00am. If you want to show up in person, it is at the Plant Quarantine
29 building on Auiki Street. But the process is really long, but it gives the public every
30 opportunity to tell us what's right and what's wrong before we move forward with the
31 law.

32
33 Wayne invited the listeners to reach out to a loan officer at the Agricultural Loan
34 Division. Their number is 808.973.9460. They can help explain what the process is.

35
36 Joey invited listeners to reach out to him if they have any questions regarding the Food
37 Safety Modernization Act, they can google Hawaii Produce Safety Program. We're here
38 to help the farmers meet Federal compliance standards for the FDA. Their number is:
39 808.832.0685.

40
41 Questions

1 *I have 2 short questions. If it does get approved, does it go into action right away, like*
2 *tonight? Are there any priorities to neighbor islands or is it purely merit based for the*
3 *food hubs program?*

4
5 Act 069 has been approved by the governor, so the revised statutes is active. We've
6 been doing loans and loaned out close to 4.5 million dollars. We've nearly reached our
7 ceiling of revolving credit line for the Agricultural Loan Division. So, we're waiting for this
8 session to conclude and we're hoping the legislature will again renew our revolving line
9 of credit so we can lend more money out.

10
11 Joey addressed the question about neighbor islands.

12
13 According to the permits and priorities, nothing here specifies an outer island preference
14 or non-preference.

15
16 For grant approval:

17
18 Preference shall be given to:

- 19 1) Organizations having demonstrated delivering local produce to local markets.
- 20 2) Qualified applicants that are receiving their first award from the department over
21 multiple award grantees. Department shall now grant more than one award in this
22 program to any applicant in a fiscal year as long as the funding remains available.
- 23 3) Shall be guided by the nature and economic significance of the activity of each
24 grant application. The importance of the grant to the activity success and the
25 potential economic advantage or job creation prospects offered to the state in
26 determining the distribution of funds.

27
28 The chair explains: the total pool of money for grants is 1 million dollars.

29
30 Wayne explained the different categories of loans:

- 31
32 1) Qualified Farmers – they own their own farms. LLC or Corp.
- 33 2) Facility Loans – land purchases, production structures
- 34 3) Operating Loans – fertilizer, pesticides, tractors, equipment
35 Loans upwards of 1.5 million dollars with qualifications
- 36 4) Micro Loans Program – up to 50,000 dollars
- 37 5) Soil & Water Program – up to 750,000 dollars
- 38 6) Emergency Loan Program – Bonafide catastrophe. Emergency proclamation by
39 the governor to activate program.
- 40 7) New Farmer Loans – Farmers who have graduated and certified by Go Farms or
41 have a degree from the University of Hawaii or have worked as a laborer on
42 other farms and have experience to run their own farms. Loans up to 750,000
43 dollars. Interest rate of 3% with no loan denials.

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- 1
- 2 Trainees and college graduates are eligible for loans up to 100,000 dollars with
- 3 3% interest with no loan denials.
- 4
- 5 8) Farm Innovation Loans – Eligible up to 75,000 dollars at 3% interest, 10 year
- 6 maximum term. One loan denial required.
- 7 9) Biosecurity Loans – Eligible up to 1 million dollars at 3% interest, 25 year term,
- 8 with one loan denial.
- 9 10) Import Replacement Crops – Eligible up to 2.5 million dollars at 3% interest, loan
- 10 terms at 10 years.
- 11 11) Line of Credit

12
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14

15 Thank you for tuning in. Your input is valuable and the Department of Agriculture and
16 Biosecurity appreciates your attendance.

17
18 I'd like to thank the governor and the legislators for giving us this package and, my real
19 final word is... come work for us. Go to our website. In the upper right hand corner, there
20 is a tab for careers. Open the tab and look at our openings and would love for you to
21 come and check us out.

22
23

23 Respectfully submitted,

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26
27

28 Francis Duran

Sheila Ringor

March 5, 2026

Chairperson Sharon Hurd
Board of Agriculture and Biosecurity
1478 South King Street
Honolulu, Hawaii 96814

Re: Testimony in Support for Proposed Amendments to HAR Chapter 4-8 and New HAR Chapter 4-61 (Agricultural Loan Program and Food Hub Grant Program).

Aloha Chairperson Hurd and Members of the Board of Agriculture and Biosecurity,

I am writing in support of the proposed amendments to HAR chapter 4-8 and the adoption of HAR chapter 4-61, relating to the Agricultural Loan Program and Food Hub Grant Program.

I believe that amending (HAR) chapter 4-8 is very important given the challenges highlighted by the Board, such as rising land and water costs, labor shortages, and infrastructure needs for farmers and ranchers who are trying to expand their operations. I also believe that increased support for small local farmers and ranchers will benefit Hawai'i in the long run, as our islands continue to face serious food insecurity.

According to a University of Hawai'i at Hilo article titled "Food Sovereignty in Hawai'i," about 85–90% of our food is still imported. Hawai'i is located about 2,506 miles from the continental United States, and any disruption to imported food will greatly affect the people of Hawai'i. With already high rates of food insecurity, as seen by Hawai'i food banks across the islands, disruptions to imports will only deepen that insecurity if we continue to rely so heavily on imported food. As highlighted in "Hawai'i's Vulnerable Food Supply" by Hawai'i Sea Grant and "Study: Food insecurity remains at 'crisis levels' in Hawai'i" by Maui News, emergencies and disruptions such as COVID-19, the Maui wildfires, SNAP cuts, and government shutdowns have only made us more aware of the importance of local food production. I believe that continued support for our local farmers will benefit not only the farmers themselves, but also the State and its people.

I support the addition of HAR chapter 4-61, which will implement the Food Hub Grant Program, as well as proposed changes such as adding a definition of "food hub," updating the "letters of decline" requirement so that only one credit denial from a private lender, a farm credit system member, or the Farm Service Agency is needed (with no denials required for certain new farmers), and updating interest rates to a flat 4% for most qualified classes and 3% for new

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farmers and other specified loan classes. These additional rules and changes will make it easier for small and mid-sized farmers and ranchers to access the capital they need.

Modifying the current agricultural loan program to ensure more equitable access to capital, with a focus on “wider access to institutional and retail markets for small producers and increased consumer access to fresh healthy food,” will help reduce Hawai‘i’s reliance on imported goods by making our local food system more accessible and self-sustaining.

Respectfully submitted,

Sheila Ringor

March 6, 2026

Agricultural Loan Division
Hawai'i Department of Agriculture and Biosecurity
1428 S. King St., Honolulu, HI 96814

RE: Testimony on Proposed Amendments to HAR Chapter 4-8 and Proposed HAR Chapter 4-61

Aloha,

I am a community member on O'ahu submitting written testimony regarding the proposed amendments to Hawai'i Administrative Rules Chapter 4-8 and the creation of Chapter 4-61 governing the Food Hub Grant Program.

I appreciate the Department's efforts to modernize the Agricultural Loan Program in response to the real financial barriers facing local farmers and ranchers. I write today not in opposition, but to ask clarifying questions and raise considerations I hope the Board will address. The underlying themes for most of my concerns and questions are implications that will be put on the new farmers.

Firstly, I would like to address on Interest Rate Changes (§ 4-8-12). I support the intent behind lowering interest rates, particularly the 3% for new farmers. However, I would like to understand how a new farmer will be defined in practice, and whether the Department anticipates sufficient loan fund reserves to sustain these reduced rates long-term without limiting availability.

Additionally, on Reduced Denial letter Requirements (§ 4-8-8), I thought of this as a meaningful step in reducing barriers. I am curious whether the Department has data on how many applicants were previously deterred by multi-denial requirements, and how the exemption for certain new farmers will be applied consistently and equitably.

I truly enjoy this addition of Line of Credit Loans (§ 4-8-20) for farmers managing seasonal cash flow. I would ask the Department to clarify what assets qualify as sufficient collateral for securing a line of credit. Also, what would be the caps on the credit amount by farm size or the loan class?

Lastly, I encourage the Department to share and be transparent on how it will prioritize applications and whether there are extra provisions, if already existing, to support food hubs in rural or underserved communities across neighbor islands, when the Food Hub Grant Program (§ 4-61) is discussed.

Thank you for the opportunity to provide a testimony and for the Department's effort to strengthen Hawai'i's food security and agricultural self-sufficiency. I look forward to hearing the Board's responses to community concerns on March 9, 2026.

Mahalo nui,
Anonymous community member

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ATG

Ua Alencastre-Galimba
Hawaii Department of Agriculture and Biosecurity Agricultural Loan Division
Re: Amendments to HAR Chapter 4-8 and HAR Chapter 4-61
March 6, 2026

Aloha Chairperson Hurd,

Thank you for the opportunity to testify. I am writing in support of the amendments to (HAR) Chapter 4- 8 and the adoption of (HAR) Chapter 4-61. I believe these are important steps in fulfilling the State's sustainability and agricultural self-sufficiency goals both in the short and long-term.

Having grown up on a ranch in a rural part of Hawai'i Island, I understand the difficulties that are inherent in agriculture in Hawai'i. In particular, the high cost of living here (e.g. transportation, food, land costs) are magnified in the context of farming and ranching operations. Economically and environmentally sustainable agriculture in Hawai'i is especially challenging because, for example, there is significant overlap in the land zoned for agriculture and real property values that make purchasing this land impossible for these small and mid-size farmers and ranchers. Land, of course, is one of, if not, the most expensive resource an agricultural operation must manage and be able to access, but it is certainly not the only obstacle a local agricultural operation faces in Hawai'i.

With this context in mind, these amendments and the implementation of the Food Hub Grant Program are positive steps by the Department of Agriculture and Biosecurity to address the many challenges Hawai'i's small and mid-size farmers and ranchers. The broader goal of these amendments is a positive step towards healthier and more sustainable communities because when farmers and ranchers are provided with improved access to agricultural loans, farmers and ranchers are then better able to continue their operations and sell their products within Hawai'i.

For these reasons, I respectfully urge the adoption of the proposed amendments to HAR Chapter 4-8 and (HAR) Chapter 4-61, as these are important initiatives to ensure Hawai'i can sustain its agriculture industry and therefore a sustainable food supply.

Sincerely,

Ua Alencastre-Galimba

Zhanelyn Joy Cacho

Regarding Hawaii Department of Agriculture and Biosecurity Agricultural Loan Division

March 5, 2026

Dear Hawaii Department of Agriculture and Biosecurity Agricultural Loan Division,

My name is Zhanelyn Joy Cacho, and I am a concerned Hawaii resident. I am testifying in support of the amendments to (HAR) Chapter 4-8 and the adoption of (HAR) Chapter 4-61. I believe these are important first steps in supporting smaller and mid-sized farmers and securing food security for our community.

Growing up on the Big Island of Hawaii, I witnessed firsthand the risks of food insecurity, with over 40% of households facing food insecurity, making it one of the most food-insecure areas in the state. A 2012 study by the Office of Planning, Department of Business, Economic Development & Tourism, found that 85-90% of Hawaii's food is imported, making it vulnerable to disasters. We have already seen this with the COVID-19 crisis, which exposed the vulnerabilities in our food system, raising the risk of shipping disruptions and fears of food shortages.

The proposed amendments would help combat these issues by supporting all our farmers and creating Food Hub Programs, which would improve food security, economic resilience, and self-sufficiency. Specifically, amending (HAR) Chapter 4-8 would provide all farmers and ranchers with equitable access to address rising land and water costs, labor shortages, and infrastructure needs. As such, smaller and mid-sized farmers help them remain viable and feed our communities.

Additionally, adopting (HAR) chapter 4-61 would create the Food Hub Program and ensure that funds support the establishment of food hubs. This not only ensures farm viability but also provides wider access to fresh, healthy, locally produced food for our communities.

For these reasons, I respectfully urge the adoption of the proposed amendments to (HAR) Chapter 4-8 and (HAR) Chapter 4-61, as these are important initiatives to ensure Hawaii can sustain its food supply.

Sincerely,
Zhanelyn Joy Cacho

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Department of Agriculture and Biosecurity

Public Hearing: HAR Chapter 4-8 & HAR Chapter 4-61

March 6, 2026

Testimony for HAR Chapter 4-8 Agricultural Loan Division was received from the public on March 10, 2026 by email.

Import Replacement:

"Import replacement loans" means loans that provide credit for qualified farmers intending to farm on large-scale basis with the specific intent to grow crops for the Farm to State program or replace imported crops being brought into the State.

Letters of Decline:

§4-8-8 Letters of decline. a) The statutes specify the number of credit denials that are required for each loan class. Waiver of this requirement means no credit denials are required to qualify for the program. If credit denials are required, they may be accepted from any of the following:

1. Private lending institutions.
2. Members of the Farm Credit System; or
3. Farm Services Agency, United States Department of Agriculture

(b) To be considered for a participation loan, the applicant must receive a credit denial from the participating lender.

Line of Credit:

4-8-20 Line of credit loans. (a) Use of the Account. Line of credit funds shall only be used for authorized agricultural purposes unless written authorization is provided. Written authorization shall only be provided with approval from the Chairperson of the Board of Agriculture and Biosecurity. The program is not required to make advances to borrower under the account and can refuse a request for an advance at any time. The borrower shall not exceed the credit limit and if the credit limit is exceeded the exceeded amount is immediately due and payable. The program at its discretion and with the Chairperson's approval may reduce the credit limit of the line of credit.

(b) Repayment. Line of Credit loans requires monthly interest only payments. If the line of credit has been delinquent for 6 months, the program at its sole discretion may convert the line of credit to an operating loan. The operating loan terms and conditions shall be approved by the Chairperson of the Department of Agriculture and Biosecurity.

(c) Security. Security for line of credit loans shall not exceed 85% of the value of the collateral offered. The program may require additional security to adequately secure line of credit loans or substitute collateral securing the loan provided the substitute collateral offered is of similar value. All changes to collateral securing line of credit loans requires approval by Chairperson of the Department of Agriculture and Biosecurity.

(d) Finance Charges. Interest for line of credit loans shall be based on the amount of outstanding balances on line of credit loans and begins to accrue from the date it is added to the daily balance and continues to accrue until the date the payment is entered into the loan system.

(e) The program shall conduct annual reviews of line of credit borrowers to determine ongoing credit worthiness the review may include personal financial statements, annual tax returns or credit reports.

(f) The program may terminate the line of credit at any time with the approval of the Chairperson of

the Department of Agriculture and Biosecurity. The borrower may terminate the line at any time provided that there is no balance on the account.

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Attachment to Board of Agriculture and Biosecurity Item A-1
4/28/26 Meeting Agenda

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DEPARTMENT OF AGRICULTURE AND BIOSECURITY

Amendment and Compilation of Chapter 4-8

Hawaii Administrative Rules

April 28, 2026

1. Chapter 4-8, Hawaii Administrative Rules, entitled

"Agricultural Loan Program Rules"

is amended and compiled to read as follows:

"HAWAII ADMINISTRATIVE RULES TITLE 4

DEPARTMENT OF AGRICULTURE AND BIOSECURITY

SUBTITLE 2 AGRICULTURAL LOAN DIVISION

CHAPTER 8 AGRICULTURAL LOAN PROGRAM RULES

Subchapter 1 Loan Applications

§4-8-1	Definitions
§4-8-2	Administration of agricultural loan program
§4-8-3	Qualified farmer applicants
§4-8-4	New Farmer applicants
§4-8-5	Sound credit risk
§4-8-6	Application for loans
§4-8-7	Filing fee
§4-8-8	Letters of decline
§4-8-9	Restrictions on loan purpose
§4-8-10	Restrictions on participating loans
§4-8-11	Repayment term of loan
§4-8-12	Interest rates
§4-8-13	Collateral
§4-8-14	Equity contribution
§4-8-15	Emergency loans
§4-8-16	Scope of emergency loans

- §4-8-17 Review, analysis, and recommendation
- §4-8-18 Loan closing
- §4-8-19 Disbursement of loan funds
- §4-8-20 Loans to farmers' cooperatives, corporations, food hubs, and food manufacturers.
- §4-8-21 Line of credit loans
- §4-8-22 Import replacement loans

SUBCHAPTER 2 LOAN SERVICING

- §4-8-25 Administration
- §4-8-26 Right to inspect
- §4-8-27 Borrower responsibilities
- §4-8-28 Assumption of indebtedness
- §4-8-29 Waiver of payment and extension
- §4-8-30 Subordination and partial release
- §4-8-31 Application of payment
- §4-8-32 Refinancing and consolidation
- §4-8-33 Changes in participating loan
- §4-8-34 Default
- §4-8-35 Delinquent and problem loans
- §4-8-36 Attorney general accounts
- §4-8-37 Loans paid in full

SUBCHAPTER 3 NORTH KOHALA LOAN AND GRANT PROGRAM LOAN SERVICING REPEALED

§§4-8-43 to §§4-8-48 Repealed

- §4-8-43 Administration
- §4-8-44 Right to Inspect
- §4-8-45 Borrower's responsibilities
- §4-8-46 Repayment
- §4-8-47 Waiver of payment and extension
- §4-8-48 Refinancing

SUBCHAPTER 1 Loan Applications

§4-8-1 Definitions. As used in this chapter:
"Consolidation" means to reorganize the financing of two or more debts.

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"Cooperatives" corporations, food hubs, and food manufacturers loans means loans for a farmers' cooperative or corporation shall have a majority of its board of directors that dedicate a majority of its time to farming operations.

"Department" means the department of agriculture and biosecurity.

"Division" means the agricultural loan division of the department of agriculture and biosecurity.

"Division head" means the agricultural loan division head.

"Extension" means extending the time within which the installments of principal may be paid.

"Extra payment" means that portion of total prepayments made during the course of the loan through liquidation or sale of secured assets.

"Food hub" means a business or organization that actively manages the aggregation, distribution, and marketing of agricultural products from local and regional producers' operations.

"Import replacement loans" means loans that provide credit for qualified farmers intending to farm on large-scale basis with the specific intent to grow crops for the Farm to State program or replace imported crops being brought into the State.

"Line of credit" means a secured revolving loan with a preset credit limit for farm operational expenses and to improve farm operations.

"Loan officer" means the division's business loan [division] officer and agricultural loan officer.

"Refinancing" means to renew or reorganize the financing of a debt.

"Refund" means that portion of loan funds which was deposited into a supervised checking account and returned to the State.

"Workout" means a plan to solve a delinquent or problem loan. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §155-4)

§4-8-2 Administration of agricultural loan program. Responsibility for administration of the agricultural loan program shall be placed within the

agricultural loan division. [Eff 1/31/85; comp
9/20/86; 9/20/86; comp] (Auth: HRS
§155-4) (Imp: HRS §155-4)

§4-8-3 Qualified farmer applicants. (a)

Qualified farmer applicants shall have two or more years of experience in operating the applicant's own farm, of which most of the time shall have been spent on farming or most of the income shall have been derived from farming.

(b) The qualified farmer applicant's ability to repay the loan shall be based substantially on the operating results of the applicant's prior farming experience.

(c) Qualified farmer applicants shall provide satisfactory proof of farming, including but not limited to, tax returns and general excise tax license.

(d) Qualified farmer applicants shall authorize the department in writing to confirm the applicant's qualifications and any other information. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §§155-2, 155-4) (Imp: HRS §155-1)

§4-8-4 New farmer applicants. (a)

When a new farmer applicant's qualifications are based on farming experience, the experience shall be relevant and contribute significantly towards the new farmer loan project.

(b) New farmer applicants shall provide satisfactory proof of qualifications, including but not limited to, a diploma, college transcripts, and general excise tax license.

(c) New farmer applicants shall authorize the department in writing to confirm the applicant's qualifications and any other information.

(d) The new farmer applicant's equity contribution towards the cost of the project may be by means other than cash. Non-cash equity contribution shall be reasonably valued and contribute significantly towards the project requirement as determined by the division. In accepting cash from loans as equity contribution, these loans shall be placed on standby and repayment shall require the

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approval of the department. [Eff 1/31/85; comp
9/20/86; comp] (Auth: HRS §155-4)
(Imp: HRS §155-10)

§4-8-5 Sound credit risk. To be eligible for a loan, the applicant shall be a sound credit risk with the ability to repay the money borrowed, as determined by the department. The department's determination may be based on projections of income and expense with reasonable assumptions submitted by the applicant. Income from the applicant's farming activities shall be the sole criterion for the department's determination of the applicant's ability to repay the money borrowed. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §155-10)

§4-8-6 Application for loans. (a) The applicant for a loan shall file an application with the department at any of the following locations:

- (1) Agricultural Loan Division
State Department of Agriculture and
Biosecurity
1428 South King Street
Honolulu, Hawaii 96814
(Mailing address: P.O. Box 22159,
Honolulu, Hawaii, 96822)
- (2) Agricultural Loan Division
Department of Agriculture and
Biosecurity
P.O. Box 226
Captain Cook, Hawaii 96704
- (3) Agricultural Loan Division
State Department of Agriculture and
Biosecurity
~~[16E Lanikaula Street]~~
75 Aupuni Street #104
Hilo, Hawaii 96720

~~(4) Agricultural Loan Division
State Department of Agriculture
P.O. Box 700
Wailuku, Maui, Hawaii 96793~~

~~(5) Department of Agriculture
P. O. Box 1671
Lihue, Kauai, Hawaii 96766]~~

(b) The application shall be filed on forms prescribed and furnished by the division. The division requires a completed application for review. Financial statements prepared by an accountant in a format acceptable to the division may be provided as part of the application.

(c) The division may require the applicant to provide supporting documentation for the information submitted in the application.

(d) The division may require the applicant to provide written authorization to verify or otherwise secure relevant information from third parties such as other creditors of the applicant.

(e) The application and any prepared financial statements shall be signed by the applicant or the applicant's authorized representative. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §155-4)

§4-8-7 Filing fee. The department does not charge a filing fee for any application. However, the applicant shall pay for any actual expenses incurred, as provided in section 4-8-18. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §155-4)

§4-8-8 Letters of decline. (a) ~~[The division requires that each direct loan application shall include letters of decline as follows:~~

- ~~(1) The applicant's bank of account (private lender);~~
- ~~(2) One other private lender;~~
- ~~(3) Federal Land Bank Association of Hawaii for classes "A" and "B" loans and for classes "D" and "F" loans where loans are primarily for class "A" purposes;~~

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- ~~(4) Hawaii Production Credit Association for class "C" loans and for classes "D" and "F" loans where loans are primarily for class "C" purposes;~~
- ~~(5) Sacramento Bank for Cooperatives or their authorized representative for class "E" loans; and~~
- ~~(6) Farmers Home Administration of the United States Department of Agriculture.]~~

a) The statutes specify the number of credit denials that are required for each loan class. Waiver of this requirement means no credit denials are required to qualify for the program. If credit denials are required, they may be accepted from any of the following:

- (1) Private lending institutions.
- (2) Members of the Farm Credit System; or
- (3) Farm Services Agency, United States Department of Agriculture

(b) The division requires letters of decline for participating loans. To be considered for a participation loan, applicant must receive a credit denial from the participating [private] lender. [~~and~~] [~~from the Farmers Home Administration of the United States Department of Agriculture.~~] If a substantial part of a proposed participating loan is to refinance a debt held by another private lender, [~~who also has a participating agreement with the State,~~] a letter of decline be required from that lender. [~~also.~~]

~~[(c) To facilitate processing of class "D" emergency loans, the division may accept a blanket letter of decline from a lender to cover a specific commodity group or area which the lender will not finance because of the lender's policy or where the financial situation will not warrant extension of credit by the lender.] [Eff 1/31/85; comp 9/20/86; am and comp] (Auth: HRS §155-4) (Imp: HRS §§155-3, 155-6, 155-8)~~

§4-8-9 Restrictions on loan purpose. (a) The applicant's reasons for requesting the loan shall be relevant to encouraging the growth, development, and well-being of agriculture in the state.

(b) Loan funds for vehicle purchase may be provided by the department, but only for vehicles which are clearly suitable for agricultural purposes, such as trucks, pickup and panel trucks, jeeps and other multi-purpose vehicles. Loan funds for vehicle purchase shall not be provided for passenger cars.

(c) Loan funds shall not be provided by the department if funds are to be used in any way for the production or keeping of:

- (1) Any animal that will be sold, kept, or used for fighting or baiting as defined and prohibited under section 711-1109, Hawaii Revised Statutes;
- (2) Any animal that will be sold, kept, or used as a pet, including but not limited to, a dog, cat, canary, parakeet, or any other animal life not used as work stock or for agricultural production; or
- (3) Any plants whose possession, use, or products are prohibited by law. [Eff 1/31/85; comp 9/20/86; comp _____] (Auth: HRS §155-4) (Imp: HRS §§155-2, 155-10, 155-12)

§4-8-10 Restrictions on participating loans. (a) Except where there is an unusual danger of natural catastrophe or economic hardship, the State's share of a loan in participation with a private lender shall not exceed seventy-five per cent of the principal amount of the loan made to a qualified farmer. The State's share of a participating loan may be the legal maximum of ninety per cent when the loan applicant operates in a danger area (such as the Puna rift zone) or when the major portion of the borrower's income is from a commodity affected by prolonged or severe economic difficulties such as depressed prices, disease, weather, or other circumstances of fairly wide impact on the commodity group. Ninety per cent participation shall be for class "C" and "D" loans only, since it is not the intent of the department to encourage permanent expansion in danger areas or uneconomic commodity groups.

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(b) Out of the interest collected, the department shall pay the participating private lender a service fee as follows:

<u>Private Lender's Share of Loan</u>	<u>Allowable Service Fee</u>
29% or less participation	1/2 of 1% on the State's unpaid principal balance.
30% to 39% participation	3/4 of 1% on the State's unpaid principal balance.
40% or more participation	1% on the State's unpaid principal balance.

(c) Where all or any portion of a participating loan is to be used to refinance existing loans from participating lenders, the State's share of the amount to be refinanced shall not exceed fifty per cent. In a situation where it is in the best interest of the State as determined by the department, the chairperson may waive this restriction. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §§155-4, §155-6)

§4-8-11 Repayment term of loan. The department shall determine the repayment term of the loan based on factors such as the loan's purpose, the useful life of the items being financed, the applicant's repayment ability, and the financial condition of the applicant. [Eff 1/31/85; comp 9/20/86; comp] (Auth: §HRS 155-4) (Imp: HRS §155-13)

§4-8-12 Interest rates. [~~The date of loan approval by the chairperson or the board of agriculture shall be used in determining the applicable interest rate for a similar type loan made by the appropriate farm credit bank.~~] Loans shall bear simple interest on the unpaid principal balance, charged on the actual amount disbursed to

the borrower. The interest rate on loans of class "A", "B", "C", "E", "G", and "J" shall be at a rate of four per cent a year. The interest rate of class "D", "F", "H", "I", and "K" loans shall be three per cent a year. [Eff 1/31/85; comp 9/20/86; am and comp] (Auth: HRS §155-4) (Imp: HRS §155-8)

§4-8-13 Collateral. (a) Adequacy of collateral shall be determined by the department. For purposes of land purchase and improvements, the department shall require a real estate mortgage recordable at the bureau of conveyances or the land court of the State of Hawaii. A non-farm recordable real estate mortgage with adequate value may be substituted, at the department's discretion. Chattels, using a security agreement and a financing statement, shall be used as primary collateral for farm operating loans.

(b) Where it is determined by the department that there is adequate collateral but questionable repayment history, limited life on security such as crops and livestock, or where the borrower has outstanding loan from several sources, a third or fourth mortgage may be taken as additional collateral to secure the loan. But in no event shall a third or fourth mortgage be the primary collateral.

(c) The department may require an appraisal for real estate and improvements. Whenever practicable, an independent appraiser shall be utilized. The applicant shall be responsible for hiring an independent appraiser at the applicant's own expense, and the applicant shall pay for all costs incurred in the appraisal.

(d) Appraisals made by bank, [~~farmers home administration~~] Farm Service Agency, [~~and~~] other mortgage lenders, and County Assessor may be accepted.

(e) Loan officers may appraise chattels, crops, and other assets.

(f) In the event of a dispute, a second appraisal shall be required. [Eff 1/31/85; comp 9/20/86; am and comp] (Auth: HRS §155-4) (Imp: HRS §§155-10, 155-11)

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§4-8-14 Equity contribution. (a) The department may require a reasonable cash contribution from an applicant to purchase equipment or other capital items or to complete the project. The department may modify the repayment term based on the amount of applicant's equity contribution.

(b) Cash, real property, farm equipment, crops, and other assets which contribute significantly toward the project may be accepted as equity contribution. The division shall determine whether non-cash equity contribution contributes significantly toward the project. [Eff 1/31/85; comp 9/20/86 am and comp] (Auth: HRS §155-4) (Imp: HRS §§155-10, 155-11)

§4-8-15 Emergency loans. (a) The board may implement an emergency loan program under the following circumstances:

- (1) The emergency shall involve significant economic loss of an agricultural commodity or significant damage to agriculture in a county or an island;
- (2) Loans are not available from any other agency of the state, federal, or county governments, and private lenders are unwilling to lend under emergency conditions; and, The governor has proclaimed an emergency.

(b) Emergency loans shall be for the purpose of providing relief and rehabilitation to qualified farmers without limit as to purpose:

- (1) In areas stricken by extraordinary rainstorms, windstorms, droughts, tidal waves, earthquakes, volcanic eruptions, and other natural catastrophes;
- (2) On farms stricken by livestock disease epidemics and crop blights;
- (3) On farms seriously affected by prolonged shipping and dock strikes;
- (4) During economic emergencies caused by overproduction, excessive imports, and the like; and

- (5) During other emergencies as determined by the board of agriculture and biosecurity. The maximum amounts and period for the loans shall be determined by the board of agriculture; provided that the board shall require any settlement or moneys received by qualified farmers as a result of an emergency declared under this section shall first be applied to the repayment of an emergency loan made under this chapter.
[Eff 1/31/85; comp 9/20/86; comp
] (Auth: HRS §155-4) (Imp: HRS §155-9)

§4-8-16 Scope of emergency loans. (a) An emergency loan is intended to allow the applicant to continue farming at a level comparable to the applicant's activities immediately prior to losses from the emergency. Replacements for losses of facility and equipment must contribute significantly to farming and shall be reasonably similar to damaged or loss items.

- (b) An emergency loan shall not be provided to:
- (1) Establish an applicant in farming nor to expand substantially the operations of the applicant carried on immediately prior to the emergency;
 - (2) Enable an applicant to reorganize farm or ranching operations; or
 - (3) An applicant not affected by the emergency.

(c) Since an emergency loan involves higher than normal credit risk, the loan shall be made only where a sound basis for credit exists and if there is reasonable assurance that the loan will be repaid in full. [Eff 1/31/85; comp 9/20/86; comp
] (Auth: HRS §155-4) (Imp: HRS §§155-4, 155-11, 155-12)

4-8-17 Review, analysis, and recommendation.

(a) The applicant shall be responsible for completing the application. Information shall be current with necessary supporting documents or exhibits. The loan officer shall inform the applicant of any deficiency.

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If the applicant fails to complete the application within a reasonable period of time, the incomplete application may be canceled by the department. The applicant may submit a new application with completed information.

(b) Each application shall be subject to assessment of credit factors such as management ability, credit history, repayment ability, financial position, adequacy of security, and past performance. A loan recommended for approval by the loan officer may include approval conditions and shall be submitted to the division head for review.

(c) The division head shall review each application for compliance with this chapter and chapter 155, Hawaii Revised Statutes.

(d) A loan application recommended for approval by the division head shall be submitted to the chairperson for approval by the board only if there are funds available. Should it become necessary because of a scarcity of funds to restrict loan activities, the first priority shall be given to participating loans.

(e) The board may approve or disapprove a submitted application and may modify or add to its approval conditions. The chairperson may approve or disapprove a submitted application and may modify or add to its approval conditions, where the requested amount plus any principal balance on existing loans to the applicant, does not exceed [~~\$25,000~~] \$50,000 of State funds. [Eff 1/31/86; comp 9/20/86; am and comp] (Auth: HRS §155-4) (Imp: HRS §155-4)

§4-8-18 Loan closing. (a) The applicant whose loan has been approved shall be responsible for:

- (1) Providing necessary documents, such as assignment of insurance, and compliance with the loan approval conditions;
- (2) Providing the department with a preliminary report and a certificate of title, lien letter, or title insurance covering the real property being used as security showing lien position as approved by the board. A title

- (3) company or escrow company shall be utilized, whenever applicable, and the applicant shall be responsible for the costs;
- (4) Hiring an attorney at the applicant's own expense to draft the real estate mortgage (in fee or leasehold) and other documents, as required. Mortgages shall be submitted to the department of the attorney general for review and approval as to form; and
- (5) Paying for the actual costs incurred in closing the loan, such as appraisals, lien searches, title searches, document preparation, and any work in connection with the loan that is outside the department's scope of activities.

(b) Direct loans shall be closed by the division staff. The borrower shall execute documents before a notary public where required. Execution of other documents shall be acknowledged by the loan officer.

(c) The applicable approval conditions of the loan shall be met to the satisfaction of the department. The borrower is responsible for compliance with the approval conditions.

(d) The private lender shall be responsible for closing participating and insured loans. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §§155-4, 155-11, 155-12)

§4-8-19 Disbursement of loan funds. (a) Loan funds shall be disbursed only after the lien instruments have been recorded at the bureau of conveyances of the State of Hawaii.

(b) The request for funds shall be initiated by the borrower and is subject to approval by the loan officer.

(c) Disbursements shall be made according to approved loan purpose. The borrower may request single or multi-disbursements, subject to approval by the loan officer.

(d) For multi-disbursements, loan funds shall be disbursed through a supervised account opened at a bank or a savings and loan institution. A deposit agreement shall be executed by the borrower, the financial institution, and the State.

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(e) When disbursement of loan funds involve single or only a few payments that are easily acknowledgeable such as for purchase of land or equipment, direct disbursement can be made to the escrow company or vendor. Acknowledgement shall be required.

(f) Any change in the use of loan funds requires the prior written approval of the department.

(g) The borrower shall provide the division with copies of invoices or statements prior to disbursements. [Eff 1/31/85; am and comp 9/20/86; am and comp] (Auth: HRS §155-4) (Imp: HRS §§155-4, 155-12)

§4-8-20 Loans to farmers' cooperatives, corporations, food hubs, and food manufacturers. Loans to farmers' cooperatives, corporations, food hubs, and food manufacturers shall provide credit to entities engaged in marketing, purchasing, and processing, and providing farm business services, including:

(a) Facility loans to purchase or improve land, building, and equipment for an amount not to exceed \$1,500,000 and a term not to exceed twenty years;

(b) Operating loans to finance inventories of supplies and materials, warehousing, and shipping commodities; extension of consumer credit to justified farmer-members; and other normal operating expenses for an amount not to exceed \$750,000 and a term not to exceed seven years; and

(c) The exportation of crops and livestock. To be eligible, a farmers' cooperative or corporation shall have a majority of its board of directors and a majority of its membership as shareholders who meet the eligibility requirements of section 155-10, Hawaii Revised Statutes and who devote most of their time to farming operations, and the facility loans shall be for an amount not to exceed \$1,500,000 or eighty-five per cent of the cost of the project, whichever is less.

(d) To be eligible, a food hub shall have a majority of its board of directors and a majority of its membership as shareholders who meet the

eligibility requirements of section 155-10, Hawaii Revised Statutes and who devote most of their time to farming operations.

(e) For the purposes of this section, "food hub" means a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand.

(f) To be eligible, a food manufacturer shall be licensed to do business in the State, and the controlling interest of the entity shall possess a minimum of two years of relevant processing or manufacturing experience as acceptable to the department of agriculture. The entity shall process Hawaii-grown agricultural products or use Hawaii-grown agricultural products as an ingredient in the manufacturing process.

(g) Facility loans shall be for an amount not to exceed \$1,500,000 or eighty-five per cent of the cost of the project, whichever is less. The requirement in section 155-10, Hawaii Revised Statutes shall be waived for food manufacturing loans; however, the entity shall be a sound credit risk with the ability to repay the money borrowed. [Eff]
(Auth: HRS §155-4)

4-8-21 Line of credit loans. (a) Use of the Account. Line of credit funds shall only be used for authorized agricultural purposes unless written authorization is provided. Written authorization shall only be provided with approval from the Chairperson of the Board of Agriculture and Biosecurity. The program is not required to make advances to borrower under the account and can refuse a request for an advance at any time. The borrower shall not exceed the credit limit and if the credit limit is exceeded the exceeded amount is immediately due and payable. The program at its discretion and with the Chairperson's approval may reduce the credit limit on the line of credit.

(b) Repayment. Line of Credit loans require monthly interest only payments. If the line of credit has been delinquent for 6 months, the program at its

sole discretion may convert the line of credit to an operating loan. The operating loan terms and conditions shall be approved by the Chairperson of the Department of Agriculture and Biosecurity.

(c) Security. Security for line of credit loans shall not exceed 85% of the value of the collateral offered. The program may require additional security to adequately secure line of credit loans or substitute collateral securing the loan provided the substitute collateral offered is of similar value. All changes to collateral securing line of credit loans require approval by Chairperson of the Department of Agriculture and Biosecurity.

(d) Finance Charges. Interest for line of credit loans shall be based on the amount of the outstanding balance on the line of credit loan and begins to accrue from the date it is added to the daily principal balance and continues to accrue until the date the payment is entered into the loan system.

(e) The program shall conduct annual reviews of the line of credit borrowers to determine ongoing credit worthiness, the review may include personal financial statements, annual tax returns or credit reports.

(f) The program may terminate the line of credit at any time with the approval of the Chairperson of the Department of Agriculture and Biosecurity. The borrower may terminate the line of credit at any time provided that there is no balance on the account.

[Eff] (Auth: HRS §155-4)

§4-8-22 Import replacement loans. (a) shall provide credit for farm expansion to grow import replacement crops or to fund crops grown for the farm to state program established under section 27-8, Hawaii Revised Statutes.

- (1) Loans made under this class shall be for the purposes specified in class "A" and class "C", and terms shall be determined by the primary purpose of the loan funds.
- (2) Loans for crops grown for the farm to state Program shall have written commitments from the appropriate state agency.

- (3) Import replacement crops shall be of sufficient scale to impact regional, island wide, or statewide markets. Loans shall be for an amount not to exceed \$2,500,000 and for a term not to exceed ten years.
- (4) To be eligible, the applicant shall be a qualified farmer of sound credit rating with the ability to repay the money borrowed, as determined by the department. Interest rates for this class shall be three per cent per year. [Eff _____] (Auth: HRS §155-4)

SUBCHAPTER 2 LOAN SERVICING

§4-8-25 Administration. (a) The division shall have the following powers:

- (1) To accept and process applications for all types of loan applications as provided in chapter 155, Hawaii Revised Statutes;
- (2) To disapprove loan applications in all cases where disapproval is based upon the applicant's inability to meet the requirements, purposes, and policies of the agricultural loan program;
- (3) To make personal risk investigations in connection with loan applications;
- (4) To close loans and disburse loan proceeds;
- (5) To collect amounts due on loans;
- (6) To have borrowers maintain insurance policies and coverage in sufficient amounts to protect the State's security interests in the loans;
- (7) To determine when to file claim against estates of deceased borrowers and to file proper claims;
- (8) To recommend for board action final determination as to foreclosure of direct loans and to determine the date of call in such cases; and

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(9) To invest idle funds in time certificates of deposit and other investments authorized by the department of budget and finance[?].

(b) The chairperson shall have the following powers:

- (1) To execute legal documents on the board's behalf after official policy-making determinations have been decided by the board;
- (2) To approve applications for release of personal liability;
- (3) To approve change in use of loan funds and installment dates, loan transfers, assignment of loans, loan workouts and assumptions, partial releases, and subordinations;
- (4) To approve sales of repossessed real estate and chattels, or offers of settlement, purchase of State-owned real estate, or purchase of crops, livestock and other chattels;
- (5) To waive and extend loan payments, except in unusual circumstances involving forbearance for specific commodity groups; and
- (6) To dispose of insurance proceeds for building, replacement, or repayment on loans, or by release to borrower if for loss of personal property. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §§155-4, 155-13, 155-14)

§4-8-26 Right to inspect. The division or its authorized representative has the right to inspect, at reasonable hours, the mortgaged property, the farm, the security, crops, livestock, equipment, chattels, the books, and the records of the borrower in connection with the administration of the loan. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §§155-4, 155-12)

§4-8-27 Borrower's responsibilities. Each borrower or guarantor shall:

- (1) Submit to the division an annual financial statement during the life of the loan and interim statements and reports as may be requested by the division;
- (2) Comply with the term loan agreement, which may be amended from time to time with approval by the division;
- (3) Keep the division informed on any and all changes on security and other major changes in the operation;
- (4) Promptly provide information and documents to the division upon request; and
- (5) Repay loans made under the agricultural loan program in accordance with the terms of the promissory note. [Eff 1/31/85; comp 9/20/86; comp] Auth: HRS §155-4) (Imp: HRS §§155-4, 155-12, 155-13)

§4-8-28 Assumption of indebtedness. Assumption of indebtedness may be considered if the person which proposes to assume the indebtedness is eligible under section 155-10, Hawaii Revised Statutes. The maker of the note cannot be released on the assumption of the indebtedness by others. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §§155-4, 155-10, 155-11)

§4-8-29 Waiver of payment and extension. (a) When inability to meet a scheduled payment is caused by a natural catastrophe, depressed prices, or other external factors beyond the borrower's control, the borrower may request the department for a waiver of payment. In its discretion, the department may grant the waiver. A waiver is normally for a limited period of six months or less at which time the borrower's situation shall be reviewed by the division. The department shall not grant a waiver where reasonable assurance of repayment in the future is lacking, collateral for the loan will be jeopardized, or where the borrower otherwise has not complied with the loan requirements.

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(b) Upon request for waiver, the chairperson may grant an extension for more than six months where the division finds that:

- (1) The borrower cannot meet payment schedule even after a waiver of six months, because of prolonged natural or economic disaster;
- (2) The borrower cannot meet more than fifty per cent of its annual payment; and
- (3) The borrower would require a period of one year or longer to recover from the effects of depressed prices, natural catastrophe, or other external factors beyond borrower's control.

(c) If the department grants an extension, the extension may be subject to any one or more of the following conditions:

- (1) The borrower shall agree to special conditions with regard to extension.
- (2) The interest on the borrower's existing loans from the department shall be brought to current status.
- (3) The borrower shall make monthly payments on the existing loans from the department through an assignment of income.
- (4) There shall be a year-end analysis and review of the borrower's financial status.

[Eff 1/31/85; comp 9/20/86;
comp] (Auth: HRS §155-4)
(Imp: HRS §§155-4, 155-13)

§4-8-30 Subordination and partial release. (a)

A direct loan borrower may apply to the division for a subordination or partial release of collateral. The division will review such requests on a case-by-case basis.

(b) The chairperson may approve a request for subordination or partial release if the borrower meets any one or more of the following conditions:

- (1) The borrower shall reduce its loan balance;
- (2) The borrower is current on loan payments and there is sufficient security to cover requests;

- (3) The borrower shall add to or substitute the Security with other security of better value (especially for borrowers with average or below average performance); and
- (4) The borrower shall strengthen the State's Security position by assigning payments to the department through a person, a bank, a wholesaler, or a cooperative, and the borrower shall bring all its delinquent loans to current status. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-(Imp: HRS §§155-4, 155-13)

§4-8-31 Application of payment. (a) Refund and canceled undisbursed funds shall be applied to the principal and returned to the loan revolving fund.

(b) The department may apply payment to any loan outstanding in the case of a borrower with multiple loans from the department. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §§155-4, 155-13)

§4-8-32 Refinancing and consolidation. Refinancing and consolidation may be considered when the loan meets the following criteria:

- (1) The loan is delinquent and part of the Workout requires a new loan. Refinancing will cure delinquency or improve the cash flow situation, or both;
- (2) The borrower's financial condition will be improved; and
- (3) The adequacy of the security will be unimpaired, or it may be improved. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §§155-4, 155-13)

§4-8-33 Changes in participating loan. On all participating loans, any request for changes shall be initiated by the private lender, with recommendation for concurrence from the loan officer through the division head and disposition by the chairperson. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §§155-4, 155-6)

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§4-8-34 Default. (a) Default, whether in the payment of any debt or in the performance of any covenant or agreement, shall constitute default under all instruments evidencing a debt from the borrower to the State.

(b) Upon such a default, the State, at its option, may declare all or any part of that indebtedness immediately due and payable.

(c) Failure of the State to exercise this option shall not constitute a waiver of the State's right to exercise the option in the event of any subsequent default. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §§155-4, 155-12)

§4-8-35 Delinquent and problem loans. The division shall review delinquent and problem accounts to determine whether or not defaults are being satisfactorily resolved, acceptable repayment arrangements are in effect, or if a satisfactory repayment arrangement can be worked out. Any workout repayment plan shall be subject to periodic review, normally every six months. If the division determines that there is no satisfactory workout of a delinquent account or remedies to other defaults, the account shall be referred to the board for appropriate action. The board may refer the delinquent account to the attorney general for appropriate action where:

- (1) The borrower has failed to maintain workout arrangements or otherwise remedy defaults; or
 - (2) Legal action is required to protect the State's interest; or
 - (3) The division's security position is threatened by the borrower or by the actions of the borrower's other creditors or vendors; or
 - (4) There is no financial or other remedy to solve the borrower's breach or default.
- [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §§155-4, 155-12)

§4-8-36 Attorney general accounts. (a) The attorney general may act on behalf of the department to protect its interest in security for loans provided to borrowers and to otherwise pursue legal measures to effect collection on delinquent accounts.

(b) The attorney general shall provide the board with timely reports on the status of delinquent accounts. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §§155-4, 155-12)

§4-8-37 Loans paid in full. Upon payment in full, the collateral shall be released by the department through its chairperson unless the collateral is pledged to secure another debt to the State or department. [Eff 1/31/85; comp 9/20/86; comp] (Auth: HRS §155-4) (Imp: HRS §§155-4, 155-11)

~~[Subchapter 3~~

~~NORTH KOHALA LOAN AND~~

~~GRANT PROGRAM LOAN SERVICING~~

~~Historical Note: This subchapter is based substantially upon Regulation No. 1, entitled "North Kohala Loan and Grant Program," of the Department of Agriculture. [Eff 3/12/73; R] 9/20/86]~~

~~**§4-8-43 Administration.** Responsibility for the administration of the North Kohala loan and grant program shall be placed within the department of agriculture.] [Eff and comp 9/20/86; R] (Auth: SLH 1972, Act 197, §3) (Imp: SLH 1972, Act 197, §3)~~

~~**§4-8-44 Right to inspect.** The department or its authorized representative shall have the right to inspect, at reasonable hours, the physical facilities, the books and records of the borrower in connection~~

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~~with the administration of the loan under the North Kohala loan and grant program.] [Eff and comp 9/20/86], R] (Auth: SLH 1972, Act 197, §3) (Imp: SLH 1972, Act 197, §3)~~

~~[§4-8-45 Borrower's responsibilities. The borrower or guarantor shall:~~

- ~~(1) Submit to the department an annual financial statement during the life of the loan and such interim statements and reports as may be requested by the department;~~
- ~~(2) Comply with the term loan agreement, which may be amended from time to time with approval by the department and concurred by the authorized representative of the county of Hawaii;~~
- ~~(3) Keep the department informed on any and all changes concerning security and other major changes in the operation;~~
- ~~(4) Promptly provide information and documents to the department upon request; and~~
- ~~(5) Repay loans made under the North Kohala loan and grant program in accordance with the terms of the promissory note.] [Eff and comp 9/20/86] R] (Auth: SLH 1972, Act 197, §3) (Imp: SLH 1972, Act 197, §3)~~

~~[§4-8-46 Repayment. (a) Loans made shall be repaid in accordance with the terms of the note and payments shall be applied first to interest then to principal.~~

~~(b) The department shall transmit repayments to the State and County of Hawaii in accordance with appropriate contractual agreements.~~

~~(c) Additional payments in any sums, or the payment of the entire principal may be made at any date within the time period of the loan without penalty.] [Eff and comp 9/20/86] R] (Auth: SLH 1972, Act 197, §3) (Imp: SLH 1972, Act 197, §3)~~

~~[§4-8-47 Waiver of payment and extension. (a) The department, with the concurrence of the county of Hawaii may defer payment of the installments of principal for a period not to exceed two years. (b) The borrower shall agree to keep interest payments current.] [Eff and comp 9/20/86; R] (Auth: SLH 1972, Act 197, §3) (Imp: SLH 1972, Act 197, §3)~~

~~[§4-8-48 Refinancing. The department may require the borrower to refinance the balance owed on any direct loan as soon as the borrower is able to obtain credit from other sources at standard rates and terms.] [Eff and comp 9/20/86; R] (Auth: SLH 1972, Act 197, §3) (Imp: SLH 1972, Act 197, §3)~~

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2. Material, except source notes and other notes, to be repealed is bracketed and stricken. New material is underscored.

3. Additions to update source notes and other notes to reflect these amendments and compilation are not underscored.

4. These amendments to and compilation of chapter 16-23, Hawaii Administrative Rules shall take effect ten days after filing with the Office of the Lieutenant Governor; provided that the implementation of the amendments relating to the Hawaii Joint Underwriting Plan rules and rates contained herein shall occur on October 1, 1982 for renewal policies effective on or after that date; provided further that implementation of the amendments to section 16-23-11 relating to required optional additional coverage shall occur on December 1, 1982.

I certify that the foregoing are copies of the rules, drafted in the Ramseyer format pursuant to the requirements of section 91-4.1, Hawaii Revised Statutes, which were adopted on August 2, 1982 and filed with the Office of the Lieutenant Governor.

MARY G. F. BITTERMAN
Director of Commerce
and Consumer Affairs

APPROVED AS TO FORM:

Deputy Attorney General

HAR §4-8, Department of Agriculture And Biosecurity, and the
Agricultural Loan Division Rules Amendment

Analysis:

August 21, 2025

1. Native Hawaiian traditional and customary rights or practices affected by the proposed rule:

The Department of Agriculture And Biosecurity (DAB) has not identified any traditional and customary rights or practices that would be affected by the proposed amendments to Title 4, Chapter 8, Hawaii Administrative Rules.

As discussed in HAR §4-8, the Department of Agriculture And Biosecurity, and the Agricultural Loan Division rules classify and regulate the procedures, qualifications and intent of the Agricultural Loan Division rules to serve the state's agricultural communities and to be consistent with in furtherance of the policies in Chapter 4-8 Hawaii Revised Statutes. Furthermore, the rules protect and promote the public health, safety, and general welfare of the community to protect and preserve places and areas of historical, cultural, architectural, or environmental importance and significance, as set forth in the Department of Agriculture And Biosecurity, and the Agricultural Loan Division in Chapter 4-8, HRS.

2. Scope and extent to which those rights or practices will be impaired

Not applicable.

3. How the proposed rule reasonably protects those rights and practices

Not applicable

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**OTHER STATE
AGRICULTURAL
LOANS:**

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Loan No.	Loan Amt	Principal	Interest	Status
382-01-01	\$180,000	\$164,362.26	\$202.65	Current
382-01-02	\$45,000	\$36,027.70	\$44.40	Current

**LOAN REQUEST
& PURPOSE:**

OCR, Inc. (OCR), dba Small Kine Farm, is requesting a Department of Agriculture and Biosecurity (DAB) Kona Low Emergency loan to recover from flood water damage to its mushroom growth media. During the heavy rains water flowed through hoop house used to store composted material that is used as substrate for mushroom production. The loss of compost resulted in lost sales, and a need to replace the composting materials which need to be sterilized and cured before it can be used as mushroom substrate. The proposed loan will provide operational funds and replace supplies lost in the flood waters

Class D, Emergency Loan:

\$20,000	Operational funds
\$ 5,000	Purchase Supplies
<u>\$25,000</u>	Total Request

TERMS:

:

DAB Kona Low Emergency Loan:

Amount: \$25,000
Term: 5 years
Interest: 3.00%
Repayment: Monthly principal and interest payments for 60-months of \$450 until maturity.

SECURITY:

DAB Class-D \$25,000 Emergency loan will be secured by the following:

- Junior Position UCC blanket security interest and financing statement including all crops, receivables, inventory, furniture, fixtures, supplies, etc.
- Priority position is currently held by USDA Farm Service Agency (FSA) who will subordinate their lien positions to

allow the proposed loan to obtain the priority lien position.

Shown below is the Loan to Value Ratio (LTV):

DAB Existing loans \$200,346 + Proposed loan \$25,000 = LTV 29.6%
Chattel \$677,235 (Appraisal 4/21/2026)

The LTV ratio of 29.6% properly secures the proposed emergency loan.

GUARANTORS:

None

**FINANCIAL
CONDITION:**

SEE EXHIBIT A (CONFIDENTIAL)

**REPAYMENT
ABILITY:**

SEE EXHIBIT A (CONFIDENTIAL)

INSURANCE:

Borrower shall maintain existing hazard insurance and commercial liability insurance with the State of Hawaii, Department of Agriculture and Biosecurity, with the Agricultural Loan Division as certificate holder.

Keyman Life Insurance in the amount of \$250,000 will remain in place for the proposed loan.

**BACKGROUND/
MANAGEMENT
ABILITY:**

Oahu Community Recycling Inc. (OCR) initially started as an agricultural composting company. Mr. Yang visited an Oregon organic mushroom farm and was introduced to genus Agaricus mushroom cultivation, better known as Portabella and Crimini mushroom farming. Mr. Yang was so inspired by the process that in May of 2007, he began building a 500 sq.ft. test facility to experiment and grow organic mushroom in an old Waimanalo warehouse which was later expanded to a 10,000 sq.ft. facility. SKF uses local "green waste" from its recycling operation as the

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base for compost substrate material to cultivate genus Agaricus mushrooms.

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In 2015, OCR began to position itself as an organic Portabella and Crimini mushroom producer by adopting “Small Kine Farm” (SKF) as its business trade name and began selling his mushroom to restaurants and organic retailers. By using proprietary innovations and sustainable practices, SKF produces high quality organic and food safety certified mushrooms for local restaurants, natural food stores and retailers with no seasonal variations. SKF’s zero waste agriculture model uses recycled materials for inputs with no irrigation runoff, no soil nutrient depletion and minimal land requirements. The result is an environmentally responsible local agricultural product that can compete directly with mainland competitors on price as well as quality.

In 2023, OCR received an Agricultural Resource Management (ARM) lease in Waimanalo Agricultural Park with the assistance of DAB loans OCR proceeded to relocating all his equipment to the new permanent site and expanded his mushroom operation. Due to the costs to develop and relocate his operation resulted in the financial strength for the operation being stretched which made the flood damage timing extremely inopportune.

SUMMARY:

The applicant has proven agricultural experience, stable established markets and a permanent fully developed location. Mr. Yang’s recycling operation provides the necessary raw materials that can be sterilized and composted to provide good substrate to sustainably grow high quality USDA certified organic mushrooms. The proposed loan will allow the operation to recover and restart mushroom production to meet customer demand.

RECOMMENDATIONS:

This loan is recommended for approval based on the applicant's innovative farming techniques, financial management ability, collateral offered, and excellent credit history.

Date

4/21/2026

Recommended by:

Wayne S. Takamine
Wayne S. Takamine
Acting Agricultural Loan Officer VI

Date

4/21/26

Reviewed and concurred by:

Dean Matsukawa
Dean Matsukawa
Acting Agricultural Loan Administrator

Date

4/21/26

Approved for Submission

Sharon Hurd
Sharon Hurd, Chairperson
Board of Agriculture & Biosecurity

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STATE OF HAWAI'I
DEPARTMENT OF AGRICULTURE AND BIOSECURITY
AGRICULTURAL RESOURCE MANAGEMENT DIVISION
HONOLULU, HAWAI'I

April 28, 2026

Board of Agriculture and Biosecurity
Honolulu, Hawai'i

Subject: REQUEST FOR CONVERSION OF GENERAL LEASE NO. S-4519;
RODOLFO V. DIEGUEZ AND RAJITA A. DIEGUEZ, LESSEE; TMK: (2)
2-7-015:026, FORMER KAUPAKULUA SCHOOL LOT, WEST
KAUPAKULUA, MAKAWAO (HĀMĀKUALOA), ISLAND OF MAUI,
HAWAI'I

Authority: Section 166E-4, Hawaii Revised Statutes (HRS) and
Section 4-158-8, Hawaii Administrative Rules (HAR)

Lessee: Rodolfo V. Dieguez and Rajita A. Dieguez

Land Area: 1.905 gross acres

Tax Map Key: 2nd Div/2-7-015:026 (Exhibit "A")

Lease Term: 55-years, July 8, 1976, through July 7, 2031

Land Status: Encumbered by Governor's Executive Order No. 4719, dated
September 24, 2024, to the Department of Agriculture, now
known as the Department of Agriculture and Biosecurity for
agricultural purposes.

Annual Rental: \$10,500.00 per year

Character of Use: General Agriculture Residential

BACKGROUND:

Effective July 8, 1976, the Board of Land and Natural Resources (BLNR) awarded
General Lease S-4519 to David R. Masters.

On September 24, 2024, General Lease S-4519 was transferred to the Department of Agriculture, now known as the Department of Agriculture and Biosecurity, by Governor’s Executive Order No. 4719 pursuant to Act 90, Session Laws of Hawaii 2003.

By mesne assignment, the Chairperson of the Board of Agriculture and Biosecurity (BAB), through authority delegated to her by BAB, consented to the assignment of said lease to Rodolfo V. Dieguez and his wife, Rajita A. Dieguez, in 2026. Together they continue to utilize the subject property for their fruit orchard where they grow tangerines, tangelos, oranges, longans, bananas, lemons, eggfruits, lychee, and mango. Securing a long-term lease will provide stability, allowing them to make long-range investments in the property and be able to expand their agricultural efforts and increase their success and productivity.

The Dieguezes are requesting the conversion of General Lease S-4519 to a new 35-year lease in accordance with the requirements of Chapter 4-158, HAR, the pertinent sections of which are stated as follows:

The department shall:

- Require an appraisal of the parcel in accordance with section 4-158-21, HAR;
- Impose other lease terms, provisions, restrictions, and conditions as provided in this Chapter as may be required to protect the State’s interest;
- Require the payment of annual lease rent by appraisal and a premium computed at twenty-five percent (25%) of the annual base rent for each year of the lease equal to the number of years that person occupied the land, but not to exceed seven (7) years and;
- Require those qualifying under subsection (a) to meet the bona fide farmer criteria as defined in section 4-158-1, HAR.

An appraisal was completed pursuant to section 4-158-21, HAR, for the purpose of determining the fair market rental for the subject parcel. The Department of Agriculture and Biosecurity contracted ACM Consultants, Inc., to determine the fair market annual base rental for the initial fifteen (15) year term of the lease. The appraised annual rental for the new lease is \$4,070.00 with percentage rent of 1.50% of gross proceeds (to the extent such percentage calculation exceeds the base rent) and will be applied to the effective date of the lease. In accordance with section 4-158-8(b)(4), the lessee shall also pay an annual premium equal to 25% of the annual base rental for a period not to exceed seven (7) years.

Further, the BAB and Lessee mutually agree to cancel the existing General Lease S-4519 by executing a Mutual Cancellation of General Lease S-4519 subject to execution of the converted general lease documenting the effective date so that only one lease is in full force and effect. Since the mutual cancellation of the lease is agreed upon and executed by the parties and is not due to breach or default by the Lessee, Lessee remains eligible and qualified for the new

general lease, in this respect only. All other eligibility terms must be met to the satisfaction of the Board.

RECOMMENDATION:

That the Board of Agriculture and Biosecurity:

1. Find that by allowing the conversion of General Lease S-4519 to a new long-term lease, the State would realize greater returns and reduce disruptions to current ongoing farming operations and the conversion is, therefore, in the public interest.
2. Approve Lessee's request to convert General Lease S-4519 to a new Non-Agricultural Park Lands lease of thirty-five (35) years subject to the conversion provisions of Chapter 4-158-8, HAR, with rent reopenings at the expiration of the 15th and 30th years.
3. Accept the fair market base rental rate of \$4,070.00 per year with percentage rent of 1.50% of gross proceeds (to the extent such percentage calculation exceeds the base rent), and the assessment of a 25% conversion premium on the base rent payable for the first seven (7) years of the new lease.
4. Approve the Mutual Cancellation of General Lease S-4519, subject to the execution of the effective date of the new general lease.

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Board of Agriculture and Biosecurity
April 28, 2026
Page 4 of 7

All related documents are subject to the review and approval as to form by the Department of the Attorney General, and such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State.

Respectfully submitted,



BRIAN KAU
Administrator and Chief Engineer,
Agricultural Resource Management Division

Attachments - Exhibit "A"

APPROVED FOR SUBMISSION:



Sharon Hurd
Chairperson, Board of Agriculture and Biosecurity





STATE OF HAWAI'I
DEPARTMENT OF AGRICULTURE AND BIOSECURITY
AGRICULTURAL RESOURCE MANAGEMENT DIVISION
HONOLULU, HAWAI'I

April 28, 2026

Board of Agriculture and Biosecurity
Honolulu, Hawai'i

- Subject: REQUEST TO APPROVE RIGHT-OF-ENTRY TO GENERAL LEASE NOS. S-4445, S-4636, S-5905, S-4760 AND S-4775, FOR AKINAKA & ASSOCIATES, LTD., TO CONDUCT AN ENVIRONMENTAL ASSESSMENT FOR THE CONSTRUCTION OF NON-POTABLE WATER WELLS ON VARIOUS LOTS LOCATED IN THE PANA'EWA AGRICULTURAL PARK AND PANA'EWA FARM LOTS; TMK NOS. (3) 2-2-056:039, (3) 2-2-056:054, (3) 2-4-049:022, 026, 027, 028, AND 029; SOUTH HILO, ISLAND OF HAWAI'I, HAWAI'I
- Authority: Sections 166-9 and 166E, Hawai'i Revised Statutes (HRS), and Section 4-153-3(b) (3) and Section 4-158-2(a)(8), Hawai'i Administrative Rules (HAR)
- Lessee: Various listed in Exhibit "A"
- Land Status: Properties set aside to the Department of Agriculture and Biosecurity by various Executive Orders
- Character of Use: Various

BACKGROUND:

In the 2025 legislative session, funding was appropriated to the Department of Agriculture and Biosecurity (DAB) to prepare an Environmental Assessment (EA) for the drilling of non-potable water wells on individual parcels at the DAB-managed Pana'ewa Agricultural Park and Pana'ewa Farm Lots.

DAB Agricultural Resource Management Division (ARMD) contracted with Akinaka & Associates, Ltd. (Akinaka) to perform this study. Akinaka contacted all (35) DAB lessees in these areas and held a community meeting on February 27, 2026, to discuss the project. Three lessees expressed interest in drilling a non-potable water well on their leased property and being included in the study.

Participation in the study will also require completion of a Right-of-Entry (ROE) agreement, granting Akinaka and their subconsultants access to the property to carry out this work. Onsite work may include, but is not limited to, interviews, discussion of historical and projected water demand data, site inspections, surveys, archaeological, cultural, and biological investigation, and documentation of site conditions, activities, and operations. Interested lessees understand this study is limited to the EA, and that lessees are responsible for all costs associated with planning, design, permitting, construction, operation, and maintenance of a future well.

The properties affected by the EA include portions of TMK Nos. (3) 2-4-049:022, 26, 027, 028, 029, (3) 2-2-056:039, and (3) 2-2-056:054. Subject to the approval of the Board of Agriculture and Biosecurity, the term of the agreement will commence on May 1, 2026, and will continue for a period of sixty (60) days, unless sooner terminated pursuant to the terms set forth in the ROE. In addition, staff is requesting that the Board delegate to the Chairperson the authority to approve extensions to the ROE term, if necessary.

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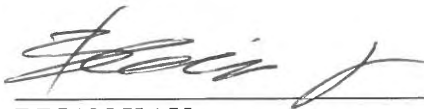
RECOMMENDATION:

That the Board approve the following:

1. The issuance of a Right-of-Entry Agreement for Akinaka & Associates, Ltd. to perform an Environmental Assessment for the drilling of a non-potable water well on General Lease Nos. S-4445, S-4636, S-5905, S-4760 and S-4775.
2. Delegation of authority to the Chairperson to extend the term of the ROE, if necessary.

All related documents are subject to the review and approval as to form by the Department of the Attorney General, and such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State.

Respectfully submitted,



BRIAN KAU
Administrator and Chief Engineer
Agricultural Resource Management Division

Attachments – Exhibits “A” and “B”
APPROVED FOR SUBMISSION

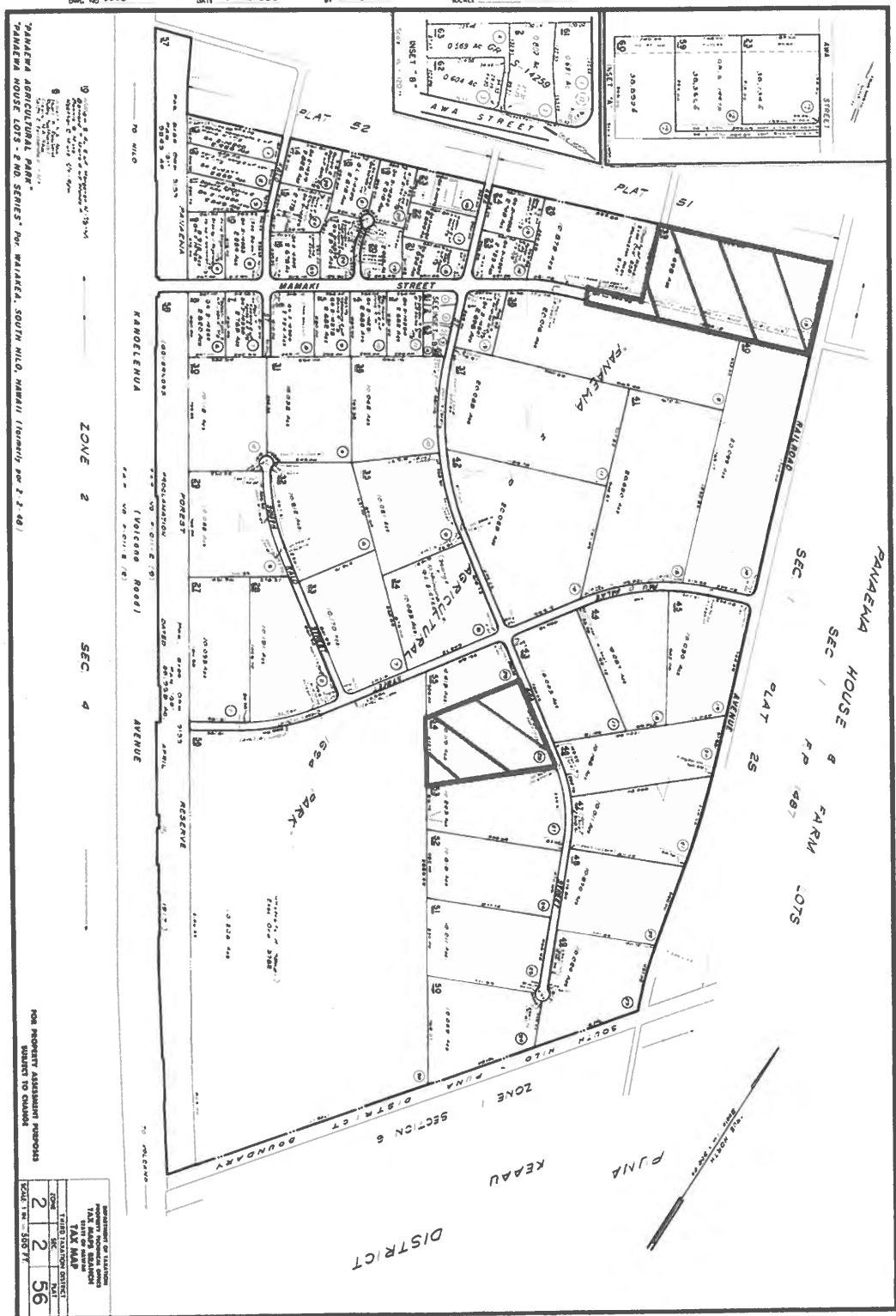


SHARON HURD
Chairperson, Board of Agriculture and Biosecurity

Exhibit "A"

Lease No.	Parcel TMK	Lessee	Gross Acres	Annual Lease Rent	Character of Use
S-4445	(3) 2-4-049:026, 027 and 028	Green Point Nursery, Inc.	30.340	\$10,560.00	General Agriculture
S-4636	(3) 2-4-049:022	Green Point Nursery, Inc.	10.243	\$4,700.00	Diversified Agriculture
S-5905	(3) 2-4-049:029	Green Point Nursery, Inc.	10.103	\$1,730.00	Intensive Agriculture
S-4760	(3) 2-2-056:039	Kaz's Nursery, Inc.	18.698	\$5,360.00	Diversified Agriculture
S-4775	(3) 2-2-056:054	James McCully	10.119	\$3,140.00	Diversified Agriculture

Exhibit "B"

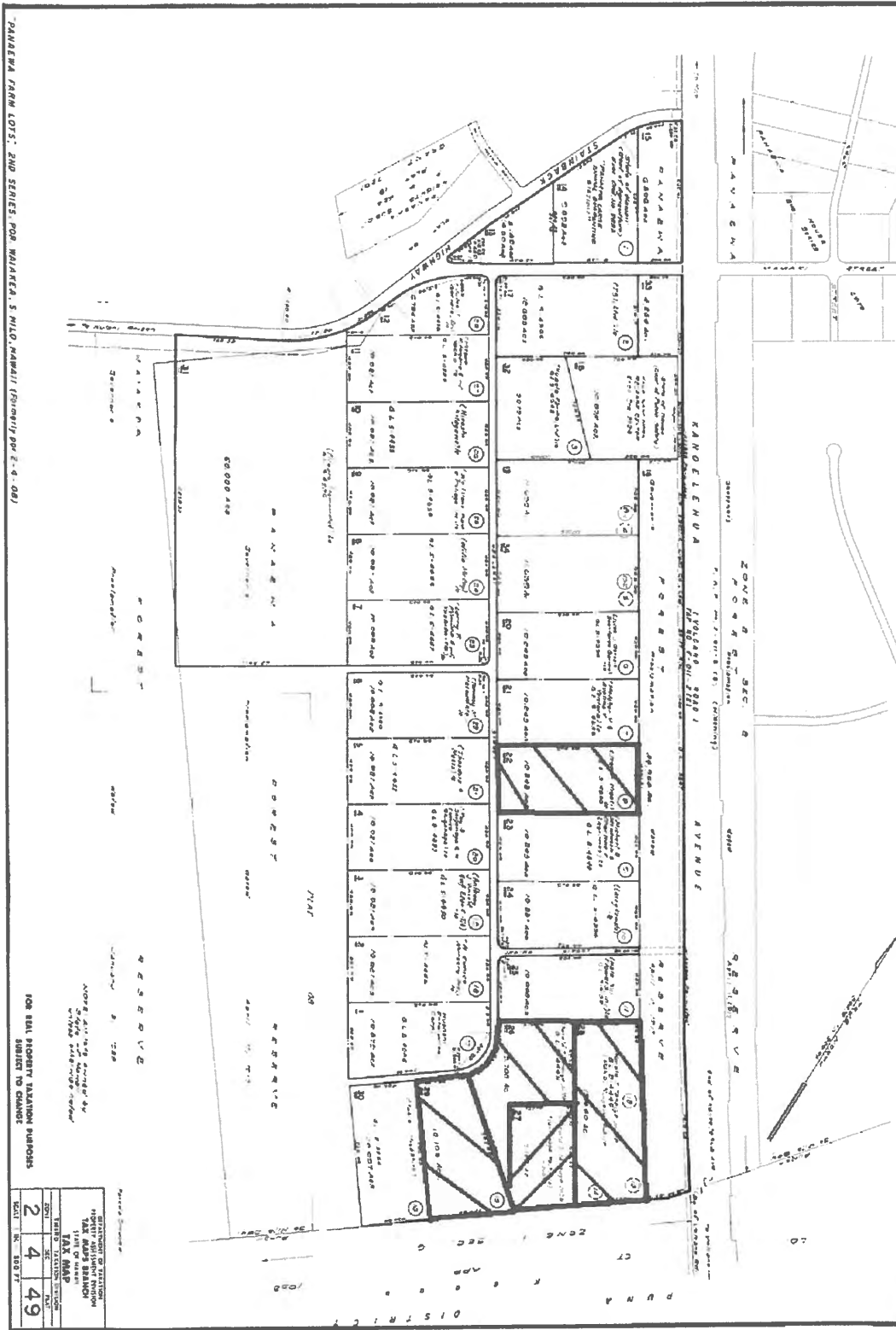


19 PANAMA AGRICULTURAL PAIN SERIES FOR MAIHEA, SOUTH WILD, HAWAII (FORM NO. 2-1-48)
 PANAMA HOUSE LOTS 2 (NO. SERIES) FOR MAIHEA, SOUTH WILD, HAWAII (FORM NO. 2-1-48)

ZONE 2 SEC 4

FOR PROPERTY ASSESSMENT PURPOSES
 SUBJECT TO CHANGE

ZONE	SEC	LOT	AREA
2	2	36	



JOSH GREEN, M.D.
Governor

SYLVIA LUKE
Lt. Governor



SHARON HURD
Chairperson
Board of Agriculture & Biosecurity

DEAN M. MATSUKAWA
Deputy to the Chairperson

State of Hawai'i
DEPARTMENT OF AGRICULTURE & BIOSECURITY
KA 'OIHANA MAHI'AI A KIA'I MEAOLA
1428 South King Street
Honolulu, Hawai'i 96814-2512
Phone: (808) 973-9560 FAX: (808) 973-9613

April 28, 2026

Board of Agriculture & Biosecurity
Honolulu, Hawaii

SUBJECT: Request to: (1) Allow the Importation and Possession of Twenty-seven (27) Plains Bison, *Bison bison*, an Animal on the List of Restricted Animals (Part B), by Permit, for Breeding and Commercial Meat Production, by Aloha Bison, LLC; and

(2) Update Permit Conditions for the Importation and Possession of Plains Bison, *Bison bison*, an Animal on the List of Restricted Animals (Part B), by Permit, for Breeding and Commercial Meat Production, by Aloha Bison, LLC.

I. Summary Description of the Request

PQB NOTES: *The Plant Quarantine Branch (PQB) submittal for requests for import or possession permits, as revised, distinguishes information provided by the applicant from procedural information and advisory comment and evaluation presented by PQB. With the exception of PQB notes, hereafter "PQB NOTES," the text shown below in Section II from page 2 through page 21 of the submittal was taken directly from the Aloha Bison, LLC's application and subsequent written communications provided by the applicant Mr. Michael J. Botha. For instance, the statements on pages 16-21 regarding effects on the environment are the applicant's statements in response to standard PQB questions and are not PQB's statements. This approach for PQB submittals aims for greater applicant participation in presenting import requests in order to move these requests to the Board of Agriculture and Biosecurity (Board) more quickly, while distinguishing applicant provided information from PQB information. The portion of the submittal prepared by PQB, including the Advisory Subcommittee Review, Advisory Committee Review, and Proposed Permit Conditions are identified as Sections III, IV, and V of the submittal, which starts at pages 22, 25, and 30, respectively.*



C1

Plains Bison, *Bison bison*
Michael Botha, Aloha Bison, LLC

We have a request to review the following:

COMMODITY: Twenty-seven (27) Plains Bison, *Bison bison*
(Refer to Appendix A for Permit Application).

SHIPPERS: Michael J. Botha, Big Sky Bison, LLC,
234 Vaughn North Frontage Road, Vaughn, Montana 59487
Phone No.: (808) 478-1479.

IMPORTER: Michael J. Botha, Aloha Bison, LLC,
59-426 Kawowo Place, Haleiwa, Hawaii 96712
Phone No.: (808) 478-1479.

CATEGORY: Plains Bison, *Bison bison*, are on the List of Restricted Animals (Part B). Pursuant to Hawaii Administrative Rules (HAR) §4-71-6.5, Bison (*Bison bison*), may be imported into Hawaii for government use, or private and commercial use, including research, or zoological parks.

PQB NOTES: *The applicant's request to the Board of Agriculture and Biosecurity (Board) also includes amendments to current permit conditions to import and possess bison, previously approved by the Board on July 27, 1995. Pursuant to section 4-71-4, Hawaii Administrative Rules, amendments to permit conditions for nondomestic animal imports require Board approval. Permit conditions in this request have been amended to clarify current entry requirements into the State and enhance safeguarding procedures and requirements. If approved by the Board, the updated permit conditions would apply to any and all other ranching operations seeking to import bison into the State.*

II. Information Provided by the Applicant in Support of the Application

PROJECT:

- Aloha Bison's mission is to inspire a thriving future by raising healthy, naturally nurtured bison in Hawaii through regenerative agriculture practices, revitalizing our land, enriching ecosystems, and nourishing our island communities with ethical, wholesome meat.
- Our Regenerative Philosophy - We believe that raising bison should work with nature, not against it. At Aloha Bison, everything is connected—our animals, the soil, the water, the plants, and the people. Regenerative ranching means improving the health of the land every year, building stronger soil, protecting native wildlife, and supporting a thriving, pasture-raised bison herd.
- We use rotational grazing to mimic how wild bison once moved across the plains. This helps the land recover, encourages the growth of native

Plains Bison, *Bison bison*
Michael Botha, Aloha Bison, LLC

grasses and forbs, and boosts the ecosystem around us. Our ranch is more than just a place to raise bison—it's a living, breathing landscape where nature thrives.

- Our grazing practices benefit more than bison. By avoiding chemicals and protecting plant diversity, we create a rich habitat for wildlife especially birds, and pollinators. Our efforts help maintain a balanced ecosystem, where every creature has a role to play.
- At Aloha Bison, we raise more than just bison, grow healthy soil, support native wildlife, and protect the land we love. It's our mission to raise healthy, naturally nurtured bison in Hawaii through regenerative agriculture practices, revitalizing our land, enriching ecosystems, and nourishing our island communities with ethical, wholesome meat.

PQB NOTES: *Mr. Botha provided a Certificate of Compliance with the Audubon Conservation Ranching Program for "Grazed on Audubon Certified Bird Friendly Land" in Montana. Please see Attachment 1 for the certificate.*

OBJECTIVE:

Introducing Bison to the North Shore of Oahu, Hawaii: Project Objective
A Sustainable Approach to Agriculture and Nutrition

Objective

The primary goal of this project is to introduce a foundation herd of Plains Bison to the North Shore of Oahu, in Hawaii. And utilize regenerative agriculture practices to ethically raise bison and produce healthy, nutritious grass-fed meat for local island communities. This initiative aims to create a sustainable agricultural model that not only supports the local ecosystem but also provides a reliable source of high-quality protein to enhance food security in Hawaii and promote better health among island communities.

Importance of Bison to the Project

Bison, as a keystone species, play a vital role in maintaining the health of grassland ecosystems. Their natural grazing habits help to regenerate the soil, promote biodiversity, and reduce the need for chemical fertilizers and pesticides. The introduction of bison to Hawaii is expected to have numerous ecological benefits, such as improving soil health, increasing water retention, and fostering native plant growth. Moreover, bison meat is known for its high nutritional value, being rich in protein, omega-3 fatty acids, and essential vitamins and minerals, making it an ideal addition to the diet of the local island communities.

Utilization of Bison

The bison will be raised on rotational grazing systems, which mimic their natural grazing patterns and allow for the recovery and regeneration of pastures. This

Plains Bison, *Bison bison*
Michael Botha, Aloha Bison, LLC

approach will ensure that the land remains fertile and productive, while minimizing the environmental impact of livestock farming. The project will also focus on ethical animal husbandry practices, ensuring that the bison are treated with care and respect throughout their lives. We practice low pressure stockmanship strategies, and allow our bison to live out their lives as naturally as possible, our goal is that our bison only experience one bad day in their life. This includes providing ample space for roaming, access to clean water, no unnecessary stress and a diet free from antibiotics and hormones.

Project Timeline

- **Phase 1:** Feasibility Study and Planning (Months 1-6) - Conduct thorough research on the logistical requirements, and community acceptance of introducing bison to Hawaii. Develop a comprehensive project plan, including budget, resources, and timelines. Current status: Started 12/15/24 expected completion 6/15/25
- **Phase 2:** Infrastructure Development (Months 7-12) - Establish the necessary infrastructure, such as fencing, water systems, and grazing areas, to support the bison. Secure DAB permits and approvals from relevant authorities. Current status: Pending DAB application approval. Application submitted 5/21/25 expected completion 12/15/25

PQB NOTES: *Should this request be approved, a permit shall not be issued until a site inspection has been conducted and it has been verified that the site is capable of securely housing the animals.*

- **Phase 3:** Introduction of Bison (Months 13-18) - Transport and introduce the first herd of bison to the designated grazing areas. Monitor their adaptation to the new environment and make necessary adjustments to ensure their well-being. Current status: Pending start 01/15/26 expected completion 6/15/26
- **Phase 4:** Ongoing Management and Evaluation (Months 19-36) - Implement rotational grazing systems, monitor soil health, and assess the overall impact of the project. Engage with local communities to promote awareness and support for sustainable agriculture practices. Current status: Started 06/16/26 expected completion 06/15/27
- **Phase 5:** Expansion and Optimization (Beyond Month 36) - Evaluate the success of the initial phase and explore opportunities for expanding the project to include increasing the herd size by importing additional stud bison bulls from different genetic lineage. Continuously optimize management strategies to ensure long-term sustainability. Current status: Pending 01/01/28 and ongoing

Conclusion

This project represents a significant step towards creating a sustainable and ethical holistic agricultural model in Hawaii. By introducing bison to the islands and employing

Plains Bison, *Bison bison*
Michael Botha, Aloha Bison, LLC

regenerative agriculture practices, we aim to improve the health of the local ecosystem, enhance food security in Hawaii and provide affordable high-quality meat protein to the island communities. Through careful planning, community engagement, and ongoing management, this initiative has the potential to make a lasting positive impact on the environment and the well-being of local populations.

PROCEDURE:

Raising Bison to Produce Healthy Meat in Hawaii Procedures and Timeline

Introduction

Raising bison to produce healthy meat involves a series of detailed procedures to ensure our animals' welfare and maximize meat yield. This guide provides a comprehensive overview of the breeding process, the ideal age and size for slaughter, and the expected meat yield from a meat bison in Hawaii.

Breeding and Calf Production

Breeding Age

Bison typically reaches sexual maturity at different ages based on their gender:

- **Females (Cows):** Generally, bison cows can start breeding at around 2-3 years of age. However, it is often recommended to allow cows to reach at least 3 years old to ensure they are physically mature enough to carry and nurture a calf effectively.
- **Males (Bulls):** Bulls can begin breeding at approximately 2 years of age, but they are often more effective breeders at around 3 years old and beyond when they are fully mature and more dominant.

Calving Season

The calving season typically occurs in the late spring to early summer (May to June). This timing takes advantage of the optimal weather conditions and abundant forage availability, which support the nutritional needs of the cow and her calf.

Ideal Age and Size for Slaughter

Age for Slaughter

We have found that the ideal age for slaughtering bison for meat production is generally between 24 to 30 months. At this age, bison have typically reached a good balance between size, meat quality, and feed efficiency.

Size for Slaughter

We prefer to slaughter bison when they reach a live weight of around 1,100 to 1,300 pounds. This weight range ensures that the meat is tender and has a desirable flavor profile.

Plains Bison, *Bison bison*
Michael Botha, Aloha Bison, LLC

Meat Yield Expectations

The amount of meat yield from a bison can vary based on several factors, including the animal's diet, health, and overall management. However, some general expectations for meat yield from a meat bison include:

- **Dressed Weight:** The dressed weight (carcass weight after the hide, head, and internal organs are removed) is typically about 55-60% of the live weight. For example, a bison with a live weight of 1,200 pounds may have a dressed weight of approximately 660 to 720 pounds.
- **Meat Yield:** The actual meat yield (boneless, trimmed meat) from the dressed carcass is around 60-65% of the dressed weight. Using the example above, the meat yield would be approximately 396 to 468 pounds.

Conclusion

Raising bison for meat production requires careful attention to their breeding, growth, and slaughter processes to ensure high-quality meat yield. By following the outlined procedures and timelines, we optimize the health and productivity of our bison, resulting in nutritious, healthy and flavorful bison meat for our island communities.

DISCUSSION:

1. Person Responsible:

- Person responsible:
 - Michael J Botha will be responsible and accountable for the safeguarding and use of the bison.
 - Mail/Home address: 59-426 Kawowo Pl, Haleiwa, HI 96712
 - Phone (808) 478-1479
 - We have reserved the name Aloha Bison LLC with DCCA and intend to register Aloha Bison LLC as a new Hawaii LLC in the coming weeks. Aloha Bison LLC will be the name of the entity that operates the bison enterprise. Michael J Botha will own Aloha Bison LLC.
- Summary of Experience:
 - Michael J Botha is a 57-year-old entrepreneur who spent 21 years (1996- 2017) living full time on the North Shore of Oahu where he founded Sandwich Isle Pest Solutions. Starting as a one-man operation based on Oahu's North Shore, Michael grew Sandwich Isle Pest Solutions to become one of the largest pest management businesses in Hawaii and earned a position in the Top 100 Pest Management Business in the entire country. In 2016 Michael sold Sandwich Isle to Terminix International, moved to Montana full time, and founded a real estate investment business and other business

Plains Bison, *Bison bison*
Michael Botha, Aloha Bison, LLC

ventures. Michael owns a home in Pupukea where he and his family stay while in Hawaii. Michael and his family plan to move back and to live full time in Hawaii, once we have received approval for our application to import bison and Aloha Bison becomes operational.

- Michael founded, owns and operates Big Sky Bison, a regenerative bison ranch that raises grass fed bison, sells live animals to other producers, produces bison meat products, operates a visitor and bison education program, and offers bison hunting opportunities in Central Montana.
 - In 2018 Michael purchased a top-quality foundation herd of 28 bred bison heifers and 2 stud bison bulls and began bison operations on leased private grazing land near Bozeman, MT. In 2020, Michael purchased a 1,200-acre ranch, which he converted from an existing cattle operation to a new bison operation, this is where Big Sky Bison operates today. Big Sky Bison produces top quality bison and offers healthy grass-fed bison meat and bison products throughout Montana and around the country.
 - Michael has been actively involved in the bison industry since 2018 and is a member of the National Bison Association and Montana Bison Association where he has served as Director.
 - Aside from overseeing all operations at Big Sky Bison, Michael personally guides bison hunters and completes an average of 50 bison hunts per year.
- Resume:
 - Please see attached as a separate document (Refer to Appendix B).

2. Safeguard Facility and Practices

List of Facility Details

Facility Name: G Tree Ranch owned by the Kelley Family is the name of the property that Aloha Bison will be leasing the land from.

Physical Address: 67-150 Farrington Hwy, Waialua, HI 96791

The Tax Map Keys (TMK's) for the ranch are 6-7-2-40 and 6-7-2-43.

Entry Gate Address: 67-172 Farrington Hwy, Waialua, HI 96791 This is the driveway location, which is shared with Corteva.

City: Waialua

Zip Code: 96791

Phone Number: (808) 478-1479

Fax Number: none

Plains Bison, *Bison bison*
Michael Botha, Aloha Bison, LLC

Organism Storage and Use Location: On-site at Aloha Bison located on G Tree Ranch, within designated grazing pastures.

PQB NOTES: *Aloha Bison, LLC. submitted 'Maps and Directions,' which are included as Attachment 2 for reference.*

Pictures of the Facility:

Images of Aloha Bison's "future facility" are not available. Presently the land is in a raw and unimproved state. We do not intend to build fences or construct improvements on the leased land until we have received conditional approval that our application to import bison will be approved. Once we receive conditional approval, we will begin construction of the required bison enclosure and corral system. Existing barbed wire perimeter and cross fences are already installed; however, we will need to build new fences to accommodate Plant Quarantine Branch requirements for fencing bison.

PQB NOTES: *Aloha Bison, LLC submitted photographs of the proposed facility site, as referenced in Attachment 3.*

Future Facility Appearance:

Expect open grazing pastures with native grasses, brushy open forest as depicted in the pictures of the actual property above. There will be fenced areas and a corral system for bison, and possibly a visitor center for community engagement. The landscape features lush, tropical vegetation typical of the North Shore of Oahu.

Effluent Drain/Sump:

We do not presently have plans to construct permanent bathrooms or permanent commercial buildings. Initially we will have Portable Toilets serviced by a local vendor.

Nearby Bodies of Water:

In Waialua, potential nearby bodies include the smaller drainages and seasonal streams that may feed into the Pacific Ocean. Ranch operations are not anticipated to produce any wastewater; therefore, no direct wastewater will be discharged into drainages, streams or the ocean.

Specific Container or System for Organism Storage and Use:

Organism: Bison (live animals for grazing and meat production).

Storage System:

Perimeter Fence and Grazing Pastures: Bison will be confined and kept in open,

Plains Bison, *Bison bison*
Michael Botha, Aloha Bison, LLC

fenced pastures designed to comply with all Plant Quarantine Branch requirements as detailed in PQB Permit Conditions Publication Section 9 A-E. We have used 4-point barbed wire fences with 100% success for the past five years at Big Sky Bison ranch, therefore we will prefer to use this PQB option. Our pastures will be designed for rotational grazing to promote soil health and prevent overgrazing, aligning with our mission to revitalize our land, enriching ecosystems.

Corral and Holding Pens: Temporary holding pens will be constructed and purpose-built to handle bison for veterinary checks, annual bison works or before transport to a USDA slaughterhouse. These pens will be designed to minimize stress, with adequate stock water access.

Processing Facility: For meat production, bison may be processed off site in a local facility compliant with USDA and Hawaii DOH standards.

3. **Method of Disposition:**

1. Post-Project or Termination Handling of Bison

- Continued Operation (Preferred Scenario):
 - Action: If the project (defined as ongoing bison ranching for meat production) continues beyond its initial scope or is not terminated, bison will remain on-site as part of Aloha Bison's regenerative agriculture mission to produce wholesome meat and support Hawaii's food security.
 - Rationale: Our mission emphasizes sustainable, long-term production, so bison will continue to be raised, grazed rotationally, and processed for local consumption, maintaining herd size through natural breeding or importation of additional stud bulls.
 - Storage Conditions: Live bison will be kept in fenced pastures (PQB recommended and approved fencing) with access to native grasses, shade, and water. Pastures are designed for regenerative grazing to promote soil health and prevent overgrazing. Meat from processed bison is stored in USDA-compliant walk-in coolers (35–40°F) with vacuum-sealed packaging to ensure freshness.
 - Why Not Destroyed: Bison are a valuable agricultural resource contributing to food security and ecosystem restoration. Destruction is unnecessary unless required by disease control or regulatory mandates.
- Project Termination (e.g., Business Closure or Regulatory Requirement):
 - Action: If the project is terminated, bison will be:

Plains Bison, *Bison bison*
Michael Botha, Aloha Bison, LLC

- Sold or Transferred: Healthy bison will be sold to other DAB-approved ranches in Hawaii or mainland U.S. facilities. With DAB approval, priority will be given to local ranches to support Hawaii's agricultural economy.
- Processed for Meat: A portion of the herd may be humanely slaughtered at a USDA-inspected facility, with meat distributed to local markets or donated to community food banks to enhance food security.
- Euthanasia: If sale or processing is not feasible (e.g., due to disease or regulatory restrictions), bison will be humanely euthanized by precision field harvest, with carcasses disposed of per DAB protocols (see below for disposal details).
- Shipping:
 - How: Bison will be transported in heavy-duty livestock trailers with secure latches, cleaned, and disinfected before and after use to prevent disease spread. Transport complies with DAB and USDA interstate livestock movement regulations.
 - Where: Potential destinations include DAB-approved ranches on other Hawaiian islands or mainland bison facilities. Permits will be obtained from DAB's Livestock Disease Control Branch (808-483-7106).
 - Documentation: Health certificates and movement permits will accompany each animal, ensuring traceability and biosecurity compliance.
- Conditions: Shipping will occur only under veterinary supervision, with bison inspected for health and vaccinated as required. Transport vehicles will avoid populated areas to minimize escape risks
- Conditions for Use:
 - Bison will continue to be used for meat production, supporting local food security, and as part of regenerative agriculture. They will graze in rotational pastures to enhance soil health and ecosystem vitality, as per the mission statement.
 - Use will occur under DAB and USDA oversight, with required veterinary checks to ensure animal welfare and compliance with food safety standards.
- Conditions for Storage:
 - Live Bison: Stored in secure pastures with high-strength fencing, water troughs, and shade structures to minimize stress. Pastures are monitored daily for fence integrity and weekly for environmental conditions.

Plains Bison, *Bison bison*
Michael Botha, Aloha Bison, LLC

- Conditions for Destruction:
 - Destruction will occur only if mandated by DAB or USDA due to a contagious disease outbreak (e.g., bovine tuberculosis, brucellosis) or if bison cannot be sold/transferred.
 - Method: Humane euthanasia by precision field harvest. Carcasses will be incinerated or buried in a designated disposal site approved by DAB, following Hawaii's environmental regulations to prevent contamination.
 - Conditions: Destruction will be supervised by DAB officials, with biosecurity measures (e.g., isolation of affected animals, disinfection of equipment) to prevent disease spread.

2. Handling of Deceased Bison (Due to Disease or Other Causes)

- Disposal Procedures:
 - Natural Death or Non-Disease Causes:
 - Action: Deceased bison will be examined by a veterinarian to confirm the cause of death. If no contagious disease is detected, carcasses will be disposed of via:
 - Composting: Carcasses are composted in covered, aerated piles on-site, following and USDA guidelines for livestock mortality composting. This method supports regenerative agriculture by returning nutrients to the soil.
 - Rendering: If composting is not feasible, carcasses are sent to an DAB-approved rendering facility.
 - Burial: Carcasses are buried in a designated, DAB-approved deep pit (at least 4 feet deep) away from water sources to prevent contamination.
 - Conditions: Disposal sites are located at least 500 feet from streams, wells, or the Pacific Ocean, per Hawaii's environmental regulations.
 - Disease-Related Death:
 - Action: If death is due to a reportable disease (e.g., brucellosis), the carcass is isolated immediately, and DAB's Livestock Disease Control Branch is notified within 24 hours (808-483-7106). Disposal options include:
 - Incineration: Method for contagious diseases, using a licensed incinerator facility to destroy pathogens.

Plains Bison, *Bison bison*
Michael Botha, Aloha Bison, LLC

- Deep Burial: Carcasses are buried in an DAB-approved site with lime treatment to neutralize pathogens, ensuring no contact with groundwater.
- Conditions: Diseased carcasses are handled with PPE (gloves, masks, coveralls) by trained staff. The area is cordoned off, and all equipment is disinfected to prevent disease spread.
- Procedures to Prevent Contamination or Disease Spread:
 - Quarantine Protocol: If a bison shows signs of illness, it is immediately moved to an isolated holding pen (steel-reinforced, separate from main pastures) for veterinary evaluation. The pen is located at least 100 feet from other animals and water sources.
 - Disease Surveillance: Monthly veterinary inspections and RFID monitoring (e.g., HerdDogg system) track health metrics (e.g., temperature, weight loss) to detect diseases early. Blood samples are tested for reportable diseases per DAB requirements.
 - Staff Training: Annual biosecurity training ensures staff follow DAB protocols for handling deceased animals, including proper PPE use and reporting procedures.
 - Environmental Protection: Disposal sites are monitored to ensure no runoff reaches nearby bodies of water, complying with the Clean Water Act and DOH wastewater rules.

4. Abstract of Organisms:

a. Plains Bison - *Bison bison bison*

We will be importing Plains Bison from Big Sky Bison in Montana.

A bison (pl.: bison) is a large bovine in the genus *Bison* (Greek: "wild ox" (bison)) within the tribe Bovini. Of the two surviving species, the American bison, *B. bison*, found only in North America, is the more numerous. The North American species is composed of two subspecies, the Plains bison, *B. b. bison*, and the generally more northern wood bison, *B. b. athabascae*. Bison species have been traditionally classified in their own genus, modern genetics indicates that they are nested within the genus *Bos*, which includes, among others, cattle, yaks and gaur, being most closely related to yaks.

- ##### b. The American bison are the largest surviving terrestrial animals in North America. They are typical artiodactyl (cloven hooved) ungulates and are similar in appearance to other bovines such as cattle and true buffalo.

Plains Bison, *Bison bison*
Michael Botha, Aloha Bison, LLC

They are broad and muscular with shaggy coats of long hair. Adults grow up to 2 meters (6 feet 7 inches) in height and 3.5 m (11 ft 6 in) in length for American bison. American bison can weigh from around 400 to 1,270 kilograms (880 to 2,800 pounds). Bison are nomadic grazers and travel in herds. Towards the end of the summer, for the reproductive season, the sexes necessarily commingle. Bison may live to 20 years of age. Female bison ("cows") typically reproduce after three years of age and can continue beyond 19 years of age. Cows produce calves annually as long as their nutrition is sufficient, but not after years when weight gain is low. Reproduction is dependent on a cow's mass and age. Heavier cows produce heavier calves (weighed in the fall at weaning), and weights of calves are lower for older cows.

- c. Bison are ruminants, able to ferment cellulose in a specialized stomach prior to digestion. Bison consume grasses and sedges, and a wide variety of plants including woody plants and herbaceous eudicots. Over the course of the year, bison shift which plants they select in their diet based on which plants have the highest protein or energy concentrations at a given time and will reliably consume the same species of plants across years.
- d. American bison once roamed the entire continent of America from high elevation mountain areas to sea level and coastal areas. Today bison are confined to a number of National and State Parks and private land throughout most states in the USA. Typical habitats are open or semi open grasslands, as well as sagebrush, semiarid lands, and scrublands and forest. Some heavily wooded areas are also known historically to have supported bison. Bison also graze in hilly or mountainous areas where the slopes are surprisingly steep.
- e. There is not a high degree of potential for bison to become established in Hawaii should an animal escape. As mentioned above (4. A, B, C) if bison escape, they are easily eradicated by targeted elimination or hunting. Bison are massive animals that are easy to find, prefer to stay in herds, prefer to graze in open grass areas and need to drink water every day. Considering the above, an escaped bison will be easy to find and eradicate. Another thing to consider is that to become established; it would require that both bull and heifer bison escape and elope together, in order to breed. Cow bison can have only one calf per year.
- f. Bison are considered a valuable commodity. Bison are not considered a pest or nuisance in their native range, or where they have become established. There is growing interest throughout most states in the USA in raising bison for commercial meat consumption.

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- g.** Bison are highly adaptable and can live in a wide range of climates, from extreme heat to extreme cold. Their thick coats and efficient digestive systems allow them to thrive in varying temperatures. In warmer climates bison do not grow thick winter fur as they do in colder climates. We have observed our own Big Sky Bison herd located in Central Montana flourish in extreme temperatures ranging from -55 degrees Fahrenheit during harsh winter conditions to +102 degrees Fahrenheit during extreme hot drought conditions in summer.
- h.** Bison (*Bison bison*) are considered semi-domesticated or minimally domesticated. Unlike cattle, which have undergone thousands of years of selective breeding for docility and productivity, bison retain much of their wild nature. They are larger, stronger, and less predictable, requiring specialized handling and robust infrastructure. Bison are adapted to natural grazing behaviors and thrive in open pastures, aligning with regenerative agriculture practices. Bison are cultivated for commercial purposes, primarily for meat production. Their meat is valued for its lean, nutrient-rich profile, appealing to health-conscious consumers and supporting Hawaii's food security by reducing reliance on imported meat. Bison are also raised for hides, bones, and occasionally tourism (e.g., ranch tours), though meat is the primary commercial focus. Commercial bison ranching is less widespread than cattle ranching due to higher infrastructure costs and handling challenges. In the U.S., the National Bison Association (2025 data) estimates 400,000 bison, compared to 90 million cattle.
- i.** In their native range, privately owned bison are required to be kept confined upon their private property and kept separate from wild bison herds. Bison may exhibit aggressive behavior towards other bovines such as cattle.
- j.** List diseases or other pests associated with the organism.
- Bovine Tuberculosis (TB)
 - Brucellosis
 - Bovine Respiratory Disease Complex (BRDC)
 - Parasitic Infections (Internal and External)
 - Clostridial Diseases (e.g., Blackleg, Tetanus)
 - Malignant Catarrhal Fever (MCF)
- k.** Bison, like other large mammals, are not inherently toxic or pathogenic. Their meat, organs, and byproducts are generally safe for human consumption when properly handled, processed, and cooked. However, there are specific contexts where bison could pose health risks related to toxicity or pathogenicity:
- Pathogenic Risks:

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- **Bacterial Infections:** Bison can carry pathogens like *Brucella abortus* (causing brucellosis), *Mycobacterium bovis* (bovine tuberculosis), or *E. coli*. These can be transmitted to humans through contact with infected animals, consumption of undercooked meat, or unpasteurized dairy products. Brucellosis, for instance, is a significant concern in some wild bison populations, particularly in areas like Yellowstone National Park, where it can spread to cattle or humans.
- **Parasites:** Bison may harbor parasites such as *Toxoplasma gondii* or *Trichinella* species, which can be transmitted through undercooked meat. Proper cooking eliminates this risk.
- **Zoonotic Diseases:** Direct contact with bison (e.g., through hunting, butchering, or handling) can expose humans to zoonotic diseases if the animal is infected. Standard hygiene practices, like wearing gloves and thoroughly cooking meat, mitigate these risks.
- **Toxicity Risks:**
 - **Environmental Contaminants:** Bison grazing in contaminated areas may accumulate toxins like heavy metals (e.g., lead, mercury) or pesticides in their tissues. This is not unique to bison but depends on their environment. For example, bison near industrial or mining sites could have elevated levels of contaminants.
 - **Plant Toxins:** Bison may consume toxic plants (e.g., locoweed or certain alkaloid-containing plants) in their diet, which could theoretically accumulate in their tissues. However, bison have evolved to avoid most toxic plants, and such cases are rare.
 - **Improper Handling:** Spoilage due to improper storage or processing of bison meat can lead to the growth of toxigenic bacteria like *Clostridium botulinum*, which produces botulinum toxin. This is a risk for any meat, not specific to bison.
- **Allergic Reactions:**
 - Some individuals may have allergic reactions to bison fur or meat, similar to red meat allergies (e.g., alpha-gal syndrome, often linked to tick bites). This is not toxicity but an immune response.
- **Mitigation:**
 - **Cooking:** Thoroughly cooking bison meat to an internal temperature of at least 160°F (71°C) kills most pathogens and parasites.

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- **Source Verification:** Sourcing bison from reputable farms or regulated hunting areas reduces the risk of environmental contaminants or diseases.
- **Hygiene:** Proper handling and sanitation during butchering and preparation prevent contamination.

In summary, bison are not inherently toxic or pathogenic, but like any livestock or wild game, they can carry pathogens or environmental toxins under certain conditions. Safe handling, cooking, and sourcing practices effectively eliminate these risks.

5. **Effects on the Environment:**

- a. Bison are herd animals with a very strong herding instinct. Bison do not like to be separated from their herd mates and will attempt to rejoin their herd whenever they become separated. In the unlikely event that bison become separated from the herd and/or escape their enclosure, the first step will be to attempt to lead them back to their herd using non-lethal stockmanship strategies. If the bison do not comply with the attempts to return them to their enclosure, they will be humanely euthanized with a precision rifle shot to the axis bone (top segment of their vertebrae). Using a single 180 grain .308 cartridge or similar will render the bison dead upon bullet impact. This is the process we use for humane field harvest at Big Sky Bison.

If bison were somehow able to become established in the wild they will be easy to track, find and eradicate. Bison are massive herd animals; they usually stick together in tight herd structures and prefer to graze in open grassy areas. Bison need to drink up to twelve gallons of water per day, so they will need to travel to watering sites daily. Once bison have been tracked down, they can be easily dispatched with a precision rifle shot to the axis bone (neck) or a broadside shot to the vital organs including heart and lungs. Another thing to consider is that to become established; it would require that both bull and heifer bison escape and elope undetected together, in order to breed. Cow bison typically come into heat in July and bear calves in May and can have only one calf per year.

Potential impact of pathogens, parasites that may accompany this introduction - We intend to address this by following all precautions recommended by the Plant Quarantine Branch and Animal Disease Control Branch pertaining to bison shall be followed and adhered to prior to, and post importation to Hawaii.

- b. **Environmental impact** - Bison will be confined to their fenced areas where they will be selectively rotated through pastures as part of a

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regenerative grazing process. Bison hoof action forces organic materials into the soil and improves water retention of the soil. Urination and defecation introduce nutrients to soils that improve the soil profile. Bison will drink water from water troughs supplied by a water well already in operation on the property. Bison do not make much sound, aside from deep low volume grunts as they communicate within their herd. Bison do not moo or make other loud sounds often observed around cattle.

PQB NOTES: *The proposed importation and possession request does not trigger an Environmental Assessment under the Hawai'i Environmental Policy Act (HEPA), HRS Chapter 343.*

Economic impact – Bison will be raised and produced for local meat consumption in Hawaii. Our average 1,000 lbs. meat bison at our ranch in Montana generates \$6,120 in meat sales revenue. We anticipate a similar pricing strategy for Hawaii, which equals a meat value of approximately \$17.00 per 1 lbs. of boneless cuts of meat. A typical 1,000 lbs. live bison produces 36% of its live weight in boneless cuts of meat; therefore 1,000 lbs. x 36%=360 lbs. of boneless cuts of meat x \$17.00 per 1 lbs. = \$6,120 potential meat sales per bison. We will market our locally produced bison meat products directly to consumers and to leading local restaurants, health food stores and grocery stores. Hawaii Meats Processing at their Central Oahu location has agreed to charge approximately \$1,100 to slaughter and process a single meat bison under USDA inspection. We intend to employ members from the local community to work in the bison production enterprise and potential bison agritourism (bison field tours) enterprise. We intend to follow the successful model for agritourism that we presently employ at Big Sky Bison, www.bigskybison.com our bison ranch in Montana. We intend offering a daily visitor program that will include guided bison field tours, educational/school tours and events, bison burger food truck, and possibly farm store meat sales.

Societal impact – Aloha Bison's mission is to inspire a thriving future by raising healthy, naturally nurtured bison in Hawaii through regenerative agriculture practices, revitalizing our land, enriching ecosystems, and nourishing vibrant communities with ethical, wholesome meat. As long-time Hawaii residents we are keenly aware that 80% of Hawaii's food is imported, and Hawaii only holds a five-day supply of food. Hawaii food security is a real concern for us, and we intend to positively contribute to mitigating this challenge by ethically producing nutrient dense healthy bison protein in Hawaii for the local island communities. We would also like to give back to the community, once we have achieved a sustainable livestock production level, we intend to offer traditional Native Hawaiian field harvest events that mimic what we presently offer to Native American groups and schoolchildren. Please see link to a recent Field Harvest event we put on for over 100 Native American school kids.

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<https://www.ktvh.com/news/montana-ag-network-students-experience-bison-harvest-and-blackfeet-traditional-ceremony>

c. Biosecurity Measures for Aloha Bison Ranch

Equipment to Minimize Escape, Theft, or Release of Bison and Associated Diseases/Pests

- High-Strength Fencing:
 - Description: Pastures will be enclosed with PQB approved exterior fences, designed to contain bison, which are strong and capable of charging. Electric fencing (low-voltage, solar-powered) will be integrated in high-risk areas to deter escapes.
 - Purpose: Prevents bison from escaping confined grazing areas, reducing the risk of environmental damage or interaction with local wildlife.
 - Maintenance: Fences will be inspected weekly or more frequently for damage, with immediate repairs to maintain integrity.
- Secure Holding Pens:
 - Description: Heavy-duty steel corrals with reinforced gates are used for veterinary checks, loading, or temporary containment. Pens include water troughs to minimize stress.
 - Purpose: Ensures bison are securely contained during handling, reducing escape risk during transport or treatment.
- Disease Monitoring Tools:
 - Description: A Veterinarian will be scheduled to be on-site for routine health checks. We are presently experimenting with RFID tags, if these devices meet expectations we may install RFID tags on all bison. A mobile app (e.g., HerdDogg or similar livestock tracking system) monitors bison health via RFID tags, alerting staff to signs of illness.
 - Purpose: Early detection of diseases like bovine tuberculosis or brucellosis, which could spread to other livestock or wildlife, ensuring rapid isolation and treatment.

Practices and Procedures to Minimize Escape, Theft, or Release of Bison and Associated Diseases/Pests

- Rotational Grazing:
 - Procedure: Bison are moved between pastures using a rotational grazing system, guided by regenerative agriculture principles.

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Portable electric fencing divides pastures, and moves are planned to avoid overgrazing or fence stress.

- Purpose: Reduces pressure on fencing, minimizing escape attempts, and promotes soil health, reducing pest habitats.
- Regular Health Monitoring:
 - Procedure: Bison are very hardy and may live full long lives without ever needing vaccines. Bison will be vaccinated against common diseases per USDA and Hawaii Department of Agriculture (DAB) guidelines. Sick animals are quarantined in isolated pens.
 - Purpose: Prevents disease spread within the herd or to local wildlife.
- Staff Training:
 - Procedure: All staff will undergo annual biosecurity training, covering proper handling, sanitation protocols, and emergency response for escapes or disease outbreaks. Training includes DAB's biosecurity guidelines for livestock.
 - Purpose: Ensures consistent application of biosecurity measures, reducing human error in containment or disease prevention.
- Visitor Control:
 - Procedure: Visitors, including suppliers or community members, must first check in at a gated entrance. No unauthorized access to bison pastures will be allowed.
 - Purpose: Minimizes external introduction of pathogens and reduces theft or vandalism risks.
- Transport Protocols:
 - Procedure: Bison are transported in heavy-duty livestock trailers with secure latches, cleaned and disinfected before and after use. Transport routes avoid populated areas to minimize escape risks in case of accidents.
 - Purpose: Ensures bison remain contained during movement to the slaughterhouse, preventing release into non-native environments.

Security Features to Minimize Theft, Vandalism, or Damage from Natural Elements

- Perimeter Security:
 - Description: The facility location is difficult to access from public areas, the property is surrounded by Corteva to the North which

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has security fencing and locked gates fronting Farrington Highway, this is the only public road access to the property. Private ranches are located to the east and west of the property and Mokuleia Forest Reserve is a roadless neighboring parcel to the south. Road access from Farrington Hwy requires passing through three sets of locked gates before arriving at the entry to the property. The ranch has existing barbed wire fence pastures and perimeter fences to further deter unauthorized entry. Motion-activated sim card enabled security cameras and solar-powered lighting will be installed at key access points. We will also have an aerial drone which will be used for perimeter fence checks and surveillance along the perimeter.

- Purpose: Prevents theft of bison or equipment and discourages vandalism, such as fence cutting.
- Weather-Resilient Infrastructure:
 - Description: Pasture fencing will be anchored with deep-set posts and braces to withstand winds up to 150 mph. The property is naturally sloped from Mauka to Makai with drainage systems around pastures to prevent flooding during heavy rain.
 - Purpose: Maintains containment and operational integrity during natural events, reducing escape or damage risks.
- Alarm Systems:
 - Description: An alert message system is connected to the ranch manager's phone and alerts staff to gate breaches or unusual activity detected by cameras. Local police will be on speed-dial for rapid response.
 - Purpose: Enhances response time to potential theft or vandalism incidents.

Examples Demonstrating Biosecurity Effectiveness

- Big Sky Bison Ranch (our Montana Ranch):
 - Aloha Bison will be set up almost identical to how we have set up Big Sky Bison, our Montana regenerative bison ranch. Aloha Bison will adopt similar biosecurity protocols, ensuring comparable success and biosecurity control. Big Sky Bison controls all entry to the property via locked gates and secure perimeter fencing. Bison are rotated through pastures regularly to prevent stress which may lead to increased fence pressure. Our bison are vaccinated and vet checked once per year, and do not require any other human intervention. We use Tactacam solar powered sim card enabled security/herd movement cameras, these cameras send a real time

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color photograph to ranch staff anytime motion is detected. We also use an aerial drone for surveillance along our 14.5 miles of fence line. Ranch staff are required to complete daily fence checks in active pastures and weekly full perimeter fence checks. If a fence is damaged, which at Big Sky Bison is usually from deer or elk getting tangled in a fence when they try to jump over, the fence is repaired immediately.

- Relevance: Demonstrates that regular monitoring and rotational grazing, as planned for Aloha Bison, effectively minimize biosecurity issues.

6. Alternatives:

We are bison experts and enthusiasts and are only interested in producing bison at Aloha Bison. We do not have alternatives for this operation; without bison this operation will not exist.

7. References:

- The Bison Producers Handbook – **First** Edition
 - National Bison Association Publication
- The Bison Producers Handbook – **Second** Edition
 - National Bison Association Publication
- The Bison Field Necropsy Guide
 - National Bison Association
- The Bison Disease Field Guide
 - National Bison Association
- The Insider's Guide to Bison Handling and Management
 - National Bison Association
- All of the above noted references are available by clicking this link:
<https://nationalbison.org/bison-store/>

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III. Advisory Subcommittee Review

This request was submitted to the Advisory Subcommittee on Land Vertebrates for their review and recommendations. Their recommendations and comments are as follows:

1. I recommend approval ___ / ___ disapproval to allow the importation and possession of twenty-seven (27) Plains Bison, *Bison bison*, an animal on the List of Restricted Animals (Part B), by permit, for breeding and commercial meat production, by Aloha Bison, LLC.

Dr. Allen Allison, Vice President/Assistant Director, Research and Scholarly Studies, Bernice Pauahi Bishop Museum: Recommends approval.

Comments: "As mentioned in the application, Bison nest phylogenetically within the genus *Bos* and in that sense are simply another species of cattle. Without actually seeing the areas where they will be kept, it is difficult to assess their potential impact on the environment. However, I am assuming that they will be kept on range land that has been designated for cattle. Pastures in Hawaii have few if any native species of plants or animals, so the potential for adverse environmental impacts is low. The claim that Bison will assist in ecological restoration is laughable. The pasture grasses in Hawaii are almost all introduced and ecological restoration in Hawaii requires an absence of large ungulates. However, if Bison husbandry otherwise adds to Hawaii's food security, that's a good thing. This is basically a request to import another species of cattle and from an environmental point of view I don't see a problem with that."

Dr. Isaac Maeda, DVM, State Veterinarian, DAB-Animal Industry Division: Recommends approval.

Dr. Carolyn McKinnie, DVM: Recommends approval.

Comments: "Reasons for approval:

- 1) Existing bison herd in Kauai
- 2) Regenerative farming
- 3) Pasture rotation to improve (Soil health, prevent overgrazing)
- 4) Ethical husbandry practices
- 5) Pastures monitored daily for fence integrity and weekly for environmental conditions.
- 6) Monthly vet inspections and RFID health metric monitoring (e.g., temperature, weight loss)
- 7) Diet free from antibiotics and hormones (growing health concern)
- 8) Disposal sites are monitored to ensure no runoff reaches nearby bodies of water"

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Dr. Robert Reed, Director of the United States Geological Survey, Pacific Island Ecosystems Research Center, Hawaii Volcanoes National Park: Recommends approval.

Comments: "Adherence to the existing requirements for importation of bison and water buffalo should be sufficient to avoid introduction of significant pathogens; the primary gap in that document is absence of a requirement to treat bison for internal parasites. I am concerned about introduction of non-native noxious plants via zoochorous seeds carried in the bison coats, and would prefer that they be visually screened for seeds.

The statements about bison promoting biodiversity, revitalizing the land, enriching ecosystems, etc in Hawaii are without merit and should not be considered in the application review process. These are nonnative animals that will be pastured on non-native grasses, most of which are invasive and which contribute to loss of native plant diversity."

Dr. Robert Thomson, Professor, School of Life Sciences, University of Hawaii at Manoa: Recommends approval.

Comments: "Request is framed as representing a 'significant step toward creating a sustainable and holistic agricultural model in Hawaii'. The potential for this is likely minimal, as large ungulate grazing operations of this sort are not representative of historical Hawaiian ecosystems and sustainability of large ungulate meat production at a meaningful scale for feeding Hawaii's populations is questionable. This may add a new element to local food production that could potentially contribute in a way that is similar to cattle production elsewhere in the state. That said, significant negative impacts are also unlikely to exceed those of cattle grazing operations elsewhere in the state: the potential for invasiveness appears to be minimal and there are few disease risks beyond those posed by cattle grazing. Pending PQB site visit to ensure secure facilities capable of holding Bison, I recommend approval."

Dr. Amber Wright, Associate Professor, School of Life Sciences, University of Hawaii at Manoa: Recommends disapproval.

Comments: "I do not support introducing bison to Hawaii. They have no connection to this place, and are not native to tropical or island environments, being a temperate grassland species. The argument that they will not become invasive because they are a herd animal is not compelling, as we have several highly invasive ungulates here that live in herds such as mouflon sheep and axis deer."

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2. I recommend approval ___ / ___ disapproval to update permit conditions for the importation and possession of twenty-seven (27) Plains Bison, *Bison bison*, an animal on the List of Restricted Animals (Part B), by permit, for breeding and commercial meat production, by Aloha Bison, LLC.

Dr. Allen Allison: Recommends approval.

Comments: "I have no experience with ranching but trust the experts at HDOA to ensure that pastures are secure, etc."

Dr. Isaac Maeda: Recommends approval.

Comments: "Permittee will need adequate corral/chute for exam and testing of animals when required."

Dr. Carolyn McKinnie: Recommends approval.

Comments: "Although I recommend approval, I recommend Aloha Bison, LLC address the following:

- 1) Local/native animal displacement
- 2) Effects of tropical environment on temperate animals. For example, extreme humidity and effects on their skin (rain rot) and coat, exposure to parasites not found in Montana, etc.
- 3) Bison herd in Kauai recently moved to drier side of island. Bison may have had issues from being exposed to more moisture and rain
- 4) Proximity to traditional cattle herds in relation to disease transmission and applicant mentions Bison may exhibit aggressive behavior towards other bovines such as cattle
- 5) Access to a variety of plants/shrubs that would fill the need to shift to higher protein sources at certain times of years (applicant mentions they change food forage preferences in Montana)"
- 6) What SOP's will be in place to train the workers as bison require specialized handling"

Dr. Robert Reed: Recommends approval.

Dr. Robert Thomson: Recommends approval.

Dr. Amber Wright: Recommends disapproval.

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IV. Advisory Committee Review:

This request was submitted to the Advisory Committee on Plants and Animals (Advisory Committee) at its meeting on April 2, 2026, held simultaneously in person at the Plant Quarantine Branch (PQB) Conference Room located at 1849 Auiki Street and via a Zoom virtual meeting. PQB Land Vertebrate Specialist Jessica Ann Miura provided a synopsis of the request. Five members of the Advisory Subcommittee recommended approval, while one member recommended disapproval.

Michael Botha, applicant, provided in-person testimony in support of the request. Mr. Botha introduced himself as being associated with Big Sky Bison and stated that he has been in the bison business in Montana since 2018. He described his Montana operation as a 1,200-acre ranch where plains bison are raised for meat production and for sale as live animals to help establish foundation herds for new producers.

Mr. Botha described additional educational and cultural activities conducted through his Montana operation, including field harvest programs involving Native American schools and educational tours intended to teach participants about bison and meat processing. He also described a guided hunting component that developed from customer interest in participating directly in harvest activities.

Mr. Botha stated that he and his family have lived between Montana and Hawai'i and that the proposed Hawai'i operation would begin on a smaller scale. He stated that the plan is to lease a portion of G-Tree Ranch and initially import a small number of young bison, likely calves or yearlings, with the long-term goal of raising healthy plains bison in Hawai'i for local harvest and consumption.

Racquel Achiu testified remotely. Ms. Achiu identified herself as the Vice Chair of the North Shore Neighborhood Board and Chair of the Water and Land Committee for her community, but stated that she was presenting testimony as an individual and neighboring rancher (Refer to Attachment 4 for Racquel Achiu's written testimony).

Ms. Achiu stated that while the presentation sounded promising, she had significant concerns regarding the proposed location and operation. She noted that the area had recently experienced major flooding and stated that she did not hear sufficient information about emergency response or containment planning in the event of flooding or escape. She expressed concern about the potential effects on nearby schools, neighborhoods, and the broader surrounding community if bison were to escape. She also questioned whether the proposed site was appropriate for bison given the terrain and environmental conditions and asked whether the operation could affect existing cattle ranching operations that are already facing challenges. Ms. Achiu further stated that there were concerns related to disease control, land use compatibility, and whether the space available would be adequate for the proposed use. She requested that the Committee take those concerns into consideration.

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No additional testimony was offered by the public.

Committee members engaged in discussion with staff and the applicant regarding the request.

Committee member Pam Mizuno asked staff about prior experiences with bison in Hawai'i and whether there had been any incidents involving escape or other problems. Ms. Miura stated there had been an incident involving bison on Kaua'i during a historic flood event, during which some animals had escaped from the ranch property. She explained the site had since been re-evaluated and follow-up inspections had been conducted. She stated the affected operation had been relocated to another location to reduce the risk of a similar event recurring and she was not aware of any further incidents after those improvements were made. In response to a follow-up question, Ms. Miura estimated the herd of that operation consisted of approximately 100 bison.

Committee member Thomas Eisen asked why bison are included on the restricted animal list rather than treated like cattle. Ms. Miura explained that bison are not considered domesticated in the same way as cattle and because of their size, strength, and retained wild characteristics, they are regarded as less predictable animals and capable of charging. She stated this was her understanding of why bison were originally placed on the restricted list.

Committee member Eisen also asked whether bison pose any unique disease or parasite concerns relative to cattle or the environment. Ms. Miura responded that although bison and cattle are different species, they can share similar diseases and parasite concerns. She stated bison would be subject to disease screening, testing, vaccination requirements, and monitoring requirements similar to those applied to cattle through import and animal health procedures.

Committee member Robert Hauff asked follow-up questions regarding the previously referenced bison operation in the state, including whether relocation of that herd had been due solely to containment issues or also to the health and welfare of the animals in a wetter environment. Ms. Miura stated that it appeared to be a combination of environmental suitability and containment concerns, with the newer location being drier and more appropriate for the animals.

Committee member Hauff then asked whether the Department had the resources to capture and contain a bison if one were to escape and the owner was unable to recover it. Ms. Miura stated the PQB itself does not currently have the necessary equipment for that purpose and would likely coordinate with other branches or departments, such as the Animal Disease Control Branch, for assistance if needed.

Committee member Hauff also asked about concerns raised during Subcommittee review regarding the possible introduction of invasive plants or grasses through seeds or mud carried on the animals or transport equipment. Ms. Miura stated the import

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would be handled in a manner similar to livestock imports. She said PQB staff and the Animal Disease Control Branch would both have roles in inspection, and transport containers are inspected for pests. She acknowledged the concern and stated it could be addressed further if necessary.

Committee member Greg Takeshima asked whether the proposed site on O'ahu was similar in geography or flood risk to the original site on Kaua'i where flooding had previously occurred. Mr. Botha responded that the proposed O'ahu site differs significantly from the former Kaua'i site. He stated the proposed pasture areas are located on sloped land at a higher elevation, are not situated directly adjacent to a major river, and did not experience the same flood-related issues as lower-lying pastures.

PQB NOTES: *Mr. Botha submitted "Supplement: Emergency Preparedness for Escapes and Floods," which is included as Attachment 5.*

Committee member Eisen asked Mr. Botha about the size of the proposed property and whether it would be sufficient to support rotational grazing. Mr. Botha stated that the full ranch consists of approximately 1,000 acres, but the initial leased area would likely be approximately 200 to 400 acres. He stated the herd would begin on a smaller scale and the initial acreage would be sufficient to support rotational grazing. He explained his Montana operation uses large pastures and temporary electric fencing to manage rotational grazing and similar methods could be adapted for the Hawai'i operation within the permitted perimeter fencing system.

Committee member Eisen also asked about wildfire risk in the area and what plans would be in place if fire threatened the property. Mr. Botha stated one of the management goals of the operation would be to clear overgrowth and maintain more open pasture areas, which he believed would help reduce risk of fires. He also stated water sources and equipment could be used as part of fire response preparations, drawing on practices already used at his Montana ranch.

Committee member Eisen asked what benefit bison would provide over cattle, given that bison require a restricted animal permit. Mr. Botha responded that bison meat is preferred by some consumers because it is leaner and more nutrient-dense than beef, with lower fat content and a different nutritional profile. He also stated from his perspective, bison are valuable as both an agricultural product and an opportunity to strengthen local food production in Hawai'i.

Committee member Eisen further asked about slaughtering facilities and whether slaughter would occur on-site or elsewhere. Mr. Botha stated slaughter capacity in Hawai'i is presently limited, but he had spoken with slaughter facilities on Hawai'i Island, Kaua'i, and O'ahu. He stated slaughter options on Kaua'i and O'ahu remained possible and a separate future enterprise could involve development of a small-scale USDA-licensed slaughter facility.

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Michael Botha, Aloha Bison, LLC.

Committee member Hauff asked whether there were any local licensing or operational requirements beyond the permit itself that would help verify the legitimacy of the proposed ranching operation. Ms. Miura stated the PQB does not impose additional operational licensing beyond the permit conditions, although other branches or agencies may have separate requirements, such as branding registration or future permitting requirements. She noted one of the permit conditions was intentionally written broadly so if future state or federal licenses or certifications became necessary, the permittee would be required to maintain them.

Committee member Hauff also asked whether the Department or PQB took a position on the application. Jonathan Ho, Plant Quarantine Branch Manager, responded the PQB generally does not formally take a position at the Advisory Committee level because the Committee's recommendation is part of the review process that informs subsequent action by the Board. However, he stated, based on the information available and the Advisory Subcommittee review, the request did not present major unresolved concerns from the PQB's perspective. He said the request appeared to be in line with other permitted activities involving restricted animals already present in the state, provided that the applicant complies with all required site upgrades, fencing requirements, inspections, and other administrative conditions before any animals are imported. Mr. Ho added that disease and animal health concerns had also been reviewed by the state veterinarian through the Advisory Subcommittee process.

Committee member Takeshima asked Mr. Botha about long-term herd growth and expansion plans. Mr. Botha stated herd size would be determined by the carrying capacity of the leased land and the goal of maintaining a pasture-based operation without excessive supplemental feed. He explained the initial heifer calves would not be bred until they were older and herd expansion would occur gradually, with any surplus animals eventually harvested for meat.

Committee member Eisen asked whether bison would consume the types of invasive grasses and overgrowth commonly found in unmanaged areas on the North Shore. Mr. Botha stated bison are highly adaptable grazers and browsers and are capable of feeding in a variety of habitats. He explained that they can consume grasses, brush, and herbaceous vegetation and his operation would not rely on planting special grasses but instead on managing existing vegetation and allowing available forage to recover.

Committee member Eisen also asked whether the applicant had undertaken community outreach. Mr. Botha stated formal outreach had not yet been conducted because the project had not reached the stage of permit certainty. Once the permit status became clearer, he intended to engage the community, explain the project, receive input, and seek support.

Further discussion occurred regarding emergency response if a bison were to escape. Mr. Botha stated his operation relies heavily on culling animals that do not respect fencing and on training the herd to follow feed vehicles for movement. He stated bison

Plains Bison, *Bison bison*
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have a strong herd instinct and tend not to separate from the group. He explained that, if necessary, attempts would first be made to recover animals using feed conditioning methods, but if an animal could not be safely contained, it would be euthanized.

Committee member Takeshima also stated that if Mr. Botha's operation were ever to expand, additional Department of Health requirements relating to water pollution or surface water protection planning might apply. Mr. Botha clarified the initial leased acreage would remain below that threshold and the full 1,000-acre total referenced was the overall size of the ranch property, not the acreage that would necessarily be leased or used.

After discussion concluded, Advisory Committee Chairperson Yeong Han Lau made a final call for additional questions. Hearing none, he called for a vote.

Vote to Recommend Approval of the request: Approved Unanimously 5/0.

Recommend Approval: Yeong Han Lau, Pam Mizuno, Robert Hauff, Thomas Eisen, Greg Takeshima.

Motion Passed.

Plains Bison, *Bison bison*
Michael Botha, Aloha Bison, LLC.

V. Proposed Import and Possession Permit Conditions

1. The restricted article(s), Plains Bison, *Bison bison*, including progeny, shall be imported and possessed for breeding and commercial meat production, purposes approved by the Board of Agriculture and Biosecurity (Board), and shall not be given, sold, and/or transferred in Hawaii unless approved by the Board. Release of the restricted article(s) into the environment is prohibited.
2. The permittee, Michael J. Botha, Aloha Bison, LLC., 59-426 Kawowo Place, Haleiwa, Hawaii 96712, shall be responsible and accountable for the restricted article(s), including progeny, from the time of their arrival to their final disposition.
3. The restricted article(s) shall be safeguarded at Aloha Bison, LLC., 67-150 Farrington Highway, Waialua, Hawai'i 96791, Tax Map Keys (TMKs): (1) 6-7-002:040 and (1) 6-7-002:043, site(s) inspected and approved by the Hawaii Department of Agriculture and Biosecurity (DAB) Plant Quarantine Branch (PQB) prior to importation. A site inspection and approval by the PQB Chief is required prior to the import or transport of the restricted article(s) to another site.
4. The restricted article(s) shall be maintained by the permittee, Michael J. Botha, Aloha Bison, LLC., 59-426 Kawowo Place, Haleiwa, Hawaii 96712 or by trained or certified personnel designated by the permittee.
5. The restricted article(s) shall be imported only through the port of Honolulu, as approved by the Board. Entry into Hawaii through another port is prohibited unless specified by the Board.
6. The permittee shall provide the DAB PQB and Animal Industry Division (AID) with the confirmed arrival date, time, mode of transportation, and any other required information for the arrival of the restricted article(s) at least 48 hours prior to arrival. The permittee shall immediately notify the PQB and AID of any changes to this information.
7. Each shipment of the restricted article(s) shall be accompanied by the following:
 - a. A complete copy of the PQB permit for the restricted article(s);
 - b. An invoice, packing list, or other similar PQB approved document listing the scientific and common names of the restricted article(s);
 - c. The quantity of the restricted article(s); and
 - d. Shipper contact information, including mailing address, phone number and email address.
8. The restricted article(s) shall be permanently marked with a unique identification code, or other markings or identifiers as approved by the PQB Chief.

Plains Bison, *Bison bison*
Michael Botha, Aloha Bison, LLC.

9. Each container holding the restricted article(s) imported into the state shall be clearly labeled with "Live Animals" and "May be Opened and Delayed for Agriculture Inspection" in 1/2-inch minimum sized font.
10. All bedding used to transport the restricted article(s) and fecal material from the restricted article(s) shall be bagged and disposed of directly into the municipal landfill.
11. The restricted article(s) shall comply with all pre-entry and post-entry animal health requirements of the AID, pursuant to Chapter 4-16, Hawaii Administrative Rules, or as required by the DAB State Veterinarian (Ph: (808) 837-8092).
12. The restricted article(s) shall be kept secured by PQB-approved exterior fences and gates at all times. The following requirements apply to all fencing and gates used to secure the restricted article(s):
 - a. The approved fence(s) and gate(s) shall be a minimum of 5.5 feet in height and shall be made of woven wire, chain link fence, 4-point barbed wire, or other PQB-approved material. A combination of the aforementioned materials may be used.
 - b. All barbed wire used shall be a minimum of 12.5 gauge, and the space between horizontal wires shall not exceed 8 inches. If fencing consists of only barbed wire, the distance between line posts shall not exceed 10 feet.
 - c. All woven wire used shall be a minimum of 9 gauge. If fencing consists of only woven wire, the space between all horizontal wires shall not exceed 10 inches, the space between vertical wires shall not exceed 12 inches, and the distance between line posts shall not exceed 16 feet.
 - d. The lowest horizontal barbed wire and/or woven wire shall not be greater than 6 inches off the ground. The lowest point on a vertical barbed wire, woven wire and/or chain link fence shall not be greater than 6 inches off the ground. Line posts shall be a minimum of 7-inch diameter wooden posts, metal T-posts, or other comparable PQB approved material.
 - e. For other fencing or containment options that are not already specified in Condition No. 12, the Board may approve alternative fencing options on a case-by-case basis.
13. The restricted article(s) shall be subject to inspection by the DAB PQB, and the AID prior to entry into the State. It is the responsibility of the permittee to provide any restraint(s), including chemical restraint(s), deemed necessary by the AID to

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conduct a proper inspection. The permittee shall be responsible for ensuring an inspection is conducted by PQB and the AID.

14. The approved site, restricted article(s), records, and documents pertaining to the restricted article(s) and progeny under this permit, shall be subject to post-entry inspections by PQB and the AID. The permittee shall make the site, restricted article(s), including progeny, and records pertaining to the restricted article(s) available for inspection upon request by a PQB or the AID inspector.
15. The permittee shall adhere to the use, facility, equipment, procedures, and safeguards described in the permit application and as approved by the Board.
16. The permittee shall have a biosecurity manual available for review and approval by the PQB at the time of the initial site inspection and any subsequent post-entry inspection(s), which identifies the practices and procedures to be adhered to by the permittee to minimize or eliminate the risk of theft, escape, or accidental release of the restricted article(s), including the risk of introduction and spread of diseases and pests associated with the restricted article(s) to the environment. The permittee shall adhere to all practices and procedures as stated in this biosecurity manual.
17. The permittee shall immediately notify the PQB Chief verbally and in writing under the following circumstances:
 - a. If any escape, theft, release, disease outbreaks, pest emergence and/or mortality involving the restricted article(s) or progeny under this permit occurs. If the restricted article(s) or progeny escape or are found to be free from containment, the DAB may confiscate or capture the restricted article(s) or progeny at the expense of the permittee, pursuant to the Hawaii Revised Statutes (HRS), §150A-7(c). The AID shall also be notified of any sign or occurrence of disease.
 - b. If any changes to the approved site, facility, and/or procedures regarding the restricted article(s) or progeny occur or are to be made, the permittee shall obtain written approval from the PQB Chief as soon as practicable (if unplanned) or prior to implementation (if planned). The permittee shall also submit a written report documenting the specific changes to the PQB Chief.
 - c. If a shipment of the restricted article(s) is delivered to the permittee without a PQB "Passed" stamp, tag or label affixed to the article, container, or delivery order that indicates that the shipment has passed inspection and is allowed entry into the State, then the permittee shall not open or tamper with the shipment and shall secure, as evidence, all restricted article(s), shipping container(s), shipping document(s) and

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packing material(s) for PQB inspection.

- d. If the permittee will no longer import or possess the restricted article(s) or progeny authorized under this permit, then the permittee shall submit a written report to the PQB Chief stating the name and address of the individual to whom the restricted article(s) will be transferred to. If the restricted article(s) and/or progeny will be transferred within the State, a PQB possession permit shall be obtained by the new owner and a site inspection conducted by the PQB shall be completed prior to transfer. Once the transfer is complete, this permit shall be cancelled or amended as appropriate.
 - e. If the restricted article(s) and subsequent progeny reproduce, the permittee shall submit a written report to the PQB Chief indicating the number of offspring and any other information deemed necessary by the PQB Chief.
 - f. If the restricted article(s) or progeny expires, the permittee shall submit a written report to the PQB Chief that details the circumstances surrounding the death of the restricted article(s) or progeny, the cause of death of the restricted article(s) or progeny, and any other information deemed necessary by the PQB Chief. The permittee shall also submit a necropsy report from a U.S. Department of Agriculture accredited veterinarian within thirty (30) days post-mortem. This condition shall not apply to restricted article(s) or progeny that are used for meat production.
18. The permittee shall submit a copy of all valid licenses, permits, certificates or other similar documents required by other agencies for the restricted article(s) to the PQB Chief. The permittee shall immediately notify the PQB Chief in writing when any of the required documents are suspended, revoked, or terminated. This permit may be amended, suspended, or canceled by the PQB Chief upon suspension, revocation, or termination of any license, permit, certificate, or similar documents required for the restricted article(s).
 19. The permittee shall comply with all applicable requirements of municipal, state, or federal law pertaining to the restricted article(s) and progeny.
 20. The permittee shall submit a semi-annual report to the PQB Chief in January and July of all restricted articles(s) and progeny imported or possessed. The report shall be in a format approved by the PQB Chief and include the following information for the prior 6-month period:
 - a. The permit number, quantity, scientific name of each restricted article(s) and progeny;

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- b. The status of the use and possession of the restricted article(s) and progeny;
 - c. A summary of any significant changes to the permittee's operation, personnel, and/or procedures; and
 - d. Any significant events that occurred at the permittee's site.
21. Any violation of the permit conditions may result in citation, permit cancellation, and enforcement of any or all of the penalties set forth in HRS §150A-14.
22. The permittee is responsible for costs, charges, or expenses incident to the inspection, treatment, or destruction of the restricted article(s), including progeny, as provided in Act 173, Session Laws of Hawaii 2010, Section 13, including, if applicable, charges for overtime wages, fixed charges for personnel services, and meals.
23. A canceled permit is invalid and upon written notification from the PQB Chief, all restricted article(s) listed on the permit shall not be imported. In the event of permit cancellation, any restricted article(s) imported or possessed under this permit, including progeny, may be moved, seized, treated, quarantined, destroyed, or sent out of State at the discretion of the PQB Chief. Any expense or loss in connection therewith shall be borne by the permittee.
24. The permit conditions are subject to cancellation or amendment at any time due to changes in statute or administrative rules restricting or disallowing import or possession of the restricted article(s) or due to Board action disallowing a previously permitted use of the restricted article(s).
25. These permit conditions are subject to amendment by the PQB Chief in the following circumstances:
 - a. To require disease screening, quarantine measures, and/or to place restrictions on the intrastate movement of the restricted article(s), as appropriate, based on scientifically validated risks associated with the restricted article(s), as determined by the PQB Chief, to prevent the introduction or spread of disease(s) and/or pests associated with the restricted article(s).
 - b. To conform to updated Board approved permit conditions for the restricted article(s), as necessary to address scientifically validated risks associated with the restricted article(s).
26. The permittee shall defend and indemnify the State of Hawaii, its officers, agents, employees and the Board of Agriculture and Biosecurity members for any and all

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claims against the State of Hawaii, its officers, agents, employees or Board of Agriculture and Biosecurity members that may arise from or be attributable to any of the restricted article(s) that are introduced under this permit. This permit condition shall not apply to a permittee that is a federal or State of Hawaii entity or employee, provided that the state or federal employee is a permittee in the employee's official capacity.

STAFF RECOMMENDATION: Based on the recommendations and comments of the Advisory Subcommittee on Land Vertebrates and 5/0 recommendation to approve by the Advisory Committee on Plants and Animals, the PQB is recommending the Board approve and update permit conditions for this request.

Respectfully Submitted,



Jonathan Ho
Manager, Plant Quarantine Branch

Concurred:



Dean Matsukawa
Acting Administrator, Plant Industry Division

APPROVED FOR SUBMISSION:



Sharon Hurd
Chairperson, Board of Agriculture and Biosecurity



State of Hawaii
 Department of Agriculture
 PLANT QUARANTINE BRANCH
 1849 Auiki Street, Honolulu, HI 96819-3100
 Phone: (808) 832-0566, FAX: (808) 832-0584

**PERMIT APPLICATION FOR
 RESTRICTED COMMODITIES
 INTO HAWAII**

For Office Use Only	
Fee: \$ _____	Receipt No. _____
<input type="checkbox"/> Approve Permit No. _____	Date: _____
<input type="checkbox"/> Disapprove	<input type="checkbox"/> Other _____
Processed by: _____	Date: _____

Date: 05/20/25

In accordance with the provision of Chapter 71, Hawaii Administrative Rules of the Division of Plant Industry, Department of Agriculture, a permit is requested for the following commodities:

Please type or print clearly.

Quantity	Commodity	Scientific Name
22	Bison Heifers	Bison bison
5	Bison Bulls	Bison bison

Name and address of shipper: Michael J Botha, Big Sky Bison LLC, 234 Vaughn N. Frontage Rd. Vaughn MT 59487 808-4781479
mjbotha@bigskyps.com www.bigskybison.com

(Mainland or Foreign address)

Approximate date of arrival: 01/15/2026

Mode of Shipment: Mail Air Freight Boat

Type of Permit:
 --- Import
 one time only multi-shipments
 --- Intrastate shipment
 one time only multi-shipments
 Possession

Object of importation:
 Kept caged at all time
 Used for propagation
 Imported for exhibition
 Imported for liberation
 Other purposes - specify _____

Please type or print clearly.

Applicant's Name Michael J Botha

Company Name Aloha Bison LLC
(if applicable)

Hawaii Mailing Address 59-426 Kawowo Place, Haleiwa, HI 96712

Telephone number 808 478 1479

Facsimile number _____

Fee Amount Enclosed (cash, check or mail order) \$ _____

(complete reverse side)

C37

PLEASE COMPLETE THE FOLLOWING INFORMATION (attach extra sheet if necessary)

1. State in detail the reasons for introduction (include use or purpose).
 The purpose of introduction is to start a bison production operation on the North Shore of Oahu. The long-term purpose is to provide grass fed bison meat and bison products for local harvest and consumption. An additional long-term purpose is to provide public education on the use of bison as a tool for regenerative agriculture.

2. Person responsible for the organism (include name, address and phone number).
 Michael J Botha and Aloha Bison LLC will be responsible and accountable for the safeguarding and use of the bison.
 Mail address is 59-426 Kawowo Pl, Haleiwa, HI 96712 Phone 808 4781479
 We intend to register Aloha Bison LLC as a new Hawaii LLC that will own and operate this business.

3. Location(s) where the organism will be kept and used (include address, contact and phone number).
 - a. Bison will be confined at G Tree Ranch located Tax Map Keys (TMK's) for the ranch are 6-7-2-40 and 6-7-2-43. The physical address is 67-150 Farrington Hwy, Waialua, HI 96791, there is no mail delivery and no mailbox associated with the address. The driveway entry location, which is shared with Corteva (formerly Pioneer), is 67-172 Farrington Hwy, Waialua, HI 96791.
 - b. Bison will be contained within a purpose-built fenced pasture enclosure, designed and built according to Plant Quarantine Branch approved design, materials and construction protocols. Please see Attachment A for details.

4. Method of disposition.
 - a. Bison will be harvested for local meat consumption once they attain their targeted liveweight. Bison may be field harvested on property, or transported via enclosed stock trailer to Hawaii Meats, a local USDA Slaughter and processing facility nearby.
 Please see Attachment A for additional details.

5. Give an abstract of the organism with particular reference to potential impact on the environment of Hawaii (include impact to plants, animals and humans).
 Please see Attachment A for in depth details.

I request permission to import the articles as listed on the permit application and further, request that the articles be examined by an authorized agent of the Department of Agriculture upon arrival in Hawaii.

I agree that I, as the importer, will be responsible for all costs, charges or expenses incident to the inspection or treatment of the imported articles.

I further agree that damages or losses incident to the inspection or the fumigation, disinfection, quarantine, or destruction of the articles, by an authorized agent of the Department of Agriculture, shall not be the basis of a claim against the department or the inspectors for the damage or loss incurred.

Signature Michael J Botha Date 5/20/25
 (Applicant)

Attachment A: PQ-7 additional details:

1. Reasons for Introduction

The purpose of introduction is to start a bison production operation on the North Shore of Oahu. The long-term purpose is to provide grass fed bison meat and bison products for local harvest and consumption. An additional long-term purpose is to provide public education on the use of bison as a tool for regenerative agriculture.

2. Person responsible for Bison

Michael J Botha will be responsible and accountable for the safeguarding and use of the bison. Michael J Botha mail address is 59-426 Kawowo Pl, Haleiwa, HI 96712
Phone 808 4781479
We intend to register Aloha Bison LLC as a new Hawaii LLC that will own and operate this business.

3. Locations Where Bison will be kept and used

- a. Bison will be confined at G Tree Ranch located Tax Map Keys (TMK's) for the ranch are 6-7-2-40 and 6-7-2-43. The physical address is 67-150 Farrington Hwy, Waialua, HI 96791, there is no mail delivery, and no mailbox associated with the address. The driveway entry location, which is shared with Corteva (formerly Pioneer), is 67-172 Farrington Hwy, Waialua, HI 96791.
- b. Bison will be contained within a purpose-built fenced pasture enclosure, designed and built according to Plant Quarantine Branch approved design, materials and construction protocols.
- c. There are multiple layers of security and locked gates that need to be navigated before gaining access to the fenced bison containment area. The first step in gaining access to the property is through a shared driveway with Corteva. This driveway has two sets of locked gates located at 67-172 Farrington Hwy, Waialua, HI 96791 that must first be accessed before gaining access to the third locked gates and driveway leading into G Tree Ranch. Upon access to G Tree Ranch, a private road leads to the fenced and locked gates for the bison containment pasture. Additional security measures include: hidden solar powered real time motion activated security cameras positioned throughout the property, roaming security guard patrols, manually activated aerial drone security surveillance.
- d. We practice humane low stress stockmanship with our bison. Onsite management will ensure that bison are secured, maintained humanely and have free access to grass pasture and water.

4. Method of Disposition

- a. Bison will be harvested for local meat consumption once they attain their targeted liveweight. Bison may be field harvested on property, or transported via enclosed stock trailer to Hawaii Meats, a local USDA Slaughter and processing facility nearby.
- b. Bison are herd animals with a very strong herding instinct. Bison do not like to be separated from their herd mates and will attempt to rejoin their herd whenever they become separated. In the unlikely event that bison become separated from the herd

and/or escape their enclosure, the first step will be to attempt to lead them back to their herd using non-lethal stockmanship strategies. If the bison do not comply with the attempts to return them to their enclosure, they will be humanely euthanized with a precision rifle shot to the axis bone (top segment of their vertebrae). Using a single 180 grain .308 cartridge or similar will render the bison dead upon bullet impact.

- c. If bison were somehow able to become established in the wild they will be easy to track, find and eradicate. Bison are massive herd animals; they usually stick together in tight herd structures and prefer to graze in open grassy areas. Bison need to drink up to twelve gallons of water per day, so they will need to travel to watering sites daily. Once bison have been tracked down, they can be easily killed with a precision rifle shot to the axis bone (neck) or a broadside shot to the vital organs including heart and lungs.

5. Abstract of Organism and potential impact on the environment

- a. A bison (pl.: bison) is a large bovine in the genus *Bison* (Greek: "wild ox" (bison)^[1]) within the tribe Bovini. Of the two surviving species, the American bison, *B. bison*, found only in North America, is the more numerous. The North American species is composed of two subspecies, the Plains bison, *B. b. bison*, and the generally more northern wood bison, *B. b. athabascae*. Bison species have been traditionally classified in their own genus, modern genetics indicates that they are nested within the genus Bos, which includes, among others, cattle, yaks and gaur, being most closely related to yaks. We will be importing Plains bison from Montana.
- b. The American bison are the largest surviving terrestrial animals in North America. They are typical artiodactyl (cloven hooved) ungulates and are similar in appearance to other bovines such as cattle and true buffalo. They are broad and muscular with shaggy coats of long hair. Adults grow up to 2 meters (6 feet 7 inches) in height and 3.5 m (11 ft 6 in) in length for American bison. American bison can weigh from around 400 to 1,270 kilograms (880 to 2,800 pounds). Bison are nomadic grazers and travel in herds. Towards the end of the summer, for the reproductive season, the sexes necessarily commingle. Bison may live to 20 years of age. Female bison ("cows") typically reproduce after three years of age and can continue beyond 19 years of age. Cows produce calves annually as long as their nutrition is sufficient, but not after years when weight gain is low. Reproduction is dependent on a cow's mass and age. Heavier cows produce heavier calves (weighed in the fall at weaning), and weights of calves are lower for older cows.
- c. Bison are ruminants, able to ferment cellulose in a specialized stomach prior to digestion. Bison consume grasses and sedges, and a wide variety of plants including woody plants and herbaceous eudicots. Over the course of the year, bison shift which plants they select in their diet based on which plants have the highest protein or energy concentrations at a given time and will reliably consume the same species of plants across years.
- d. American bison once roamed the entire continent of America from high elevation mountain areas to sea level and coastal areas. Today bison are confined to a number of National and State Parks and private land throughout most states in the USA. Typical habitats are open or semi open grasslands, as well as sagebrush, semiarid lands, and

scrublands and forest. Some heavily wooded areas are also known historically to have supported bison. Bison also graze in hilly or mountainous areas where the slopes are surprisingly steep.

- e. Bison are highly adaptable and can live in a wide range of climates, from extreme heat to extreme cold. Their thick coats and efficient digestive systems allow them to thrive in varying temperatures. In warmer climates bison do not grow thick winter fur as they do in colder climates. We have observed our own Big Sky Bison herd located in Central Montana flourish in extreme temperatures ranging from -55 degrees Fahrenheit during harsh winter conditions to +102 degrees Fahrenheit during extreme hot drought conditions in summer.
- f. The bison diet is made up of mainly grasses. Bison also eat some other plant vegetation when grass sources are limited. It is estimated one bison needs around 8-12 gallons of water each day.
- g. All precautions recommended by the Plant Quarantine Branch and Animal Disease Control Branch pertaining to bison shall be followed and adhered to prior to, and post importation to Hawaii.
- h. All recommendations from Plant Quarantine Branch and Animal Disease Control Branch to prevent the introduction of contaminants to Hawaii, both pre and post entry shall be followed.

6. Other documented information that supports and justifies the request

- a. Bison are not considered a pest or nuisance in their native range, or where they have become established. There is growing interest throughout most states in the USA in raising bison for commercial meat consumption.
- b. Potential impacts of introducing bison
 - i. Environmental impact - Bison will be confined to their fenced areas where they will be selectively rotated through pastures as part of a regenerative grazing process. Bison hoof action improves water retention of the soil. Urination and defecation introduce nutrients to soils that improve the soil profile. Bison will drink water from water troughs supplied by a water well already in operation on the property. Bison do not make much sound, aside from low volume grunts as they communicate within their herd. Bison do not moo or make other loud sounds often observed around cattle.
 - ii. Economic impact – Bison will be raised and produced for local meat consumption in Hawaii. Our average 1,000 lbs. meat bison at our ranch in Montana generates \$6,120 in meat sales revenue. We anticipate a similar pricing strategy for Hawaii, which equals a meat value of approximately \$17.00 per 1 lbs. of boneless cuts of meat. A typical 1,000 lbs. live bison produces 36% of its live weight in boneless cuts of meat; therefore $1,000 \text{ lbs.} \times 36\% = 360 \text{ lbs.}$ of boneless cuts of meat $\times \$17.00 \text{ per 1 lbs.} = \$6,120$ potential meat sales per bison. We will market our locally produced bison meat products direct to consumer and to leading local restaurants, health food stores and grocery stores. Hawaii Meats has agreed to charge approximately \$1,100 to slaughter and process a single meat bison under USDA inspection. We intend to hire local

employees to work in the bison enterprise as well as a potential bison agritourism enterprise. We would like to follow the successful model for agritourism that we presently employ at Big Sky Bison, www.bigskybison.com our bison ranch in Montana. We intend offering a daily visitor program that will include guided bison field tours, educational tours and events, bison burger food truck, and possibly farm store meat sales.

- iii. Societal impact – Aloha Bison’s mission is to inspire a thriving future by raising healthy, naturally nurtured bison in Hawaii through regenerative agriculture practices, revitalizing our land, enriching ecosystems, and nourishing vibrant communities with ethical, wholesome meat. As long-time Hawaii residents we are keenly aware that 80% of Hawaii’s food is imported, and Hawaii only holds a five-day supply of food. Hawaii food security is a real concern, and we intend to positively contribute to mitigating this challenge by ethically producing nutrient dense healthy bison protein for the local market. We would also like to give back to the community, once we have achieved a sustainable livestock production level, we intend to offer traditional Native Hawaiian field harvest events that mimic what we presently offer to Native American groups and schoolchildren. Please see link to a recent Field Harvest event we put on for over 100 Native American school kids. <https://www.ktvh.com/news/montana-ag-network-students-experience-bison-harvest-and-blackfoot-traditional-ceremony>
- iv.
 - c. Potential impact of pathogens, parasites that may accompany this introduction? - We intend to address this by following all precautions recommended by the Plant Quarantine Branch and Animal Disease Control Branch pertaining to bison shall be followed and adhered to prior to, and post importation to Hawaii.
 - d. There is not a high degree of potential for bison to become established in Hawaii should an animal escape. As mentioned above (4. A, B, C) if bison escape, they are easily eradicated by targeted elimination or hunting. Bison are massive animals that are easily to find, prefer to stay in herds, prefer to graze in open grass areas and need to drink water every day. Considering the above, an escaped bison will be easy to find and eradicate. Another thing to consider is that to become established; it would require that both bull and heifer bison escape and elope together, in order to breed. Cow bison can have only one calf per year.
 - e. As of 5/20/25 we have not applied for or received other permits. We intend to follow all HDOA guidelines for applying for all necessary permits.
 - f. This application was completed by Michael J Botha, owner of Big Sky Bison LLC based out of Big Sky, MT. We started a bison operation on leased property in Montana in 2018, and moved to our own Big Sky Bison ranch in 2020. Big Sky Bison is a working bison ranch producing ethically raised top quality bison in Montana. Big Sky Bison raises and sells live bison, we produce USDA Certified bison meat products for the retail and commercial market, we sell meat direct to consumer online and from our ranch store. Big Sky Bison Ranch operates a growing visitor program including: daily bison tours, photography tours, field harvest educational events, bison hunting opportunities

Appendix A

(Buffalo Hunt Montana is the name of our hunting and outfitting enterprise), overnight RV stays, Airbnb stays at a renovated historic schoolhouse on the ranch, we are active members of the National Bison Association and Montana Bison Association.

Links to our website and social media pages and helpful industry links are below:

Big Sky Bison Website: www.bigskybison.com

Big Sky Bison Online Store: <https://app.barn2door.com/QOdzM>

Facebook Big Sky Bison: <https://www.facebook.com/grassfedbison/>

Instagram Big Sky Bison: <https://www.instagram.com/bigskybisonmt/>

Facebook Buffalo Hunt Montana:
<https://www.facebook.com/profile.php?id=100087745860116>

Instagram Buffalo Hunt Montana: <https://www.instagram.com/buffalohuntmt/>

National Bison Association: <https://nationalbison.org/>

Montana Bison Association: <https://www.montanabison.org/>



MICHAEL J. BOTHA
ENTREPRENEUR/INVESTOR

OBJECTIVE

Create, grow, and manage a successful income producing real estate and business investment portfolio in the USA.

SKILLS & ABILITIES

I have a broad range of business experiences, networking and public speaking. I am a highly energetic strong leader, and a goal driven person who welcomes new challenges.

LOCATED

P.O.Box 161900
Big Sky, MT 59716

M 808 478 1479

W 406 539 7020

E mjbotha@bigskyps.com

www.wapitiventures.com

EXPERIENCE

EQUITY PROPERTIES, LLC, BIG SKY, MT

NOV 2017 - PRESENT

Operations Manager, Property Management Company professionally managing a portfolio of single family, multi family, mixed use, retail, storage, RV and Mobile Home Communities

WAPITI VENTURES, LLC, JACKSON, WY

DEC 2016 - PRESENT

CEO, Holdings Company for various real estate and business entities throughout USA

BIG SKY BISON, LLC, BIG SKY, MT

NOV 2018 - PRESENT

Operations Manager, Top Quality Cow/Calf Bison Ranching and Bison Meat Products Company based out of MT

YELLOWSTONE HOLDINGS, LLC, BIG SKY, MT

DEC 2016 - PRESENT

CEO, Residential Real Estate Investment Company with holdings in Big Sky, MT

LONE PEAK ENTERPRISES, LLC, BIG SKY, MT

DEC 2016 - PRESENT

CEO, Commercial Real Estate Investment Company with holdings in Big Sky, MT

BOTHA PROPERTIES, LLC, HALEIWA, HI

DEC 2004 - PRESENT

CEO, Residential Real Estate Investment Company with holdings in Hawaii

SANDWICH ISLE PEST SOLUTIONS, INC, PEARL CITY, HI

JAN 1997 – SEPT 2016

Founder, Associate Certified Entomologist and President of Hawaii's leading pest, termite and wildlife management company, serving all of Hawaii and Midway Atoll

TERMINIX INTERNATIONAL, CA AND HI

JAN 1990 – DEC 1996

Trainee Manager in Laguna Hills, California and Technical Specialist for Hawaii Region

MICHAEL J. BOTHA
ENTREPRENEUR/INVESTOR

EDUCATION

BROWARD COMMUNITY COLLEGE, FORT LAUDERDALE, FL, PEST CONTROL TECHNOLOGY

4.0 GPA, graduated

LEADERSHIP

Jack Creek Preserve Foundation, March 2017 – September 2018
Member Board of Directors and Executive Committee

2016 Crown Leadership Award Recipient, 2016 sponsored by PCT/Syngenta

NPMA Fumigation Division, July 2015- July 2017 - Chairman of Board

QualityPro July 2016 -July 2017– Member Board of Directors

Hawaii Dept of Agriculture Advisory Board, June 2015 -2018
Member Board of Directors

Hawaii Pest Control Board - Department of Commerce and Consumer Affairs - Board Member and Chairman of Board 1998 - 2004 · 6 yrs

State of Hawaii Regulated Industries Complaints Office, Jan 2014-2018 Advisory Committee Member

NPMA 2014-2016 Member Board of Directors

HPCA 1997-2010 Member Board of Directors

MEMBERSHIP AND PARTICIPATION

National Pest Management Association

National Bison Association

Montana Bison Association

Dakota Territory Bison Association

Log Home Builders Association – Certified Log Home Builder

Hawaii Pest Control Association

MICHAEL J. BOTHA
ENTREPRENEUR/INVESTOR

SCI – Great Falls Chapter

Dallas Safari Club

National Rifle Association

Rocky Mountain Elk Foundation

Wild Sheep Foundation

PERSONAL INTERESTS

Family man married to Melissa with two children

Passionate about learning and self-improvement

Active outdoorsman, enjoy hunting, fishing, fitness and water sports

PROFESSIONAL INTERESTS

Interested in providing quality products and services that are in harmony with the natural world.

Enjoy seeking and engaging in new business ventures that have potential to provide conservative profit and growth in both strong and weak economies.

Driven to build a successful income-generating business investment portfolio.

REFERENCES

CHUCK TINDOL, PRESIDENT NPMA

678 614 2418

LAURA VUKASIN, PRESIDENT PRAIRIE MT BANK

406 268 0404

CHRIS MC CLOUD, INVESTOR/RETIRED

847 612 0760

TIM R. KENT, PRESIDENT FIRST SECURITY BANK

406 556 3215

 Audubon Conservation Ranching Program

Certificate of Compliance

Certified Party:

Big Sky Bison

224 Vaughn North Frontage Road, Vaughn, MT 59487



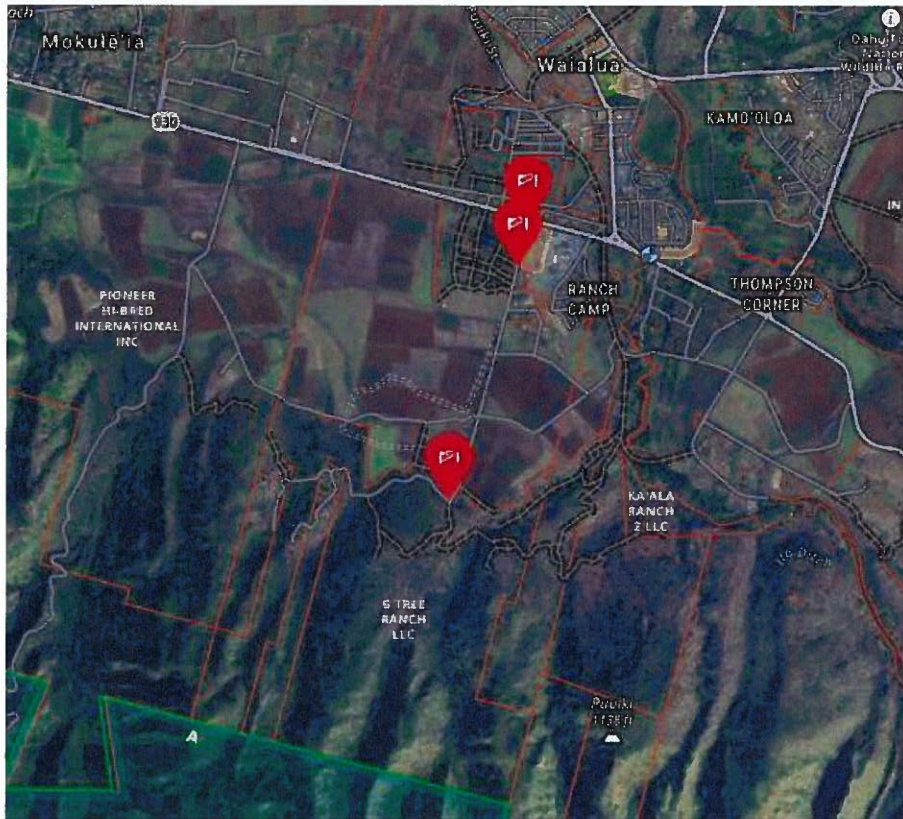
Certified Livestock: Bison
CCID#: 05552-2025
Effective From: 07/11/2025
Certification Body:
Food Alliance, Fletcher, NC

The “Grazed on Audubon Certified Bird Friendly Land” certification seal distinguishes farms and ranches committed to raising livestock in a manner that enhances habitat for focal bird species and other wildlife, conforms to forage consumption protocols that allow cattle to graze on open pastures, adheres to the compassionate treatment of animals, and ensures environmental sustainability that results in cleaner streams, healthier soils, and functional ecosystems.

The Certified Party is authorized to label meat products produced from certified livestock using the Audubon Certified seal, as displayed above. Questions regarding the verification of this certificate should be directed to Food Alliance at certification@foodalliance.org, or 425-466-7168. Certificate effective until surrendered, suspended, or revoked according to Audubon Certification Protocols and Policies.

This certificate is not transferable to another party. Version Date of Certificate: 07/21/2025

Map and Directions:



Directions

Get on I-H-1 W from HI-92 W

- ↑ 1. Head north on Rodgers Blvd
3 min (1.6 mi)

- ↶ 2. Turn left onto HI-92 W
20 ft

- ↷ 3. Use the right lane to keep right
0.9 mi

- ↗ 4. Slight right onto the Interstate H1 W ramp to Aiea Pearl City
0.1 mi

- 0.6 mi

Take I-H-2 N to HI-99 S/Wilikina Dr

- ↗ 5. Merge onto I-H-1 W
15 min (14.4 mi)

- ↗ 6. Use the right 2 lanes to turn slightly right onto I-H-2 N (signs for Mililani/Wahiawa)
6.2 mi

- 8.2 mi

Continue on Wilikina Dr to your destination

- ↑ 7. Continue onto HI-99 S/Wilikina Dr
17 min (9.3 mi)

- ↶ 8. Keep left to continue on Wilikina Dr
mi

- ↑ 9. Continue onto HI-803
mi

- ↑ 10. Continue onto State Hwy 930/Farrington Hwy
4.0 mi

- ↻ 11. At the traffic circle, take the 2nd exit onto State Hwy 930
0.7 mi

- ↶ 12. Turn left onto Kuemanu St/Plantation Rd
0.4 mi

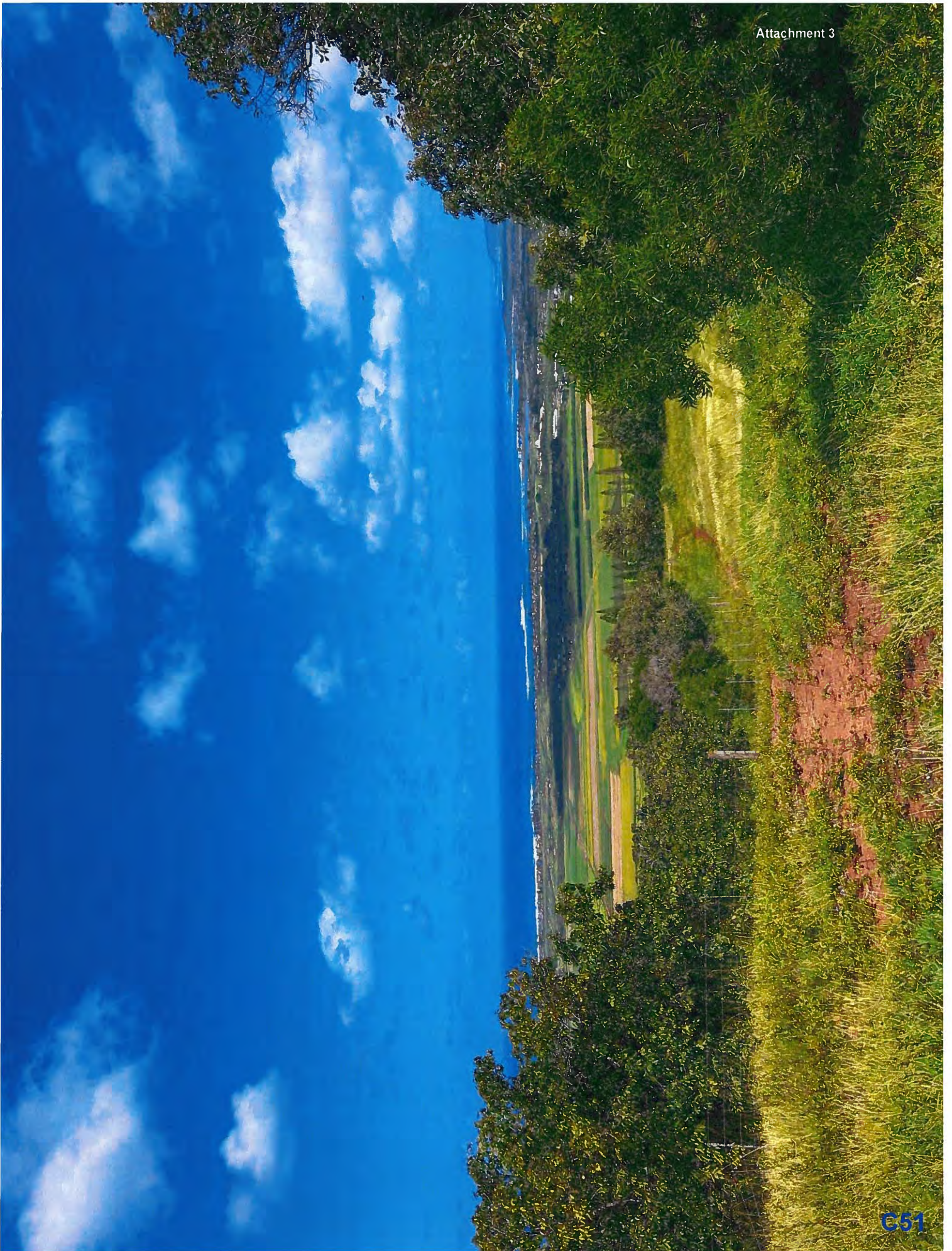
- Restricted usage road

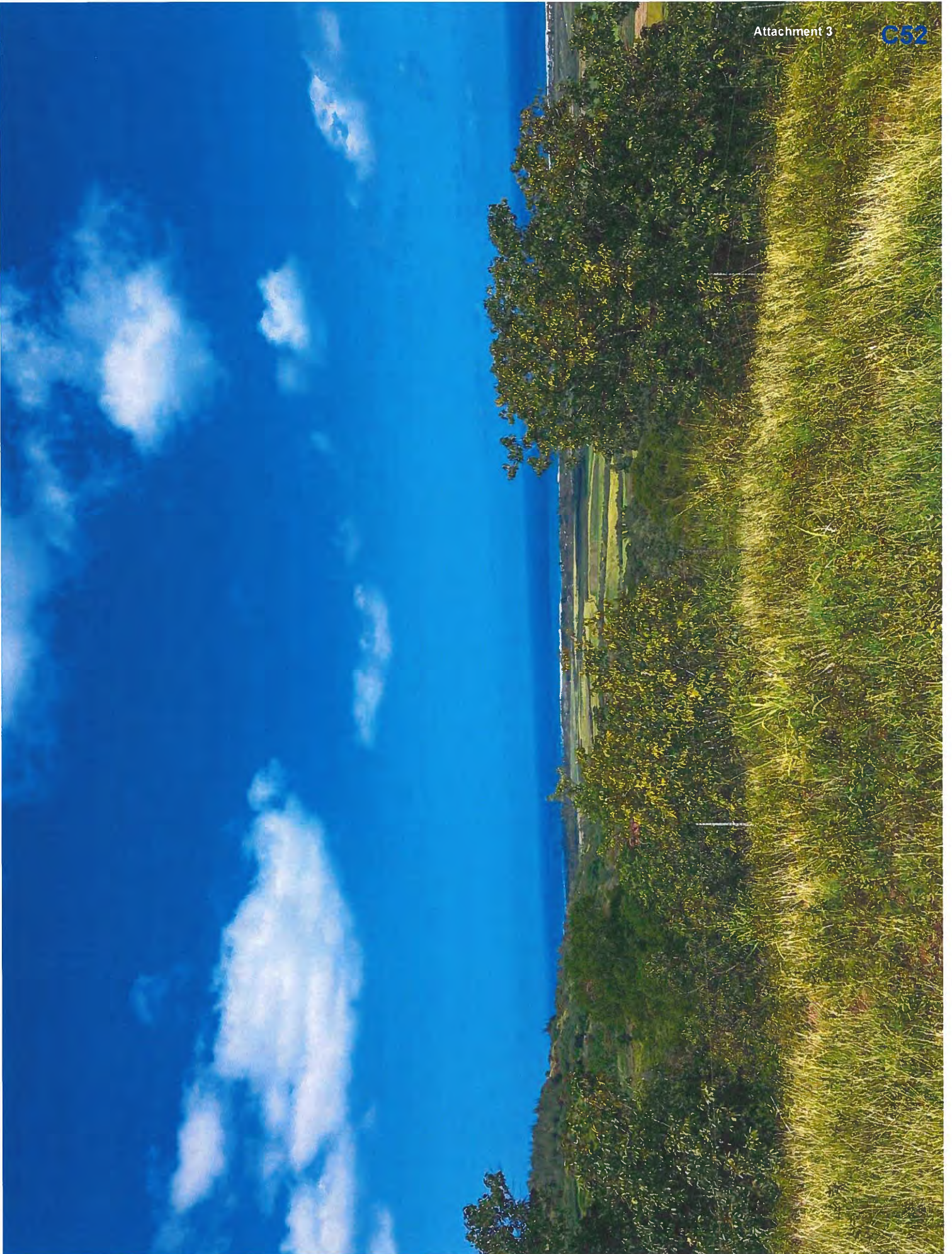
0.4 mi

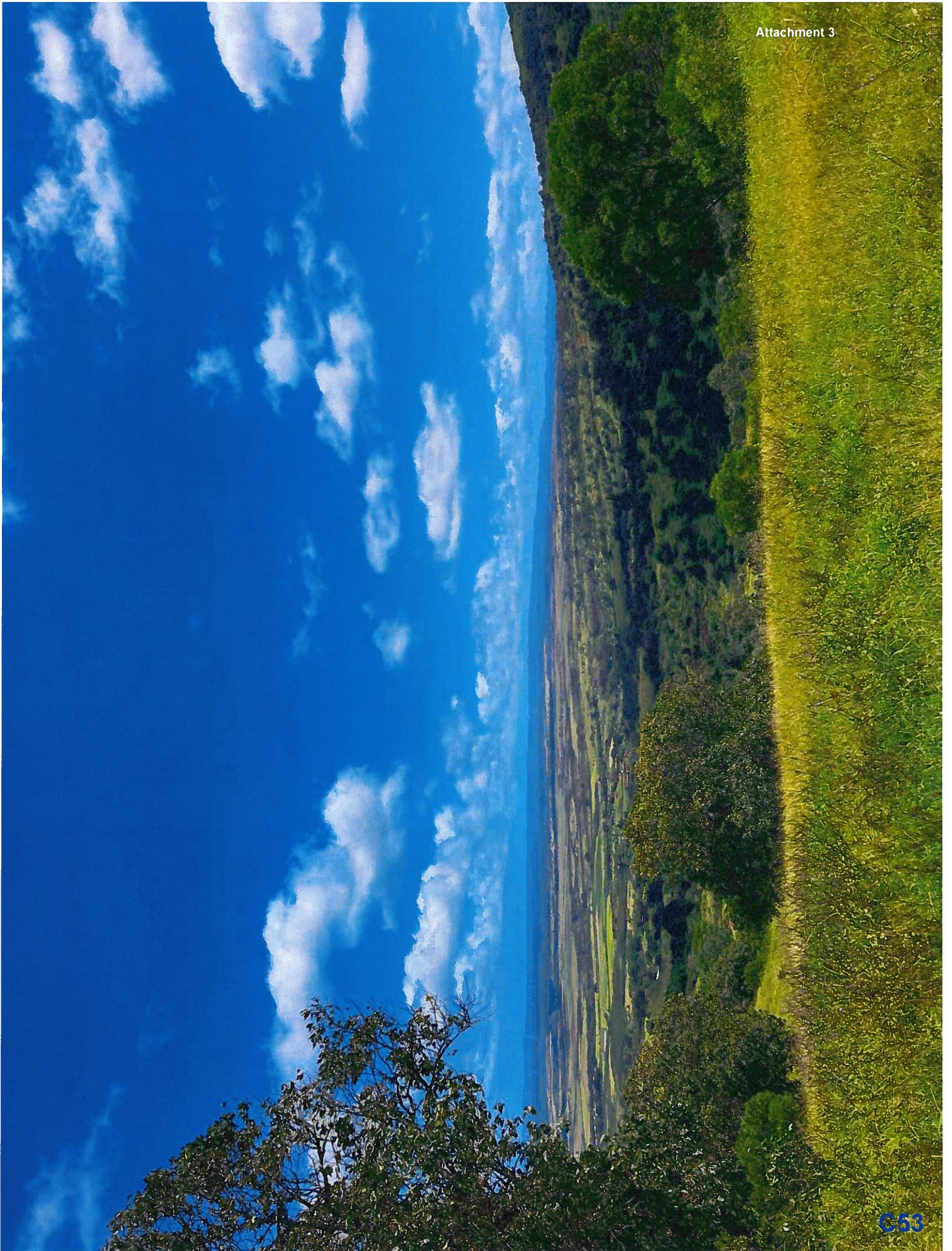
- ↶ 13. Turn left
0.1 mi

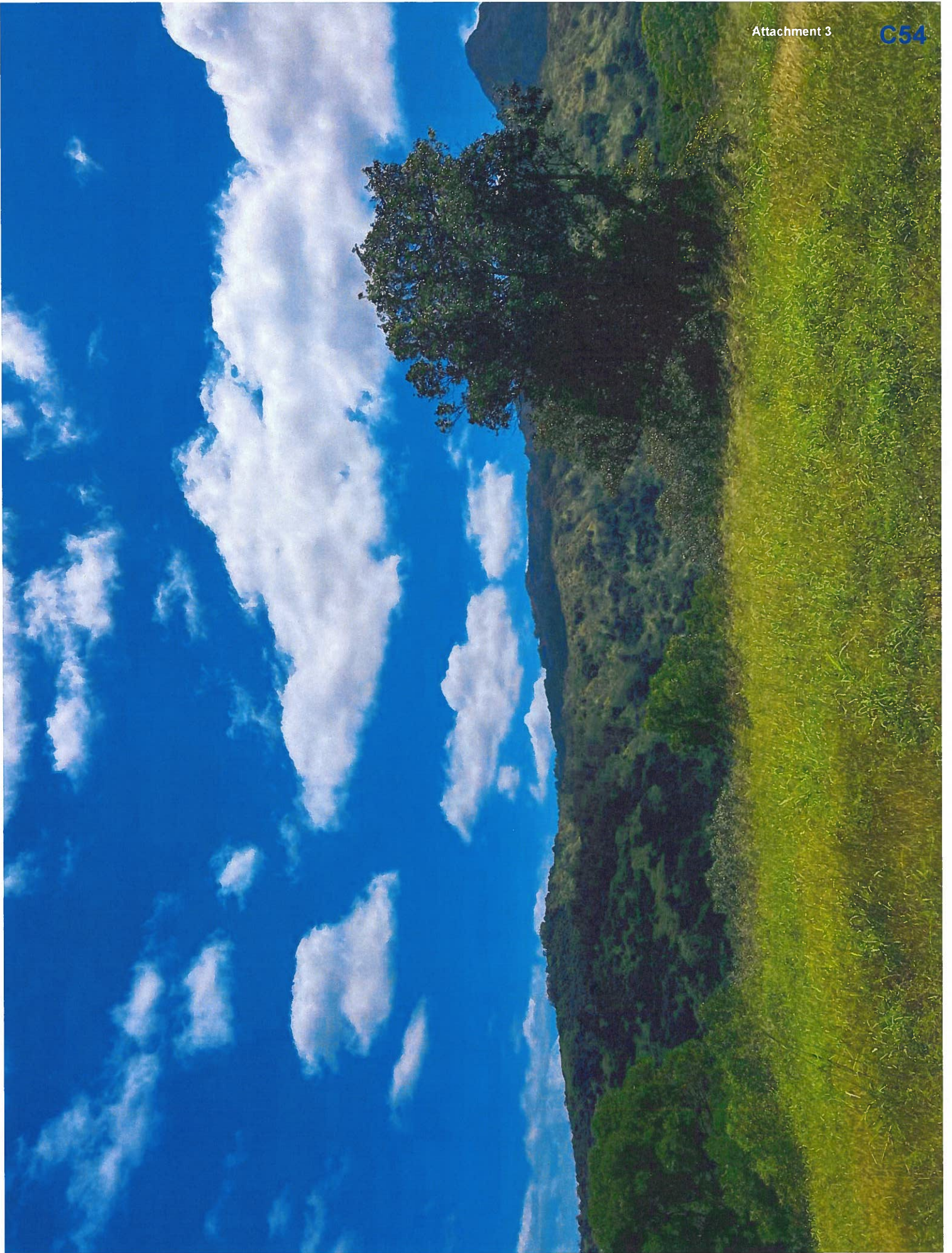
67-172 Farrington Hwy
Waiialua, HI 96791

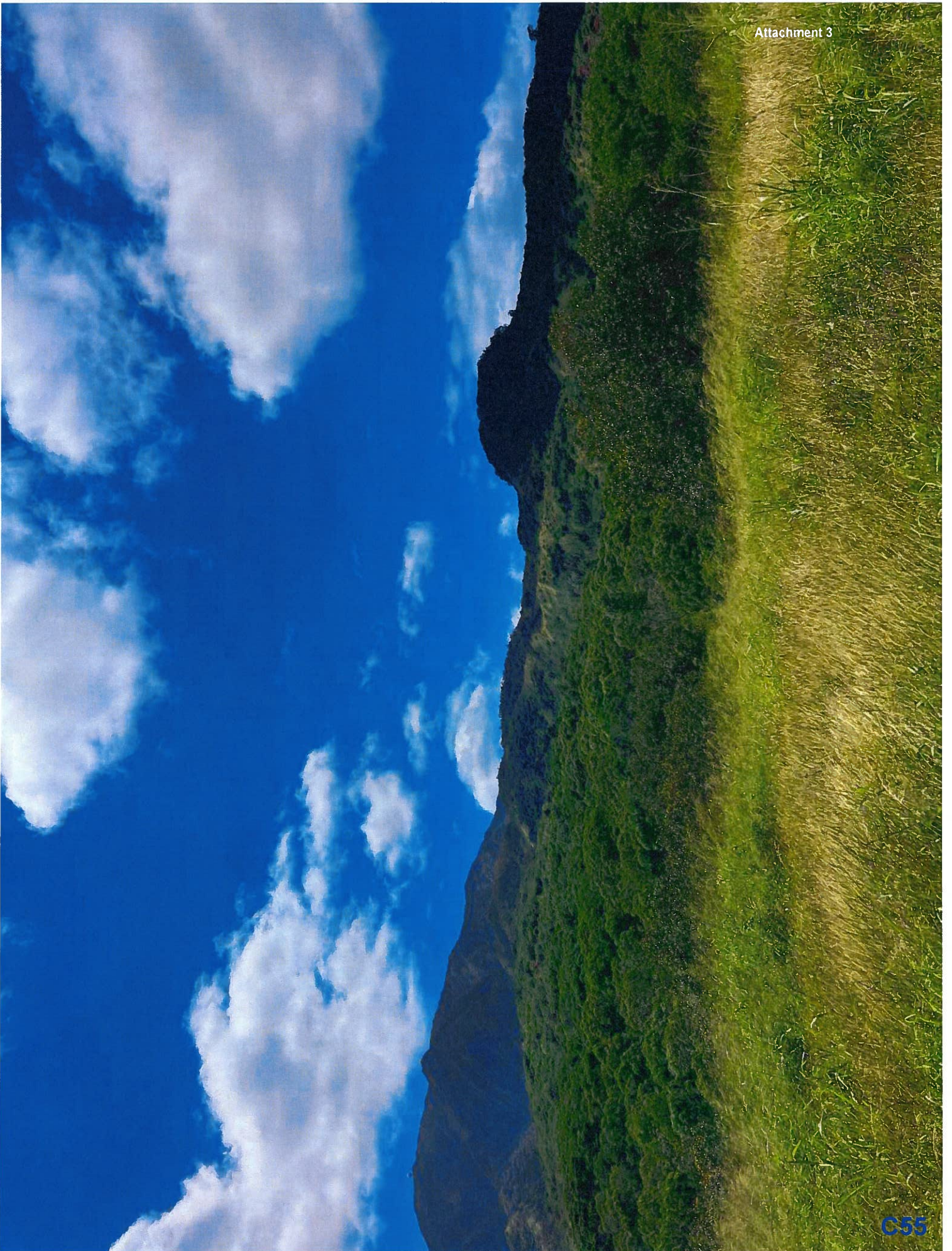


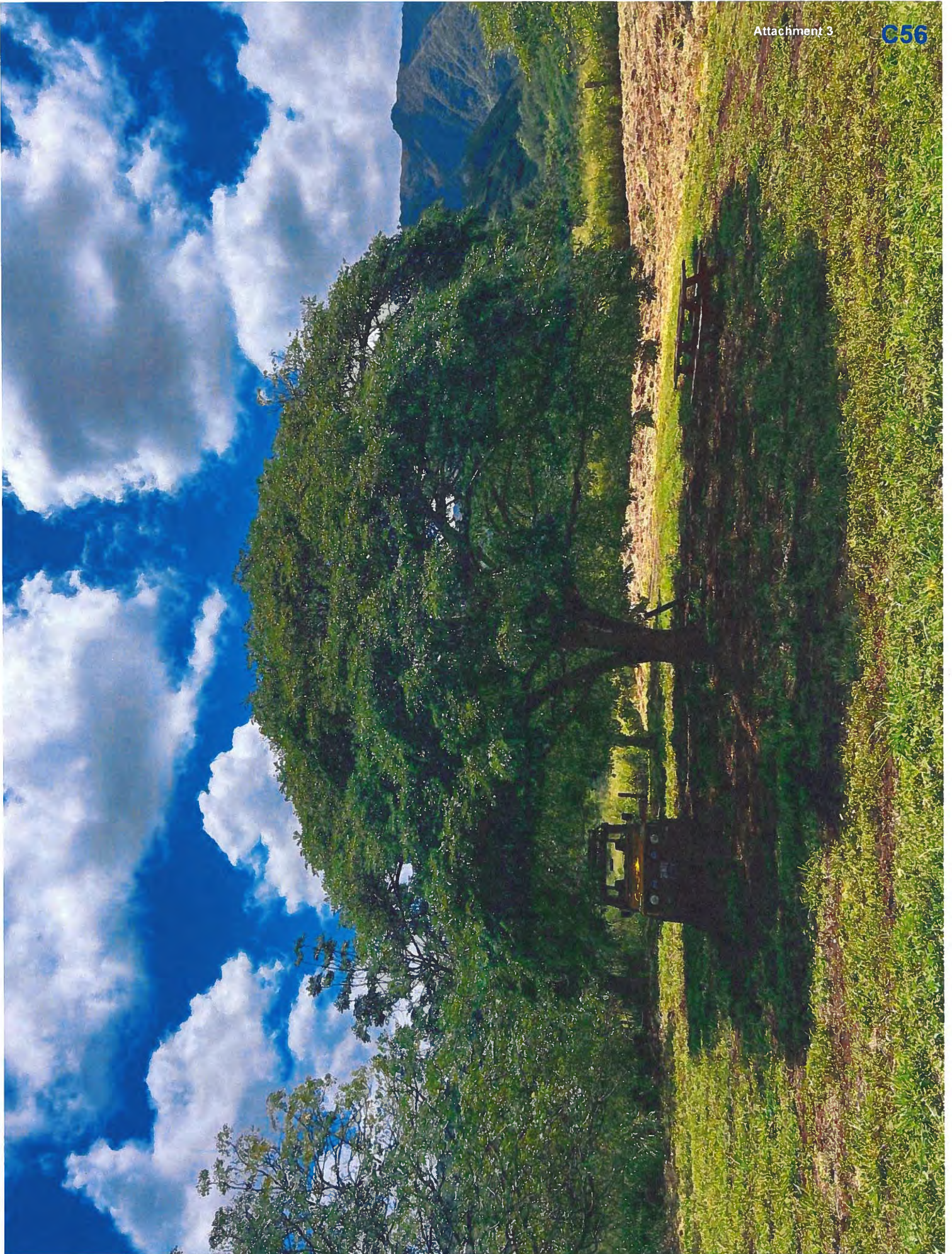
















Ho, Jonathan K

From: Racquel Hill-Achui <rhachui@gmail.com>
Sent: Wednesday, April 1, 2026 11:57 PM
To: DAB.PQ.TESTIMONY
Subject: [EXTERNAL] Importation of Bison

Aloha e Committee Members,

My name is Racquel Achui of the Waialua Moku. I currently sit as Vice Chair of the North Shore Neighborhood (NSNB) and chair of the NSNB Water & Land Committee. However, I am submitting this testimony as an individual and farmer/rancher.

My husband and I have been ranching for over 20yrs on our own. My husband has been in the industry much longer if I count the 35 plus years he spent growing up on his uncles ranch, the very ranch we ranch today.

I submit this testimony expressing great concern for the consideration being placed in the importation of Bison by the applicant.

Naturally the concerns of bringing bison into our community are significant. For example,
#1 the very serious risk of disease that pose a risk to existing neighboring cattle/livestock
#2 The inability to appropriately maintain multiple large animal livestock as they, typically require large open, flat land without fencing - which our moku doesn't have - also of significant note is the crippling of an industry in swift swoop!
#3 the close proximity of residents, schools, farmers and cattle ranchers creates health and safety concerns
#4 conceptual/proposed supporting facilities require approvals for activities that must go thru further review by other county protocols.

This list goes on and on.

Please reconsider making any decision and urging the applicant to engage with the community to ensure I front and accountability..

Mahalo nui,
Racquel Achui

Aloha Bison – Application to Import Bison to Hawaii
Supplemental Information – Emergency Preparedness for Escapes and Floods
Updated 4/7/26 by Michael J Botha

Supplement: Emergency Preparedness for Escapes and Floods

As a result of some concerns expressed to us by members of the local community and the March 2026 floods in Waialua, we have prepared a brief supplement to provide more detail on how we plan to address unforeseen emergency situations including bison escapes and floods. This subject is already addressed on pages 12, 13, 14 of our Application to Import Bison under the paragraph heading “ Practices and Procedures to minimize Escape, Theft, or release of Bison...”

Bison Escapes

First and perhaps most important is that the bison will be confined behind multiple locked gates, inside fenced grazing pastures located inside the perimeter fence. Fences will be constructed according to PQB Standards, Specifications and Requirements. We have had hundreds of bison at our Big Sky Bison Ranch in Montana since 2018 and have never had a single escaped bison. There are various components to preventing and addressing potential bison escapes from their holding pasture. It is important to consider that bison still maintain their natural wild instincts (unlike typical domesticated farm animals) and are social herd animals with an incredibly strong desire to be with their herd mates. It is extremely rare for a bison to desire to move away from the herd, they almost always prefer to seek safety, security and the companionship of the herd structure. Therefore, it is extremely unlikely that a bison would be motivated to leave the safety of the herd to escape into the unknown.

The only bison that will be shipped to Hawaii will be shipped from our Big Sky Bison Ranch where we have raised them from birth. Our bison are trained to respect fences from the day they are born. Our stockmanship and bison handling goal is that our bison only have one bad day in their life, and that day is their last. Every day, we provide them with plentiful food, water, adequate space and a low stress natural environment where they feel at home, safe and secure. We create and maintain an environment where the bison are motivated to stay and have no reason to want to leave. We will have multiple pastures within our perimeter fence where the bison will be rotated through as we graze and rest the land.

We use “range cake” for two purposes. The first purpose is to provide a nutrient supplement, providing supplemental protein and minerals which is especially beneficial to pregnant or calving cow bison. The second purpose is to have fail safe means to be able to get and keep the attention of the bison herd, and condition them to follow the “cake truck” for a reward. Every time we feed them cake, they are required to follow the cake truck (either a pickup truck or UTV with a cake feeder mounted on the back to dispense cake). They can only get access to the cake if they follow the truck. We use this method to reliably get the bison herds’ attention and to motivate them to follow us to where we want the bison to go. This process works like magic to move the bison herd or individual bison wherever we want them to move. Therefore, in the unlikely event that a bison escapes and does not return to be with the herd on its own, the

Aloha Bison – Application to Import Bison to Hawaii

Supplemental Information – Emergency Preparedness for Escapes and Floods

Updated 4/7/26 by Michael J Botha

simplest strategy will be able to attract the bison back by offering it a cake reward for following the cake truck back into the enclosure.

Low pressure “pushing” bison gently and calmly by positioning a trained bison wrangler towards the rear quarter of a bison just outside of its fight or flight zone causes a bison to slowly move away from the “pressure quarter”. This is how we reliably and customarily move bison on foot. Our bison are used to us working with them, trust us, they recognize individuals and the cues we give them and typically respond immediately to low pressure stockmanship. If a bison were to escape another option is to guide the bison back to where we want it to go using these proven techniques.

Finally, in a the most unlikely scenario where a bison is motivated and capable of breaching the corral, pasture and perimeter fences to escape; and is not motivated by its innate herd behavior to rejoin its herd mates, and does not respond to our low pressure stockmanship or follow the cake truck, we may make the decision to humanly euthanize the animal with a .308 180 grain bullet to the skull. Bison are very easy to kill in one well placed shot by a practiced professional. We have humanely field harvested over 200 bison with one shot, in our view this is the most ethical way to end a bison’s life and a procedure that we customarily use for most of our direct-to-consumer meat sales in Montana.

If bison were to escape into the environment and all of the above emergency procedures failed, it is important to consider that bison need to drink 12-15 gallons of water per day. Bison also prefer to feed in open areas and eat 20 lbs. of food per day. Bison are the largest land mammal in North America and stand out in any environment. Searching for a massive bison with binoculars, drone and thermal monocular/rifle scope at night by focusing on water and feed areas will be the most effective method of finding the bison. Humane euthanizing by rifle would be the most efficient solution in this situation. We own and regularly use thermal imaging monocular and scopes as part of our herd management strategy.

Floods

We feel fortunate to have been able to be onsite during the recent Waialua floods in March. We also do work with Corteva the neighboring 5,000 acre ranch property Makai of G Tree ranch. We have had the opportunity to have unlimited access to these properties before, during and after the floods. We gained some excellent historical flood water flow intelligence and are confident that the location of our pastures will not be impacted by similar future recurring floods. The pastures we plan to use for the bison are higher on the ridges of mountain and far above the worst of the flooding. Most of the flood damage we have observed was in the low lying areas and at the bottoms of drainages.

State of Hawai'i
Department of Agriculture and Biosecurity
Plant Industry Division
Plant Quarantine Branch
Honolulu, Hawai'i

April 28, 2026

Board of Agriculture and Biosecurity
Honolulu, Hawai'i

Subject: Resubmittal of Request for: Review and Approval of the Petition From Nancy Holman, Kalaupapa National Historic Park, to Initiate Administrative Rulemaking to Amend Plant Quarantine Interim Rule 25-1, to Allow Gravel to be Moved From Any Other Area in the State to the Island of Molokai if it Has Been Subjected to an Approved Treatment Prior to Movement.

I. **Historical Background**

Since its initial detection on Oahu in late 2013, the coconut rhinoceros beetle (CRB), *Oryctes rhinoceros*, has been found on Kauai, West Hawai'i Island, Maui and Lanai, with an ongoing eradication program occurring in West Hawai'i Island. Multiple interim rules regarding CRB have been implemented, with permanent restrictions in Chapter 4-72, Hawaii Administrative Rules (HAR) on the movement of CRB host materials from Oahu to other areas in the State unless subjected to treatments that eliminate all life stages of CRB.

On September 23, 2025, the Board of Agriculture and Biosecurity (Board) adopted Plant Quarantine Interim Rule 25-1 (IR 25-1), which prohibited the transportation of plants, soil, gravel, and other CRB host material including decomposing plant material such as compost, wood or tree chips, and mulch, plant propagation media and other items comprised of decomposing organic plant material such as landscaping material or erosion control socks, to the Island of Molokai from any other area in the State to prevent the spread of CRB. At that meeting, there was discussion on whether or not gravel should be included in the interim rule, with the Board ultimately deciding to keep the restriction on gravel within IR 25-1. A copy of IR 25-1 is included as ATTACHMENT 1.

On February 17, 2026, the Office of the Chairperson received a petition from Nancy Holman (Petitioner), Superintendent, Kalaupapa National Historic Park, seeking to amend IR 25-1 to allow the transportation of gravel subjected to a fumigation before movement to Molokai. A copy of Ms. Holman's Petition is included as APPENDIX A.

Board of Agriculture and Biosecurity
April 28, 2026
Resubmission of Holman Petition – Amendment to IR 25-1
Page 2 of 4

On February 24, 2026, this Petition was brought before the Board for review and consideration. The Board deferred the request and asked the PQB to have the applicant address the questions brought up during the discussion and to bring the request back at a later date. PQB staff subsequently worked with the applicant to address the questions raised by the Board.

II. Procedural Background

IR 25-1 was established pursuant to 150A-9.5, Hawaii Revised Statutes (HRS), which enables the Hawaii Department of Agriculture and Biosecurity to establish an interim rule governing the transport of flora and fauna into and within the State. Pursuant to §150A-9.5(b), HRS, the Board may adopt an interim rule may if there is a finding by the Advisory Committee on Plants and Animals (Committee) that the importation or movement of any flora or fauna, in the absence of effective rules, creates a situation dangerous to public health and safety or to the ecological health of flora or fauna present in the State which is so immediate in nature as to constitute an emergency. IR 25-1 was reviewed by the Committee at its meeting on September 17, 2025. At that meeting, the Committee made the necessary finding of an emergency that enabled the Board to approve IR 25-1 on September 23, 2025.

This Petition for rule amendment was initially brought under the Board's Rules of Practice and Procedure, Chapter 4-1, HAR, which authorizes the initiation of rulemaking by petition of an interested person or agency upon Board approval (§4-1-23, HAR, et seq.) and unlike the initial establishment of IR 25-1 pursuant to 150A-9.5, HRS, because the Committee already made the finding of an emergency necessitating the need for IR 25-1, the Committee does not need to make another finding prior to the Board taking action, provided the Board proceeds with amending IR 25-1 as stated in the Petition.

III. Summary of Proposed Amendment

The Petition seeks to allow the transportation of gravel to Molokai subject to a treatment with the fumigant Profume, pursuant to Special Local Need Label (SLN) HI-2501, a copy of which is included with the Petition. The Petitioner states the amendment is necessary for a number of reasons including, but not limited to a time-limited shipping window from July to August (i.e. single annual shipment, harbor is narrow and shallow, and limited favorable tide conditions); critical infrastructure needs (i.e. unpaved road maintenance, pothole repair, erosion control, etc.); and to ensure the health and safety of the community (i.e. access to water well, ensuring maintained evacuation routes, or access for emergency response teams), particularly in an emergency. The Petition

provides additional details about the necessity to amend IR 25-1 and potential impacts should the proposed amendment not be made.

IV. Analysis of Petitioner’s Proposed Amendment

After the Board’s initial review in February, the Petitioner provided detailed responses to the questions raised by the Board Members as included as APPENDIX B. The responses include the type of gravel to be brought is “HDOT base course in 3/4-inch and 1-1/2-inch” and it originates from Grace Pacific’s quarry in Makakilo. They indicated they have purchased bulk gravel since 2019, with the most recent shipment arriving on September 5, 2025. They also provide a cost assessment for acquiring the gravel on-island with estimated costs averaging approximately \$500,000.00 depending on the mode of transportation. They also indicated a willingness to implement and incorporate additional measures for safeguarding the shipment and transport vehicles to further lessen risk, including the including requirements for contractors to prevent pest infestation and be free of other debris.

The Petitioner also circulated a survey within the Kalaupapa community regarding the Petition. A sample of the survey and the results are included as APPENDIX C. Of the 59 respondents, 57 were in support of amending IR 25-1, with one respondent unsure and another in opposition. The Petitioner also provided two letters of support included as Attachment 2.

The Plant Quarantine Branch (PQB) still believes that the Petition’s proposed change to IR 25-1 is extremely reasonable as it is only a single shipment and poses essentially the same risk of introducing CRB to Molokai as any other large shipment arriving on the island. The PQB already considers gravel to be low risk as it is not otherwise regulated for CRB, except to Molokai. Additionally, prior to movement of the gravel, the Petition proposes to subject the shipment of gravel to a treatment with Profume gas at a concentration that would eliminate any CRB that may be within the shipment. The PQB already approves this same treatment method to certify shipments to other islands and accommodating this shipment would not cause further operational issues. To date, no shipment subjected to the treatment proposed in the Petition has been found to be infested with CRB.

To effectuate the Petition’s proposed change to IR 25-1 to allow the treatment of gravel, the PQB has attached proposed changes in Ramseyer format. An amended version of IR 25-1 is included as APPENDIX D. The proposed changes to IR 25-1 can be found underlined on lines 5, 7-8, 17-18, and 46-47. The PQB believes that including appropriate variations of “gravel not subject to a treatment approved by the Department” enables the Petitioner’s amendment to IR 25-1 while still prohibiting untreated gravel and also allows for other treatments that are verified to eliminate all life stages of CRB,

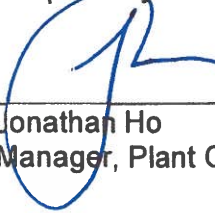
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should others become developed. However, should the Board believe this proposed language provides too much latitude for the PQB to authorize treatments that do not yet occur, replacing “treatment approved by the Department” with some variation of “Profume gas fumigant under SLN HI-2501” would specifically allow only the treatment proposed by the Petitioner.

V. Staff Recommendation

Based on the PQB's analysis of the Petitioner's proposed amendment to IR 25-1 to subject gravel to a verified treatment that is already being used to eradicate all life stages of CRB, prior to movement to Molokai, and willingness to implement further safeguards to prevent the spread of CRB, the PQB recommends the Board approve the Petitioner's proposed amendment to IR 25-1 as included as APPENDIX D to enable the treatment of gravel prior to movement to Molokai.

Respectfully Submitted,



Jonathan Ho
Manager, Plant Quarantine Branch

Concurred:



Dean Matsukawa
Acting Administrator, Plant Industry Division

APPROVED FOR SUBMISSION:



Sharon Hurd
Chairperson, Board of Agriculture and Biosecurity



United States Department of the Interior

NATIONAL PARK SERVICE

Kalaupapa National Historical Park

P.O. 2222

Kalaupapa, HI 96742

Tel: 808-567-6802

Fax: 808-567-6729



February 12, 2026

Chairperson Sharon Hurd
Board of Agriculture and Biosecurity
1428 South King Street
Honolulu, Hawaii 96814

Petition for Amendment to Interim Rule § 25-1 Regarding the Prohibition of Interisland Movement of Coconut Rhinoceros Beetle (CRB) Host Materials, Specifically Gravel, to Kalaupapa, Molokai

Dear Chairperson Hurd and Members of the Board of Agriculture and Bio Security,

This petition is made pursuant to section 4-1-23. Hawaii Administrative Rules, requesting the Board of Agriculture to amend the interim rule prohibiting the movement of gravel to the island of Molokai to stop the spread of CRB.

The amendment we are seeking is to allow gravel to be moved to Molokai if it has received a fumigation with Profume Specialty Gas fumigant under SLN HI-2501.

Statement of petitioner's interest in the subject matter of proposed amendment

The National Park Service (NPS) is deeply committed to preventing the spread of the CRB and other invasive species interisland. To achieve this, the NPS, in collaboration with members of the CRB Response Team, has implemented a comprehensive set of measures to protect the Kalaupapa settlement and its surrounding areas. As part of these efforts, traps and monitoring systems have been strategically placed throughout Kalaupapa to provide methods for early detection and effective management of any potential CRB presence. Additionally, the NPS treats locally generated wood chips with fumigation as an important preventive measure to eliminate potential CRB and other pest infestations before the chips are transported for use around the settlement. These actions are integral to a broader strategy aimed at safeguarding both the natural and cultural resources within Kalaupapa National Historical Park and the broader island of Molokai, ensuring their long-term health and preservation.

Given the historical significance of the peninsula and its designation as a National Historic Site, the NPS is governed by specific federal rules and regulations for maintenance and operations. Among other responsible actions, the NPS is entrusted with collaborating with the State of Hawaii to preserve and maintain Kalaupapa National Historical Park in Kalawao County on the island of Molokai, as outlined in Public Law 96-565, Section 105. This law authorizes the NPS to enter into cooperative agreements with landowners to preserve, protect, and manage historic, cultural, and natural resources within the park. This law also allows the NPS to work with local stakeholders to ensure key infrastructure, like the roadways and access to critical resources, is routinely maintained, safeguarding both the operational needs and historical integrity of the park.

2026 FEB 17 PM 1:09

HAWAII DEPT OF AGR

For large cargo, including vehicles, equipment, and construction materials such as roll-off containers filled with gravel, Kalaupapa relies on a single barge delivery each year. This barge typically sails between Honolulu and Kalaupapa during the July to August window, which is the only opportunity for the settlement to receive the necessary materials for the entire year. This timing is not arbitrary—due to the unique geographical characteristics of the Kalaupapa Harbor, this narrow and shallow harbor requires precise tide conditions for the barge to safely dock and unload its cargo. The harbor is small and restrictive, and the barge's size—which is significantly smaller than those used to service other Hawaiian Islands—further complicates the process of docking. The timing of the barge's arrival must coincide with optimal tide conditions, which are essential to ensure that the vessel can safely navigate through the narrow, shallow channels without the risk of grounding or damaging the vessel.

Given the challenging geography, the Kalaupapa Harbor only allows for safe barge access during specific windows of time in the summer months. These windows are dictated by the tide schedule, which can vary from year to year but must coincide with the barge's sailing window. If the barge is unable to dock during these critical months, the settlement risks missing an entire year's worth of supplies. The barge's annual arrival is time-sensitive and must align with the narrow window of favorable tidal conditions to avoid delays, prevent damage to the vessel or the environment, and ensure that all necessary equipment, materials, and supplies can be delivered.

Moreover, the small size of the barge means that the settlement must prioritize its most urgent needs, from safety equipment to water and electrical infrastructure. As a result, there is often little room for less immediate, yet still necessary, supplies. Space allocation aboard the barge is crucial to ensure that every essential item—from maintenance materials to critical services—fits within the limited capacity. The significantly smaller vessel makes the process of sourcing and transporting materials even more difficult, as the barge's capacity imposes severe logistical constraints. Each year, the settlement is forced to plan meticulously to ensure that all necessary supplies are shipped, as the tight window for barge operations—scheduled between July and August—only allows for one chance to bring in everything needed for the entire year.

The risk of overlooking or underprioritizing certain supplies is high, and even a slight error in space allocation can result in shortages that directly affect daily operations. If crucial materials are missed, it can leave the settlement without the necessary resources to maintain infrastructure, provide healthcare services, and continue essential preservation work at the park. A missed or delayed shipment could lead to catastrophic consequences, significantly disrupting the settlement's ability to function and meet its operational needs. This gap would place the community at a severe disadvantage until the next annual shipment, further complicating efforts to maintain critical systems and infrastructure vital to Kalaupapa's survival. This delay would not only hinder day-to-day functionality but also significantly delay any planned improvements or repairs, leaving the settlement without the necessary resources to maintain its critical operations.

A critical limitation we now face is the need to source gravel to maintain the unpaved roadways throughout Kalaupapa, particularly those leading to Kalawao, where sensitive infrastructure is located. These roads are essential for accessing the original site of the first arriving colony, affected by Hansen's disease, and they provide vital connections to key resources. The roads serve as the only access route to the settlement's operational water well, which supplies water to the entire community. Additionally, these roads provide access to two significant churches—Siloama and St. Philomena, several cemeteries, numerous burial sites (including St. Damien's), and important heiau and other culturally significant areas. Beyond the daily

operations, these roads also serve as the designated evacuation route for the settlement in case of an emergency, underscoring their critical role in both community safety and historical preservation.

Each year, Kalaupapa purchases approximately 200 tons of gravel, which is shipped in 8 to 12 end dumps and roll-off containers on the annual barge. The gravel is off-loaded in Kalaupapa and delivered to coned staging areas along the unpaved roads around the peninsula, where it is prepared for use in road repairs and rehabilitation. Before the gravel is approved for use, the NPS conducts on-site testing of each gravel pile to ensure it is free from LFAs (Little Fire Ants) and other pests. These tests are carried out by members of our Natural Resources Management Department, with samples of each test sent to a diagnostic lab for analysis. Once the test results are received and the gravel is cleared for use, the NPS proceeds with the necessary roadwork, ensuring the safety and functionality of the roadways while preventing the spread of invasive species.

The road to Kalawao continues to be an essential route for the patient residents of Kalaupapa, who access it daily, whether to seek faith, personal enjoyment, or in remembrance of their past. For many, the road serves as a path to reflect on the history of their community and the challenges they faced, while also offering a sense of connection to the broader Kalaupapa area. The road provides vital access to not only St. Philomena Church, but also to historic landmarks, cultural sites, and memorials that hold deep meaning for the residents. Whether taking a moment to honor the past or simply enjoying the natural beauty around them, this road remains a crucial part of the daily lives of Kalaupapa's residents, fostering a connection to the past and the present. Without timely access to essential materials like gravel, the ability to maintain safe roads, access to vital infrastructure, and ongoing preservation of historical sites would be compromised.

Delayed repairs to unpaved roads can pose significant risks to travelers, as the deterioration of road conditions, such as erosion and potholes can make travel both unsafe and difficult. When these roads are not maintained in a timely manner, they become hazardous for vehicles, increasing the likelihood of accidents, vehicle damage, and inconvenience to those who rely on the roads for daily access to vital services. Furthermore, unmaintained roads can become particularly dangerous in the event of an emergency, as access to critical infrastructure, such as the drinking water system, evacuation routes, or emergency response teams, may be delayed or obstructed. This makes it even more crucial that road repairs are performed regularly to ensure safe travel and timely response in emergencies. Ensuring that road maintenance is performed regularly is crucial for the safety, efficiency, and well-being of all travelers.

Given that there is only one opportunity per year to receive essential supplies in Kalaupapa, missing a shipment means the settlement would be without critical materials, causing long-lasting negative consequences for infrastructure, safety, and operations. Without an exemption from the existing ban on gravel imports, the inability to secure gravel for the 2026 barge will result in a catastrophic disruption to the NPS's mission, preventing the maintenance of vital infrastructure and halting preservation efforts for two years. This would undermine both public safety and the protection of Kalaupapa's historical and cultural assets.

We respectfully request an amendment to Interim Rule § 25-1 to ensure continued access to gravel, which is essential for maintaining the park's infrastructure and allowing the NPS to fulfill its mission to preserve unimpaired the natural and cultural resources of Kalaupapa National Historical Park, enabling the NPS to continue serving the Kalaupapa resident community. Without this critical resource, the settlement's infrastructure, safety, and cultural preservation efforts would be severely compromised, impacting the well-being of those who call Kalaupapa home and jeopardizing the park's ability to protect its unique historical and cultural assets.

Statement of reasons in support of the proposed amendment

Our proposed amendment includes the use of Special Local Needs Label (SLN) "HI-2501" with Profume gas fumigant "EPA Registration # 1015-79" which is accepted and adopted as a pre-quarantine treatment method by Hawaii Department of Agriculture and Biosecurity (DAB) as well as the United States Department of Agriculture (USDA).

Under the commodities that may be treated in SLN HI-2501 it states: "Wood chips, mulch, mulch containing dirt for the flower industry and agricultural production sectors, compost, host trees, erosion socks containing organic matter, and other breeding host materials for both export and interisland movement." Plant Quarantine Interim Rule 25-1 lists gravel as a host material and this fumigant is a standard treatment being used statewide currently to allow host CRB material to be removed out of quarantine sites. Our contractor performing the fumigations will follow the 3000 CT at a 20–30-hour exposure as defined in the EPA and DOA approved SLN.

This product is a true gas similar in properties to oxygen and CO₂ and will not result in residue or leaching issues.

Please see the attached SLN document for supportive literature.

Control Methods and Safeguarding:

Upon determination of 3000 CT's and the Profume Label/ Supplemental label and SLN have been satisfied, the fumigation will be concluded, and aeration will begin. Once the fumigation has been cleared to zero PPM, the treated gravel will be covered and safeguarded during transit to prevent re-infestation.

Conclusion

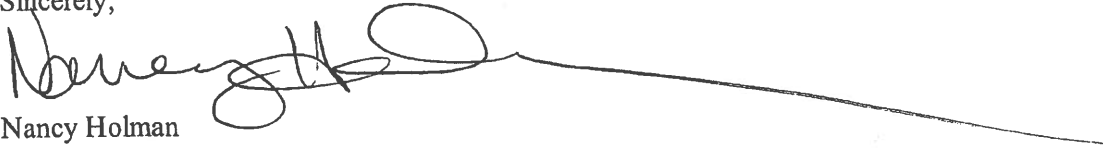
In conclusion, the NPS's ability to maintain infrastructure and protect the cultural and historical assets of Kalaupapa National Historical Park depends heavily on the annual barge delivery, which is the only method for bringing essential supplies, including gravel for critical roadways. The small size of the barge, combined with the limited shipping window and federal procurement requirements, exacerbates the logistical challenges faced by Kalaupapa each year. Missing this single delivery would leave the settlement without critical materials for up to two years, which would not only disrupt day-to-day operations but also jeopardize the preservation and public safety of the park.

Without an exemption from the existing ban on gravel imports, Kalaupapa's roads, which provide access to vital resources like drinking water, designated evacuation sites, churches, cemeteries, and culturally significant sites, would be left in a state of disrepair, further isolating the settlement. The safety of the Kalaupapa community and the long-term preservation of the park's historical and cultural heritage are at risk. Therefore, we humbly request an amendment to Interim Rule § 25-1 to permit the transportation of treated gravel interisland, a critical resource. This exemption is vital to maintain the settlement's sensitive infrastructure throughout the year.

We respectfully request that the Board of Agriculture and Biosecurity consider this petition at the February 2026 meeting. Given the tight timelines and barge schedules, it is crucial that we act promptly to ensure continued support for the mission to preserve Kalaupapa. The timely approval of this amendment is essential to maintaining the infrastructure, safety, and cultural heritage of the settlement, while allowing the NPS to fulfill its responsibilities to Kalaupapa.

Thank you for your consideration of this petition and for all your efforts to protect Hawaii and the island of Molokai from the CRB. Please do not hesitate to contact us if we can provide any further information or clarification regarding this petition.

Sincerely,

A handwritten signature in black ink, appearing to read "Nancy Holman", with a long horizontal line extending to the right from the end of the signature.

Nancy Holman
Superintendent
Kalaupapa National Historical Park
Mailing Address: PO Box 2222
Physical Address: 7 Puahi Street
Kalaupapa, HI 96742
Mobile: (808) 658-6204
Email: Nancy_Holman@nps.gov

Attachment A: SLN

RESTRICTED USE PESTICIDE
DUE TO ACUTE INHALATION TOXICITY OF SULFURYL FLUORIDE
 For sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification. An applicator certified by the state must be present on site at all times during introduction of fumigant, reentry prior to aeration, and initiation of the aeration procedure.

FIFRA 24(c) Special Local Need Label (SLN)

For Distribution and Use Only in the State of Hawaii Fumigation of Non-Edible Commodities to Control Designated Pests

ProFume® gas fumigant

EPA Reg. No. 1015-79

SLN HI XXX



DANGER POISON

ACCEPTED
HI-2501
 Under Hawaii Pesticides Law
 as Supplement to Product No.
 1015-79

This label expires and must not be distributed or used in accordance with this SLN registration after May 20, 2030.

Directions for Use

- It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
- This state-specific Section 24(c) labeling must be in the possession of the user at the time of application.
- Follow all applicable directions, restrictions, and precautions on the EPA registered label for EPA Reg. No. 1015-79.

This Section 24(c) Special Local Needs label permits the use of ProFume® gas fumigant on non-edible commodities and to control designated pests listed in Table 1. Follow all use directions, requirements, and precautions on the label attached to the product container and included in the ProFume Applicator's Manual.

ProFume may be used for the treatment of commodities that are not part of the food chain for human consumption, including:

- Wood chips, mulch, mulch containing dirt for the flower industry and agricultural production sectors, compost, host trees, erosion socks containing organic matter, and other breeding host materials for both export and interisland movement.

Pests and Application Rates

Table 1. Designated Pest and Dosage Rates

Designated Pest	Temperature	Required accumulated Dosage (CT*; oz-hr./1000 ft ³)	Exposure Period
<i>Oryctes rhinoceros</i> (Coconut Rhinoceros Beetle, all life stages)	Minimum 70°F	3000	Minimum 20 hrs. after reaching equilibrium. Longer exposure times may be used to achieve the required accumulated dosage. Fumigant concentration should be monitored and documented during the exposure period using a minimum of 2 monitoring points distributed evenly within the fumigated space and measured using an appropriate monitoring device to ensure the required dosage is achieved.

*Dosage = Concentration (C) x Time (T) or D = C x T (CT). CT = oz-h/1000 cu ft. The concentration in oz/1000 cu ft of fumigant multiplied by the exposure time in hours.

All applications under this SLN label must be conducted at normal atmospheric pressure (NAP).

When ProFume is used according to the treatment above, the following are applicable:

- The Fumiguide® program for ProFume is required for dosage calculation.
- The maximum concentration of ProFume can exceed 128 oz/1000 cu ft.
- The maximum target dosage can exceed 1500 oz-h/1000 cu ft.

Follow all requirements for dosage rates, treatment periods, monitoring, and other procedures specified by the EPA-registered label and the Applicator's Manual for ProFume.

Douglas Products and Packaging Company
1550 East Old 210 Hwy
Liberty, MO 64068-9459

Douglas Products and Packaging Company assumes no risk or liability for loss or damage from fumigations performed under this SLN label.

[EPA Approval Date] May 20, 2025

Issue Date: May 21, 2030

Expiration Date: May 20, 2030



United States Department of the Interior

NATIONAL PARK SERVICE

Kalaupapa National Historical Park

P.O. 2222

Kalaupapa, HI 96742

Tel: 808-567-6802

Fax: 808-567-6729



April 20, 2026

Dear Chairperson Hurd and Members of the Board of Agriculture and Biosecurity,

The following questions and responses were prepared to address inquiries raised by the Hawaii Department of Agriculture and Biosecurity (HDAB) Board Members regarding Kalaupapa National Historical Park's request to amend Interim Rule 25-1 to allow the transport of treated (fumigated) gravel to Kalaupapa under the ProFume Special Local Needs (SLN) pathway. Kalaupapa National Historical Park (KNHP) supports the intent of Interim Rule 25-1 and shares the common goal of preventing coconut rhinoceros beetle (CRB) from reaching Molokai. Accordingly, these responses summarize the operational need for gravel, historic sourcing and quantities, feasible delivery options, and the proposed safeguards—treatment, inspection, staging, and verification measures—intended to ensure a stringent and enforceable risk-mitigation approach.

James Gomes – Questions & Responses

Q: When was the last time KNHP bought in gravel, and were any precautions taken prior to shipment?

A: KNHP last brought in gravel on the barge sailing on September 6th, 2025. Fumigation was not performed at that time because gravel was not considered a CRB host material and prohibited for transport to Molokai.

Q: What type of gravel do we bring in?

A: HDOT base course in 3/4-inch and 1-1/2-inch.

Q: Can topside Molokai support Kalaupapa's gravel request?

A: Yes. GP Manawainui Quarry can support a 200-ton purchase request. However, market research indicates this is currently the least feasible option for delivery to Kalaupapa due to cost and logistics:

Option 1 – Helicopter delivery (estimated total: \$512,509.14)

- 134 one-cubic-yard sacks at \$160 each
- Hauling 134 sacks from Manawainui Quarry to Kalae Pavilion (includes forklift and operator): \$4,299.14
- 140 helicopter sling loads from Kalae Pavilion to Kalaupapa Barrel Field (includes mobilization and crew): \$486,770.00

Option 2 – Direct barge from Molokai to Kalaupapa (estimated total: \$487,770.00)

- 200 tons in 10 super dump trucks, including barge, logistics, and driver travel

Option 3 – “Pit stop” on the annual Kalaupapa barge (N/A)

- Young Brothers does not support this option due to operational challenges with barge loading/unloading at the Molokai pier and limited staging/loading capacity.

Potential “pit stop” alternative (needs clarification/approval):

This may be possible if gravel sourced from Molokai could sail to Oahu during the same week as Kalaupapa

APPENDIX B

barge loading. However, based on our reading of Interim Rule 25-1, this route would likely still be prohibited because the gravel would leave Molokai and then be transported to Kalaupapa via Oahu (interisland movement). Please advise whether an exemption could apply to this routing scenario.

Q: Are these dump trucks/containers certified to be bug-free?

A: Because the bulk gravel purchase and delivery service exceeds the Government purchase card micro-purchase threshold, we are required to acquire this service through a formal contract solicitation process rather than a credit card purchase. This ensures the requirement is competed and allows any qualified vendor to submit a proposal in response to the solicitation.

To further protect Molokai and Kalaupapa from CRB risk, we can include specific prevention requirements in the solicitation and resulting contract. For example, the scope of work can require all truck dump beds, containers, and trailers used for this work to be clean and debris-free, and free of prior CRB host materials (including soil, organic material, plants, propagative plant parts, and seeds), with required inspection. This approach helps ensure both the transport equipment and the gravel load meet CRB risk-mitigation standards before shipment.

Q: How many patients are there?

A: There are currently three patient residents actively living in Kalaupapa. In addition, there are two patients living on Oahu; one of them travels back and forth to the peninsula frequently. One patient drives out to Kalawao daily, and another patient owns the tour company that operates up to six days per week. Although our patient resident community is getting smaller, they still rely on safe, reliable road conditions for daily access—whether for work or enjoyment.

Q: Where are they [trucks] coming from, what's the location?

A: This would be determined during the contract solicitation and could vary by vendor. However, to reduce CRB risk, we can include specific prevention requirements in the solicitation and resulting contract—such as requiring documentation of staging locations in their proposal and excluding vehicles staged in known high-risk CRB areas.

Q: Has KNHP purchased gravel in earlier years? If so, is it from the same source?

A: Yes. KNHP has purchased bulk gravel since 2019, and the gravel has been sourced from Grace Pacific's Makakilo Quarry for those purchases. If the source location is a concern, we can incorporate specific CRB prevention requirements into the solicitation and resulting contract, including requirements to source gravel from a specified facility/location and to meet defined inspection, cleanliness, and treatment safeguards.

Q: Is it the same size or load?

A: Yes. KHNP has been purchasing HDOT ¾-inch and 1-1/2-inch base course since 2019. The material types have remained consistent, but the quantities have increased over time as roadway conditions have required more spot repairs. In 2019, the initial purchase was approximately 40 cubic yards of each material. In 2020, that amount doubled to approximately 80 cubic yards of each material (about 100 tons per material). This is most likely the max amount we are able to bring in on the shared barge due to its small size and everything else being shipped into Kalaupapa for the year.

Q: Mobilization, when carrying from point A to point B, is the trucks inside of the bed being checked?

A: Yes. We have included scope of work language requiring the Contractor to inspect and ensure the gravel is free of harmful invasive pests and contaminants—including coqui, little fire ants, dirt, weeds, mud, plants, propagative plant parts, and seeds—on the barge loading date prior to delivery to Young Brothers Pier 39/40 in Honolulu. The scope also requires that all work vehicles, machinery, and equipment (including truck beds) be clean and free of debris.

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Q: Has KNHP considered sourcing gravel on island?

A: If referring to topside Molokai-- Alternative delivery options are also not feasible from a cost and logistics standpoint. Helicopter sling-loading approximately 200 tons of gravel would exceed the \$500,000 threshold, and a dedicated barge operating between Molokai and Kalaupapa would be expected to cost a similar amount. YB does not recommend adding a “pit stop” to the Kalaupapa barge to pick up gravel trucks from Molokai; the Molokai YB Pier does not have the loading logistics or staging space capacity to support that operation.

If referring to Kalaupapa, we’ve asked our cultural resource department about crushing rock on-site, similar to what was done in the past using non-cultural material. We’ve been told it would be very difficult to determine that any specific rock on the surface is not or had not been part of a culturally constructed feature in the past. Based on existing archaeological surveys, it appears that a large part and possibly a majority of the Kalaupapa Peninsula had been modified during pre-contact and proto-historic periods by the construction of dryland field walls that take the form of low, dry stacked boulders and cobbles. These walls are not very obvious, especially in a partially deteriorated state. This would make sourcing surface stone very expensive and time consuming as each piece acquired would involve an expensive and time-consuming resource monitoring process. Additionally, even stones that have never been part of a culturally constructed feature, are still constituent parts of the larger cultural landscape. Removal and destruction this material at the substantial scale that would be necessary for the construction and maintenance of modern infrastructure would not align with the NPS mission to protect and preserve these resources.

Q: If sourcing from Oahu, are you allowing gravel to be moved from CRB infected areas?

A: If the source location is a concern, we can incorporate specific CRB prevention requirements into the solicitation and resulting contract, including requirements to source gravel from a specified facility/location and to meet defined inspection, cleanliness, and treatment safeguards.

Q: Do you have any pre- and post- entry requirements or surveillance?

A: The NPS is also willing to implement additional safeguards as part of a pre- and post- treated-gravel pathway, such as:

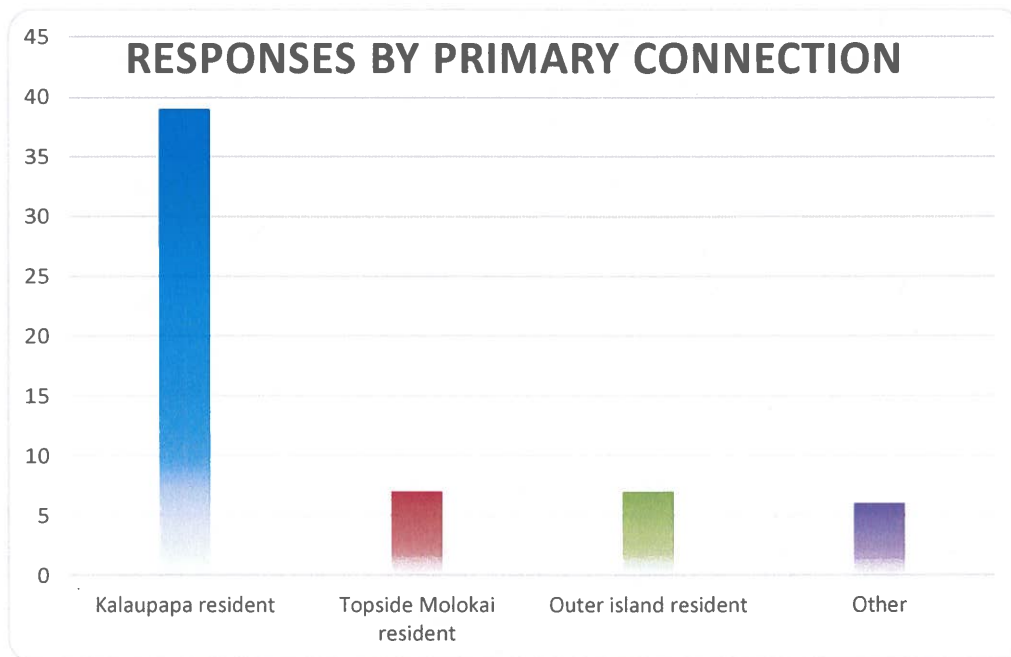
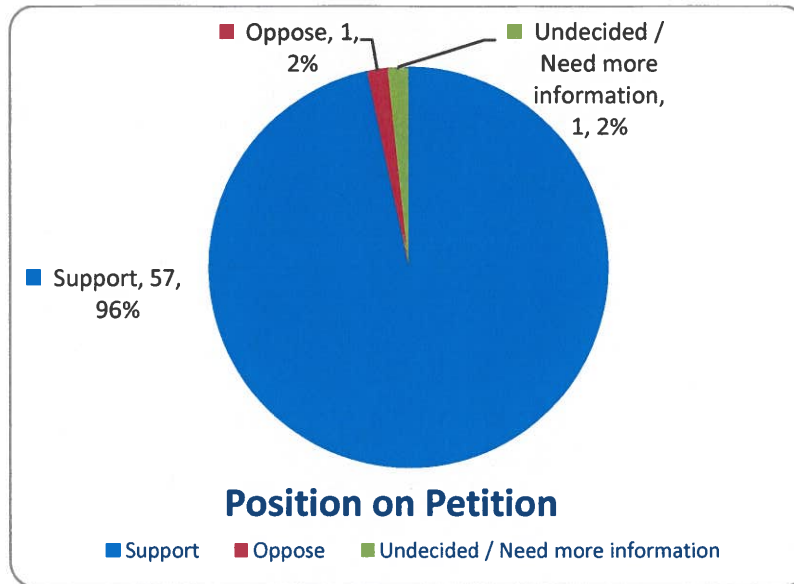
- Treating (fumigating) gravel on Oahu prior to loading on the barge;
- Unloading and staging treated gravel in designated areas in Kalaupapa; and
- Inspecting and testing the gravel after arrival. This could include measures such as covering the pile, and using monitoring tools (e.g., nets, traps, and other detection methods) to confirm the pile is free of CRB prior to approval for use.

David – Questions & Responses

Q: How important is this petition to us?

A: This petition is critically important to the Kalaupapa community. KNHP supports the intent of Interim Rule 25-1 and is requesting an amendment that would allow treated (fumigated) gravel to be transported to Kalaupapa, rather than seeking to remove gravel from the list of prohibited items. We share a common goal of preventing CRB from reaching Molokai and are working to identify a solution that allows Kalaupapa to receive a critical maintenance material with stringent, enforceable mitigations in place.

Results from a gravel survey circulated within the Kalaupapa community during March and April, completed by 59 respondents, indicate 97% support KNHP’s request for treated gravel, 2% oppose the request, and 2% are undecided. Respondents included 39 Kalaupapa residents, 7 topside Molokai residents, 7 outer-island residents, and 6 individuals who identified as other. Respondents were able to select more than one category and identified as follows: 2 patient residents, 10 DHHL beneficiaries, 38 employees of Kalaupapa, and 7 contractors in Kalaupapa, while 14 selected “not applicable.”



Kalaupapa’s uniquely controlled access also provides a strong opportunity to manage risk effectively. We receive one barge per year, and there is no roadway connection between topside Molokai and Kalaupapa. In addition, freight access is limited to one freight plane entry per weekday, and passenger flights on average are limited to up to three round trips per day. Ocean access is restricted and permit-controlled. Because access is so limited and scheduled, we have clear visibility into when materials arrive, how they are transported, and where they originate. This creates an exceptional opportunity to require and verify treatment of the gravel prior to entry, and to implement additional safeguards—such as controlled staging, inspection, and testing upon arrival—before the material is approved for use.

Nathaniel Oswald – Questions & Responses

Q: Are the trucks and containers being fumigated?

A: The gravel will be fumigated in the container or trailer that directly holds the material (the “vessel” carrying the gravel). For example, a roll-off container or end-dump trailer will first be cleaned of debris—including soil, organic material, plants, propagative plant parts, and seeds—and inspected prior to being loaded. Once filled, the container/trailer will be tarped and fumigated. The truck or tractor unit used to

APPENDIX B

transport the container/trailer would not be fumigated because it is the mode of transportation, not the vessel that holds the gravel.

Q: Is there a treatment staging area? Is it a known site for CRB?

A: The specific treatment staging area would be identified through the contract solicitation process. However, we can incorporate clear CRB prevention requirements into the solicitation and resulting contract. This would include requiring the contractor to provide an appropriate staging/yard area in a location not listed as high-risk for CRB with sufficient space to treat (fumigate) the gravel and transport vehicles at the same time, and to meet defined inspection, cleanliness, and treatment safeguards. We can also require the contractor to identify the proposed staging location in their proposal for review before an award is made, to avoid staging near known high-risk conditions (such as areas with green waste, mulch, compost, or other decaying organic materials that can harbor CRB).

Q: How long does it sit at that spot after treatment? What is the potential for reinfestation? Are we set up to address it quick and fast? What is the retreatment timeline?

A: Typically, treatment of the material is performed the day before the barge loading date. In our scenario, all freight—except fuel and septic trucks—is delivered to YB Piers 39/40 on Thursday, with the barge sailing for Kalaupapa late Friday night/early Saturday morning. Once the gravel is cleared by the Department of Agriculture at the treatment staging area, they would proceed directly to YB for check-in. With appropriate protocols in place, same-day movement from the staging area to the pier, and treatment conducted at a staging location not identified as high risk, the potential for re-infestation should be minimal.

En Young – Questions & Responses

Q: What are the options available for gravel in Kalaupapa?

A: There are no practical options for sourcing gravel within Kalaupapa. Crushing rock or stone locally from the peninsula would not align with the park's mission to protect and preserve natural and cultural resources. As a result, gravel must be sourced from outside of Kalaupapa—either from topside Molokai or from Oahu. Historically, gravel has been sourced from Oahu because the annual Kalaupapa barge originates there, making Oahu the most logistically feasible source under normal operations.

KALAUPAPA COMMUNITY SURVEY

Support / Opposition to Petition to Amend Interim Rule 25-1 (Gravel to Kalaupapa, Molokai)

Purpose: The National Park Service (NPS) is requesting feedback from the Kalaupapa community regarding a petition to amend the Hawaii Department of Agriculture & Biosecurity Plant Quarantine Interim Rule 25-1. This interim rule currently restricts the interisland movement of coconut rhinoceros beetle (CRB) host materials—including gravel—to Molokai.

Background: Interim Rule 25-1 became effective on September 24, 2025. Since that date, shipping gravel from other islands (such as Oahu) to Molokai—including shipments destined for Kalaupapa—has been prohibited under the rule, because gravel is treated as a regulated CRB host material. The amendment NPS is seeking would allow gravel to be moved to Molokai only if it is fumigated with ProFume specialty gas (sulfuryl fluoride) under the Special Local Needs (SLN) label HI-250001 (often referenced as HI-2501). SLN HI-250001 authorizes ProFume fumigation for CRB control for interisland movement of certain non-edible commodities (for example: wood chips, mulch, compost, erosion socks containing organic matter, host trees, and other breeding host materials). This is a restricted-use treatment and must be applied by certified applicators. The petition would extend this fumigation/treatment pathway to gravel as a condition for interisland shipment to Molokai—specifically Kalaupapa.

1) Full Name (required): _____

2) Phone (optional): _____ Email (optional): _____

3) Primary connection (check one): Kalaupapa resident Topside Moloka'i resident Outer island resident Other:

4) Status (check all that apply): Patient resident DHHL beneficiary Employee of Kalaupapa Contractor in Kalaupapa Not applicable / prefer not to say

5) Position (check one): Do you support amending Interim Rule 25-1 to allow gravel to Moloka'i (incl. Kalaupapa) if fumigated with ProFume under SLN HI-250001?

Support Oppose Undecided / Need more information

6) Reasons (check all that apply):

If SUPPORT (check all that apply): Needed for essential projects (roads/utilities/drainage/erosion/safety) Local sourcing not feasible Treatment is acceptable safeguard Other: _____

If OPPOSE (check all that apply): Any added CRB risk unacceptable Concern about treatment/enforcement Prefer local-only materials Prefer other options Other: _____

7) If approved, safeguards you want (check all that apply): Certified applicator only Fumigation certificate Chain-of-custody Inspection on arrival Sealed/covered loads Limit to essential/public projects Other:

8) Would you support a limited pilot first? Yes, limited pilot with monitoring No, approve generally with safeguards No, do not allow Unsure

9) Additional comments (optional):

10) Signature (Required): _____ Date: _____

APPENDIX C

Kalaupapa Gravel Survey Results Summary

Overview

Total Responses Entered	59
Responses with Position Selected	59
Support	57
Oppose	1
Undecided / Need more information	1
Support %	97%
Oppose %	2%
Undecided %	2%

Status Selections

Status	Count
Patient resident	2
DHHL beneficiary	10
Employee of Kalaupapa	38
Contractor in Kalaupapa	7
Not applicable / prefer not to say	14

Primary Connection

Category	Count
Kalaupapa resident	39
Topside Molokai resident	7
Outer island resident	7
Other	6

Pilot Preference

Choice	Count
Yes - limited pilot with monitoring	13
No - approve generally with safeguards	36
No - do not allow	0
Unsure	7

Reasons for Support

Reason	Count
Needed for essential projects	55
Local sourcing not feasible	39
Treatment is acceptable safeguard	42
Other	3

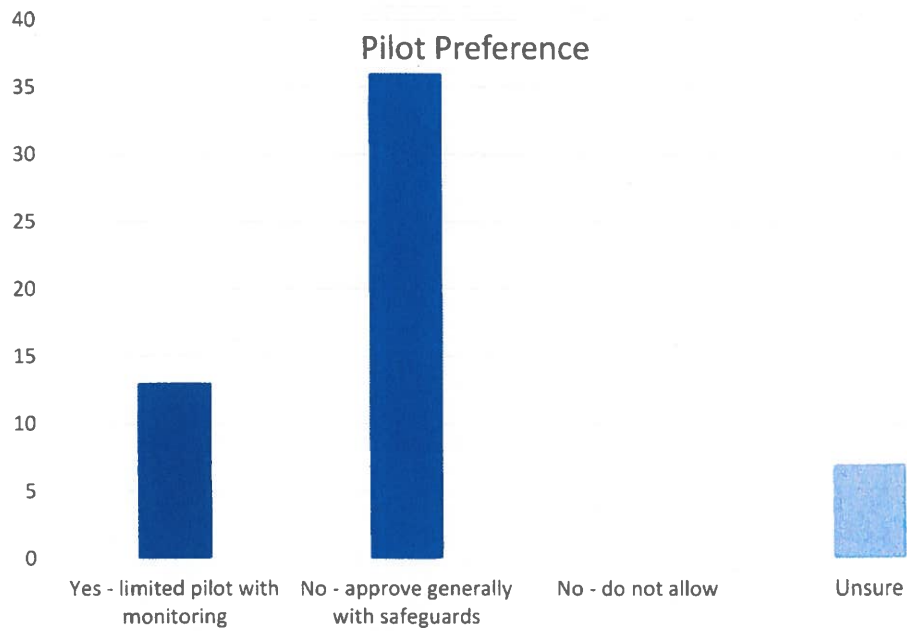
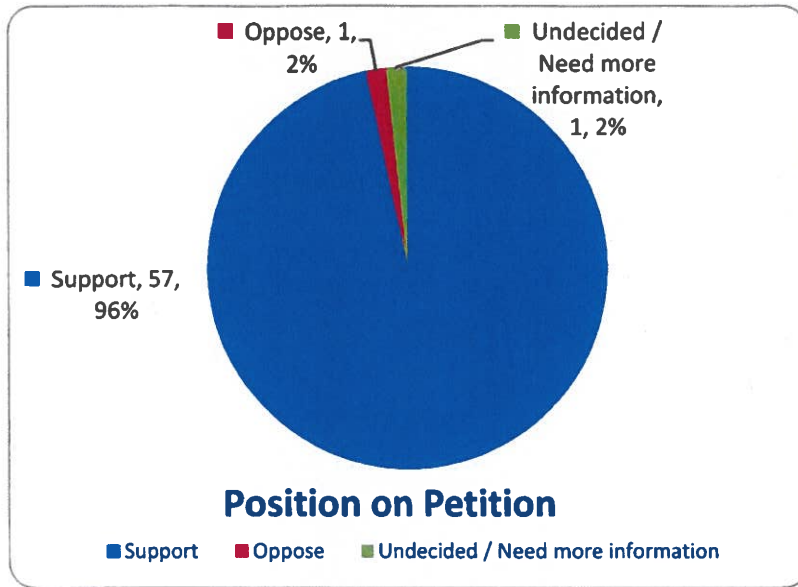
Reasons for Opposition

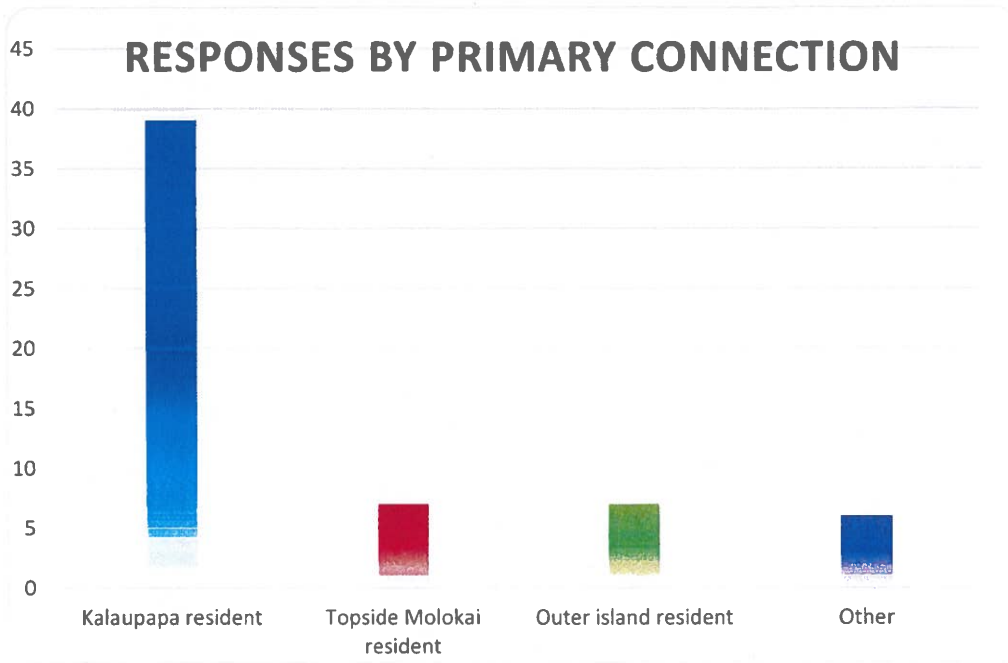
Reason	Count
Any added CRB risk unacceptable	1
Concern about treatment / enforcement	0
Prefer local-only materials	0
Prefer other options	0
Other	0

Safeguards Requested

Safeguard	Count
Certified applicator only	33
Fumigation certificate	42
Chain-of-custody	19
Inspection on arrival	33
Sealed/cover loads	29
Limit to essential/public projects	25
Other	2

Charts update automatically from the Summary sheet.





APPENDIX C

Response ID	Date Received	Initials	Primary Connection	Status (multi-select; use)	Position	Reasons - Support (multi-select; use)	Reasons - Oppose (multi-select; use)	Safeguards Requested (multi-select; use)	Pilot First?	Additional Comments	Signature Received?
1	3/10/2026	HA	Kalaupapa resident	Employee of Kalaupapa	Support			Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	Unsure		Yes
2	3/10/2026	CN	Kalaupapa resident	Employee of Kalaupapa, Contractor in Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Inspection on Arrival, Sealed/Cover Loads	Yes - limited pilot with monitoring		Yes
3	3/10/2026	MP	Kalaupapa resident	DHHL beneficiary, Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	No - approve generally with safeguards	Gravel is extremely low risk as a host material for CRB. Fumigation provides ample mitigation; with monitoring before and after transport. The treated gravel is critical to health and safety in Kalaupapa and far outweighs the minimal risk this poses.	
4	3/10/26	GP	Kalaupapa resident	DHHL beneficiary, Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	Yes - limited pilot with monitoring, No - Approve Generally with Safeguards		Yes
5	3/10/26	GPS	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects, Other	No - Approve Generally with Safeguards	Additional testing on-site once gravel arrives. Thank you.	Yes
6	3/10/26	CI	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only	No - Approve Generally with Safeguards		Yes
7	3/10/26	KC	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects		Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	No - Approve Generally with Safeguards		Yes
8	3/10/26	RM	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects		Certified Applicator Only, Fumigation Certificate	No - Approve Generally with Safeguards		Yes
9	3/10/26	JH	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects		Certified Applicator Only	Yes - limited pilot with monitoring, No - Approve Generally with Safeguards		Yes
10	3/10/26	BIW	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Limit to Essential/Public Projects	No - Approve Generally with Safeguards	Volunteer in Kalaupapa	Yes
11	3/11/26	ADL	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard, Other		Certified Applicator Only	No - Approve Generally with Safeguards	Safety for cars/vans etc.	Yes

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12	3/11/26	LL	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate	No - Approve Generally with Safeguards	I find it hard to believe that CR8 would be hanging out in gravel in the first place. It seems to me they would be in material that they would be able to survive in.	Yes
13	3/11/26	HA	Kalaupapa resident	DHHL beneficiary, Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Fumigation Certificate, Chain-of-Custody	No - Approve Generally with Safeguards		Yes
14	3/12/26	JY	Outer Island resident	Contractor in Kalaupapa	Support	Needed for Essential Projects		Fumigation Certificate	Yes - Limited Pilot with Monitoring		Yes
15	3/12/26	MB	Topside Molecular resident	Not applicable / prefer not to say	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Fumigation Certificate, Sealed/Cover Loads, Limit to Essential/Public Projects	No - Approve Generally with Safeguards	Former Kalaupapa employee visiting the settlement.	Yes
16	3/12/26	DC	Other	Not applicable / prefer not to say	Support	Needed for Essential Projects, Treatment is Acceptable Safeguard		Fumigation Certificate, Sealed/Cover Loads, Limit to Essential/Public Projects	No - Approve Generally with Safeguards	Retired nurse from Kalaupapa Care Home.	Yes
17	3/16/26	ES	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Inspection on Arrival, Sealed/Cover Loads	Yes - Limited Pilot with Monitoring		Yes
18	3/19/26	AU	Other	Not applicable / prefer not to say	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Limit to Essential/Public Projects	No - Approve Generally with Safeguards	We visited in 2024 and the roads were much better then. This time the roads were much worse and unsafe.	Yes
19	3/19/26	RU	Other	Not applicable / prefer not to say	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Limit to Essential/Public Projects	No - Approve Generally with Safeguards	Visitor/pilgrimage. Needed for improved road safety.	Yes
20	3/21/26	SA	Other	Not applicable / prefer not to say	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard, Other		Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	No - Approve Generally with Safeguards	Visiting with friends from Oahu. Roads are washed out due to recent heavy rainfall. Roads are not safe for persons riding in vehicles or walking on roads.	Yes
21	3/22/26	TJ	Outer Island resident	Not applicable / prefer not to say	Support	Needed for Essential Projects, Treatment is Acceptable Safeguard			No - Approve Generally with Safeguards	There were several roads that have been washed out with recent rains/storms--the roads are not safe for all vehicles.	Yes
22	3/22/26	DMK	Outer Island resident	Not applicable / prefer not to say	Support	Needed for Essential Projects			No - Approve Generally with Safeguards	Several large divots made in the middle of the road. With recent rains its even worse. Roads need to be safe fr vehicles and people riding in the vehicles.	Yes
23	3/23/26	JK	Outer Island resident	Not applicable / prefer not to say	Support	Needed for Essential Projects, Local Sourcing Not Feasible		Fumigation Certificate, Inspection on Arrival	No - Approve Generally with Safeguards		Yes
24	3/23/26	RK	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects		Fumigation Certificate, Chain-of-Custody, Inspection on Arrival	No - Approve Generally with Safeguards		Yes
25	3/27/26	SH	Kalaupapa resident	Contractor in Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Inspection on Arrival	No - Approve Generally with Safeguards	PHP staff.	Yes

APPENDIX C

26	3/27/26	MM	Kalaupapa resident	Contractor in Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	No - Approve Generally with Safeguards		Yes
27	3/27/26	ADD	Kalaupapa resident	Contractor in Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	No - Approve Generally with Safeguards		Yes
28	3/29/26	JA	Kalaupapa resident	Patient resident	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	No - Approve Generally with Safeguards		Yes
29	3/29/26	MJN	Other	Not applicable / prefer not to say	Undecided / Need more information			Certified Applicator Only, Inspection on Arrival, Limit to Essential/Public Projects	Yes - Limited Pilot with Monitoring	Former Kalaupapa employee visiting the settlement., Former Kalaupapa employee visiting the settlement. Suggest testing gravel. How will gravel be retained on roadway? What other options have been considered-is creating gravel here another option using non-cultural material?	Yes
30	4/1/26	JK	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads, Other	Unsure	Used in a timely manner.	Yes
31	4/2/26	TH	Topside Molokai resident	Employee of Kalaupapa	Support	Needed for Essential Projects		Certified Applicator Only	Yes - Limited Pilot with Monitoring		Yes
32	4/2/26	JM	Other	Contractor in Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	No - Approve Generally with Safeguards	Kalaupapa Saints Tour Driver.	Yes
33	4/2/2026	EC	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects		Certified Applicator Only, Fumigation Certificate, Inspection on Arrival, Sealed/Cover Loads	Yes - Limited Pilot with Monitoring		Yes
34	4/2/2026	JD	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects		Limit to Essential/Public Projects	No - Approve Generally with Safeguards		Yes
35	4/3/26	KA	Topside Molokai resident	DHHL beneficiary, Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Inspection on Arrival, Sealed/Cover Loads	Unsure		Yes
36	4/3/26	RD	Kalaupapa resident	DHHL beneficiary, Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	Unsure		Yes
37	4/5/26	AB	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only	Yes - Limited Pilot with Monitoring		Yes

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38	4/6/26	VY	Topside Molokai resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard	Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	Unsure		Yes
39	4/6/26	JM	Kalaupapa resident	DHHL beneficiary, Employee of Kalaupapa	Support	Needed for Essential Projects	Certified Applicator Only, Fumigation Certificate, Inspection on Arrival	No - Approve Generally with Safeguards	We need gravel to repair roads to Kalawao and to our pump house. Gravel is essential to Kalaupapa for a lot of things like backfilling water line repairs, trails, roads, building foundations, and more.	Yes
40	4/6/26	TP	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard	Fumigation Certificate, Sealed/Cover Loads, Limit to Essential/Public Projects	Yes - Limited Pilot with Monitoring		Yes
41	4/6/26	BIE	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Treatment is Acceptable Safeguard	Fumigation Certificate, Inspection on Arrival	No - Approve Generally with Safeguards		Yes
42	4/6/26	BI	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects	Fumigation Certificate, Inspection on Arrival	No - Approve Generally with Safeguards		Yes
43	4/6/26	KM	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard	Certified Applicator Only, Fumigation Certificate, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	Yes - Limited Pilot with Monitoring	Local meaning Kalaupapa and doesn't include Molokai.	Yes
44	4/6/26	WA	Kalaupapa resident	DHHL beneficiary, Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard	Fumigation Certificate, Inspection on Arrival, Sealed/Cover Loads	Yes - Limited Pilot with Monitoring		Yes
45	4/6/26	MW	Kalaupapa resident	Patent resident, DHHL beneficiary, Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard, Other	Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads	No - Approve Generally with Safeguards	Safety for tour vans to Kalawao. We need gravel.	Yes
46	4/8/26	RM	Kalaupapa resident	DHHL beneficiary, Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard	Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival	No - Approve Generally with Safeguards		Yes
47	4/8/26	NTU	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard	Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	Yes - Limited Pilot with Monitoring		Yes
48	4/9/26	JAB	Topside Molokai resident	Employee of Kalaupapa	Support	Needed for Essential Projects	Sealed/Cover Loads	No - Approve Generally with Safeguards		Yes
49	4/9/26	DBL	Kalaupapa resident	Not applicable / prefer not to say	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard	Fumigation Certificate	No - Approve Generally with Safeguards		Yes
50	4/9/26	MIDNV	Kalaupapa resident	Not applicable / prefer not to say	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard	Fumigation Certificate	No - Approve Generally with Safeguards		Yes

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51	4/9/26	HAA	Outer Island resident	Not applicable / prefer not to say	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Fumigation Certificate	No - Approve Generally with Safeguards		Yes
52	4/9/26	FMP	Outer Island resident	Not applicable / prefer not to say	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Fumigation Certificate	No - Approve Generally with Safeguards		Yes
53	4/13/26	EKE	Topside Molokai resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Sealed/Cover Loads	Yes - Limited Pilot with Monitoring		Yes
54	4/13/26	SP	Topside Molokai resident	Contractor in Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	No - Approve Generally with Safeguards		Yes
55	4/14/2026	EDM	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	Yes - limited pilot with monitoring	Tenting Building. Keep Molokai / Kalaupapa safe from outside pest or any invasive species.	Yes
56	4/14/2026	JHK	Kalaupapa resident	Employee of Kalaupapa	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	Unsure		Yes
57	4/15/2026	KM	Outer Island resident	Not applicable / prefer not to say	Support	Needed for Essential Projects, Local Sourcing Not Feasible, Treatment is Acceptable Safeguard		Certified Applicator Only, Fumigation Certificate, Chain-of-Custody, Inspection on Arrival, Sealed/Cover Loads, Limit to Essential/Public Projects	No - approve generally with safeguards	Yes to all safeguards, listed AND rock source limited to local, non-cultural rock, invasive species management plan in place to include monitoring.	Yes
58	4/16/2026	RM	Kalaupapa resident	Employee of Kalaupapa	Support			Inspection on arrival	Unsure		No
59	4/16/2026	RK	Kalaupapa resident	DHHL beneficiary, Employee of Kalaupapa	Oppose				Unsure	Any added CRB risk unacceptable	Yes

JOSH GREEN, M.D.
Governor

SYLVIA LUKE
Lt. Governor



SHARON HURD
Chairperson
Board of Agriculture & Biosecurity

DEAN M. MATSUKAWA
Deputy to the Chairperson

State of Hawai'i
DEPARTMENT OF AGRICULTURE & BIOSECURITY
KA 'OIHANA MAHI'AI A KIA'I MEAOLA
1428 South King Street
Honolulu, Hawai'i 96814-2512
Phone: (808) 973-9560 FAX: (808) 973-9613

HAWAII DEPARTMENT OF AGRICULTURE AND BIOSECURITY

PLANT QUARANTINE INTERIM RULE 25-1
Amended April 28, 2026

To Prohibit the Transportation of Plants, Soil, Gravel not subjected to a treatment approved by the Department, and other CRB Host Material Including Decomposing Plant Material Such as Compost, Wood or Tree Chips, and Mulch; Plant Propagation Media; and Other Items Comprised of Decomposing Organic Plant Material Such as Landscaping Material or Erosion Control Socks, to Prevent the Movement of Coconut Rhinoceros Beetle, *Oryctes rhinoceros*, to the Island of Molokai From Other Areas of the State.

Under authorization granted in Section 150A-9.5, Hawaii Revised Statutes (HRS), the Hawaii Department of Agriculture and Biosecurity (Department) hereby establishes this interim rule to impose a quarantine on the movement of plants, soil, gravel not subjected to a treatment approved by the Department, and other coconut rhinoceros beetle (CRB) host material, including decomposing plant material such as compost, wood or tree chips, and mulch; plant propagation media; and other items comprised of decomposing organic plant material such as landscaping material or erosion control socks, to prevent the spread of the CRB, *Oryctes rhinoceros*, to the Island of Molokai, an island where CRB has not been detected.

The interim rule is needed to prevent the further spread of CRB to the Island of Molokai from other areas of the State. The residents of Molokai utilize the coconut tree, *Cocos nucifera*, and other palm species for subsistence, local food production, and cultural



28 practices and the need to protect these natural resources on Molokai from the imminent
29 peril of CRB constitutes an emergency. Further, CRB establishment on Molokai would
30 impact native and endemic palm species, including the rare loulou palm, *Pritchardia*
31 *hillebrandii*. CRB has been detected moving between Islands of the State on potted
32 plants that are not typically considered hosts of adult CRB and has been detected
33 moving interisland despite the CRB interim rules issued by the Department that took
34 effect on October 4, 2023, and October 11, 2024, that restrict the movement of CRB
35 host material and palm plants in the genera *Cocos*, *Livistona*, *Phoenix*, *Pritchardia*,
36 *Roystonea*, and *Washingtonia*; decomposing plant material such as compost, wood
37 or tree chips, and mulch; plant propagation media; and other items comprised of
38 decomposing organic plant material such as landscaping material or erosion control
39 socks, from the Island of Oahu to other areas of the State.

40

41 This interim rule prohibits the movement of potted or bare root plants and other CRB
42 host material, which:

43 (A) Includes decaying plant material, mulch, trimmings, fruit and vegetative scraps,
44 wood, stumps, compost, plant propagation media in live planting, commercially
45 bagged plant propagation media or landscaping materials that have been staged or
46 stored in any area of the State, soil, and gravel that has not been subjected to a
47 treatment approved by the Department; and

48 (B) Does not include:

49 (i) Plant products intended for consumption, such as coconuts, fruits, nuts,
50 edible leaves, leaves used for cooking, and spices;

- 51 (ii) Plant products preserved from decay by treatment or use, such as lumber,
52 woven hats, dried and painted coconuts, wooden posts, wood carvings, and
53 firewood;
- 54 (iii) Seeds for planting;
- 55 (iv) Cut flowers and foliage for decoration, such as lei, floral bouquets, or
56 arrangements; and
- 57 (v) Rock, coral, and sand, not mixed with any organic material.

58

59 Any person who violates this rule shall be guilty of a misdemeanor and fined not less
60 than \$100. The provisions of HRS Section 706-640 notwithstanding, the maximum fine
61 shall be \$10,000. For a second offense committed within five years of a prior conviction,
62 the person(s), companies, or organization(s) shall be responsible for clean-up and
63 decontamination fees to remove contaminated material and to fully eradicate any CRB
64 that may have been caused by their violation of not following this Interim Rule. Also,
65 they shall be fined not less than \$500 and not more than \$25,000.

66

67 If any provision of this interim rule is declared unconstitutional, or the applicability
68 thereof to any person or circumstance is held invalid, the constitutionality and validity of
69 the remainder of this interim rule and applicability thereof to other persons and
70 circumstances shall not be affected.

71

72 This interim rule shall become effective on September 24, 2025, and shall be effective
73 for not more than one year from the effective date.

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Sharon Hurd, Chairperson
Board of Agriculture and Biosecurity

JOSH GREEN, M.D.
Governor

SYLVIA LUKE
Lt. Governor



State of Hawai'i
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ATTACHMENT 1
SHARON HURD
Chairperson
Board of Agriculture & Biosecurity

DEAN M. MATSUKAWA
Deputy to the Chairperson

HAWAII DEPARTMENT OF AGRICULTURE AND BIOSECURITY

PLANT QUARANTINE INTERIM RULE 25-1

To Prohibit the Transportation of Plants, Soil, Gravel, and other CRB Host Material Including Decomposing Plant Material Such as Compost, Wood or Tree Chips, and Mulch; Plant Propagation Media; and Other Items Comprised of Decomposing Organic Plant Material Such as Landscaping Material or Erosion Control Socks, to Prevent the Movement of Coconut Rhinoceros Beetle, *Oryctes rhinoceros*, to the Island of Molokai From Other Areas of the State.

Under authorization granted in Section 150A-9.5, Hawaii Revised Statutes (HRS), the Hawaii Department of Agriculture and Biosecurity (Department) hereby establishes this interim rule to impose a quarantine on the movement of plants, soil, gravel, and other coconut rhinoceros beetle (CRB) host material, including decomposing plant material such as compost, wood or tree chips, and mulch; plant propagation media; and other items comprised of decomposing organic plant material such as landscaping material or erosion control socks, to prevent the spread of the CRB, *Oryctes rhinoceros*, to the Island of Molokai, an island where CRB has not been detected.

The interim rule is needed to prevent the further spread of CRB to the Island of Molokai from other areas of the State. The residents of Molokai utilize the coconut tree, *Cocos nucifera*, and other palm species for subsistence, local food production, and cultural practices and the need to protect these natural resources on Molokai from the imminent peril of CRB constitutes an emergency. Further, CRB establishment on Molokai would



impact native and endemic palm species, including the rare loulu palm, *Pritchardia hillebrandii*. CRB has been detected moving between Islands of the State on potted plants that are not typically considered hosts of adult CRB and has been detected moving interisland despite the CRB interim rules issued by the Department that took effect on October 4, 2023, and October 11, 2024, that restrict the movement of CRB host material and palm plants in the genera *Cocos*, *Livistona*, *Phoenix*, *Pritchardia*, *Roystonea*, and *Washingtonia*; decomposing plant material such as compost, wood or tree chips, and mulch; plant propagation media; and other items comprised of decomposing organic plant material such as landscaping material or erosion control socks, from the Island of Oahu to other areas of the State.

This interim rule prohibits the movement of potted or bare root plants and other CRB host material, which:

(A) Includes decaying plant material, mulch, trimmings, fruit and vegetative scraps, wood, stumps, compost, plant propagation media in live planting, commercially bagged plant propagation media or landscaping materials that have been staged or stored in any area of the State, soil, and gravel; and

(B) Does not include:

(i) Plant products intended for consumption, such as coconuts, fruits, nuts, edible leaves, leaves used for cooking, and spices;

(ii) Plant products preserved from decay by treatment or use, such as lumber, woven hats, dried and painted coconuts, wooden posts, wood carvings, and firewood;

- (iii) Seeds for planting;
- (iv) Cut flowers and foliage for decoration, such as lei, floral bouquets, or arrangements; and
- (v) Rock, coral, and sand, not mixed with any organic material.

Any person who violates this rule shall be guilty of a misdemeanor and fined not less than \$100. The provisions of HRS Section 706-640 notwithstanding, the maximum fine shall be \$10,000. For a second offense committed within five years of a prior conviction, the person(s), companies, or organization(s) shall be responsible for clean-up and decontamination fees to remove contaminated material and to fully eradicate any CRB that may have been caused by their violation of not following this Interim Rule. Also, they shall be fined not less than \$500 and not more than \$25,000.

If any provision of this interim rule is declared unconstitutional, or the applicability thereof to any person or circumstance is held invalid, the constitutionality and validity of the remainder of this interim rule and applicability thereof to other persons and circumstances shall not be affected.

This interim rule shall become effective on September 24, 2025, and shall be effective for not more than one year from the effective date.



Sharon Hurd, Chairperson
Board of Agriculture and Biosecurity



STATE OF HAWAII
DEPARTMENT OF HEALTH
KA 'OIHANA OLAKINO
P. O. BOX 3378
HONOLULU, HI 96801-3378

April 7, 2026

Chairperson Sharon Hurd
Board of Agriculture and Biosecurity
1428 South King Street
Honolulu, Hawaii 96814

Dear Chairperson Hurd and Members of the Board of Agriculture and Biosecurity,

I write to you in support of the National Park Service's **Petition for Amendment to Interim Rule § 25-1 Regarding the Prohibition of Interisland Movement of Coconut Rhinoceros Beetle (CRB) Host Materials, Specifically Gravel, to Kalaupapa, Molokai** dated February 12, 2026.

The Department of Health (DOH) is responsible for the jurisdiction and control of Kalawao County under Hawaii Revised Statutes §326. While DOH's focus is on the safety and comfort of the patient residents and staff, we are fortunate to co-manage this unique place with the National Park Service (NPS). Since 1980, when Kalawao County was designated Kalaupapa National Historical Park, NPS has steadily taken over management of much of the county's infrastructure including drinking water, waste, electricity and road maintenance.

Maintenance of the roads in Kalawao County, particularly Damien Road, the primary East-West road across the peninsula, is essential for transportation to many important historical and cultural sites, but also to the high-ground location that serves as the community's evacuation site. In addition, Damien Road is required to reach the drinking water infrastructure and other key utility locations that keep the community operating safely.

Gravel is a key component of maintaining the roads throughout the county and is essential for the safety of our patient residents, DOH and NPS staff and visitors to Kalaupapa. Receiving gravel supplies is especially important this year when many of the roads in Kalawao County have significantly degraded due to flooding and heavy run-off from the Kona Low storms.

Due to Kalaupapa's isolation, any supplies or equipment larger or heavier than a washing machine must arrive on the once-a-year barge. This significant limitation in the supply chain requires careful planning and execution to ensure that all supplies needed

Chairperson Sharon Hurd
Board of Agriculture and Biosecurity
Support of the National Park Service Petition
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for the year are brought into the settlement on the annual barge. Without additional gravel supplies on this year's barge, the community faces significant risks in transportation and disaster preparedness.

DOH is supportive of NPS's plan to minimize the risk of transport of CRB by allowing gravel to be transported to Kalaupapa only if it is treated (fumigated) under the approved ProFume® Special Local Needs label pathway.

We acknowledge and support DAB's efforts to prevent the movement of Coconut Rhinoceros Beetle (CRB) and appreciate the intention of Interim Rule § 25-1. However, given the importance of maintaining roads in Kalawao County and the lack of viable alternatives, we appreciate your consideration of NPS's request for an amendment that would allow fumigated gravel to be brought into Kalaupapa.

Please don't hesitate to contact me or DOH Chief of Communicable Disease and Public Health Nursing Division, Dr. Diana Felton (diana.felton@doh.hawaii.gov) should you have any questions or require further explanation on the limitations and needs at Kalaupapa.

Sincerely,

Kenneth Fink

Kenneth S. Fink, MD, MGA, MPH
Director of Health

Attachment: NPS Petition for Amendment

C.
Baron Chan, DOH Hansen's Disease Branch
Diana Felton, MD, DOH CDPHND Chief
Nancy Holman, NPS KNHP Superintendent



**Tree Solutions & Environmental
Consulting Services, Inc.**

P.O. Box 10026
Honolulu, Hawaii 96816
808-734-5963

Hawai'i Department of Agriculture and Biosecurity
Plant Quarantine Branch
1849 Auiki Street
Honolulu, HI 96819

To Whom It May Concern:

Tree Solutions & Environmental Consulting Services, Inc. is writing a letter in support of the Kalaupapa National Park Service request for an exemption to Interim Rule 25-1 to transport gravel to Kalaupapa, Moloka'i from a neighbor island.

Our company is comprised of consulting arborists, plant health care specialists and entomologists that work directly on Coconut Rhinoceros Beetle (CRB) treatment, management and prevention. We have presented on CRB management and training at multiple Landscape Industry Council of Hawaii conferences and community meetings. Our arborists communicate and collaborate closely with the CRB response team, University of Hawaii, and Department of Agriculture representatives. Additionally, we provide arboriculture training to Kalaupapa National Historic Park staff and are familiar with the needs and challenges at Kalaupapa.

While we understand and support the intentions of Interim Rule 25-1 to prevent the movement of CRB host material to Moloka'i, clean gravel is an unlikely vector for CRB. The CRB host material is vegetative material where adult beetles lay eggs, because the larvae feed on plant waste. Clean gravel that is not mixed with soil or vegetative material is not a food source for CRB larvae, and subsequently larvae are unlikely to survive in clean gravel.

To reduce the likelihood of any larvae or adult beetles inadvertently being in clean gravel, the gravel can be treated prior to movement to Kalaupapa. Multiple treatment options are available and approved by the State of Hawai'i. Fumigation prior to transport would be the most effective way to kill inadvertent invasive insects living in the gravel. Once on site at Kalaupapa, staff from the National Park Service Natural Resources Management Department can search the gravel prior to it being spread across the roadways. Turning and searching is also an approved method to examine materials, as described by the CRB Response Team. Furthermore, CRB larvae prefer moist environments within soil or compost. The gravel will be spread thinly on roadways once at Kalaupapa, which would kill any inadvertent larvae by crushing or dehydration.

Our professional opinion is that the likelihood of CRB introduction to Kalaupapa by transport of clean treated gravel is very low. We kindly request the Hawai'i Department of Agriculture and Biosecurity grant the National Park Service at Kalaupapa an exemption to enable their annual shipment of gravel to continue, so that the Service can maintain this historically and culturally significant area.

If you have any questions, please contact our office at 808-734-5963.

Respectfully,

Steve Nimz
ASCA Consulting Arborist, #WE-0314AM
ISA Tree Risk Assessment Qualified

Ilana Nimz, MSc.
ASCA Arborist #796, #WE-11029AT
ISA Tree Risk Assessment Qualified

4/16/2026

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State of Hawaii
Department of Agriculture and Biosecurity
Plant Industry Division
Plant Quarantine Branch
Honolulu, Hawaii

April 28, 2026

Board of Agriculture and Biosecurity
Honolulu, Hawaii

SUBJECT: Request to: (1) Approve Proposed Chapter 4-69, Hawaii Administrative Rules, Entitled “Plant and Non-Domestic Animal Quarantine Pest Designation Rules” to Proceed to Public Hearing, Provided that the Advisory Committee on Plants and Animals Subsequently Reviews and Does not Recommend Substantive Changes to the Proposed Rules; and (2) Authorize the Chairperson to Schedule Public Hearings and Appoint One or More Hearings Officers in Connection With the Adoption of Chapter 4-69, Hawaii Administrative Rules.

I. Introduction

The Hawaii Department of Agriculture and Biosecurity (DAB) Plant Quarantine Branch (PQB) is proposing the creation and adoption of a new chapter 4-69, Hawaii Administrative Rules (HAR), entitled “Plant and Non-Domestic Animal Quarantine Pest Designation Rules” to designate specific organisms as pests for regulatory action related to import inspections.

II. Summary of Proposed Adoption of 4-69, HAR

Listed below is a summary of the proposed new chapter 4-69.

1. Adoption of chapter 4-69, HAR, entitled “Plant and Non-domestic Animal Quarantine Pest Designation Rules”.
2. Adds Subchapter 1 General Provisions, including:
 - a. §4-69-1 Purpose
 - b. §4-69-2 Definitions
 - c. §4-69-3 Severability
3. Adds section 4-69-1 Purpose, to enable the Board of Agriculture and Biosecurity to designate specific species as a pest.



4. Adds section 4-69-2 Definitions, as follows:
 - a. The definition "Board" is added.
 - b. The definition "Department" is added.
 - c. The definition "Pest" is added.
4. Adds section 4-69-3 Severability, to ensure if a specific provision of the rule is deemed invalid or unconstitutional, the remainder of the rule remains in effect.
5. Adds Subchapter 2 Pest Designations, including:
 - a. §4-69-4 Designation of pests for import inspection
6. Adds section 4-69-4 Designation of pests for import inspection, which designates the species on "List of Insects, Mites, Other Pests, and Plant Diseases, Designated as Pests for Control or Eradication Purposes by the Hawaii Department of Agriculture, dated December 16, 2008," attached to chapter 4-69A, HAR, as pests for import inspections.

III. Background

On Wednesday, April 15, 2026, at a joint informational briefing before the Senate Committees on Commerce and Consumer Protection and Agriculture and Environment, DAB was urged to bring before the Board of Agriculture and Biosecurity's (Board) April meeting, an existing list of organisms that could be designated as pests for regulatory actions related to importation into the State under Hawaii Revised Statutes (HRS) chapter 150A.

Pursuant to HRS §141-3, "[t]he department of agriculture and biosecurity shall designate the coqui frog as a pest. All other pest designations shall be established by rule, including the criteria and procedures for the designation of pests for control or eradication."

To comply with HRS §141-3, the PQB drafted proposed HAR chapter 4-69 (see APPENDIX A) that designate the organisms in chapter 4-69A, HAR, Pests for Control and Eradication (see APPENDIX B) as pests for regulatory actions related to importation into the State under HRS chapter 150A.

IV. Procedural Overview

Pursuant to HRS §150A-10, the Advisory Committee on Plants and Animals (Committee) review and advice is required for proposed HAR chapter 4-69. HRS §150A-10 states: "The committee shall advise and assist the department in developing or revising laws and regulations to carry out and effectuate the purposes of this chapter

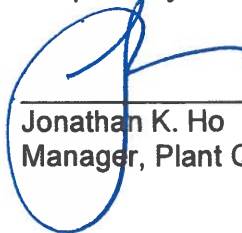
and in advising the department in problems relating to the introduction, confinement, or release of plants, animals, and microorganisms.”

In the interest of time, PQB proposes convening a subsequent Committee meeting, and requests the Board to approve proposed HAR chapter 4-69 to proceed to public hearing, unless the Committee recommends substantive changes to the proposed rule. If the Committee recommends substantive changes to proposed HAR chapter 4-69, the proposed rules will be brought back before the Board for further discussion and approval.

V. Staff Recommendation

To move these proposed rules in a timely fashion, the PQB recommends that the Board: (1) approve proposed chapter 4-69, HAR, entitled “Plant and Non-Domestic Animal Quarantine Pest Designation Rules” to proceed to public hearing, provided that the Advisory Committee on Plants and Animals subsequently reviews and does not recommend substantive changes to the proposed rules, and (2) authorize the Chairperson to schedule public hearings and appoint one or more hearings officers in connection with proposed chapter 4-69, HAR.

Respectfully Submitted,



Jonathan K. Ho
Manager, Plant Quarantine Branch

CONCURRED:



Dean M. Matsukawa
Acting Administrator, Plant Industry Division

APPROVED FOR SUBMISSION:



Sharon Hurd
Chairperson, Board of Agriculture and Biosecurity

DEPARTMENT OF AGRICULTURE AND BIOSECURITY

Adoption of Chapter 4-69
Hawaii Administrative Rules

[DATE OF ADOPTION OF RULE]

1. Chapter 4-69, Hawaii Administrative Rules, entitled "Plant and Non-domestic Animal Quarantine Pest Designation Rules", is adopted to read as follows:

"HAWAII ADMINISTRATIVE RULES

TITLE 4

DEPARTMENT OF AGRICULTURE AND BIOSECURITY

SUBTITLE 6

DIVISION OF PLANT INDUSTRY

CHAPTER 69

PLANT AND NON-DOMESTIC ANIMAL QUARANTINE

PEST DESIGNATION RULES

Subchapter 1 General Provisions

- \$4-69-1 Purpose
- \$4-69-2 Definitions
- \$4-69-3 Severability

Subchapter 2 Pest Designations

- \$4-69-4 Designation of pests for import inspection

§4-69-1

SUBCHAPTER 1

GENERAL PROVISIONS

§4-69-1 Purpose. The purpose of this chapter is to implement the requirements of chapter 150A, Hawaii Revised Statutes, to enable the Board to designate specific species as a pest allowing regulatory action by the Department.
[Eff] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-3, 150A-2)

§4-69-2 Definitions. As used in this chapter:
"Board" means the board of agriculture and biosecurity.

"Department" means the department of agriculture and biosecurity.

"Pest" means any animal, insect, disease agent, or other organism in any stage of development that is detrimental or potentially harmful to agriculture, or horticulture, or animal or public health, or natural resources including native biota or has an adverse effect on the environment as determined by the board. [Eff] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-3, 150A-2)

§4-69-3 Severability. If any provision of this chapter is declared unconstitutional, or the applicability thereof to any person or circumstance is held invalid, the constitutionality and validity of the remainder of this chapter and applicability thereof to other persons and circumstances shall not be affected. [Eff] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§141-3, 150A-2)

SUBCHAPTER 2

PEST DESIGNATIONS

§4-69-4

§4-69-4 Designation of pests for import inspection. Species provided in the "List of Insects, Mites, Other Pests, and Plant Diseases, Designated as Pests for Control or Eradication Purposes by the Hawaii Department of Agriculture, dated December 16, 2008" attached to chapter 4-69A, are designated as pests and made a part of this chapter.

[Eff _____] Auth: HRS §§141-2, 150A-9)
(Imp: HRS §§141-3, 150A-2, 150A-5)"

2. The adoption of chapter 4-69, Hawaii Administrative Rules, shall take effect ten days after filing with the Office of the Lieutenant Governor.

I certify that the foregoing are copies of the rules, drafted in Ramseyer format pursuant to the requirements of section 91-4.1, Hawaii Revised Statutes, which were adopted on [DATE OF ADOPTION OF RULE], and filed with the Office of the Lieutenant Governor.

Sharon Hurd
Chairperson
Board of Agriculture and
Biosecurity

APPROVED AS TO FORM:

Deputy Attorney General

HAWAII ADMINISTRATIVE RULES

TITLE 4 DEPARTMENT OF AGRICULTURE

SUBTITLE 6 DIVISION OF PLANT INDUSTRY

CHAPTER 69A

PESTS FOR CONTROL OR ERADICATION

§4-69A-1 Scope of rules

§4-69A-2 Definitions

§4-69A-3 Criteria to designate pests for control or eradication

§4-69A-4 Procedure for the designation of pests for control or eradication

§4-69A-5 Control or eradication of noxious weeds; entry of private property

Historical Note: Prior rules relating to pest control were adopted under §141-2, Hawaii Revised Statutes, as chapter 69, Hawaii Administrative Rules, and were repealed on the effective date of this chapter. (Eff. 7/13/81, R 9/4/93)

§4-69A-1 Scope of rules. These rules shall govern the criteria and procedures for designation of pests for control or eradication programs on public or private property other than dwellings in the State. (Eff. 9/4/93; comp **JAN 0 2 2009**) (Auth: HRS §141-3) (Imp: HRS §141-3)

§4-69A-2 Definitions. As used in this chapter: "Agricultural industry" means agricultural, horticultural, aquacultural, or livestock industry.

"Board" means the board of agriculture.

"Head" means the head of the division of plant industry.

"Livestock" means farm animals kept for use or profit and includes but is not limited to horses, mules, cattle, sheep, goats, swine, and poultry.

"Noxious weeds" means those plant species determined to be or likely to become injurious, harmful, or deleterious to the agricultural industry, forest and recreational areas, and conservation districts of the State and which are designated and listed as noxious weeds in chapter 4-68, Hawaii Administrative Rules.

§4-69A-2

"Other pests" means any invertebrate or vertebrate pest harmful to the agricultural industry or vegetation of value, as designated by the board.

"Vegetation of value" means vegetation such as desirable trees, plants, and shrubs. (Eff. 9/4/93; am and comp) (Auth: HRS §141-3) (Imp: HRS §141-3) **JAN 0 2 2009**

§4-69A-3 Criteria to designate pests for control or eradication. (a) Each insect, mite, other pest or plant disease designated by the department as a pest for control or eradication programs shall meet one or more of the following criteria:

- (1) There is a record of economic damage in the scientific literature documenting the designated pest's potential for injury to the agricultural industries or vegetation of value in the State.
- (2) The designated pest is causing or is about to cause economic loss by damage to a crop or agricultural commodity, by adversely affecting marketability, causing a loss in yield, or the like.
- (3) The designated pest transmits plant diseases which cause economic loss to a crop or ~~agricultural commodity, by adversely affecting~~ marketability, causing a loss in yield, or the like.
- (4) The designated pest is injurious or deleterious to livestock by virtue of being venomous, parasitic, or a carrier or reservoir of diseases.

(b) All noxious weeds designated pursuant to chapter 4-68, Hawaii Administrative Rules, are pests for control or eradication within the meaning of this chapter. (Eff. 9/4/93; am and comp) (Auth: HRS §141-3) (Imp: HRS §141-3) **JAN 0 2 2009**

§4-69A-4 Procedure for the designation of pests for control or eradication. (a) The head shall direct a continuous program of study and evaluation of insects, mites, other pests, or plant diseases for potential designation as pests.

(b) Study and evaluation of an insect, mite, other pest or plant disease for designation as a pest may be initiated by the head or, upon request, by other government agencies or private organizations.

(c) When sufficient data have been accumulated on an insect, mite, other pest, or plant disease to warrant designation, the head may submit to the board a request for designation as a pest for control or eradication.

(d) The insect, mite, other pest, or plant disease shall meet the criteria for designation as a pest, as provided in section 4-69A-3.

(e) An insect, mite, other pest, or plant disease shall be designated as a pest for control or eradication by the department following approval of the designation by the board, pursuant to chapter 91, Hawaii Revised Statutes.

(f) The list of insects, mites, other pests, or plant diseases designated as pests, adopted by the board on December 16, 2008, and located at the end of this chapter, is made a part of this section.

(g) When the head determines that an insect, mite, other pest, or plant disease officially designated as a pest no longer meets the criteria for designation as a pest, the head may submit to the board a request to rescind the official designation for the pest. The request shall include a report with reasons to justify rescission of the designation.

(h) For rescission as submitted as outlined in subsection (g) above, the official designation of an insect, mite, other pest, or plant disease as a pest shall be rescinded following approval by the board, pursuant to chapter 91, Hawaii Revised Statutes. (Eff. 9/4/93; am and comp

JAN 0 2 2009) (Auth: HRS §141-3) (Imp: HRS §141-3)

§4-69A-5 Control or eradication of noxious weeds; entry of private property. To the extent there may be any conflict between this chapter and chapter 4-68, Hawaii Administrative Rules, control and eradication programs for noxious weeds shall be governed by section 152-6, Hawaii Revised Statutes, and chapter 4-68. However, if after following the procedures provided therein, entry to private property other than dwelling places for control or eradication of noxious weed infestations is refused, any member of the department or any agent authorized by the department may gain entry in the same manner as provided in section 141-3.6, Hawaii Revised Statutes, for maintenance of any pest control or eradication program." (Eff. 9/14/93; am and comp **JAN 0 2 2009**) (Auth: HRS §141-3) (Imp: HRS §141-3, §141-3.6, §152-6)

List of Insects, Mites, Other Pests, and Plant Diseases
Designated as Pests
for Control or Eradication Purposes by the
Hawaii Department of Agriculture

December 16, 2008

INSECTS

<u>Scientific Name</u>	<u>Common Name</u>
<u>Adoretus sinicus</u>	Chinese rose beetle
<u>Anastrepha</u> spp.	an exotic fruit fly species
<u>Aleurocanthus woglumi</u>	citrus blackfly
<u>Anoplolepis longipes</u>	longlegged ant
<u>Aphis gossypii</u>	cotton/melon aphid
<u>Apis mellifera</u>	honey bee
<u>Aspidiella hartii</u>	turmeric scale
<u>Bactrocera correctus</u>	guava fruit fly
<u>Bactrocera cucurbitae</u>	melon fly
<u>Bactrocera dorsalis</u>	oriental fruit fly
<u>Bactrocera latifrons</u>	solanaceous fruit fly
<u>Bactrocera tryoni</u>	Queensland fruit fly
<u>Bemisia tabaci</u>	sweetpotato whitefly
<u>Ceratitis capitata</u>	Mediterranean fruit fly
<u>Cosmopolites sordidus</u>	banana root borer
<u>Coccus viridis</u>	green scale
<u>Cryptophlebia illepipa</u>	koa seedworm

<u>Cryptophlebia ombrodelta</u>	litchi fruit moth
<u>Darna pallivitta</u>	nettle caterpillar
<u>Delia radicum</u>	cabbage maggot
<u>Diatraea saccharalis</u>	sugarcane borer
<u>Dysmicoccus alazon</u>	a mealybug
<u>Dysmicoccus brevipes</u>	pineapple mealybug
<u>Elasmopalpus lignosellus</u>	lesser cornstalk borer
<u>Frankliniella occidentalis</u>	western flower thrips
<u>Heteropsylla cubana</u>	leucaena psyllid
<u>Hypothenemus hampei</u>	coffee berry borer
<u>Hypothenemus obscurus</u>	tropical nut borer
<u>Keiferia lycopersicella</u>	tomato pinworm
<u>Liriomyza spp</u>	agromyzid leafminers
<u>Metamasius callizona</u>	bromeliad weevil
<u>Monolepta australis</u>	redshouldered leaf beetle
<u>Myndus crudus</u>	American palm cixiid
<u>Myzus persicae</u>	green peach aphid
<u>Nezara viridula</u>	southern green stink bug
<u>Oryctes rhinoceros</u>	coconut rhinoceros beetle
<u>Ostrinia nubilalis</u>	European corn borer
<u>Pentalonia nigronervosa</u>	banana aphid
<u>Pheidole megacephala</u>	bigheaded ant
<u>Phoracantha semipunctata</u>	eucalyptus longhorned beetle

<u>Plutella xylostella</u>	diamondback moth
<u>Pogonomyrmex spp.</u>	harvester ants
<u>Popillia japonica</u>	Japanese beetle
<u>Pseudonirvana rufofascia</u>	two-spotted leafhopper
<u>Sipha flava</u>	yellow sugarcane aphid
<u>Solenopsis invicta</u>	red imported fire ant
<u>Thrips palmi</u>	melon thrips
<u>Toxotrypana curvicauda</u>	papaya fruit fly
<u>Trialeurodes vaporariorum</u>	greenhouse whitefly
<u>Vespula pensylvanica</u>	western yellowjacket
<u>Wasmannia auropunctata</u>	little fire ant
<u>Xylosandrus compactus</u>	black twig borer

MITES

<u>Scientific Name</u>	<u>Common Name</u>
<u>Acarapis woodi</u>	honey bee tracheal mite
<u>Polyphagotarsonemus latus</u>	broad mite
<u>Tetranychus cinnabarinus</u>	carmine spider mite
<u>Varroa jacobsoni</u>	varroa mite

OTHER PESTS

<u>Scientific Name</u>	<u>Common Name</u>
<u>Coenobita clypeatus</u>	land hermit crab
<u>Corbicula fluminea</u>	freshwater clam

<u>Dreissena polymorpha</u>	zebra mussel
<u>Eleutherodactylus coqui</u>	coqui frog
<u>Helix aspersa</u>	brown garden snail
<u>Megalabulimus oblongus</u>	giant South American snail
<u>Pomacea canaliculata</u>	apple snail
<u>Theba pisana</u>	white garden snail

PLANT DISEASES

<u>Causal Organism</u>	<u>Common Name</u>
<u>Pseudomonas solanacearum</u> (banana, Strain D)	Bacterial wilt of heliconia
Banana bunchy top virus	Banana bunchy top disease
<u>Mycosphaerella fijiensis</u> var. <u>difformis</u>	Black Sigatoka of banana
A viroid	Cadang cadang disease of coconuts
<u>Xanthomonas campestris</u> p.v. <u>citri</u>	Citrus canker or bacterial canker of citrus
<u>Colletotrichum coffeanum</u>	Coffee berry disease
<u>Hemileia vastatrix</u>	Coffee rust
<u>Peronosclerospora maydis</u>	Downy mildew(s) of corn
<u>Peronosclerospora</u> <u>philippinensis</u>	
<u>Peronosclerospora sacchari</u>	
<u>Peronosclerospora sorghi</u>	
<u>Sclerophthora macrospora</u>	

Sclerophthora rayssiae var.
zeae

Sclerospora graminicola

Fusarium oxysporum f.sp.
cubense

Fusarium wilt of banana
(Panama disease)

Fusarium oxysporum f.sp.
koae

Koa disease

A mycoplasma-like organism

Lethal yellowing of coconuts

Maize chlorotic mottle virus

Maize chlorotic mottle
disease

Pseudomonas solanacearum
Race 2 (banana, Strain B)

Moko disease of banana

Coleosporium bletiae

Orchid rust diseases

Sphenospora kevorkianii

Sphenospora mera

Sphenospora saphena

Uredo behnickiana

Uredo nigropuncta

A virus

Papaya ringspot virus

