

House District(s) _1 & 4_

Senate District(s) _1 & 2_

THE TWENTY-NINTH LEGISLATURE
APPLICATION FOR GRANTS
CHAPTER 42F, HAWAII REVISED STATUTES

Log No:

For Legislature's Use Only

Type of Grant Request:

GRANT REQUEST – OPERATING

GRANT REQUEST – CAPITAL

"Grant" means an award of state funds by the legislature, by an appropriation to a specified recipient, to support the activities of the recipient and permit the community to benefit from those activities.

"Recipient" means any organization or person receiving a grant.

STATE DEPARTMENT OR AGENCY RELATED TO THIS REQUEST (LEAVE BLANK IF UNKNOWN): DLNR

STATE PROGRAM I.D. NO. (LEAVE BLANK IF UNKNOWN): _____

1. APPLICANT INFORMATION:

Legal Name of Requesting Organization or Individual:

Big Island Resource Conservation and Development Council
Dba:

Street Address: 433 Ulu Mau Pl. Hilo, HI. 96720

Mailing Address: 200 Kanoiehua Ave, PMB 285
Hilo, Hawaii 96720

2. CONTACT PERSON FOR MATTERS INVOLVING THIS APPLICATION:

Name BRANDI MILARE

Title Program Manager

Phone # (808) 935-8426

Fax # (808) 934-0616

E-mail bircd1@gmail.com

3. TYPE OF BUSINESS ENTITY:

- NON PROFIT CORPORATION INCORPORATED IN HAWAII
- FOR PROFIT CORPORATION INCORPORATED IN HAWAII
- LIMITED LIABILITY COMPANY
- SOLE PROPRIETORSHIP/INDIVIDUAL
- OTHER

6. DESCRIPTIVE TITLE OF APPLICANT'S REQUEST:

IMPLEMENTING THE ALBIZIA HAZARD MITIGATION PLAN: HAWAII COUNTY
PROJECTS #1 (KAHAKAI BLVD) AND #8 MAKU'U STREET EVACUATION ROUTE

4. FEDERAL TAX ID #: [REDACTED]

5. STATE TAX ID #: [REDACTED]

7. AMOUNT OF STATE FUNDS REQUESTED:

FISCAL YEAR 2019: \$ 329,027

8. STATUS OF SERVICE DESCRIBED IN THIS REQUEST:

- NEW SERVICE (PRESENTLY DOES NOT EXIST)
- EXISTING SERVICE (PRESENTLY IN OPERATION)

NOTE: ALL EXISTING FUNDS WILL BE SPENT IN
CALENDAR YEAR 2018 ON RELATED, SEPARATE
PROJECTS.

SPECIFY THE AMOUNT BY SOURCES OF FUNDS AVAILABLE
AT THE TIME OF THIS REQUEST:

STATE \$ 600,000

FEDERAL \$ 55,000

COUNTY \$ 1,662

PRIVATE/OTHER \$ 23,000

TYPE NAME & TITLE OF AUTHORIZED REPRESENTATIVE:

[REDACTED SIGNATURE]

AUTHORIZED SIGNATURE

LARRY M. KOMATA, PRESIDENT
NAME & TITLE

01/13/2018
DATE SIGNED

JAN 17 2018 [Handwritten initials]

Application for Grants

Please check the box when item/section has been completed. If any item is not applicable to the request, the applicant should enter "not applicable".

I. Background and Summary

This section shall clearly and concisely summarize and highlight the contents of the request in such a way as to provide the State Legislature with a broad understanding of the request. Please include the following:

1. A brief description of the applicant's background;
The Big Island Invasive Species Committee (BIISC) is a sponsored project of the Big Island Resource Conservation and Development Council (BIRC\$D), a 501(c)3 non-profit. The RC&D was initially started by the NRCS in the 1960's to address rural poverty and help rural communities generate sustainable natural resource-based economies.

BIISC has worked since 1996 to address the highest-risk invasive species threats to Hawaii's environment, economy, and way of life. Our core operations use an early detection, rapid response approach to eradicate new invasive pests before they become costly, widespread problems. Since 2013 our project has also focused on community engagement and support to manage invasive species, like coqui, albizia, and little fire ants that directly affect residents in their homes.

After the albizia damage caused by Tropical Storm Iselle, the coalition of stakeholders first organized by BIISC and the US Forest Service became a focused Task Force. The Task Force produced a multi-agency hazard mitigation plan to deal with albizia hazards that caused the lengthy power outages and road obstructions along priority public highways, major roads, and powerlines.

2. The goals and objectives related to the request;

Eighteen priority projects were selected as emergency hazard mitigation sites by HELCO, the Hawaii Department of Transportation, and Hawaii County Department of Public Works in the 2015 Albizia Emergency Hazard Mitigation Plan. Objectives include the treatment of hazardous and non-hazardous albizia encountered within 100 meters of State and County Highways and electrical transmission lines to create safe transportation and energy corridors.

BIISC's role is to chemically treat albizia to prevent regrowth and regeneration. The three participating agencies (Helco, DOT, DPW) is to ensure the removal of immediate hazards in their rights of way, to allow the BIISC treatment to proceed.

To date, 10 of the 18 projects are complete, or very nearly so—Hawaii County projects #1 and #8 were funded by HDOT and this State Grant in Aid program in FY18 and are among those well underway.

Funds are requested to implement Hawaii County Project #2: Six miles along Kahakai Blvd. in Puna, and Project #6: Two Miles along the Waianuenue Ave. Hospital Corridor in Hilo. The County of Hawaii is working to secure *more than* 50% of the estimated cost of these two projects in their FY19 budget.

3. The public purpose and need to be served;

Prior to implementation, disruption of electrical service and tree falls across highways were associated with every windstorm to surpass 35 mph in East Hawaii. Damage resulting from Tropical Storm Iselle was catastrophic in albizia-infested neighborhoods, damage far beyond what would be expected and experienced in similar sized storms where albizia is not a factor. This work has, and will continue to, significantly reduce the frequency and duration of power outages and road blockages caused by fallen albizia.

1. Kahakai Blvd. is the sole access route for over 4,200 residents in the Hawaiian Beaches and Hawaiian Shores Subdivisions. In this neighborhood, access to emergency shelters was blocked by falling albizia *hours before* the official landfall of Tropical Storm Iselle.

2. Waianuenue Avenue is a major residential route and the site of East Hawaii's only full service hospital and a number of other medical facilities. The road is bordered at each end by 100 foot tall stands of albizia.

Both routes are County-owned roads and major thoroughfares.

4. Describe the target population to be served;

The Hazard Mitigation Plan serves all residents, businesses, and visitors on Hawaii Island by preserving infrastructure and reducing long-term maintenance costs to tax and rate payers. The proposed projects for FY19 will most directly serve:

1. Residents of Hawaiian Beaches/Hawaii Shores where median household income was \$28,467 during the last census. 28% of the population and 38% of minors live below the poverty level.

2. Those needing access to Hilo Medical Center (i.e. all of East Hawaii); and

5. Describe the geographic coverage.

The proposed projects are in the Puna and Hilo districts on the Island of Hawaii. Kahakai Bld runs 6 miles from Highway 130, north to the ocean. Waianuenue Avenue is in the Piihonua area in Hilo, along the Wailuku River.

II. Service Summary and Outcomes

The Service Summary shall include a detailed discussion of the applicant's approach to the request. The applicant shall clearly and concisely specify the results, outcomes, and measures of effectiveness from this request. The applicant shall:

1. Describe the scope of work, tasks and responsibilities;

The objective is to remove all hazardous and non-hazardous albizia growing within 100 m of the two roads. BIISC staff will secure private property access permission, contract the proposed hazard removal work to licensed, certified arborists, and carry out the safe and effective chemical treatment of the remaining non-hazardous trees to create a safety buffer in accordance with the planning document. Signs are posted in treated areas to alert residents not to enter the stand until it has decayed. Additional federal and private funds will be requested for this work.

Hawaii County is working toward creating a budget line item to cover at least 50% of the project costs. Once established, these funds will be administered annually by the County Dept. of Public Works, Highways Division, to continue the remaining albizia removal projects in the plan, and consider new areas of concern. County funds will primarily be used to contract certified arborists to cut down albizia immediately threatening Kahakai Blvd and Waianuenue Avenue, leaving behind only those "non-hazardous" trees that can safely and cheaply be treated with herbicide by BIISC.

BIISC also staffs an ecological monitoring study to measure outcomes of this treatment method in a variety of habitats and soil types. The increased light and rainfall availability leads to rapid revegetation with small, manageable grasses and shrubs in most areas. These understory plants suppress the regeneration of albizia, creating a long-term, cost effective solution.

To further extend the value of the project BIISC will continue to staff monthly community training sessions, our "Albizia Assassins" program, to encourage private landowners to identify and safely address albizia on their properties.

2. Provide a projected annual timeline for accomplishing the results or outcomes of the service;
FY19 Quarter 1: Receive notification of award. BIISC begins process to secure private property access permissions.
FY19 Quarter 2: Complete all paperwork to secure the grant funds (December 2018).
FY19 Quarter 3: Funds are released. County-funded arborists initiate and complete hazard tree removal work. BIISC work begins immediately behind the work of the arborists.

FY19 Quarter 4 through FY20 Quarter 2 (March through December 2019): BIISC herbicide control work continues and is completed.

3. Describe its quality assurance and evaluation plans for the request. Specify how the applicant plans to monitor, evaluate, and improve their results;

Mapping was first conducted by satellite imagery, followed by roadside surveys by experienced botanists and detailed cost assessments by certified arborists doing business in the state. Annual surveys have been repeated to assess progress of control efforts and the spread of new albizia populations.

The treatment method being used was first developed by UH CTAHR researcher Dr. James Leary, and field tested extensively by BIISC and the US Forest Service in forested areas for several years prior to use in more visible areas. The primary quality control issue is coverage, i.e. whether any trees were missed. This is monitored by regular site visits conducted by the field supervisor in the three months following the treatment. Missed trees are readily apparent within 4 weeks, and can safely be re-treated. The mitigation plan includes time for annual surveys and follow up control to deal with regeneration of albizia from the seedbank (which is heavily suppressed by natural regrowth of grasses).

The second trouble spot for this work is the requirement that private landowners voluntarily allow access to do the work. This issue has been partially addressed with the passage of Act 182 last year, granting authority to the counties to enforce access to private land when the landowner either does not respond to communications (i.e. absentee landowners) or refuses access outright (This is rare--only one property has refused out of hundreds addressed in this plan). Gaps in the removal effort affect quality by leaving hazardous stands that can continue to disrupt power or road access, or fall on neighboring homes. These gaps will be documented and reported to the legislature, along with a report on progress toward implementing the County access authority.

4. List the measure(s) of effectiveness that will be reported to the State agency through which grant funds are appropriated (the expending agency). The measure(s) will provide a standard and objective way for the State to assess the program's achievement or accomplishment. Please note that if the level of appropriation differs from the amount included in this application that the measure(s) of effectiveness will need to be updated and transmitted to the expending agency.

- Number of properties treated (up to 400)
- Number of acres treated (293 acres anticipated)
- Number of trees treated (BIISC typically treats 50,000-60,000 trees per year in the hazard routes, when fully staffed).
- Expenditure by County of Hawaii (hazard tree removal) at the two sites
- Volunteer participation in Albizia workdays (Over 3,000 to date)

III. Financial

Budget

1. The applicant shall submit a budget utilizing the enclosed budget forms as applicable, to detail the cost of the request.
 - a. Budget request by source of funds ([Link](#))
 - b. Personnel salaries and wages ([Link](#))
 - c. Equipment and motor vehicles ([Link](#))
 - d. Capital project details ([Link](#))
 - e. Government contracts, grants, and grants in aid ([Link](#))

2. The applicant shall provide its anticipated quarterly funding requests for the fiscal year 2019.

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Grant
\$104,690	\$74,779	\$74,779	\$74,779	\$329,027

3. The applicant shall provide a listing of all other sources of funding that they are seeking for fiscal year 2019.

Primarily we are seeking an appropriation of \$450,000 from the County of Hawaii directly to the County Department of Public Works as a recurring line item for hazardous albizia removal in the County Budget.

BIISC will continue to seek competitive grant funding from the County of Hawaii, which provided \$30,000 in start-up funds for albizia control in 2013, the Hawaii Invasive Species Council, which partially funded this project in each year 2013-2016, and from the US Forest Service which has funded the ecological monitoring portion of the project at approximately \$55,000 per year in each of 2014-2017, and private foundations.

Administrative support, e.g. supervision, vehicles/maintenance, and facilities costs, is covered primarily by the HISC, at a pro-rated cost of approximately \$34,000 per year for the albizia project.

A detailed list of all current funding sources for BIISC is provided on Spreadsheet 9.

4. The applicant shall provide a listing of all state and federal tax credits it has been granted within the prior three years. Additionally, the applicant shall provide a listing of all state and federal tax credits they have applied for or anticipate applying for pertaining to any capital project, if applicable.

Not Applicable.

5. The applicant shall provide a listing of all federal, state, and county government contracts, grants, and grants in aid it has been granted within the prior three years and will be receiving for fiscal year 2019 for program funding.

Please see Spreadsheet 9: Government Contracts and/or Grants.

6. The applicant shall provide the balance of its unrestricted current assets as of December 31, 2017. \$65,337.00 (Big Island RC&D). BIISC has no unrestricted funds.

IV. Experience and Capability

1. Necessary Skills and Experience

The applicant shall demonstrate that it has the necessary skills, abilities, knowledge of, and experience relating to the request. State your experience and appropriateness for providing the service proposed in this application. The applicant shall also provide a listing of verifiable experience of related projects or contracts for the most recent three years that are pertinent to the request.

The BIISC manager has worked in invasive species management in Hawaii since 1996. BIISC albizia-control supervisors have been on staff since January 2015, and each is a state-certified pesticide applicator, with over 3,800 field hours of experience in albizia control. The albizia coordinator has trained over 600 Hawaii residents in the safe and effective treatment method, and to evaluate the safety of each individual tree encountered prior to treatment. Staff are closely supervised until able to demonstrate understanding of pesticide handling, treatment methods, plant identification, and mastery of BIISC standard operating procedures. BIISC's final report for 2016 and 2017 work on the hazard mitigation plan is attached for reference.

2. Facilities

The applicant shall provide a description of its facilities and demonstrate its adequacy in relation to the request. If facilities are not presently available, describe plans to secure facilities.

BIISC owns a small fleet of aging vehicles, two of which are assigned to this project, a 1993 F350 and a 1999 Chevy Tahoe.

BIISC rents a small commercial building and baseyard in the Hilo industrial area (rent is covered by a HISC grant). The baseyard includes washing and sanitary facilities, secure storage for vehicles, equipment, and herbicides, phone, computer work stations, internet and electricity.

V. Personnel: Project Organization and Staffing

1. Proposed Staffing, Staff Qualifications, Supervision and Training

The applicant shall describe the proposed staffing pattern and proposed service capacity appropriate for the viability of the request. The applicant shall provide the qualifications and experience of personnel for the request and shall describe its ability to supervise, train and provide administrative direction relative to the request.

The project will be overseen by the BIISC Manager and assisted by a part-time fiscal associate and GIS (mapping) technician. Human Resources services are provided by the University of Hawaii. All BIISC field staff are required to obtain HDOA Pesticide Applicator certification. This project was developed with the assistance of experts in weed science, arboriculture, and forest ecology at UH CTAHR, Hawaiian Electric Light Company, and the USDA Forest Service.

Albizia Coordinator: Bill Buckley, the current coordinator, has been with the project for three years, holds a degree in Environmental Studies, and has over 10 years of related experience in Oregon and Hawaii. Bill serves double duty as the Rapid Ohia Death Response Coordinator.

Environmental Planner: Dustin Swan assists the coordinator with surveying project sites before and after treatment, monitoring progress and compliance, and coordinating with landowners to secure access to private properties. He has been with the project for more than 1 year, and has a background with the US Forest Service and in Information Technology.

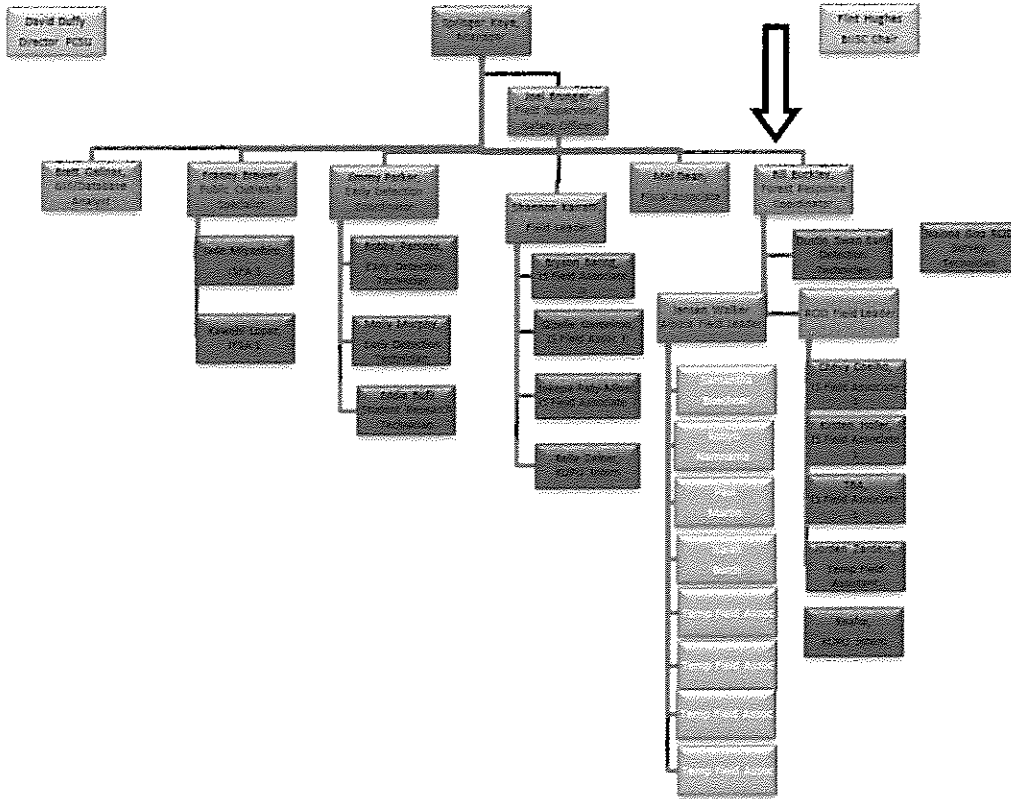
Public Outreach Specialist: Franny Brewer is a former DOE science teacher and former director of the Hawaii Island Humane Society. She is responsible for publicizing the project to ensure affected landowners understand the purpose and become willing participants. Franny also leads the monthly community training program to teach community members to be responsible for managing albizia on their lands and in their neighborhoods.

Field Leader: Jensen Walker has three years' experience with BIISC, two of those years leading the albizia field crew in daily operations.

Field Staff: Field staff vary in level of experience, from interns just learning the job to field biologists with up to five years field experience in invasive plants management in Hawaii. Inexperienced staff are closely supervised and BIISC maintains an active safety program.

2. **Organization Chart**

The applicant shall illustrate the position of each staff and line of responsibility/supervision. If the request is part of a large, multi-purpose organization, include an organization chart that illustrates the placement of this request.



3. **Compensation**

The applicant shall provide the annual salaries paid by the applicant to the three highest paid officers, directors, or employees of the organization by position.

- Manager: \$82,050
- Field Supervisor: \$61,746
- Public Outreach Specialist: \$56,511

VI. Other

1. **Litigation**

The applicant shall disclose any pending litigation to which they are a party, including the disclosure of any outstanding judgement. If applicable, please explain.

None.

2. **Licensure or Accreditation**

The applicant shall specify any special qualifications, including but not limited to licensure or accreditation that the applicant possesses relevant to this request.

None required. All supervisors and full-time staff are licensed pesticide applicators in the state of Hawaii.

3. **Private Educational Institutions**

The applicant shall specify whether the grant will be used to support or benefit a sectarian or non-sectarian private educational institution. Please see Article X, Section 1, of the State Constitution for the relevance of this question.

Not Applicable.

4. **Future Sustainability Plan**

The applicant shall provide a plan for sustaining after fiscal year 2018-19 the activity funded by the grant if the grant of this application is:

- (a) Received by the applicant for fiscal year 2018-19, but
- (b) Not received by the applicant thereafter.

This project directly addresses liabilities for the State Highway System, as well as the power infrastructure and roads of the County of Hawaii. It is our hope that work on this key state highway project will be funded by the Hawaii Legislature and Hawaii County, for the remaining two years of the planned work, and eventually expanded to include additional county roadways which are not yet being managed. The Hawaii County Council is currently considering a line item in their budget for the County Highways Division to continue this work.

The Hawaii Invasive Species Council funds are primarily intended to fund emerging threats and projects that affect multiple state agencies, so this project ranks low on HISC priorities. While this project is unlikely to receive significant HISC funding in the future, the recent acceptance of HISC's Statewide Albizia Management Plan may raise the priority level for funding this work.

**If county funds are not received in FY19 for their portion of the work, but we do receive State GIA funds, we will request a re-budget to allocate a portion of this grant to hazardous albizia removal, and a smaller portion for the herbicide work along Kahakai Blvd.

5. **Certificate of Good Standing (If the Applicant is an Organization)**

If the applicant is an organization, the applicant shall submit one (1) copy of a certificate of good standing from the Director of Commerce and Consumer Affairs that is dated no earlier than December 1, 2017.

Please see attached.

6. **Declaration Statement**

The applicant shall submit a declaration statement affirming its compliance with Section 42F-103, Hawaii Revised Statutes. ([Link](#))

Please see attached.

7. **Public Purpose**

The applicant shall specify whether the grant will be used for a public purpose pursuant to Section 42F-102, Hawaii Revised Statutes. ([Link](#))

This grant shall be used to serve a public purpose by securing the safety of publicly owned roads in the county of Hawaii through the removal of a hazardous invasive species.

BUDGET REQUEST BY SOURCE OF FUNDS

Period: July 1, 2018 to June 30, 2019

Applicant: Big Island Resource Conservation and Development Council, as fiscal sponsor for BIISC

BUDGET CATEGORIES	Total State Funds Requested (a)	Total Federal Funds Requested (b)	Total County Funds Requested (c)	Total Private/Other Funds Requested (d)
A. PERSONNEL COST				
1. Salaries	104,262			
2. Payroll Taxes & Assessments	see fringe			
3. Fringe Benefits	29,467			
TOTAL PERSONNEL COST	133,729			
B. OTHER CURRENT EXPENSES				
1. Arborist Services	156,000			
2. Materials and Supplies	2,400			
3. Postage	300			
4. 5% Direct Rate on Sal & Fringe (PCSU)	6,686			
5. 10% Indirect Rate (RC&D Council)	29,912			
6.				
7.				
8.				
9.				
10. US Forest Service, State & Private Forestry Grant Proposal		55,000		
11. Requested budget line item for the County Dept of Public Works to complete these and continue Hazard Mitigation work (County funds to County Agency).			450,000	
13. Proposal to the Change Happens Foundation				20,000
14.				
15.				
16.				
17.				
18.				
19.				
20.				
TOTAL OTHER CURRENT EXPENSES	195,298	55,000	450,000	20,000
C. EQUIPMENT PURCHASES	0			
D. MOTOR VEHICLE PURCHASES	0			
E. CAPITAL	0			
TOTAL (A+B+C+D+E)	329,027	55,000	450,000	20,000
SOURCES OF FUNDING		Budget Prepared By:		
(a) Total State Funds Requested	329,027	Springer Kaye 808-933-3340		
(b) Total Federal Funds Requested	55,000	Name (Please type or print) Phone		
(c) Total County Funds Requested	450,000	[REDACTED]		
(d) Total Private/Other Funds Requested	20,000	1/13/2018		
		Signature of Authorized Official Date		
TOTAL BUDGET	854,027	Larry M. Komata, President		
		Name and Title (Please type or print)		

BUDGET JUSTIFICATION - PERSONNEL SALARIES AND WAGES

Period: July 1, 2018 to June 30, 2019

Applicant: Big Island Resource Conservation & Development Council

POSITION TITLE	FULL TIME EQUIVALENT	ANNUAL SALARY A	% OF TIME ALLOCATED TO GRANT REQUEST B	TOTAL STATE FUNDS REQUESTED (A x B)
BIISC Program Manager	1	\$82,050.00	9.00%	\$ 7,384.50
BIISC Fiscal and Program Associate	0.6	\$25,485.00	9.00%	\$ 2,293.65
Albizia Program Coordinator	0.5	\$56,696.00	40.00%	\$ 22,678.40
Albizia Field Leader	1	\$41,616.00	50.00%	\$ 20,808.00
Invasive Species Field Associate 1	1	\$31,604.00	40.00%	\$ 12,641.60
Invasive Species Field Associate 1	1	\$31,604.00	40.00%	\$ 12,641.60
Invasive Species Field Associate 1	1	\$31,604.00	40.00%	\$ 12,641.60
Early Detection Technician (Biologist)	0.5	\$41,616.00	10.00%	\$ 4,161.60
Public Outreach Specialist	0.1	\$58,511.00	10.00%	\$ 5,851.10
Public Outreach Assistant	0.1	\$31,604.00	10.00%	\$ 3,160.40
				\$ -
				\$ -
				\$ -
TOTAL:				104,262.45
JUSTIFICATION/COMMENTS: Annual salary does not include fringe benefits, averaging 29%, shown on previous page.				

BUDGET JUSTIFICATION - EQUIPMENT AND MOTOR VEHICLES

Period: July 1, 2018 to June 30, 2019

Applicant: Big Island Resource & Development Council, as fiscal sponsor for BIISC

DESCRIPTION EQUIPMENT	NO. OF ITEMS	COST PER ITEM	TOTAL COST	TOTAL BUDGETED
Not Applicable			\$ -	
			\$ -	
			\$ -	
			\$ -	
			\$ -	
TOTAL:				
JUSTIFICATION/COMMENTS:				

DESCRIPTION OF MOTOR VEHICLE	NO. OF VEHICLES	COST PER VEHICLE	TOTAL COST	TOTAL BUDGETED
Not Applicable			\$ -	
			\$ -	
			\$ -	
			\$ -	
			\$ -	
TOTAL:				
JUSTIFICATION/COMMENTS:				

BUDGET JUSTIFICATION - CAPITAL PROJECT DETAILS

Period: July 1, 2018 to June 30, 2019

Applicant: Big Island Resource & Development Council as
Fiscal Sponsor for BIISC

FUNDING AMOUNT REQUESTED						
TOTAL PROJECT COST Not Applicable	ALL SOURCES OF FUNDS RECEIVED IN PRIOR YEARS		STATE FUNDS REQUESTED	OF FUNDS REQUESTED	FUNDING REQUIRED IN SUCCEEDING YEARS	
	FY: 2016-2017	FY: 2017-2018	FY:2018-2019	FY:2018-2019	FY:2019-2020	FY:2020-2021
PLANS						
LAND ACQUISITION						
DESIGN						
CONSTRUCTION						
EQUIPMENT						
TOTAL:						
JUSTIFICATION/COMMENTS: Not Applicable						

GOVERNMENT CONTRACTS, GRANTS, AND / OR GRANTS IN AID

Applicant: Big Island Resource Conservation & Development Council for BIISC

The following agreements are held by the Big Island Invasive Species Committee in FY18

Contracts Total:	2,255,421
Avail in 2018:	1,900,000

	CONTRACT DESCRIPTION	EFFECTIVE DATES	AGENCY	GOVERNMENT ENTITY (U.S. / State / Haw / Hon / Kau / Mau)	CONTRACT VALUE
1	Albizia Hazard Mitigation Plan County Project #1	7/1/2017-4/8/2018	HDOT	State	\$ 498,750
2	Albizia Hazard Mitigation Plan County Project #8	1/2018-12/2018	State Grant in Aid, DLNR-DOFAW	State	\$ 200,000
3	Hawaii Invasive Species Council 2018: Island-wide Eradication Projects	1/1/18-12/31/18	HISC	State	\$ 670,838
4	Forest Health Protection Program: Rapid Ohia Death	10/1/17-12/31/18	DLNR-DOFAW	State	\$ 275,000
5	Invasive Plant Control in Natural Area Reserves	10/1/17-12/31/19	DLNR-DOFAW	State	\$ 100,000
6	Albizia Ecological Monitoring Study	8/4/15-6/30/18	USDA Forest Serv.	Federal	\$ 55,000
7	Special Technology Development (UAV Development for Mapping Invasive Species)	7/1/17-9/30/18	USDA Forest Serv.	Federal	\$ 50,182
8	Support for Invasive Plants and Nursery Programs	7/1/17-12/31/18	HDOA	State	\$ 115,000
9	Building Plant Pono Communities (Phasing out sales of invasive ornamental plants in Hawaii)	1/1/18-12/31/18	HTA	State	\$ 25,000
10	Little Fire Ant Training for Landscape and Yard Service Industry	7/1/17-6/30/18	Hawaii County R&D	County	\$ 25,000
11	Strategic Planning and Capacity Building	7/1/17-6/30/19	Hawaii County R&D	County	\$ 24,585
12	Community Programs	7/1/17-6/30/18	Hawaii County Council	County	\$ 5,500
13	Community/Residential Little Fire Ant Training	7/1/17-12/31/18	Change Happens Foundation	Private	\$ 20,000
14	Next Generation (Employment and training for youth in Conservation)	10/1/17-9/30/18	National Fish and Wildlife Foundation	Private & Fed	\$ 48,566
15	Biological Monitoring of Invasive Species on Mauna Kea	1/18-12/31/18	TMT Corporation	Private	\$ 142,000
16					
17					
18					
19					
20					
21					
22					

**DECLARATION STATEMENT OF
APPLICANTS FOR GRANTS PURSUANT TO
CHAPTER 42F, HAWAII REVISED STATUTES**

The undersigned authorized representative of the applicant certifies the following:

- 1) The applicant meets and will comply with all of the following standards for the award of grants pursuant to Section 42F-103, Hawaii Revised Statutes:
 - a) Is licensed or accredited, in accordance with federal, state, or county statutes, rules, or ordinances, to conduct the activities or provide the services for which a grant is awarded;
 - b) Complies with all applicable federal and state laws prohibiting discrimination against any person on the basis of race, color, national origin, religion, creed, sex, age, sexual orientation, or disability;
 - c) Agrees not to use state funds for entertainment or lobbying activities; and
 - d) Allows the state agency to which funds for the grant were appropriated for expenditure, legislative committees and their staff, and the auditor full access to their records, reports, files, and other related documents and information for purposes of monitoring, measuring the effectiveness, and ensuring the proper expenditure of the grant.

- 2) If the applicant is an organization, the applicant meets the following requirements pursuant to Section 42F-103, Hawaii Revised Statutes:
 - a) Is incorporated under the laws of the State; and
 - b) Has bylaws or policies that describe the manner in which the activities or services for which a grant is awarded shall be conducted or provided.

- 3) If the applicant is a non-profit organization, it meets the following requirements pursuant to Section 42F-103, Hawaii Revised Statutes:
 - a) Is determined and designated to be a non-profit organization by the Internal Revenue Service; and
 - b) Has a governing board whose members have no material conflict of interest and serve without compensation.

Pursuant to Section 42F-103, Hawaii Revised Statutes, for grants used for the acquisition of land, when the organization discontinues the activities or services on the land acquired for which the grant was awarded and disposes of the land in fee simple or by lease, the organization shall negotiate with the expending agency for a lump sum or installment repayment to the State of the amount of the grant used for the acquisition of the land.

Further, the undersigned authorized representative certifies that this statement is true and correct to the best of the applicant's knowledge.

Big Island Resource Conservation and Development Council

(Typed Name of Authorized Representative)



01/13/2018

(Signature)

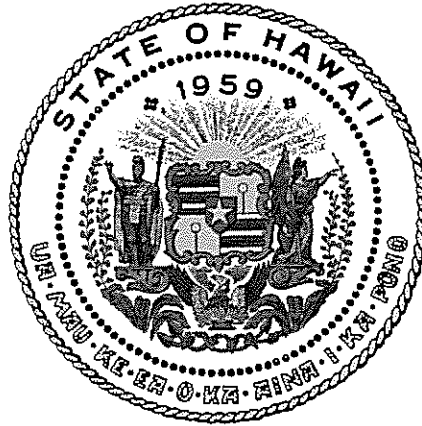
(Date)

Larry M. Komata

President

(Typed Name)

(Title)



Department of Commerce and Consumer Affairs

CERTIFICATE OF GOOD STANDING

I, the undersigned Director of Commerce and Consumer Affairs of the State of Hawaii, do hereby certify that

BIG ISLAND RESOURCE CONSERVATION AND DEVELOPMENT COUNCIL

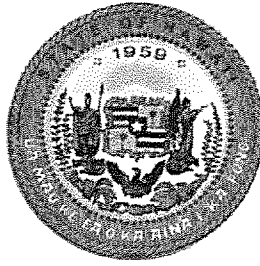
was incorporated under the laws of Hawaii on 10/12/1989 ;
that it is an existing nonprofit corporation; and that,
as far as the records of this Department reveal, has complied
with all of the provisions of the Hawaii Nonprofit Corporations
Act, regulating domestic nonprofit corporations.

IN WITNESS WHEREOF, I have hereunto set
my hand and affixed the seal of the
Department of Commerce and Consumer
Affairs, at Honolulu, Hawaii.

Dated: January 10, 2018

Director of Commerce and Consumer Affairs





**STATE OF HAWAII
STATE PROCUREMENT OFFICE**

CERTIFICATE OF VENDOR COMPLIANCE

This document presents the compliance status of the vendor identified below on the issue date with respect to certificates required from the Hawaii Department of Taxation (DOTAX), the Internal Revenue Service, the Hawaii Department of Labor and Industrial Relations (DLIR), and the Hawaii Department of Commerce and Consumer Affairs

Vendor Name: **BIG ISLAND RESOURCE CONSERVATION AND DEVELOPMENT COUNCIL**

DBA/Trade Name: **Big Island Resource Conservation and Development Council,**

Issue Date: **01/10/2018**

Status: **Compliant**

Hawaii Tax#: [REDACTED]

New Hawaii Tax#:

FEIN/SSN#: [REDACTED]

UI#: XXXXXX8741

DCCA FILE#: 77190

Status of Compliance for this Vendor on issue date:

Form	Department(s)	Status
A-6	Hawaii Department of Taxation	Compliant
	Internal Revenue Service	Compliant
COGS	Hawaii Department of Commerce & Consumer Affairs	Exempt
LIR27	Hawaii Department of Labor & Industrial Relations	Compliant

Status Legend:

Status	Description
Exempt	The entity is exempt from this requirement
Compliant	The entity is compliant with this requirement or the entity is in agreement with agency and actively working towards compliance
Pending	The entity is compliant with DLIR requirement
Submitted	The entity has applied for the certificate but it is awaiting approval
Not Compliant	The entity is not in compliance with the requirement and should contact the issuing agency for more information

INTERNAL REVENUE SERVICE
DISTRICT DIRECTOR
2 CUPANIA CIRCLE
MONTEREY PARK, CA 91755-7406

DEPARTMENT OF THE TREASURY

Date: MAY 10 1994

BIG ISLAND RESOURCE CONSERVATION
AND DEVELOPMENT COUNCIL
PO BOX 2975
KAMUELA, HI 96743-2975

Employer Identification Number:
99-0279188
Case Number:
954108041
Contact Person:
CAROLYN TSCHOPIK
Contact Telephone Number:
(213) 725-7002
Our Letter Dated:
October 17, 1990
Addendum Applies:
No

Dear Applicant:

This modifies our letter of the above date in which we stated that you would be treated as an organization that is not a private foundation until the expiration of your advance ruling period.

Your exempt status under section 501(a) of the Internal Revenue Code as an organization described in section 501(c)(3) is still in effect. Based on the information you submitted, we have determined that you are not a private foundation within the meaning of section 509(a) of the Code because you are an organization of the type described in section 509(a)(1) and 170(b)(1)(A)(vi).

Grantors and contributors may rely on this determination unless the Internal Revenue Service publishes notice to the contrary. However, if you lose your section 509(a)(1) status, a grantor or contributor may not rely on this determination if he or she was in part responsible for, or was aware of, the act or failure to act, or the substantial or material change on the part of the organization that resulted in your loss of such status, or if he or she acquired knowledge that the Internal Revenue Service had given notice that you would no longer be classified as a section 509(a)(1) organization.

If we have indicated in the heading of this letter that an addendum applies, the addendum enclosed is an integral part of this letter.

Because this letter could help resolve any questions about your private foundation status, please keep it in your permanent records.

If you have any questions, please contact the person whose name and telephone number are shown above.

Sincerely yours,



Richard R. Orosco
District Director



Big Island Resource
Conservation & Development Council

January 10, 2018

To Whom It May Concern,

I, Larry M. Komata, do certify that this financial statement is a true reflection of the Big Island Resource Conservation and Development Council's finances to the best of my knowledge.



Larry M. Komata
President
Big Island RC&D Council

The Big Island Resource Conservation and Development Council is a non-profit, tax exempt 501(c) 3 corporation organized to assist communities of Hawaii to promote the conservation of natural resources, support economic development and enhance our environment and standard of living, with community capacity building. The Big Island Resource Conservation and Development Council is an Equal Opportunity Provider.

200 Kanoelehua Avenue, PMB 285 • Hilo, Hawaii 96720 • Telephone/Fax (808) 935-8426

**Big Island RC&D
2017 Operating Budget**

Description	Budget	Remarks
Income		
Admin Fees	\$25,000.00	Projected
Sponsor's Dues	\$2,300.00	
Interests from HFS Account	\$10.00	
Lease/MPU Reefer Truck	<u>\$9,600.00</u>	
Total	\$36,910.00	
Non Personnel Expenses		
Web Hosting/Internet	\$808.00	
Business Phone	\$505.00	
Postage	\$245.00	
Box Rental	\$195.00	
Office Supplies	<u>\$435.00</u>	
Total	\$2,188.00	
Personnel/Professional Fees		
One Employee	\$13,000.00	\$1800 for Comp/\$1500 for Tax Prep
Bookkeeper	\$4,000.00	
CPA	\$3,300.00	
Payroll Taxes	<u>\$5,000.00</u>	
Total	\$25,300.00	
Insurance		
D&O	\$1,000.00	
General Liability	\$750.00	
Workman Comp Insurance	<u>\$310.00</u>	
Total	\$2,060.00	
Other Expenses		
Computer Upgrades	\$200.00	National RC&D Dues/Pac Rim Dues DCCA and efile 990 w/State
Equipment	\$400.00	
Dues	\$650.00	
State Filings	\$340.00	
State GE Taxes	\$400.00	
Total	\$1,990.00	
Travel/Meetings		
Meeting Expenses	\$300.00	
NARCDC Nat'l Conf (7/20/16)	\$2,600.00	
NARCDC BOD	\$1,800.00	
Mileage	\$200.00	

Conferences	\$1,000.00	
Total	\$5,900.00	
Total Operating Expenses	\$37,438.00	

BIRCD
Balance Sheet
As of December 31, 2017

	Dec 31, 17
ASSETS	
Current Assets	
Checking/Savings	
1000 · Cash In Bank	
1010 · Cash in bank - unrestricted	73,334.00
1011 · Cash in Bank-restricted	127,522.27
1000 · Cash In Bank - Other	346.00
Total 1000 · Cash In Bank	201,202.27
1050 · CASH IN BANK HSF	
1051 · HFS-Unrestricted	1,025.00
1053 · HFS Savings	4,461.50
Total 1050 · CASH IN BANK HSF	5,486.50
1060 · Bank of Hawaii	8,342.74
Total Checking/Savings	215,031.51
Total Current Assets	215,031.51
TOTAL ASSETS	215,031.51
LIABILITIES & EQUITY	
Equity	
3010 · Unrestrict (retained earnings)	189,588.85
3100 · Fund Balance Restricted	75,485.59
Net Income	-50,042.93
Total Equity	215,031.51
TOTAL LIABILITIES & EQUITY	215,031.51

BIRCD Restricted Funds
Income & Expense
 January through December 2017

	Jan - Dec 17
Ordinary Income/Expense	
Income	
4000 · Project Revenues	
4010 · Indiv/business contribution	24,231.86
4110 · Other Project Revenues	
41101 · Vendor Fees	100.00
41102 · Ticket Sales	-1,860.00
41104 · Registration Fees	-81.00
41105 · Other	775.00
41107 · T-Shirt Sales	1,954.04
41108 · Ribbon Sales	-1,185.00
41109 · Food Booth	-1,321.00
41110 · Vehicle Rental	2,989.30
41111 · Truck Lease Payments	70.00
Total 4110 · Other Project Revenues	1,441.34
4230 · Foundation/trust grants	
42304 · Wild Life Society	1,000.00
42313 · Kaimas Foundation	35,000.00
Total 4230 · Foundation/trust grants	36,000.00
4530 · State grants	
4531 · HTA/CPEP	20,000.00
4532 · HTA Other	43,802.38
4533 · Fish and Wildlife	30,000.00
4537 · Aloha Aina	37,200.00
Total 4530 · State grants	131,002.38
4540 · Local government grants	
4541 · County of Hawaii	
45415 · Other Supplemental Funding	47,189.50
45418 · Contingency Fund	33,150.00
Total 4541 · County of Hawaii	80,339.50
Total 4540 · Local government grants	80,339.50
Total 4000 · Project Revenues	273,015.08
4700 · Carry Over Balances	20,202.83
4800 · Refunds	1,284.10
4900 · Donations-Non-Project	59.30
5000 · Earned revenues	
5180 · Program service fees	2,250.00
Total 5000 · Earned revenues	2,250.00
Total Income	296,811.31
Gross Profit	296,811.31
Expense	
7000 · Grant & contract expense	
7010 · Supplies-Program Related	277,496.21
7011 · Administrative Fee	35,007.94
7012 · Permits & Licenses	60.00
7014 · Transportation	300.00
7020 · Professional Fees	
7023 · Bookkeeper	150.00
7020 · Professional Fees - Other	14,103.25
Total 7020 · Professional Fees	14,253.25
7028 · Entry Fees	2,000.00
7030 · Petty Cash	
7000 · Grant & contract expense - Other	405.21
Total 7000 · Grant & contract expense	329,522.61

BIRCD Restricted Funds
Income & Expense
 January through December 2017

	Jan - Dec 17
8100 · Non-personnel expenses	
8140 · Postage, shipping, delivery	58.60
8170 · Printing & copying	1,175.09
Total 8100 · Non-personnel expenses	1,233.69
8300 · Travel & meetings expenses	
8310 · Travel	
8311 · Lodging	6,202.93
8312 · Meals	1,911.33
8313 · Airfare	4,162.00
8310 · Travel - Other	729.10
Total 8310 · Travel	13,005.36
8320 · Conference, convention, meeting	325.00
8300 · Travel & meetings expenses - Other	1,630.09
Total 8300 · Travel & meetings expenses	15,160.45
8500 · Misc expenses	
8520 · Insurance	2,768.23
8570 · Advertising expenses	2,681.75
8580 · Donations	931.00
Total 8500 · Misc expenses	6,380.98
8600 · Business expenses	
8610 · Bank Charges	
8615 · NFS Checks	
8620 · Excise taxes	99.08
Total 8600 · Business expenses	99.08
Total Expense	352,397.01
Net Ordinary Income	-55,585.70
Net Income	55,585.70

BIRCD Unrestricted Funds
Income & Expense
 January through December 2017

	Jan - Dec 17
Ordinary Income/Expense	
Income	
4000 · Project Revenues	
4010 · Indiv/business contribution	97.25
Total 4000 · Project Revenues	97.25
4800 · Refunds	43.00
5000 · Earned revenues	
5180 · Program service fees	35,262.46
5220 · Dues-Organizations	
5222 · Dues-Kau SWCD	200.00
5223 · Dues-Kona SWCD	200.00
5225 · Dues-Puna SWCD	200.00
5226 · Dues-Waikeā SWCD	200.00
5227 · Dues-County of Hawaii	1,500.00
Total 5220 · Dues-Organizations	2,300.00
5310 · Interest-savings/short-term inv	6.15
Total 5000 · Earned revenues	37,568.61
Total Income	37,708.86
Gross Profit	37,708.86
Expense	
7000 · Grant & contract expense	
7012 · Permits & Licenses	3.50
7020 · Professional Fees	
7023 · Bookkeeper	3,750.00
7024 · Web Manager	350.00
Total 7020 · Professional Fees	4,100.00
Total 7000 · Grant & contract expense	4,103.50
7200 · Salaries & related expenses	
7220 · Salaries & wages - other	13,512.40
7250 · Payroll taxes	
72501 · FICA	4,054.46
72502 · State	865.84
72503 · Unemployment	51.87
Total 7250 · Payroll taxes	4,972.17
Total 7200 · Salaries & related expenses	18,484.57
7500 · Other personnel expenses	
7520 · Accounting fees	
7522 · Tax Preparation	1,560.00
Total 7520 · Accounting fees	1,560.00
7580 · Web Hosting	364.42
Total 7500 · Other personnel expenses	1,924.42
8100 · Non-personnel expenses	
8130 · Telephone & telecommunications	
8131 · Internet Access	515.02
8130 · Telephone & telecommunications - Other	557.52
Total 8130 · Telephone & telecommunications	1,072.54
8140 · Postage, shipping, delivery	458.81
8190 · Office Supplies	
8191 · Computer Software	93.59
8192 · Bank Checks	57.95
8190 · Office Supplies - Other	586.65
Total 8190 · Office Supplies	738.19
Total 8100 · Non-personnel expenses	2,269.54

01/10/18

BIRCD Unrestricted Funds
Income & Expense
January through December 2017

	<u>Jan - Dec 17</u>
8300 · Travel & meetings expenses	
8310 · Travel	
8312 · Meals	250.54
8314 · Mileage	230.00
Total 8310 · Travel	<u>480.54</u>
8320 · Conference, convention, meeting	
8321 · Pacific Rim Conference	1,403.66
Total 8320 · Conference, convention, meeting	<u>1,403.66</u>
Total 8300 · Travel & meetings expenses	1,884.20
8500 · Misc expenses	
8520 · Insurance	
85201 · General Liability	2,218.20
85203 · Workman's Comp.	229.00
Total 8520 · Insurance	<u>2,447.20</u>
Total 8500 · Misc expenses	2,447.20
8600 · Business expenses	
8610 · Bank Charges	92.25
8650 · Taxes - other	1,050.00
Total 8600 · Business expenses	<u>1,142.25</u>
Total Expense	<u>32,255.68</u>
Net Ordinary Income	<u>5,453.18</u>
Net Income	<u><u>5,453.18</u></u>

Title: Hawaii Island Albizia Hazard Mitigation and Management Program

Organization: Big Island Invasive Species Committee

Funders: Hawaii Invasive Species Council, USDA Forest Service, Hawaii Island United Way, Hawaii County Council

Direct Partners: Hawaii Electric Light Company, Hawaii Department of Transportation, Hawaii County Department of Public Works, USDA Forest Service Institute for Pacific Islands Forestry.



Summary: The current Albizia Emergency Tree Mitigation and Management Plan was presented by the Hawaii Electric Light Company (HELCO) to the state legislature in December, 2015. It includes eighteen discreet, shovel-ready projects to protect critical transportation and power infrastructure belonging to HELCO, the Hawaii Department of Transportation, and Hawaii County Department of Public Works. Recommendations are based on input from research and meetings begun by a broad coalition of albizia stakeholders in 2013. Hastened by Tropical Storm Iselle in 2014, the albizia taskforce has worked collaboratively to set priorities for the mitigation of Albizia hazards on the island of Hawaii. This interim report communicates progress made on eight projects for which BIISC had significant responsibility.

For each project summarized in the table and maps below, BIISC obtained land access permission and controlled all non-hazardous albizia growing in the zone extending up to 100 meters from the edge of the highway. Generally, this was done in close coordination with HELCO, HDOT or Hawaii County, who contracted arborists to first remove the hazardous trees. Eighty-one landowners provided permission to control albizia on their land. In some cases, noted in the project table, hazard tree removal has not yet been scheduled, but non-hazard tree control was conducted along the project route. The overall impact in 2015-2016 has been the removal of the majority of immediately hazardous albizia trees from HELCO and HDOT project sites, and the treatment, with herbicide, of the majority of non-hazard albizia trees in the immediately adjoining areas—a grand total of more than 46,000 trees on 1,625 acres spread across more than fifty miles.

BIISC also led community training workshops for albizia control, engaging more than 300 participants in 2016. This has been a direct contribution of 668 volunteer hours, valued at over \$13,000 in 2016. More importantly, most trainees have indicated an intent to use their new skills—safely and legally—to control albizia on their land and in their neighborhoods to prevent young albizia saplings from taking over and becoming future hazards. We now have four highly organized, active Albizia Assassin teams working in Puna to defeat Albizia, and hundreds of private volunteers.

In 2015-16 some of the highest density, most obvious stands of hazardous albizia affecting major powerlines and the state highways were taken care of. In the coming years, HELCO and HDOT will focus more often on isolated stands, in which there may be a few very large old trees, or newly emerging young stands, which still present significant risk. By contrast, the County is still exploring how best to engage with this mitigation plan. The County may require vocal public support to ensure their highways maintenance division has adequate funding, authority, and a mandate to deal with the hazard trees along their more extensive network of primary and secondary roads. As Iselle fades from memory, it will be ever more important to emphasize the ambitious scope of the mitigation plan, and long-term goal to remove albizia hazards, suppress regeneration, and prevent future hazards from developing to threaten the safe transport of people and goods, and reliable delivery of electricity and communications to all communities on Hawaii Island.

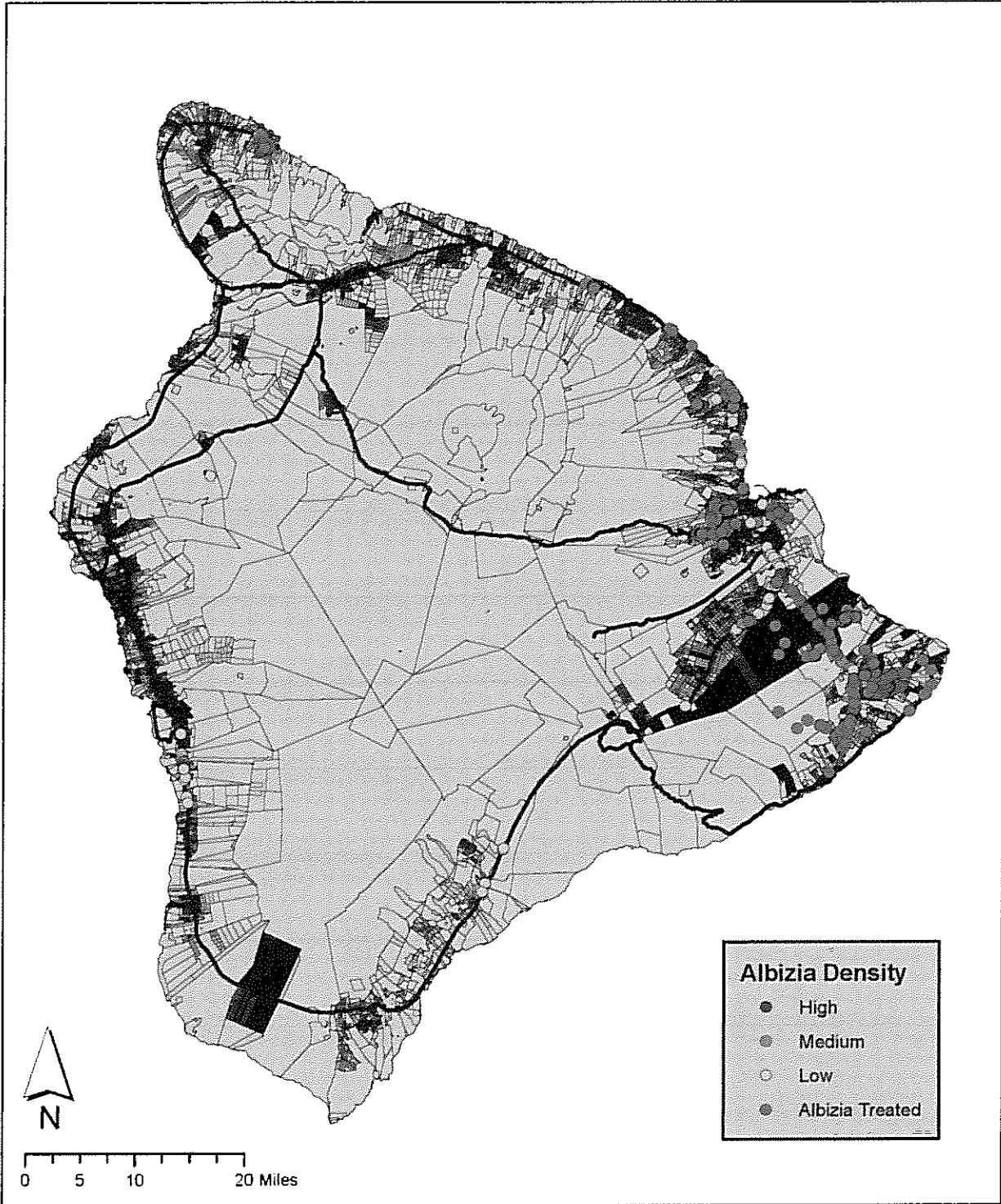
Table 1: Progress on priority infrastructure projects (BIISC)

Project (and Map View)	Priority Infrastructure	Project Number in HELCO Planning document	Hazardous Trees Completed (Estimated Percent)	Non-Hazardous Trees Completed (Estimated Percent)	Number of trees, Acreage Treated Non-Hazardous Trees (Acres)
Piihonua 7400	Piihonua Transmission Line serving South Hilo	HELCO Project 1	100	100	4,931 trees, 88.77 acres
Hawaii Belt Road Route 19	Highway 19: Hamakua Belt Road. Between Wailuku River and Hakalau Mill	HDOT Project 2	95	80	7,730 trees, 100.23 acres
Highway 130 Map Keaau to Kalapana	Hwy 130 (Keaau to Pahoia Bypass to Kalapana)	HDOT Project 3	30	30	((incl. in Hwy 130, below)
Highway 11	Highway 11 (Volcano Hwy) between Keaau and Mt. View	HDOT Project 4	100	80	5,790 trees, 33.6 acres
Puainako Street	Puainako Extension from Komohana to Saddle Road	County Project 1	10	10	5,024 trees, 214 acres
Hwy 130 Map: Hwy 132; Pohoiki, Kapoho Roads; Leilani Estates.	Pohoiki Rd (Between Kapoho Road and Leilani Ave intersections).	County Project 3	95	70	26,216 trees 204.41 acres
	Kapoho Road (Hwy 132) between Pahoia Bypass Road and Pohoiki Road	County Project 4	90	70	
	Leilani Avenue	County Project 5	na	na	

Table 1 cont... Progress on priority infrastructure projects (BIISC)		
Project (and Map View)	Priority Infrastructure	Comments
Piihonua 7400	Piihonua Transmission Line serving South Hilo	BIISC/HELCO collaboration. HELCO cut or trimmed all hazardous albizia trees and BIISC treated non-hazardous. All albizia within 100 meters of the powerline, along a one mile stretch running north from the Wailuku River, were treated.
Hawaii Belt Road Route 19	Highway 19: Hamakua Belt Road. Between Wailuku River and Hakalau Mill	BIISC/HELCO collaboration. One property has denied access and one property has not responded to repeated requests. These two properties account for most untreated hazard trees. Non-hazardous tree treatment is ongoing and is dependent on permission of landowners.
Highway 130 Map Keaau to Kalapana	Hwy 130 (Keaau to Pahoia Bypass to Kalapana)	BIISC/HELCO/County project. Some of highest density sections, at Black Sands Beach Subdivision, are heavily managed. Individual Hazard and Non-Hazard trees have been removed along upper parts of Hwy 130 as well.
Highway 11	Highway 11 (Volcano Hwy) between Keaau and Mt. View	BIISC/HELCO collaboration. The three most infested properties along the roadway were thoroughly treated. All Hazardous trees have been mitigated. Non-hazardous treatment is ongoing and is dependent on permission of landowners.
Puainako Street	Puainako Extension from Komohana to Saddle Road	County/HDOT Concern. Project is stalled because hazard tree removal requires negotiation between HDOT and HI County DPW related to questions of ownership/management. BIISC and County Highways Division have controlled some small and hazard albizia immediately along roadside in this area.
Hwy 130 Map: Hwy 132; Pohoiki, Kapoho Roads; Leilani Estates.	Pohoiki Rd (Between Kapoho Road and Leilani Ave intersections).	BIISC/HELCO collaboration. HELCO contractors mitigated hazardous trees in a stretch of road highly infested with albizia. BIISC albizia crew treated all non-hazardous trees on the worksites. Along this stretch of road both hazardous and non-hazardous trees remaining on private properties. This is an ongoing project.
	Kapoho Road (Hwy 132) between Pahoia Bypass Road and Pohoiki Road	BIISC/County/DOFAW project. There remain two very large hazardous trees threatening Hwy 132 in Nanawale Forest Reserve (NFR). DOFAW has committed to mitigate hazardous trees in NFR. Non-hazardous treatments are ongoing.
	Leilani Avenue	BIISC is working with Leilani Community Association and private landowners to treat primarily non-hazardous trees.

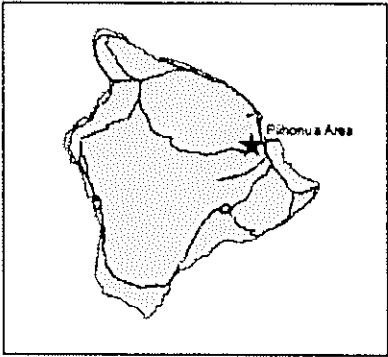


Hawaii Island Infrastructure Impacted by Albizia










Piihonua 7400 Transmission Line Impacted by Albizia



Status

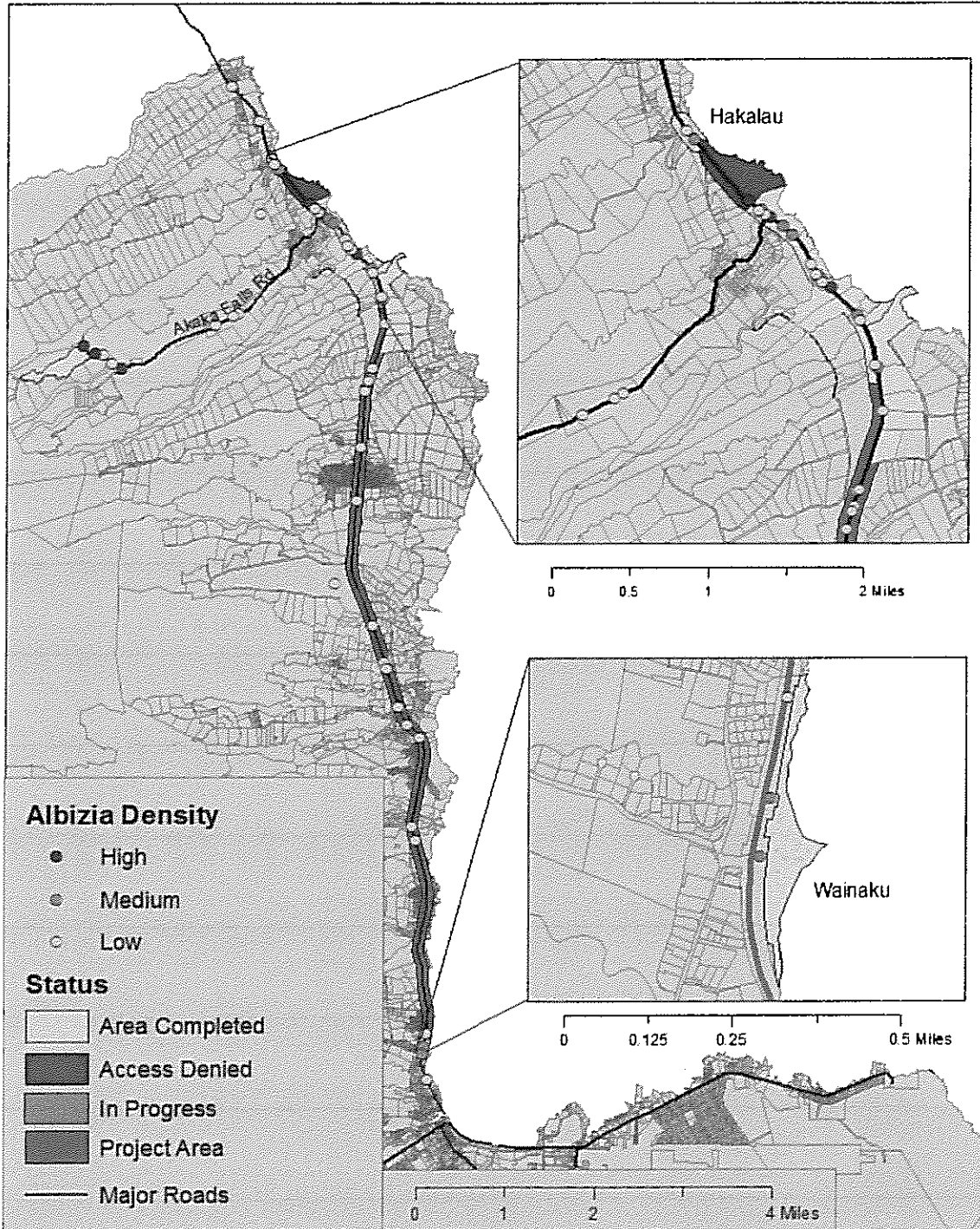
-  Completed
-  In Progress
-  Project Area
-  Powerline
-  Big Island Roads



0 0.25 0.5 1 Miles

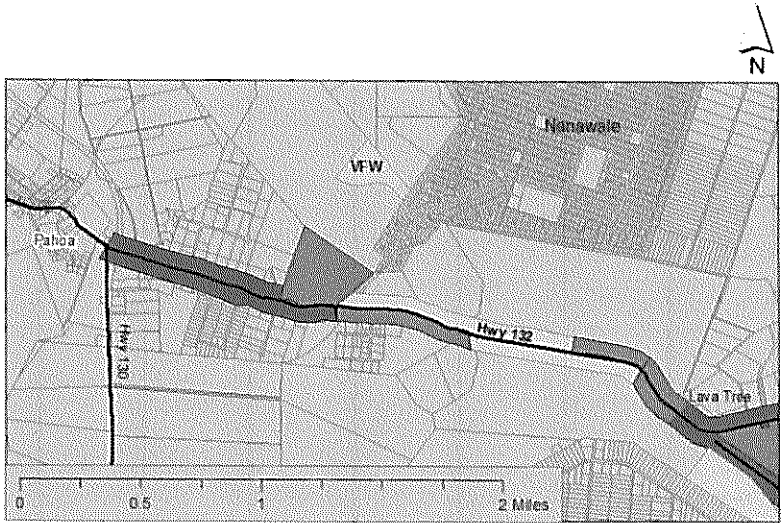
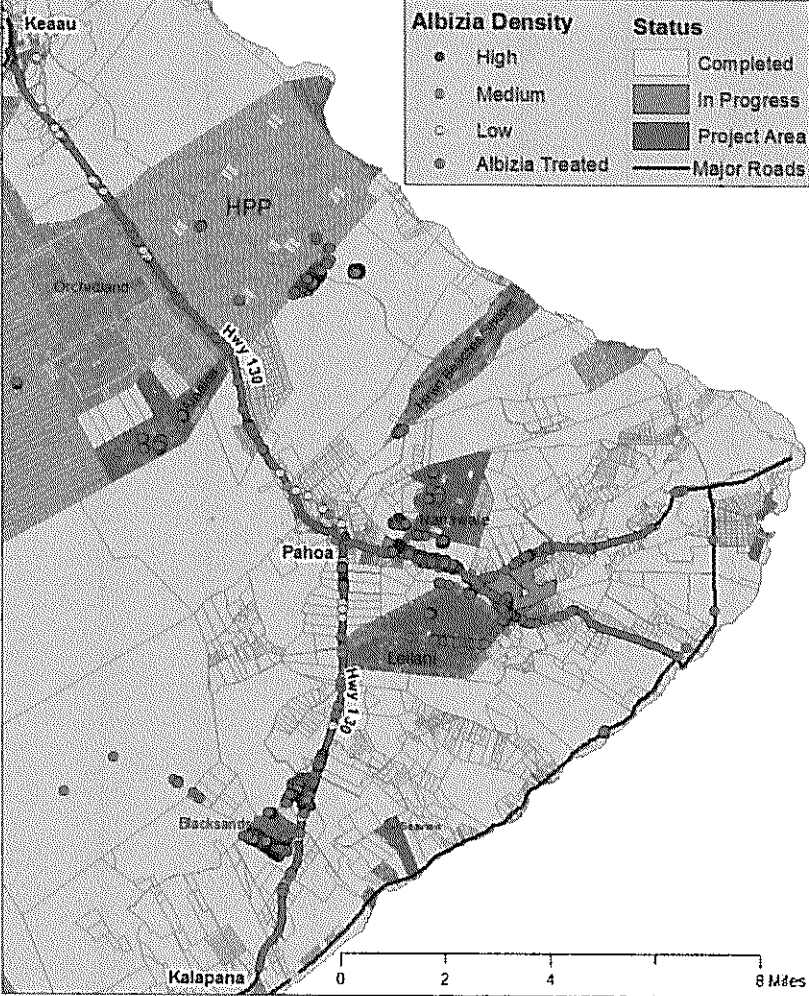


Hwy 19 Impacted by Albizia Hakalau to Wainaku





Hwy 130 Keaau to Kalapana
 Impacted by Albizia



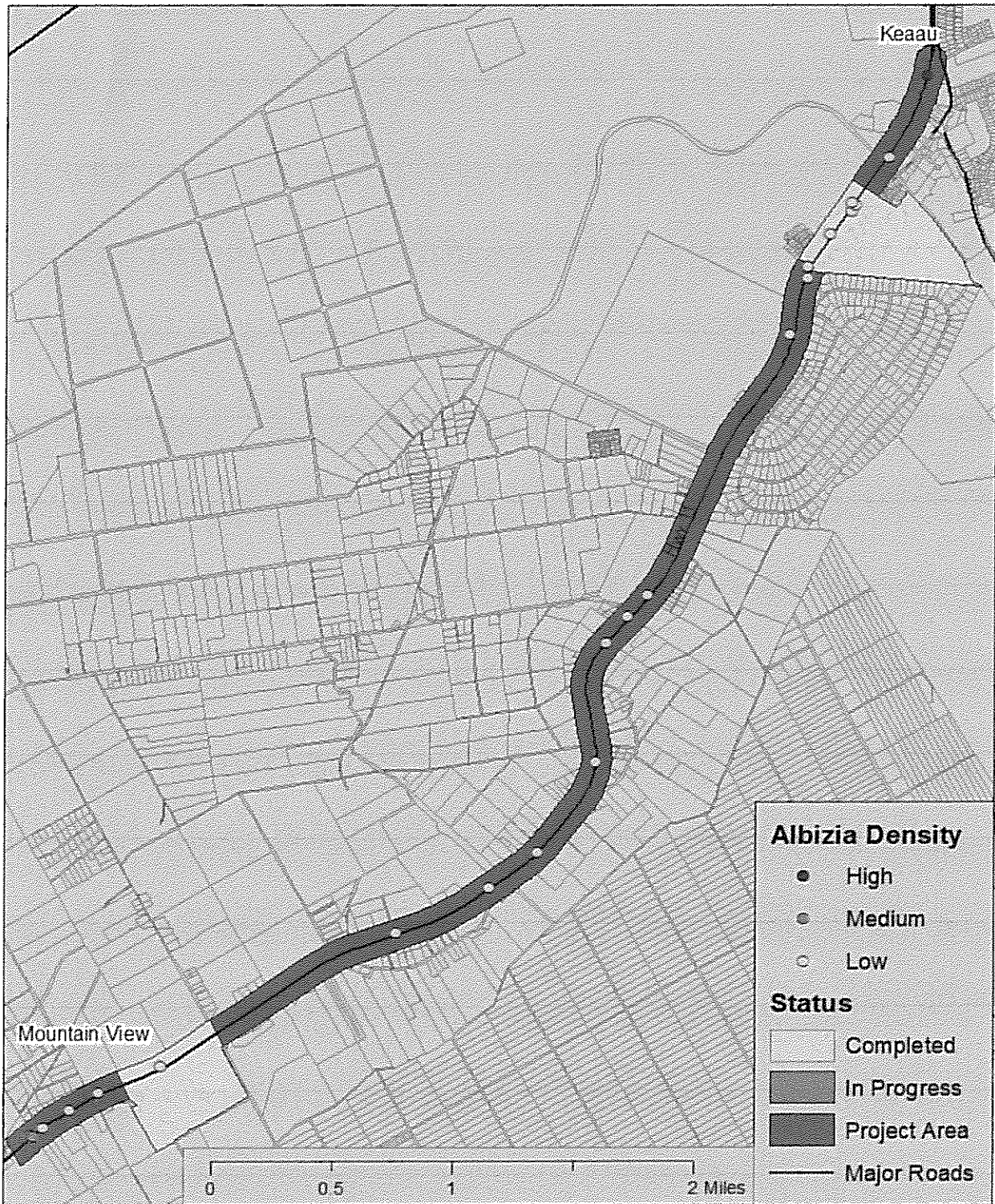
Hwy 132



Kapoho/Pohoiki Rd

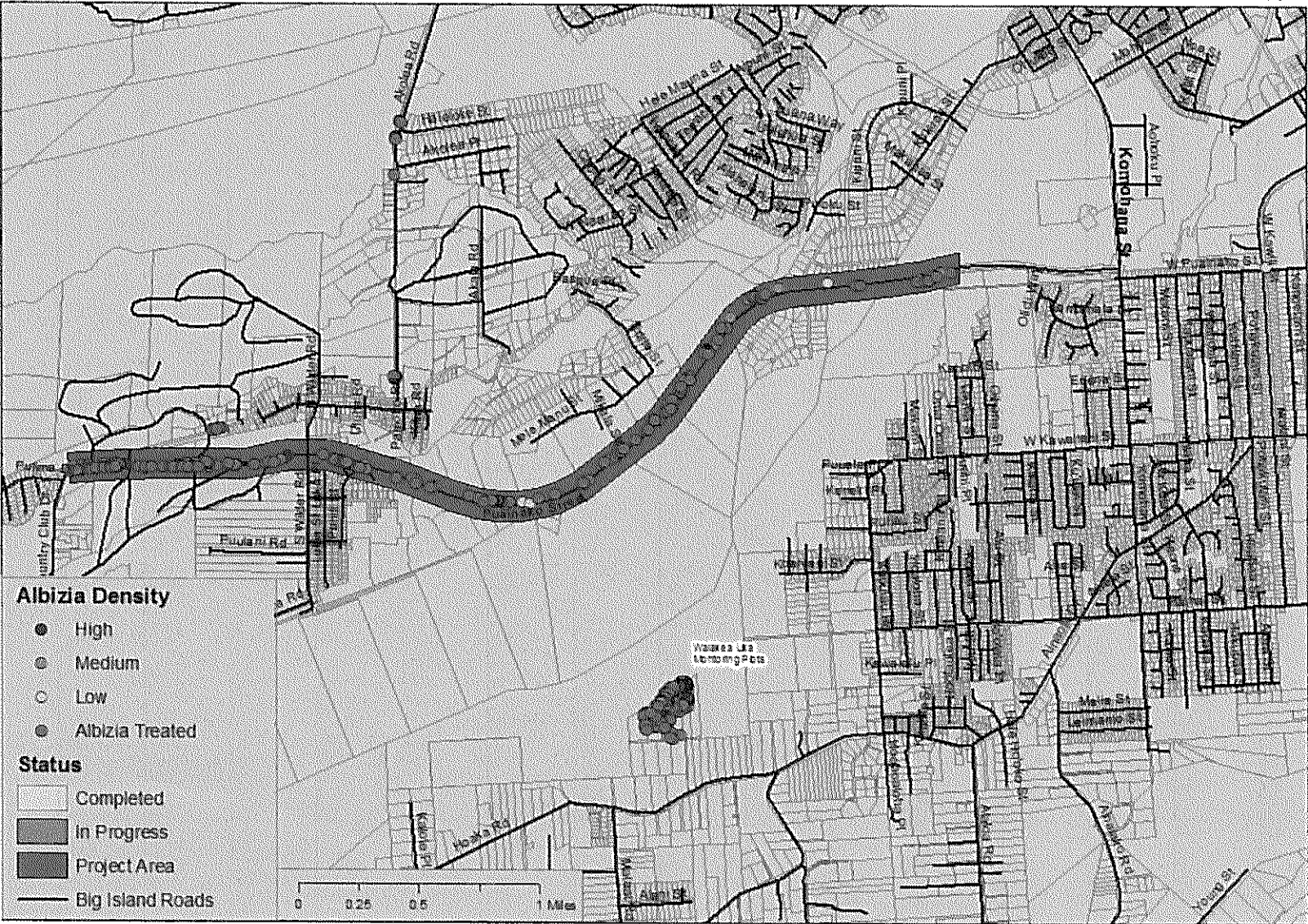


Hwy 11 Impacted by Albizia





Puainako Street Impacted by Albizia



Other BIISC Activities in 2016:

The Big Island Invasive Species Committee’s mission is to address the highest risk invasive species threats to the environment, economy, and Big Island way of life. Our motto is *Hoala i ka Maka*: Healing the land; Awakening the people. BIISC strives to empower the members of our community to take an active role in preventing and controlling the spread of invasive species that directly or indirectly impact Big Island livelihoods. A broad range of private and public funders support our work, including the Hawaii Invasive Species Council, and other local, state, and federal programs.



Decked out in safety gear, Puna volunteers control albizia along Highway 132.

Next Generation: With the assistance of HISC and private funds in 2016 BIISC supported two PIPES interns, three year-round AmeriCorps interns, and hosted two Hawaii Youth Conservation Corps teams this summer. Youth ventured into pristine lowland rainforest in Puna, upland forests on Mauna Loa and Mauna Kea, and throughout the island assisting with albizia control. Several school groups including Pahoia Middle School and HAAS Charter School have attended Albizia control workdays, learning firsthand about the tools and research that supports our work.

Protecting the Biggest Island: The Big Island is larger than all of the other islands combined. It is home to more than 70% of the state’s Strategic Forest Reserves, and more than half the State Important Agricultural Lands. The broad support of more than 16 public and private funders makes it possible for us to serve our community, and take on the greatest invasive species threats to the environment, economy, and Big Island way of life. State funds enable our program to solicit federal and state funding, and are matched nearly 1:1, doubling the investment made by the state.

Plant Pono Nursery Endorsement Program: The most cost effective way to eliminate an invasive species is to catch it before it becomes widespread, which is why the invasive species committees primarily focus on early detection targets. Through the Plant Pono Nursery Endorsement Program, we help nursery managers make sure that those invasive plants never make it to our islands in the first place. Endorsed nurseries agree to stop selling listed invasive plants, and find native or non-invasive alternatives for customers who ask for them. Look for the Plant Pono to make sure that you don’t plant “The Next Albizia!”



Public Engagement and Advocacy: When our most injurious invasive species, like albizia, are already widespread, people need help! Working on familiar species like Albizia and little fire ants gives us a chance to teach community groups about invasive species identification, management, and advocacy—enlisting our community as part of an extended “eyes and ears network” and encouraging them to speak up about what’s “bugging” them in their district.

Albizia Control Efforts Island-wide (all projects, including hazard mitigation and community, forestry projects), in 2016:

Time Period (Quarters)	Acres Surveyed and Treated	Albizia Plants Treated	Number of Workshops	Number of Volunteer Work Hours	Number of Staff Hours
1	218	8,315	5	139	1,024
2	535	13,985	7	280	1,441
3	516	15,784	10	147	1,740
4	849	12,507	4	104	999
Total for Year	2,118	50,591	26	670	5,204

For more information, please contact:

Springer Kaye,
BIISC Manager
skaye@hawaii.edu
(808) 933-3340

www.biisc.org
www.plantpono.org



Albizia Hazard Mitigation Plan

2017 IMPACT REPORT





KĀKOU!

EXECUTIVE SUMMARY



Aloha kākou!

Thank you for taking the time to explore our 2017 Impact Report on the progress of the Albizia Hazard Mitigation Plan. More than a dozen government and non-governmental entities, hundreds of community volunteers, now known as the Albizia Assassins, and political leaders at every level of government have come together to coordinate, fund, and implement the eighteen projects that make up this plan!

As we enter Year 3, we are very proud to say that **nine of the eighteen planned projects are completed**, or are just being wrapped up. Two big projects are funded and underway for 2018, and funding proposals are being submitted to multiple partners for 2019, which will be the fourth year of the project.

That we are still going strong three years after Tropical Storm Iselle says a great deal about the perseverance of our Big Island communities and the commitment that the State Legislature and other project partners have made to secure our island infrastructure and prevent a repeat of the calamity caused by falling albizia in 2014.

Our cover photo shows commuters on the Puainako Extension of Saddle Road, giving their laulima to remove a fallen albizia so they can all get on with their day. Because the road is owned by the County, but built and slated for transfer to HDOT—pending half a million dollars of albizia control work on private lands bordering the road—I honestly thought we might never negotiate a solution. The project broke ground in September, 2017, and is expected to be completed by March 31st, 2018. The aloha and laulima of our partners truly has made this project “a kākou thing.”

—Springer Kaye, Project Manager



PROJECT PARTNERS AND SPONSORS

The success of this project has been possible thanks to the hard work and generous financial and in-kind support of a large number of sponsors and direct participants.

Big Island Invasive Species Committee

Big Island Resource Conservation and Development Council

Hawaii County Councilmembers Gregor Illagan and Eileen O'hara

Hawaii County

Civil Defense

Department of Public Works-Highways

Research & Development Department

Hawaii Department of Transportation, Highways Division

Hawaii Division of Forestry and Wildlife

Hawaii Electric Light Company

Hawaii Invasive Species Council

Hawaii Island United Way

Hawaii Tourism Authority

Hawaiian Paradise Park Owners Association

National Fish and Wildlife Foundation

Pacific Internship Programs for Exploring Science

Piihonua Action Committee

PunaWatch

Representative Tulsi Gabbard

Senator Brian Schatz and Senator Mazie Hirono

University of Hawaii

College of Tropical Agriculture and Human Resources

Pacific Cooperative Studies Unit

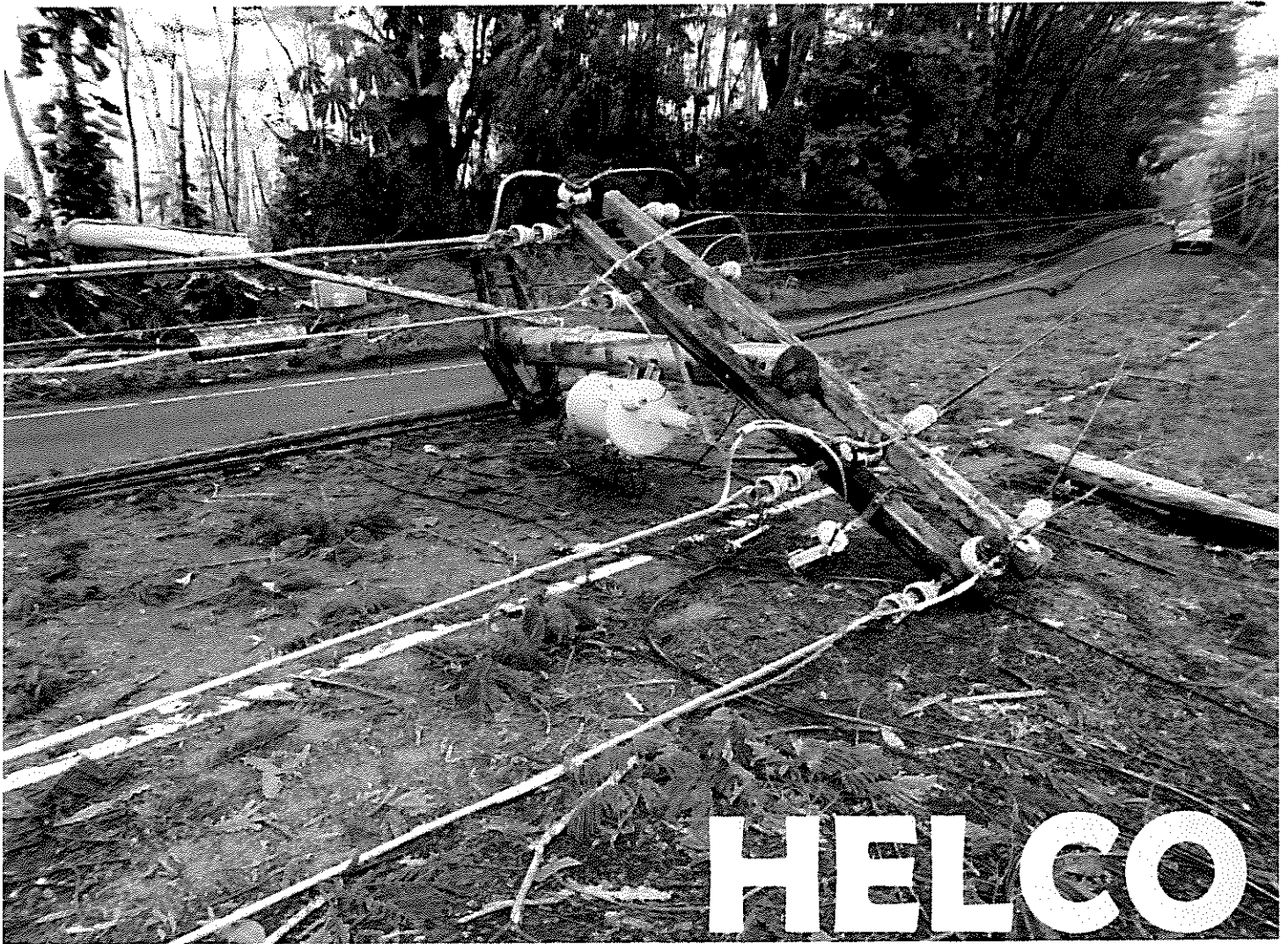
USDA Forest Service

Institute for Pacific Islands Forestry (USFS)

State and Private Forestry Program

Ainaloa Albizia Assassins

21st Century Conservation Corps



HAWAII ELECTRIC LIGHT COMPANY

HELCO was one of the first partners to embrace the value proposition of the albizia mitigation program, assisting with our first two pilot projects, in Black Sands, Puna, and the Hospital Corridor (Waianuenue) in Hilo. HELCO understood the opportunity to avoid future costs that were accruing in millions of dollars.

Long before HELCO faced the tremendous cost of rebuilding after Tropical Storm Iselle, the power company was testing ways to better deal with the routine annual storms that knock out power all across Puna and Hilo. HELCO changed the way residential power lines are connected, so that when a tree falls on a wire, only a small section loses power. They changed their contract language to require that arborists treat albizia stumps with herbicide to

prevent re-growth, and now require a 1-year guarantee: If the stumps aren't treated the contractor must go back and address any regrowth for a year!

Major transmission lines carry power long distances—they can't break away like the residential lines can—so when they are hit, vast areas can lose power. It is costly and time consuming to repair these lines, as 30,000 residents of Puna learned in 2014.

For the mitigation plan, HELCO selected four major transmission lines with an estimated 2015 cost of over \$10 Mil as their top priorities. **All four HELCO Projects are now complete!** All other transmission lines that follow the priority state highways and county roads have also been effectively managed for albizia, giving these agencies a good head start.

**HELCO - HAWAII ELECTRIC LIGHT CO., LTD.
ALBIZIA TREE MANAGEMENT SUMMARY**

		✓	✓	✓	✓	
		No. 1	No. 2	No. 3	No. 4	TOTAL: 61 Miles or 454 Acres
HELCO TRANSMISSION LINES		PIIHONUA 7400 12 Mile or 93 Acres	NANAWALE 6500 29 Miles or 214 Acres	LEILANI 8700 18 Miles or 131 Acres	KAUMANA 9200 2 Miles or 16 Acres	TOTAL COSTS:
ALBIZIA COST ESTIMATES December, 2015	YEAR 1	\$790,977	\$1,714,234	\$1,040,148	\$127,781	\$3,673,140
	YEAR 2	\$560,160	\$1,221,214	\$742,563	\$92,725	\$2,616,662
	YEAR 3	\$380,327	\$837,265	\$510,850	\$65,465	\$1,793,907
	YEAR 4	\$256,712	\$573,580	\$351,769	\$46,801	\$1,228,862
	YEAR 5	\$194,876	\$442,055	\$272,503	\$37,581	\$947,015
	TOTAL TREE MANAGEMENT COST:	\$2,183,052	\$4,788,348	\$2,917,833	\$370,353	\$10,259,586
PERCENT COMPLETION AS OF December 31, 2017		100%	100%	100%	100%	

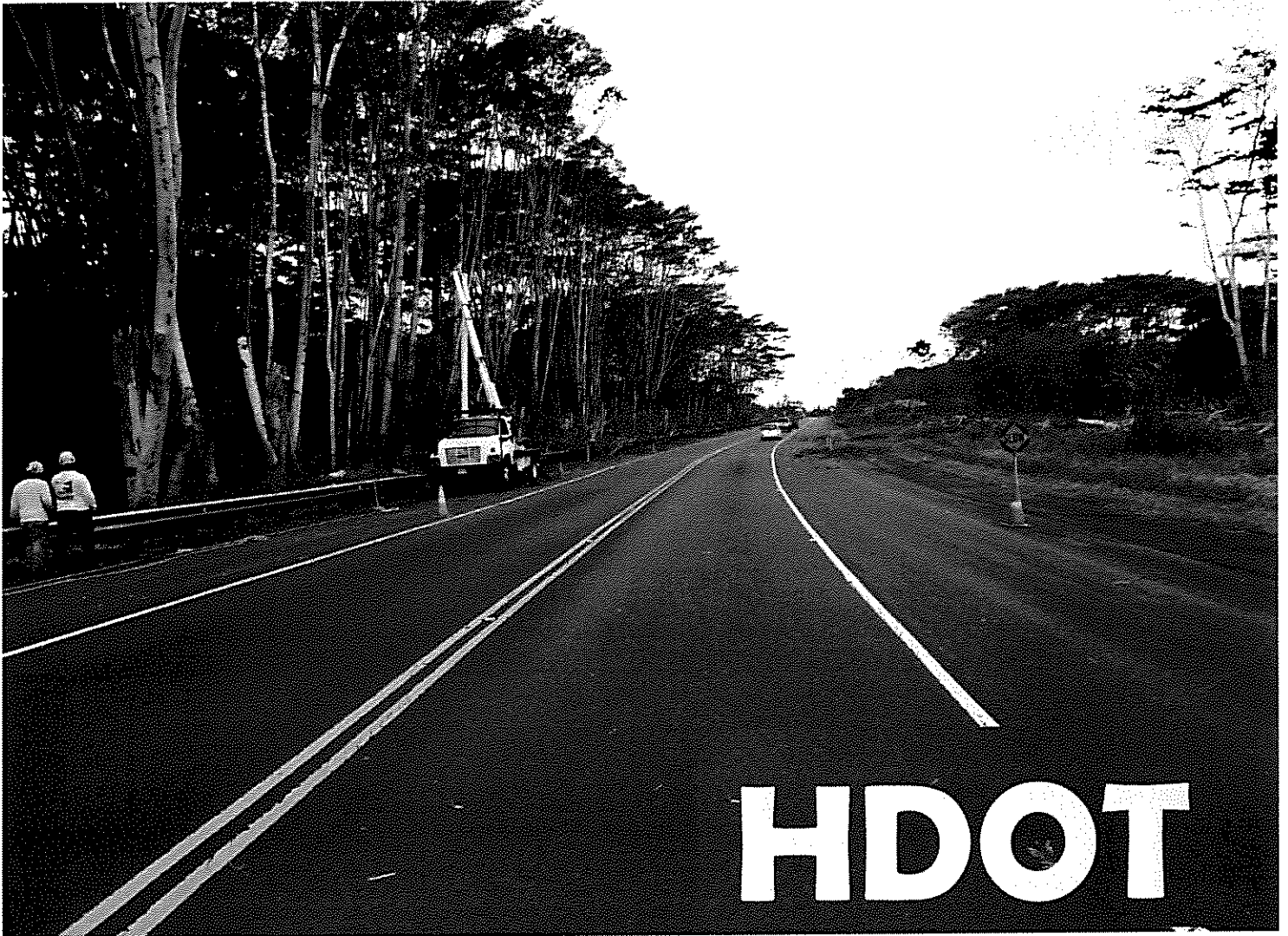


**61
MILES**

**45,000
TREES**

**100%
COMPLETE**

The first mile of the Piihonua Transmission Line, completed in 2015 for \$250,000. Photo courtesy of Rich Wlosinski.



HDOT

HAWAII DEPARTMENT OF TRANSPORTATION, HIGHWAYS DIVISION

There are over 400 state highway miles on the island of Hawaii, and many of those miles run through undeveloped forests or agricultural lands. Native forests and sweeping vistas have gradually been overwhelmed by stands of enormous albizia across East Hawaii, but when the state highways were surveyed, just 11 miles were seriously impacted.

With historic costs of up to \$1Mil per mile for mitigation, no clear protocols for limiting regrowth, and some pushback from environmental groups, the Highways Division on Hawaii Island was ready for the new set of solutions developed by the 2014 Albizia Task Force!

HDOT secured funding from the state legislature to move ahead with the five projects included in the

plan in FY 16 and 17. HDOT contracted HELCO to manage the first year of hazard albizia removal, and with BIISC to complete the chemical treatment of non-hazardous trees.

In 2017 HDOT encumbered the last of the legislative appropriation to begin hazard removal from the Puainako Extension of the Daniel K. Inouye Highway (Saddle Road). These agreements provided a vehicle for all three organizations and Hawaii County to learn from one another's strengths and share resources to make progress on the plan.

To date, four of the five state projects are complete, or very nearly so. Additional funds, beyond the usual budget, will be needed to complete year 4 and 5 of the state projects.

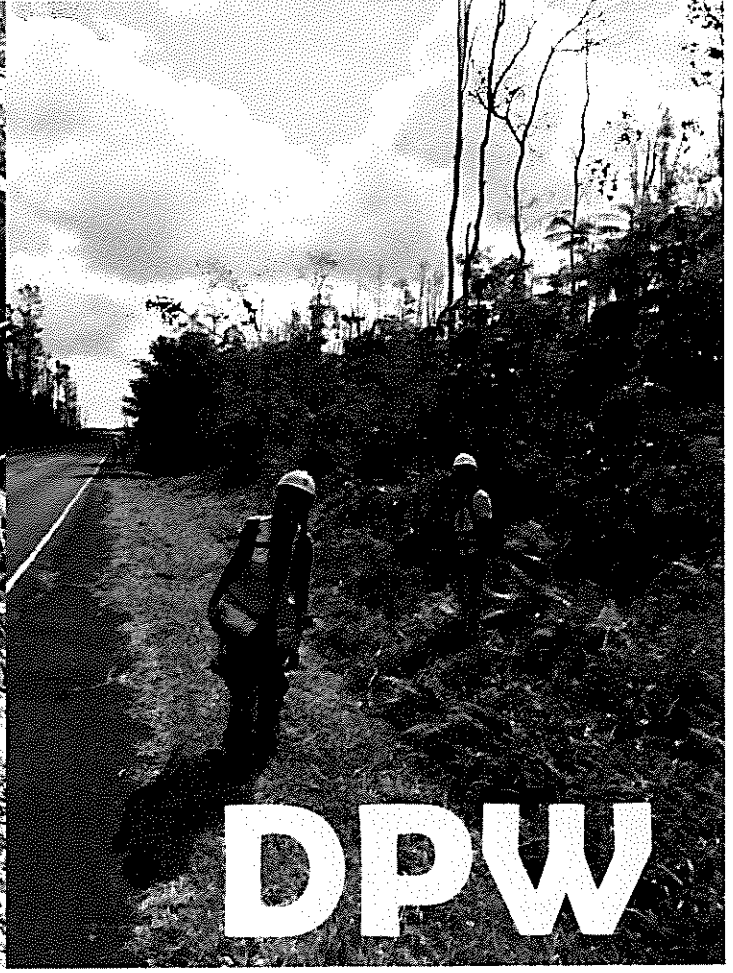
STATE HIGHWAYS DIVISION ALBIZIA TREE MANAGEMENT SUMMARY							
		✓	✓	✓	✓		
STATE HIGHWAY CORRIDORS		No. 1	No. 2	No. 3	No. 4	No. 5	TOTAL: 58 Miles or 295 Acres
		PUAINAKO ST RTE 200 1 Mile or 9 Acres	HAWAII BELT ROAD ROUTE 19 15 Miles or 117 Acres	KEAAU-PAHOA RD ROUTE 130 25 Miles or 117 Acres	MAMALAHOA HWY ROUTE 11 15 Miles or 87 Acres	HILO AIRPORT ACCESS ROAD 2 Miles or 14 Acres	TOTAL COSTS:
ALBIZIA COST ESTIMATES December, 2015	YEAR 1	\$97,314	\$1,091,367	\$1,254,395	\$453,409	\$106,389	\$3,002,874
	YEAR 2	\$68,415	\$763,500	\$903,136	\$346,809	\$77,762	\$2,159,622
	YEAR 3	\$45,888	\$507,835	\$629,812	\$264,356	\$55,516	\$1,503,407
	YEAR 4	\$30,386	\$331,786	\$442,419	\$208,526	\$40,303	\$1,053,420
	YEAR 5	\$22,606	\$243,228	\$349,454	\$181,944	\$32,820	\$830,052
	TOTAL TREE MANAGEMENT COST:	\$264,609	\$2,937,716	\$3,579,216	\$1,455,044	\$312,790	\$8,549,375
PERCENT COMPLETION AS OF December 31, 2017		80%—Completion scheduled for 2018	90%—Completion scheduled for 2018	85%	100%	50%	

Black check marks indicate completed projects.

Grey checkmarks indicate projects within 85% of completion and identified resources.



Seasoned BIISC crew members train the new albizia recruits. You can tell the experienced staff by their head wraps—worn to protect against little fire ants! Photo credit: Bill Buckley, BIISC Albizia Coordinator.



HAWAII COUNTY DEPARTMENT OF PUBLIC WORKS, HIGHWAYS DIVISION

Hawaii County owns at least 80 miles of major roads impacted by albizia, distributed across nearly every district on the island. County responsibilities include maintaining emergency access routes, which may currently pass through dense albizia forests, protecting citizens from immediate hazards to their homes, lives, and property, preventing new albizia-infested areas from taking hold in the wake of development, and managing the re-growth following Tropical Storm Iselle.

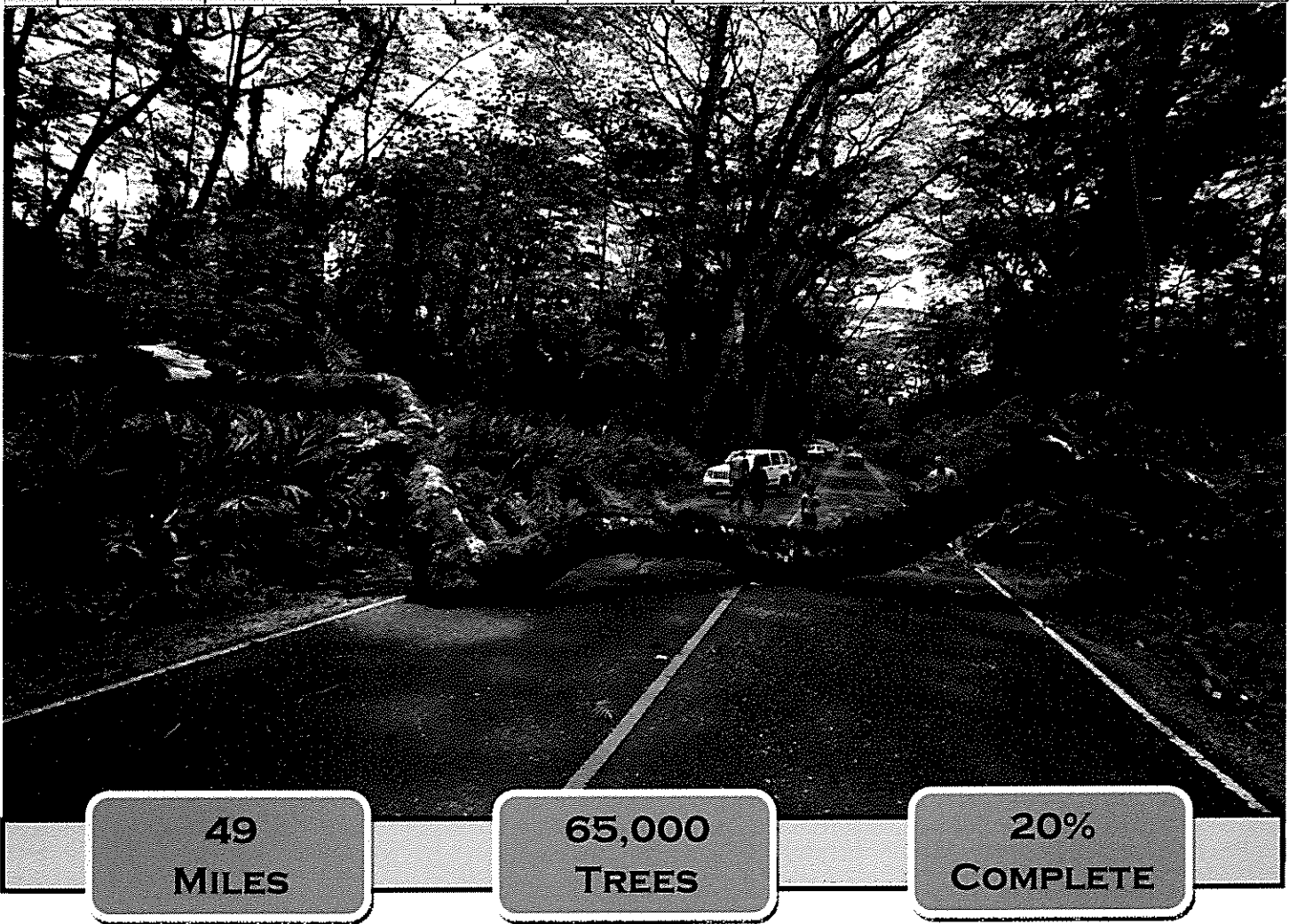
To cover all these bases, Hawaii County relies on cooperation with skilled partners, like the Hawaii Division of Forestry and Wildlife staff (pictured above left) and community volunteers (above right) in addition to their own resources. In 2013 DPW was already contributing to pilot projects, using heavy equipment to remove trees from emergency corridors. In 2017 Hawaii County allocated several hun-

dred thousand dollars to removal efforts, working with BIISC and HDOT to prioritize available funds, and ensuring that private contractors work to stretch limited funds as far as they can go.

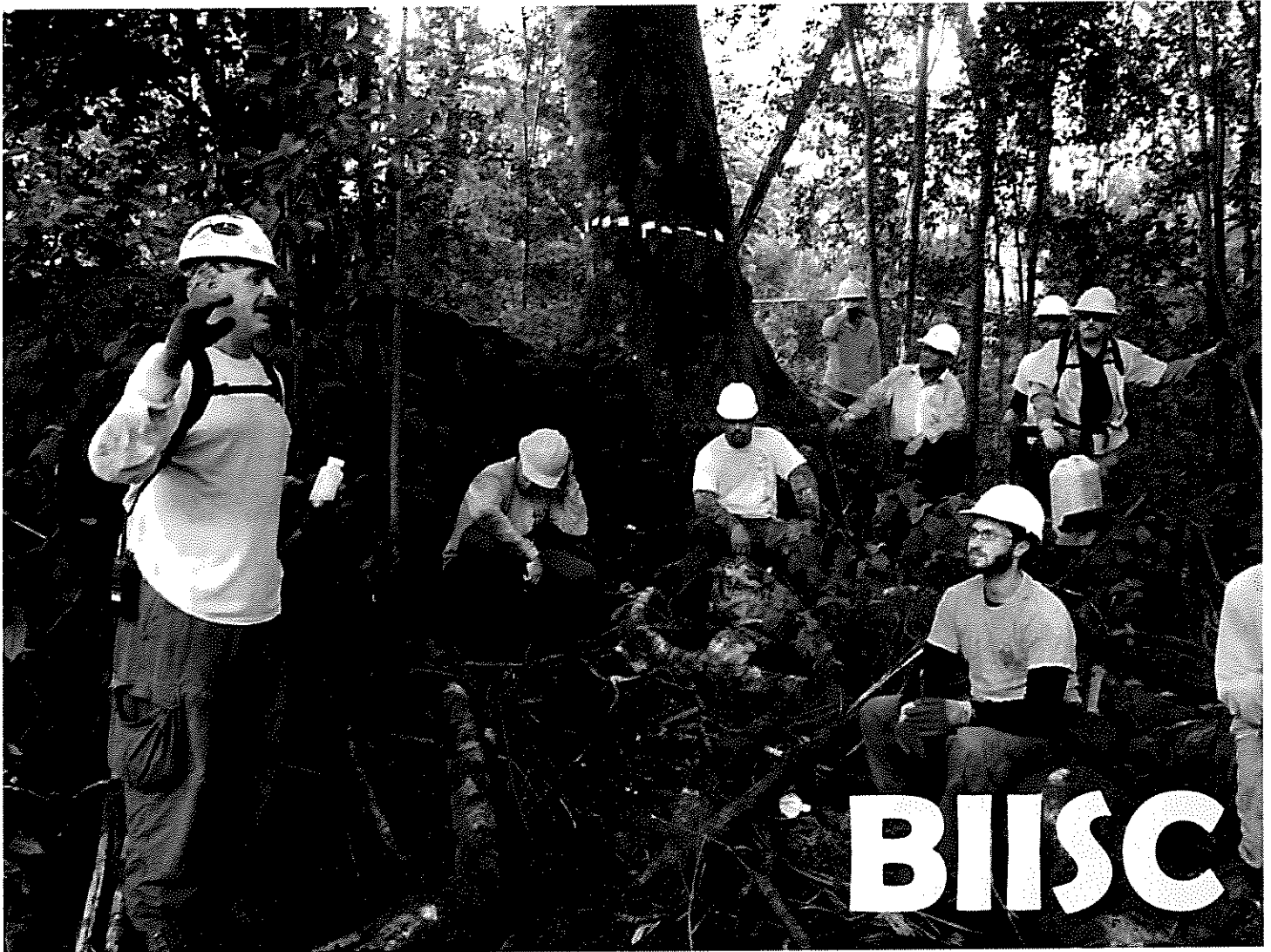
Forty-nine miles along nine routes in S. Hilo and Puna were selected as County priorities in this plan. The first county project, the clearing of Puainako Extension, broke ground in Sept., 2017 and the first year's scheduled hazard removal there should be completed by the end of January.

Projects scheduled for 2019 are marked with green arrows on the chart on the following page. Kahakai Blvd is the only albizia related power-outage site so far this year. The County Department of Public Works must establish a line item in their annual budget to continue this work, an issue that should appear before the council during this budget session.

COUNTY OF HAWAII HIGHWAYS DIVISION ALBIZIA TREE MANAGEMENT SUMMARY											
		✓	↓		✓		↓		✓		
COUNTY CORRIDOR NAME		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	TOTAL: 49 Miles or 226 Acres
		PUAINAKO EXTENSION ROUTE 200 1 Mile or 9 Acres	KAHAKAI BLVD 6 Miles or 28 Acres	POHOIKI ROAD 5 Miles or 18 Acres	KAPOHO ROAD RTE 132 8 Miles or 37 Acres	LELANI AVE 4 Miles or 25 Acres	WAIANUENUE 2 Miles or 8 Acres	RAILROAD AVE 7 Miles or 30 Acres	MAKUU ST 8 Miles or 37 Acres	HILO LANDFILL 4 Miles or 21 Acres	TOTAL COSTS:
ALBIZIA COST ESTIMATES December, 2015	YEAR 1	\$204,169	\$268,545	\$145,423	\$342,947	\$261,100	\$67,206	\$270,175	\$342,947	\$202,354	\$2,102,866
	YEAR 2	\$143,122	\$186,157	\$103,826	\$240,104	\$180,549	\$48,010	\$189,896	\$240,104	\$141,253	\$1,476,021
	YEAR 3	\$85,525	\$123,465	\$71,437	\$159,912	\$117,688	\$33,064	\$127,316	\$159,912	\$93,600	\$981,919
	YEAR 4	\$62,760	\$80,285	\$49,200	\$104,699	\$74,335	\$22,804	\$84,252	\$104,699	\$60,776	\$643,810
	YEAR 5	\$46,292	\$58,549	\$38,121	\$76,934	\$52,421	\$17,693	\$62,635	\$76,934	\$44,249	\$473,828
	TOTAL TREE MANAGEMENT COST:	\$551,868	\$715,001	\$408,007	\$924,596	\$686,093	\$188,777	\$734,274	\$924,596	\$542,232	\$5,675,444
PERCENT COMPLETION as of Dec 31, 2017		Funded, underway. COMPLETION SCHEDULED FOR 2018	20%	0%	80%	20%	10%	0%	FUNDED. SCHEDULED FOR 2018	0%	



The famous Tree Tunnel that once enclosed County Hwy 132 (above) was a frequent source of motor vehicle hazards and obstructions. A moving vehicle suffered a direct hit from a large branch not long before Tropical Storm Iselle mowed down albizia throughout the area. Arborists spent weeks cleaning up the damage, and the plan called for additional tree removal still ongoing. The sunny eight mile road is no longer recognizable (upper right on facing page). Since the storm, Albizia Assassin volunteers led by BIISC gather twice a year to maintain the albizia-free corridor, killing over 2,000 sapling trees each workday.



BIG ISLAND INVASIVE SPECIES COMMITTEE

The Big Island Invasive Species Committee (BIISC) has planned, coordinated, fund-raised and publicized the project since its inception. Our albizia crew has served a critical role in each project. Because the public rights of way (ROW) are narrower than the albizia are tall, and some albizia stands extend across large distances, a significant portion of the work must take place on private land. BIISC staff take the lead in negotiating with landowners for private property access, which is strictly voluntary under current rules. The typical safety buffer created is 100 meters from each side of the road, removing every albizia that could strike the road, and treating with herbicide remaining trees to reduce the rain of seeds into the right away—**creating a long term, cost effective solution to the albizia problem.**

Over the life of the project BIISC staff and volunteers have treated over 120,000 trees. After an 8-month lapse in funding in 2017, we secured a state Grant in Aid and HDOT Funds and hired a new crew of nine and an outreach assistant dedicated to working with the landowners on the project route.

Our greatest contribution to the project may be the Albizia Assassins. These are neighborhood teams that formed after attending hands-on BIISC trainings, then work to control emerging stands of young albizia and encourage neighbors to remove hazardous albizia threatening their communities and infrastructure. Their efforts will prevent future hazards, preserve property values, and demonstrate the commitment of each neighborhood to participate.



600+
VOLUNTEERS

120,000
TREES

16,000
FIELD HOURS



The Albizia Assassin teams in some communities like HPP, Ainaloa, and Kalapana Seaview, are highly organized. Coordinators have painstakingly mapped and secured access to the albizia trees in their neighborhood and have raised their own private donations to fund their efforts. Other volunteers join monthly BIISC work days, or divide and work solo to keep their street or block albizia free—through physical labor or letter writing campaigns. Whichever approach they are using, the Albizia Assassin teams are making an impact!



Decay Class	leaves	twigs	branches	limbs	trunk	Time since Treatment
1	present	present	intact	intact	intact	0 months
2	absent	present	intact	intact	intact	6 months
3	absent	mostly intact	intact	intact	intact	
4	absent	mostly broken	mostly intact	intact	intact	12 months
5	absent	absent	mostly broken	mostly intact	intact	
6	absent	absent	absent	mostly broken	mostly intact	18 months
7	absent	absent	absent	absent	mostly broken	
8	absent	absent	absent	absent	absent	

From Hughes et al., 2017: **Figure 5.** Average height of treated (i.e., dead) albizia snags in treatment plots over the course of 18 months (upper left graph), and average progression of tree decay during first 18 months of post-treatment monitoring (bottom table). Photo of typical stand level decay at 6 months post-herbicide treatment (upper center) and at 18 months post-herbicide treatment (upper right).

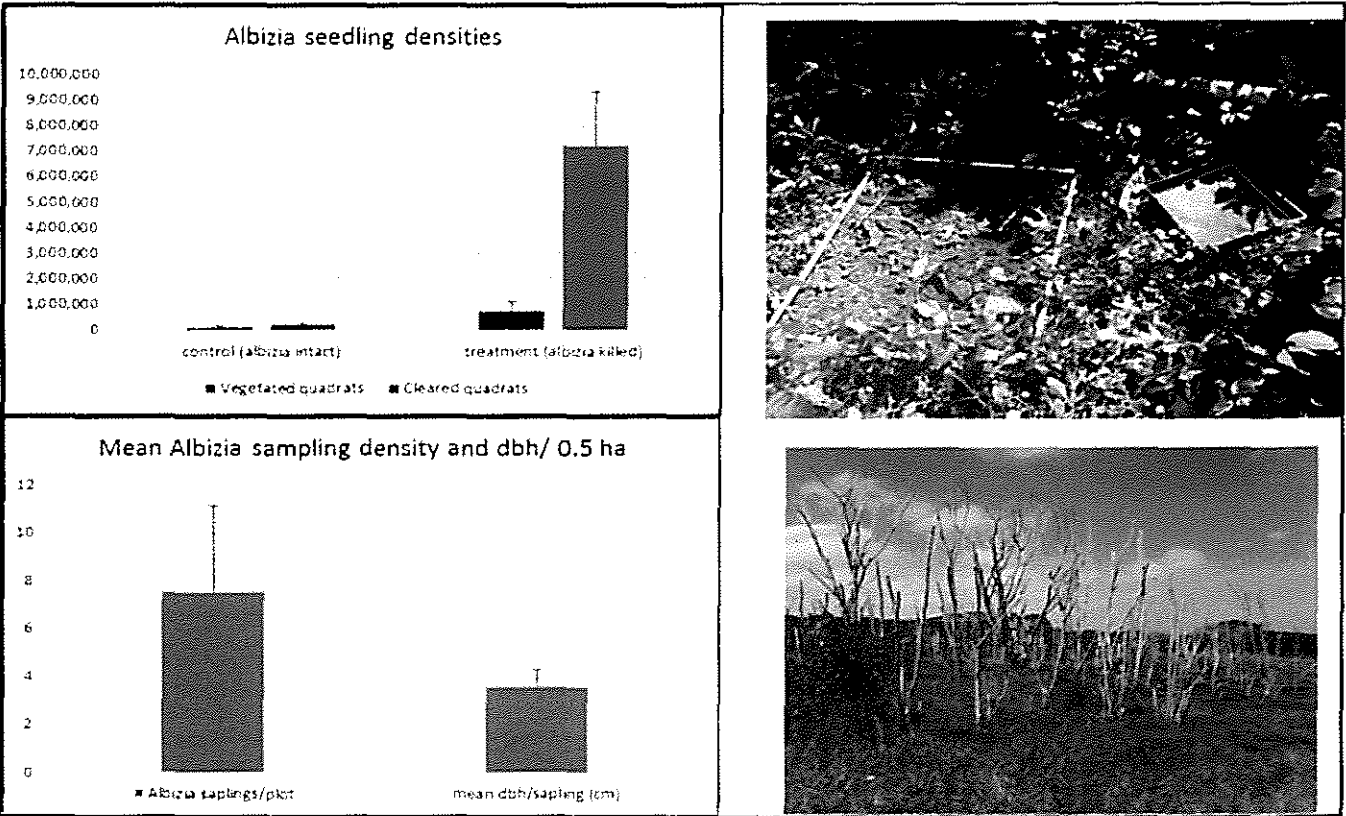


Figure 6. Mean albizia seedling densities in cleared and uncleared quadrats of control and treatment plots (upper graph), and mean densities and diameters of albizia saplings in treatment plots measured one year after herbicide application. Upper graph shows that if the land is cleared of vegetation (i.e. with herbicide or bulldozing) millions of albizia seedlings will develop. The lower photo shows the lack of albizia sapling recruitment in vegetated plots following herbicide application to albizia trees.

Key Lessons:

We have learned a great deal about albizia management in infrastructure corridors the past five years. The most important lesson is simply that it can be done! There are cost-effective, long-term solutions at our fingertips. Now we simply need to find the will and the funding to implement them.

Some of the key lessons learned are as follows:

1. **Plan for success.** The majority of serious albizia problems are found on lands that were disturbed as part of infrastructure construction, or the abandonment of lands cleared for either agriculture or development. Environmental plans for new road and power corridors should include both a mechanism and budget to lay down and maintain vegetation capable of suppressing albizia growth. During economic downturns, attention should be paid to the likelihood that once productive lands could become blighted, and permit holders may need to be held accountable.
2. **Go big!** Albizia is an aggressive invader that requires an aggressive approach. Rather than removing a few hazardous branches, and cleaning up the damage from storms year after year, public agencies can focus on the avoided future costs of removing entire stands of albizia, and laying down durable, alternative vegetation.
3. **Cut only what you must, and herbicide the rest.** It's not appropriate everywhere, but in rural areas with a limited tree control budget, it may be the only way to get ahead of this looming problem. Herbicide-treated stands result in minimal soil disturbance—allowing alternative vegetation to fill in and suppress the MILLIONS of albizia seedlings that would otherwise pop up.
4. **Treat stumps with herbicide.** Do albizia grow back from cut stumps? Yes they do! And unless the treatment of stumps with herbicide is included in contract language, it will not be done. HELCO has begun including a 1-year guarantee requirement in their arborist contracts to as a quality control and cost-saving measure. This is a measure the public agencies should employ.
5. **Partner Up!** The success so far is due to the diversity and generosity of partners' expertise and viewpoints contributed to the plan and its implementation. Each partner has expanded its resource base by welcoming the contributions of other professionals and community volunteers, and we are all better for it. Where one agency is unable to work out of bounds, an agreement with a non-profit or University of Hawaii program filled the gap. Only together can we continue to succeed!

