

House District 7

Senate District 4

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):

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

1. APPLICANT INFORMATION:

Legal Name of Requesting Organization or Individual:  
Ka Ahahui O Ka Nahelehele

Db:

Street Address:

Mailing Address: P.O. Box 2933, Kamuela, HI 96743

2. CONTACT PERSON FOR MATTERS INVOLVING THIS APPLICATION:

Name JILL WAGNER

Title Program Director

Phone # 808 325-2377

Fax # \_\_\_\_\_

E-mail jllwagner3@icloud.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:

PROVIDE SEED VIABILITY TESTING CAPABILITIES TO HELP ENSURE SUSTAINABLE HAWAII ISLAND NATIVE DRY FORESTS AND AGRICULTURE

4. FEDERAL TAX ID #: \_\_\_\_\_

5. STATE TAX ID #: \_\_\_\_\_

7. AMOUNT OF STATE FUNDS REQUESTED:

FISCAL YEAR 2018: \$ 62,000.

8. STATUS OF SERVICE DESCRIBED IN THIS REQUEST:

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

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

STATE \$ \_\_\_\_\_  
 FEDERAL \$ \_\_\_\_\_  
 COUNTY \$ \_\_\_\_\_  
 PRIVATE/OTHER \$ 2000

TYPE NAME & TITLE OF AUTHORIZED REPRESENTATIVE:

[Redacted Name]

MARY METCALF, PRESIDENT

NAME & TITLE

1/15/17  
DATE SIGNED



RECEIVED

1/19/17 na

## Application for Grants

*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;

Ka Ahahui O Ka Nahelehele (Nahelehele) was incorporated under the laws of Hawaii on 04/06/2000 as a 501(c)(3) organization dedicated to the preservation and restoration of native dryland forest ecosystems in Hawaii. Its founding members constituted the Dryland Forest Working Group in Hawaii, including research scientists, biologists, ecologists, botanists, dryland forest historical and cultural experts, US and State Forestry representatives, local agricultural and forestry business representatives and dryland forest advocates. Nahelehele's projects and programs balance environmental, cultural, scientific, educational and economic aspects in a collaborative manner with public, private, government and other nonprofit partners. The volunteer Nahelehele Board comprises an active, hands-on network of dryland forest-related individuals and groups, which allows for achievement of its organizational objectives without full-time staff.

Nahelehele conducts an annual Dry Forest Symposium that is highly regarded and attended by conservationists from across the Hawaiian Islands and the mainland. It has completed a number of dry forest and nene habitat restoration projects in West Hawaii, developed educational material, presentations and a website on dry forest plants and restoration, advocates for the preservation and restoration of dry forest remnants, and hosts dry forest restoration volunteer opportunities with business organizations and the general public.

In late 2015, Nahelehele took over responsibility for the Hawaii Island Seed Bank due to the critical role that seed banking plays in preserving the native dry forest, as well as food supply security. It is the only publically available seed bank on Hawaii Island, with triple back-up energy security which provides its users a near failsafe location to store and preserve their native plant or agricultural seed.

The website for Nahelehele is [www.drylandforest.org](http://www.drylandforest.org)

2. The goals and objectives related to the request;

The goals of this application are to acquire a seed germination chamber and initiate an ongoing internship program with the University of Hawaii's Hawaii Community College Palamanui. The interns will learn all protocols involved in seed banking and assist with seed viability testing for the seed bank users. In addition, the germination chamber and internship program will be used for researching the long term seed storage capability of Hawaiian native plant species, an effort being spearheaded by the statewide Hawaii Seed Bank Partnership, whose Founding Partners are the Hawaii Island Seed Bank, the University of Hawaii's Lyon Arboretum, the Oahu Army Natural Resources Program and the National Tropical Botanical Garden.

The Hawaii Island Seed Bank objectives for this funding request are to determine seed viability for the successful preservation of seed and to increase the number of students with the skills and expertise required for seed preservation. The Hawaii Island Seed Bank presently provides all the services necessary for the successful preservation of seed, except for this one critical service of testing the viability of the seed to grow and develop. This key indicator of the quality of the seed in storage is vital for any native plant restoration project and is also legally required for the sale of agricultural seed, which a major nonprofit user of the seed bank is working towards. The viability of seed is expressed as a percentage of the seed that will germinate under specified growing conditions. In order to scientifically and accurately determine seed viability, a germination chamber is required which controls and maintains the specified growing conditions while determining the percentage of seeds that will germinate. Seed viability degrades over time, even in the Seed Bank's cold storage unit, so periodic monitoring is essential.

3. The public purpose and need to be served;

This grant funding will support the public purpose for both native dry forest restoration projects and food security efforts in Hawaii. Following are the main users of the Hawaii Island Seed Bank who will benefit from the seed viability services and research that this grant funding will provide.

Due to the very severe threat of Rapid Ohia Death on Hawaii Island's forests, the Lyon Arboretum has been working with the Hawaii Island Seed Bank to collect and store seed from Hawaii Island's ohia (*Metrosideros polymorph*) varieties. To date over one million of these seeds have been collected and are being stored in the Hawaii Island Seed Bank. This seed will be used for research and for ohia forest restoration efforts on Hawaii Island. Determining the seed viability over time is critical for these uses. Lyon Arboretum, which houses an immense seed collection representing the majority of the native plant biodiversity in the Hawaiian Islands, has arranged for the Hawaii Island Seed Bank to be its primary storage location for the ohia seed on the Big Island. Back-up storage for the ohia seed is the National Seed Germplasm Repository in Fort Collins, Colorado, that partners regularly with the State-wide Hawaii Seed Bank Partnership.

The Kaloko-Honokohau National Park and Pu'u Honua O Honaunau National Park use the seed bank to store seed for coastal dry forest restoration. The Kaupulehu Dryland Forest supported by Kamehameha Schools is a partner in the seed bank. The restoration site regularly deposits seed for short term and long term storage. Laiopua Preserves- Department of Hawaiian Homelands, State of Hawaii stores seed for on-going restoration of critically endangered species from the dry forest. Kaloko Makai- Stanford Carr Development is a partner who stores seed for critically endangered species for the Kaloko Makai preserve. Palamanui, owned by Palamanui Global Holdings, is a partner who stores seed for the Palamanui Preserve; a sandalwood dominated dry forest on Hawaii Island. The Waikoloa Dry Forest is a partner who stores the threatened wili wili tree seeds in the seed bank. SWCA Environmental Consultants stores seed for the Oahu Department of Transportation in the seed bank. All of these sites use the Hawaii Island Seed Bank for seed storage for ongoing restoration efforts. Seed viability is basic to the success of their projects for the restoration and preservation of the native Hawaiian dry forests.

The research on native plant seed storage viability over time will help manage the preservation of the numerous threatened and endangered native plants in Hawaii, many which are on the brink of extinction. Furthermore, with climate change the leeward sides of the islands are predicted to become dryer and hotter. Leeward species on the threshold of their existing ranges will require seed banking to ensure transfer to more suitable habitats. The other Hawaii Seed Bank Partnership (HSBP) institutions involved in native species seed viability research include the University of Hawaii Lyon Arboretum on Oahu, the National Tropical Botanical Garden on Kauai, the Maui Nui Botanical Garden, and the Oahu Army Natural Resources Program. However, each island is conducting its own island-specific native species research, and this grant will fund the equipment and initial labor needed to begin this research for Hawaii Island species.

The agricultural users of the Hawaii Island Seed Bank are focused on enhancing the food security of Hawaii, including The Kohala Center nonprofit and the Kailua Kona Public Library. These organizations have public seed initiatives working with communities and farmers and gardeners locally and state wide to select, grow, harvest, store and improve food seed varieties that thrive in Hawaii. Vegetable seed grown on the mainland is adapted to climate conditions very different from the sub-tropical and tropical conditions in Hawaii. The diversity of our Islands' microclimates and unique pest and disease pressures require seed adapted to these conditions in order to thrive and support our Islands' food security. The Hawaii Seed Growers network is a dedicated group whose work and agricultural collaborations are statewide. This network has been working with The Kohala Center's Hawaii Public Seed Initiative since 2013 to identify, grow and adapt seed to make it available for sale in Hawaii and is now producing seed for the marketplace. Knowing seed viability is paramount to the success of these efforts and is required legally for the sale of agricultural seed. There is a critical need for sharing a part-time person with the Hawaii Island Seed Bank to conduct germination and purity testing, prepare seed for long-term storage, manage seed databases and package and ship seed to outlets and buyers. The Hawaii Public Seed Initiative is an important partner of

the Hawaii Island Seed Bank and a crucial link for food security in the Hawaiian Islands.  
<http://kohalacenter.org/hpsi> <http://www.hawaiiseedgrowersnetwork.com>

In addition to the above extremely important outlined needs, the Hawaii Island Seed Bank internship program will enhance STEM education for college students on Hawaii Island. It will work with the Hawaii Community College Palamanui in Kailua Kona to train students about seed banking as a tool for conservation and food security. It will also expose these interns to career path opportunities in both the conservation and agricultural fields in Hawaii.

Please see the attached Letters of Support from the University of Hawaii Lyon Arboretum, the United States Fish and Wildlife Service and the National Tropical Botanical Garden, which help to substantiate the public service and needs served from funding this grant request.

4. Describe the target population to be served; and

The Hawaii Island Seed Bank users include Federal, State, public, private and nonprofit organizations that serve a wide demographic of customers, including the general public, the conservation and agricultural communities, academic and research institutions, and residents as well as tourists. The final product of the seed that is stored in the seed bank, i.e. native forests and locally grown food, provides water, food, clean air, recreation, ecological habitats and numerous other benefits for all that live in or visit the state of Hawaii. This work is absolutely essential for the long term health and viability of the Hawaii Islands.

5. Describe the geographic coverage.

The locally optimized food seed that is being stored will be available throughout the Hawaiian Islands, once seed viability testing is in place. It is a State-wide project.

The native plant seed stored is from Hawaii Island and will be used on Hawaii Island. (Note: each island seed bank stores its own island's native seed.) The research on the viability of native plant seeds stored over time is shared with and serves the entire conservation community Statewide.

## **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;

Following is a summarized list of tasks proposed in this application that will be managed

by the Hawaii Island Seed Bank Program Director:

- In consultation with Lyon Arboretum, specify and procure the germination chamber and ancillary equipment needed for testing and research.
  - Once the equipment is delivered, arrange for a Lyon Arboretum expert to set up, test and then train the Program Director on the use of the germination chamber.
  - Develop the learning objectives and procedural manual for the Seed Bank internship program that includes all phases of seed banking, including seed cleaning, processing, drying, storage preparation, data basing, conducting germination trials and reporting seed viability results.
  - Work with the Hawaii Community College Palamanui, to initiate the internship program. Provide supervision, guidance and education for the college intern.
  - Provide seed viability reports to users and share research results with the Hawaii Seed Bank Partnership.
  - Continually review and improve the internship program based on feedback from the interns and their professors.
2. Provide a projected annual timeline for accomplishing the results or outcomes of the service;

**First Quarter:** The germination chamber and ancillary equipment will be selected and ordered, and when delivered, the germination chamber will be installed. Arrangements will be made for a Lyon Arboretum expert to setup and test the chamber and train the Program Director on its use. The internship program learning objectives and procedural manual will be developed and the program reviewed with the Hawaii Community College Palamanui.

**Second Quarter:** The internship program will be initiated as well as the viability testing of seeds for seed bank users. Research will also be initiated on the seed storage viability of high priority Hawaii Island native plant species.

**Third Quarter:** The internship program and the viability testing of seeds for seed bank users will continue. Research will continue on the seed storage viability of high priority native plant species. Funding will be sought to continue the internship program into the future.

**Fourth Quarter:** The internship program, seed viability testing and research will continue. Review and improvement of the internship program will be conducted with the community college. Research findings will be shared with the state wide seed bank partnership and on an ongoing basis into the future.

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

The Hawaii Island Seed Bank Program Director will work directly with experts from Lyon Arboretum to ensure the quality assurance of the germination chamber and seed viability testing and research results. The Program Director will also solicit feedback and

input from the interns and the university professors in monitoring, evaluating and improving the internship program.

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.

- The Hawaii Island Seed Bank will satisfy 100% of its users' requests for seed viability tests.
- The University of Hawaii, Hawaii Community College Palamanui will endorse and provide students for the Hawaii Island Seed Bank internship program.
- The Hawaii Island Seed Bank will initiate seed storage viability research on at least two native Hawaii Island plant species.

**III. Financial**

**Budget**

1. The applicant shall submit a budget utilizing the enclosed budget forms as applicable, to detail the cost of the request.
2. The applicant shall provide its anticipated quarterly funding requests for the fiscal year 2018.

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Grant
\$25,000	\$12,333	\$12,333	\$12,333	\$62,000

3. The applicant shall provide a listing of all other sources of funding that they are seeking for fiscal year 2018.

The Kohala Center has agreed to provide \$2000 in funding towards the college intern program in support of seed viability testing.

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.

None, Ka Ahahui O Ka Nahelehele is a 501(c)(3) non-profit organization.

5. The applicant shall provide a listing of all federal, state, and county government contracts and grants it has been and will be receiving for program funding.

No federal, state or county contracts or grants have been received to support the Hawaii Island Seed Bank. All grants received in the past for this program were from non-profit organizations.

6. The applicant shall provide the balance of its unrestricted current assets as of December 31, 2016.

Total unrestricted net current assets at December 31, 2016 are \$66,010.

#### **IV. Experience and Capability**

##### **A. 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.

Jill Wagner is the Program Director for the Hawaii Island Seed Bank, working as an independent contractor. She earned her BA degree in Ethnobotany from the University of Hawaii, Hilo and has been working in Hawaii conservation since 1994. She performed propagation of native Hawaiian species at the Amy BH Greenwell Ethnobotanical Garden, as well as her own nursery, Future Forests Nursery, LLC. She has taught environmental education for many years through Kealakehe High School, Kona Public Library, Kona Community School for Adults, The Kona Outdoor Circle and many other venues. She is a respected forestry consultant and has conducted numerous restoration projects in the State. She initiated the Hawaii Island Seed Bank in 2008 with the support from the Hawaii Forest Institute and the Hawaii Wildfire Management Organization and has been coordinating the seed bank ever since.

Ms. Wagner did training on seed banking at the Lyon Arboretum with Dr. Alvin Yoshinaga. She has done numerous workshops with the top seed experts in the United States and regularly consults and collaborates with the National Tropical Botanical Garden on Kauai, the Lyon Arboretum Seed Lab, and the National Germplasm Seed Lab in Fort Collins, Colorado. She is currently managing native dry forest restoration projects at Kaloko-Honokohau National Park, Pu'u Honua O Honaunau National Park, Laiopua Preserves- Department of Hawaiian Homelands, Palamanui Preserve, and koa forestry projects with private landowners.



**B. 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.

The Seed Bank has a laboratory for conducting seed work in Kailua Kona, Hawaii. This will be the facility that houses the germination chamber and the location of the internship program requested in this grant application. The lab is fully equipped with the exception of the germination chamber. The lab has drying chambers, microgram scales, bagging sealers, and all of the necessary tools for cleaning and preparing seed for storage. It also has a refrigerator for temporary storage until the seed goes into the Hawaii Island Seed Bank's long term storage facility which is located at Rogers Ranch, Pu'u Wa'awa'a.

Rogers Ranch, which is owned by Henk Rogers, built a standalone micro power grid at the base of Pu'u Wa'awa'a powered by a solar renewable energy system and is the power source for the seed bank storage unit. The system consists of 85 kW of photovoltaic panels, and a state of the art Sony Energy Storage System (ESS). The Sony ESS provides the primary storage for powering the seed bank storage unit at night, and in poor weather. The olivine type, lithium iron phosphate batteries are rated at 50 kilowatts of power with 110 kilowatt hours of stored energy. There is also a hydrogen fuel electrical generator back up system with the hydrogen fuel generated and stored on site to ensure uninterrupted power for the seed bank storage unit. Henk Rogers donates both space and power for the Hawaii Island Seed Bank's walk-in cooler, which provides savings of over \$4,000 per year in operational costs. A ten year agreement was recently put in place for these arrangements.

**A. 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.

Ms. Jill Wagner, working as an independent contractor, is currently the only staff for the Seed Bank and her qualifications and experience are listed above in Section IV. A.

**B. 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.

Jill Wagner, Program Director of the Hawaii Island Seed Bank reports to the Board of Directors for Ka Ahahui O Ka Nahelehele.

**C. 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.

The Ka Ahahui O Ka Nahelehele nonprofit operates on a volunteer basis and has no paid officers, directors or employees of the organization.

**VI. Other**

**A. 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.

There is no litigation or outstanding judgements on Ka Ahahui O Ka Nahelehele.

**B. 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.

Not applicable.

**C. 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.

**D. Future Sustainability Plan**

The applicant shall provide a plan for sustaining after fiscal year 2017-18 the activity funded by the grant if the grant of this application is:

- (1) Received by the applicant for fiscal year 2017-18, but
- (2) Not received by the applicant thereafter.

The ongoing requirements for sustaining the users' seed viability testing will be funded by service fees from the users of the Seed Bank, and grant funding will be sought to sustain the Seed Bank internship program. Since the internship program is a STEM based program, there are a number of grant opportunities that can be accessed to fund this in the future.

**E. 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, 2016.

The Certificate of Good Standing for Ka Ahahui O Ka Nahelehele dated 01/04/2017 is attached as the last page of the grant application.

## BUDGET REQUEST BY SOURCE OF FUNDS

Period: July 1, 2017 to June 30, 2018

Applicant:     Ka Ahahui O Ka Nahelehele    

BUDGET CATEGORIES	Total State Funds Requested (a)	Total Federal Funds Requested (b)	Total County Funds Requested (c)	Total Private/Other Funds Requested (d)
<b>A. PERSONNEL COST</b>				
1. Salaries				
2. Payroll Taxes & Assessments				
3. Fringe Benefits				
<b>TOTAL PERSONNEL COST</b>				
<b>B. OTHER CURRENT EXPENSES</b>				
1. Airfare, Inter-Island, Car Rental, Hotel	1,000			
2. Insurance				
3. Lease/Rental of Equipment				
4. Lease/Rental of Space				
5. Staff Training				
6. Supplies	1,000			
7. Telecommunication				
8. Utilities				
9. Independent Contractor	26,000			
10. Lyon Arborelum Contract Fee	1,000			
11. College Intern Honorarium	13,800			2,000
12. Nahelehele 10% Overhead	6,200			
13				
14				
15				
16				
17				
18				
19				
20				
<b>TOTAL OTHER CURRENT EXPENSES</b>	<b>49,000</b>			<b>2,000</b>
<b>C. EQUIPMENT PURCHASES</b>	<b>13,000</b>			
<b>D. MOTOR VEHICLE PURCHASES</b>				
<b>E. CAPITAL</b>				
<b>TOTAL (A+B+C+D+E)</b>	<b>62,000</b>			<b>2,000</b>
<b>SOURCES OF FUNDING</b>		Budget Prepared By:		
(a) Total State Funds Requested	62,000	Mary E. Metcalf <span style="float: right;">608 238-4871</span>		
(b) Total Federal Funds Requested		Name (Please type or print) <span style="float: right;">Phone</span>		
(c) Total County Funds Requested		[Redacted Signature] <span style="float: right;">1/15/17</span>		
(d) Total Private/Other Funds Requested	2,000	Signature of Authorized Official <span style="float: right;">Date</span>		
<b>TOTAL BUDGET</b>	<b>64,000</b>	President <span style="float: right;">Name and Title (Please type or print)</span>		

**BUDGET JUSTIFICATION - PERSONNEL SALARIES AND WAGES**

Period: July 1, 2017 to June 30, 2018

Applicant:     Ka Ahahui O Ka Nahelehele    

POSITION TITLE	FULL TIME EQUIVALENT	ANNUAL SALARY A	% OF TIME ALLOCATED TO GRANT REQUEST B	TOTAL STATE FUNDS REQUESTED (A x B)
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
<b>TOTAL:</b>				
<b>JUSTIFICATION/COMMENTS:</b>				
Not Applicable				

## BUDGET JUSTIFICATION - EQUIPMENT AND MOTOR VEHICLES

Period: July 1, 2017 to June 30, 2018

Applicant:     Ka Ahahui O Ka Nahelehele    

DESCRIPTION EQUIPMENT	NO. OF ITEMS	COST PER ITEM	TOTAL COST	TOTAL BUDGETED
Germination Chamber	1	\$12,000.00	\$ 12,000.00	
Magnification Camera	1	\$1,000.00	\$ 1,000.00	
			\$ -	
			\$ -	
			\$ -	
<b>TOTAL:</b>	<b>2</b>		<b>\$ 13,000.00</b>	

JUSTIFICATION/COMMENTS:

Germination chamber cost includes shipping and installation. Magnification camera is for documenting testing and research results.

DESCRIPTION OF MOTOR VEHICLE	NO. OF VEHICLES	COST PER VEHICLE	TOTAL COST	TOTAL BUDGETED
			\$ -	
			\$ -	
			\$ -	
			\$ -	
			\$ -	
<b>TOTAL:</b>				

JUSTIFICATION/COMMENTS:

## BUDGET JUSTIFICATION - CAPITAL PROJECT DETAILS

Period: July 1, 2017 to June 30, 2018

Applicant:     Ka Ahahui O Ka Nahelehele    

FUNDING AMOUNT REQUESTED						
TOTAL PROJECT COST	ALL SOURCES OF FUNDS RECEIVED IN PRIOR YEARS		STATE FUNDS REQUESTED	OF FUNDS REQUESTED	FUNDING REQUIRED IN SUCCEEDING YEARS	
	FY: 2015-2016	FY: 2016-2017	FY:2017-2018	FY:2017-2018	FY:2018-2019	FY:2019-2020
PLANS						
LAND ACQUISITION						
DESIGN						
CONSTRUCTION						
EQUIPMENT						
<b>TOTAL:</b>						
JUSTIFICATION/COMMENTS:						
Not Applicable						

**GOVERNMENT CONTRACTS AND / OR GRANTS**

Applicant:     Ka Ahahui O Ka Nahelehele    

Contracts Total:                     -                    

	CONTRACT DESCRIPTION	EFFECTIVE DATES	AGENCY	GOVERNMENT ENTITY (U.S. / State / Haw / Hon / Kau / Mau)	CONTRACT VALUE
1	Not applicable				
2					
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**DECLARATION STATEMENT OF  
APPLICANTS FOR GRANTS PURSUANT TO  
CHAPTER 42F, HAWAII REVISIED 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.

Ka Ahahui O Ka Nahelehele  
(Typed Name of Individual or Organization)

[Redacted Signature] 1/15/17  
(Signature) (Date)

Mary Metcalf President  
(Typed Name) (Title)



Harold L. Lyon Arboretum  
University of Hawai'i at Mānoa  
Hawaiian Rare Plant Program

Nandana Kalupahana  
Grant In Aid  
State Capitol, Rm 306  
Honolulu, HI 96813

January 11, 2017

Dear Nandana Kalupahana,

I am writing in strong support of the Hawai'i Island Seed Bank for a State of Hawaii Grant-in-Aid. Seed storage is the most resource-efficient method to preserve genetic diversity of plant species, and it will only become more critical as plants face increasing threats from development, invasive species, and climate change. Under proper conditions, most seeds can be stored for several years to decades. For rare plants that produce viable seeds, seed banking can offer an immediate solution to the problem of high extinction risk, until suitable managed habitat can be prepared for restoration efforts. Seed banks can also serve as repositories for active restoration, storing seeds shorter term and propagating plants for ongoing managed outplanting projects. Finally, seed banks are an important resource for preserving cultivated varieties of agricultural species, contributing to food security on our vulnerable islands.

The Hawai'i Island Seed Bank (HISB) is the only such facility on the island of Hawai'i that maintains the high operating standards necessary for medium or longer term storage. Purchase of a germination chamber will allow for germination trials on incoming seed collections, and for monitoring of viability over time. This will allow users to maintain optimum seed viability, as well as allowing HISB to gather data to inform future collections. Adequate staffing is also critical to ensure seeds are properly stored, and an internship will provide students a valuable opportunity to learn the practical aspects of one of our best tools for plant conservation.

The Lyon Arboretum Seed Conservation Laboratory (LASCL) has had a collaborative relationship with HISB for several years, and both facilities were founding members of the Hawai'i Seed Bank Partnership. In 2016, the collaboration became formalized through the OhiaLove Seed Storage Project to collect and bank seeds during the threat of Rapid 'Ōhi'a Death. This project was led by LASCL, but all collections made on Hawai'i Island have been stored at HISB to prevent spread of Rapid 'Ōhi'a Death. Staff of both seed banks have worked together to collect and store seeds on Hawai'i Island. LASCL values this collaboration and is committed to continuing this partnership.

Sincerely,

Marian M. Chau  
Seed Conservation Laboratory Manager



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[www.hawaii.edu/lyonarboretum](http://www.hawaii.edu/lyonarboretum)  
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## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Pacific Islands Fish and Wildlife Office  
300 Ala Moana Boulevard, Room 3-122  
Honolulu, Hawaii 96850

January 11, 2017

Nandana Kalupahana  
Grant In Aid  
State Capitol, Room 306  
Honolulu, HI 96813

Dear Ms. Kalupahana,

I am writing to express my strong support of the grant application submitted by Jill Wagner, Project Coordinator for the Hawai'i Island Seed Bank to the Hawai'i Grant In Aid. The Hawai'i Island Seed Bank has been essential in the ongoing response to the threat and devastation of Rapid 'Ōhi'a Death (ROD) on 'ōhi'a (*Metrosideros polymorpha*) trees. Most of our native plants and animals depend on 'ōhi'a forests for their survival, and humans depend on them for their cultural significance and role in maintaining healthy watersheds. As 'ōhi'a trees are dying at an unprecedented rate due to ROD, the collection and storage of seeds of both contaminated and healthy trees is essential for maintaining these trees *ex situ*, or in a safe, "off-site" location, via representation by their seeds, to prevent the complete disappearance of these trees when they die. Their seeds can be stored in seed banks for decades, and when ROD has been eliminated, these seeds can be propagated and trees can be returned to Hawai'i's forests for restoration. Storing seeds is the most inexpensive way to represent these trees at the Hawai'i Island Seed Bank until forest restoration can take place. A germination chamber will ensure that the seed bank staff know the viability of 'ōhi'a seed collections when they are collected and throughout their time stored in the bank.

The Pacific Islands Fish and Wildlife Office (PIFWO) has worked in partnership with Jill and the Hawai'i Island Seed Bank for five years, providing funding support from our discretionary grant funds for her recovery efforts of the rare, endangered *Isodendrion pyriformum*, or wahine noho kula, which is found only in Hawai'i. Jill's excellent propagation methods and planning have prevented the extinction of this rare plant from Hawai'i Island. Jill is also highly collaborative, working with many programs, including governmental, private, and non-profit organizations, and is a founding member of the Hawaii Seed Bank Partnership. Jill has proven her excellence in seed banking conservation and partnering, both which are critical to the future restoration of 'ōhi'a forests contaminated with Rapid 'Ōhi'a Death (ROD). I strongly support the proposed project and our office will continue to collaborate with the Hawai'i Island Seed Bank on restoration and recovery projects. We hope you will support this important project also.

Sincerely,

Lauren Weisenberger, PhD.  
Plant Recovery Coordinator  
Pacific Islands Fish and Wildlife Office  
lauren\_weisenberger@fws.gov



**NATIONAL TROPICAL BOTANICAL GARDEN**  
Chartered by Congress to Create a National Resource in Conservation, Research, and Education

August 7, 2013

Nandana Kalupahana  
Grant-in-aid Program  
State Capitol, Room 306  
Honolulu, HI 96813

Aloha.

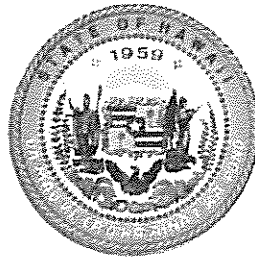
I am writing to endorse the application of the Hawaii Island Seed Bank (HISB) for grant in aid for their ongoing and new project work. As the manager of the National Tropical Botanical Garden (NTBG) Seed Bank, and as the Science and Conservation Specialist, I have been collaborating for almost ten years, with HISB. The NTBG, Lyon Arboretum, the Oahu Army Seed Lab and the HISB work together as members of the Hawaii Seed Bank Partnership, to increase the knowledge base and technical capacity for the preservation of native Hawaiian seed for conservation. Jill has been a pioneer in this work, and has served as the primary facility for seed banking on Hawaii Island.

With this grant Hawaii Island Seed Bank (HISB) will be doing work with Lyon Arboretum Seed Lab to collect and store seed of Ohia lehua (*Metrosideros* ssp.) The HISB needs to acquire a germination chamber, to do germination trials on in-coming seed collections and to test their viability over time. HISB is also working with the Hawaii Public Seed Initiative, a state-wide program to develop regionally adapted seeds for Hawaii food production. A germination chamber will also allow them to do agricultural seed evaluation. HISB plans to work with Palamanui College student interns to learn about seed collection and banking methods for conservation of both native and agricultural plant species.

I fully support this well thought out proposal and hope that you will also agree that this is an important area for public support as the state faces both the threat of Rapid Ohia Death and the need for increased agricultural sustainability.

Sincerely,

Margaret Clark, Science and Conservation Specialist  
Department of Science and Conservation  
National Tropical Botanical Garden  
3530 Papalina Road  
Kalaheo, Hawaii 96741



**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:** KA `AHAHUI `O KA NAHELEHELE

**DBA/Trade Name:** KA `AHAHUI `O KA NAHELEHELE

**Issue Date:** 01/04/2017

**Status:** Compliant

Hawaii Tax#: 96345321-01

New Hawaii Tax#:

FEIN/SSN#: XX-XXX6224

UI#: No record

DCCA FILE#: 118534

**Status of Compliance for this Vendor on issue date:**

<b>Form</b>	<b>Department(s)</b>	<b>Status</b>
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:**

<b>Status</b>	<b>Description</b>
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
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