

**THE THIRTIETH LEGISLATURE  
APPLICATION FOR GRANTS  
CHAPTER 42F, HAWAII REVISED STATUTES**

Type of Grant Request:

Operating                       Capital

Legal Name of Requesting Organization or Individual: DbA:

Ka 'Ahahui 'O Ka Nahelehele

Amount of State Funds Requested: \$ 81,800

Brief Description of Request (Please attach word document to back of page if extra space is needed):

Funds will be used for building a new seed banking storage facility to house the native seed collections of native forest restoration partners on the Island of Hawai'i. The new seed bank storage facility is needed to amass large quantities of native seeds required for post-wildfire rehabilitation of native forests at scale using seed broadcasting and aerial hydroseeding. The requested funds support recommendations 6A and 7B of the "Laulima for Lahaina" Final Report of the House of Representatives Lahaina Wildfire Interim Working Groups, December 2023.

Amount of Other Funds Available:

State: \$ \_\_\_\_\_

Federal: \$ \_\_\_\_\_

County: \$ \_\_\_\_\_

Private/Other: \$ 44,000

Total amount of State Grants Received in the Past 5 Fiscal Years:

\$ 0

Unrestricted Assets:

\$ 88,501

New Service (Presently Does Not Exist):  Existing Service (Presently in Operation):

Type of Business Entity:

- 501(C)(3) Non Profit Corporation
- Other Non Profit
- Other

Mailing Address:

P O Box 2933

City:

Kamuela

State:

HI

Zip:

96743-2933

Contact Person for Matters Involving this Application

Name:

Jill Wagner

Title:

Manager, Hawaii Island Seed Bank

Email:

jillwagner3@icloud.com

Phone:

(808) 325-2377

Federal Tax ID#:

██████████

State Tax ID#

██████████

Mary Metcalf  
Authorized Signature

Mary Metcalf, President

Name and Title

1/19/2024

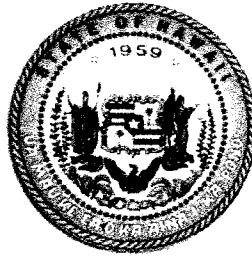
Date Signed

## Application Submittal Checklist

*The following items are required for submittal of the grant application. Please verify and check off that the items have been included in the application packet.*

- 1) Hawaii Compliance Express Certificate (If the Applicant is an Organization)
- 2) Declaration Statement
- 3) Verify that grant shall be used for a public purpose
- 4) Background and Summary
- 5) Service Summary and Outcomes
- 6) Budget
  - a) Budget request by source of funds ([Link](#))
  - ~~b) Personnel salaries and wages ([Link](#))~~ *Not applicable*
  - ~~c) Equipment and motor vehicles ([Link](#))~~ *" "*
  - d) Capital project details ([Link](#))
  - ~~e) Government contracts, grants, and grants in aid ([Link](#))~~ *Not applicable*
- 7) Experience and Capability
- 8) Personnel: Project Organization and Staffing

Mary Metcalf Mary Metcalf, President 1/19/24  
AUTHORIZED SIGNATURE PRINT NAME AND TITLE DATE



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 (DCCA).

**Vendor Name:** KA `AHAHUI `O KA NAHELEHELE

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

**Issue Date:** 01/17/2024

**Status:** **Compliant**

Hawaii Tax#: [REDACTED]  
New Hawaii Tax#: [REDACTED]  
FEIN/SSN#: XX-XXX6224  
UI#: No record  
DCCA FILE#: 118534

Status of Compliance for this Vendor on issue date:

Form	Department(s)	Status
A-6	Hawaii Department of Taxation	Compliant
8821	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	A status determination has not yet been made
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

**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, Hawai'i 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, Hawai'i 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; and
- 3) If the applicant is a non-profit organization, it meets the following requirements pursuant to Section 42F-103, Hawai'i 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.
- 4) The use of grant-in-aid funding complies with all provisions of the Constitution of the State of Hawaii (for example, pursuant to Article X, section 1, of the Constitution, the State cannot provide "... public funds ... for the support or benefit of any sectarian or nonsectarian private educational institution...").

Pursuant to Section 42F-103, Hawai'i 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)

Mary Metcalf  
(Signature)

1/19/2024  
(Date)

Mary Metcalf  
(Typed Name)

President  
(Title)

## **II. Background and Summary**

The Ka 'Ahahui 'O Ka Nāhelehele (Nāhelehele) 501(c)(3) nonprofit, was formed in 2005 by members of the Dry Forest Working Group, a diverse group of passionate community members inspired to address the ongoing destruction of Hawaii's native dry forest ecosystems. Nāhelehele's mission is supporting the perpetuation of Hawaii's dry forest ecosystems, and the many often endangered plants, birds and insects that live there. Nāhelehele's vision is "Valued and Flourishing Hawaiian Dry Forest Ecosystems".

The goals and objectives for this grant are to build a new seed storage facility for the Hawaii Island Seed Bank (HISB), a program of Nāhelehele. HISB is a public seed bank on Hawaii Island that was initiated in 2008. It provides seed banking services for landowners, agencies and farmers for native Hawaiian species and agricultural crops. It is also a back-up storage facility for seeds from other seed banks throughout the State.

HISB's seed laboratory, where the preparation of seed for storage occurs, has very limited storage capacity. It is housed at the Joseph Rock Arboretum in urban Kailua Kona located on private land owned by HISB Manager Jill Wagner, and is where the new seed storage unit will be located. HISB's other seed storage facility is a walk-in refrigerated storage unit, funded from a Hawai'i Wildfire Management Organization grant and located on Henk Rogers private inholding at the State Pu'u Wa'awa'a Forest Reserve. The unit is getting old, nearing its storage capacity limit and requiring more maintenance.

There is growing awareness across Hawaii that it is imperative to amass native seeds from many habitats for post-wildfire recovery and for expanded restoration in degraded ecosystems. HISB intends to expand its seed storage capacity to support its forest restoration partners in building their seed collections for use in post-fire recovery technologies such as seed broadcasting and aerial hydroseeding. The Waikoloa Dry Forest Initiative had very good restoration success with a seed broadcasting test following a 2018 fire in their preserve. DLNR will be conducting an aerial hydroseeding test on a 12-acre section of State dry forest that was burnt in the 2022 Leilani fire. Both use the HISB for seed banking along with many other forest restoration partners.

This project will not only serve the 'aina and the people of Hawaii Island but it will also enable HISB to conduct more seed bank training and outreach through the Hawaii Community College Pālanui, the UH College of Tropical Agriculture, Kona Master Gardeners, and schools throughout the Kona region to help with seed banking. Thus, two purposes will be served: amassing native seed collections for post-fire recovery and enabling community training on an important conservation tool.

HISB also banks seeds of Hawaii adapted agricultural crops for the Hawaii Seed Growers Network, a network of farmers throughout the State who grow local crop varieties in order to build the State's ability to be self-sustaining in food production. This high quality, locally adapted seed is available for purchase statewide. This effort, initiated by The Kohala Center, is hugely successful and continues to grow every year. HISB's increased seed storage capacity will support this important food security effort.

### **III. Service Summary and Outcomes**

The scope of work for this project will be to purchase the materials and hire the labor required to build an off-grid solar powered seed bank using a 20-foot shipping container. HISB's existing off-grid solar powered seed laboratory was built from a 40-foot shipping container, and has been in successful operation for several years. HISB has retained the same electrical engineer who designed and supervised the building of HISB's seed laboratory, to build the new seed bank using a similar design basis. The new seed bank will be insulated, climate controlled, and powered by an off-grid solar power generation system with battery and generator backup. Electrical distribution in the container will be used to distribute power for lighting and 4 large capacity refrigerators and 4 large capacity freezers for seed storage.

The existing 10' x 10' walk-in refrigeration seed storage unit at Henk Rogers ranch is powered by his fully off-grid solar power generation system. He has generously donated the space and power for this seed storage unit since 2013. The unit is getting old with increasing maintenance required, and is approaching its seed storage capacity. The new seed bank will provide much needed capacity and capability for storing seeds in two different ways. Orthodox seeds can be stored in a refrigerator for up to 15 years, depending on the species. To store seeds for a longer period of time, seed collections can also be put in freezing conditions. The new seed bank will have both these capabilities, and the multiple individual units will provide redundancy, i.e. if one refrigerator or freezer breaks, the other units can be used for backup while the broken unit is replaced. The new seed bank will be climate and humidity controlled, with a work space inside for taking out seeds as needed for the seed owner's restoration projects.

By the end of the first quarter of the project, the 20-foot container unit will be acquired and set in place, and then the unit will be painted, insulated, flooring, sliding door and the air conditioning and humidifier installed. Some of this work will be done using an Atherton grant received in 2023. During the second and third quarter of the project, the solar power generation and backup systems and electrical distribution will be installed. A reputable local solar power retailer will be used to provide the equipment needed in a timely manner. During the last quarter of the project, the power and backup systems will be fully tested as well as the climate control system. Then the refrigerators and freezers will be purchased, installed, and tested. A monitoring system will also be installed in the new seed bank with cellphone connectivity to allow HISB to monitor the temperature and relative humidity of the seeds being stored on a 24/7 basis. This monitoring of seed storage condition will help HISB achieve high stored seed viability in the new seed bank.

HISB has retained electrical engineer Aleks Vehlner as the technical lead and project supervisor for building the seed storage facility. A detailed project design and plan was donated by Aleks for the new seed storage unit. He will be responsible for material procurement, contracting local labor as needed for the construction, and responsible for project management and progress reporting.

The State Agency appropriating the funds for the project will be kept informed of the project's progress and the major milestones accomplished as described above on a quarterly basis. The quarterly report will include the major accomplishments, including graphs and photos on the build's progress. HISB will also provide a list of community members, students and interns who are trained in all aspects of seed banking during this time. The HISB database generates reports of the number of new seed collections, quantity of seeds collected, species collected, and number of individual specimens collected from.

#### **IV. Financial**

##### **Budget**

1. The Budget Request By Source of Funds for this project and the Budget Justification – Capital Project Details can be found on the following pages.
2. The anticipated quarterly funding requests for the fiscal year 2025 for this project follows.

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Grant
\$10,000	\$30,000	\$25,000	\$16,800	\$81,800

3. A \$20,000 grant from the Atherton Foundation for this project was received in 2023. \$22,000 of in-kind donations in 2022-2023 provided the plans, land and design for the project. No other sources of funding for this project are being sought for fiscal year 2025 other than this application.
4. No state and federal tax credits have been granted within the prior three years for Ka 'Ahahui 'O Ka Nahelehele, and no state and federal tax credits have been or will be applied for pertaining to any capital project.
5. No federal, state, and county government contracts, grants, and grants in aid have been granted to Ka 'Ahahui 'O Ka Nahelehele within the prior three years and none confirmed to be received for fiscal year 2025 for program funding.
6. The balance of Ka 'Ahahui 'O Ka Nahelehele's unrestricted current assets as of December 31, 2023 is \$88,501.

## BUDGET REQUEST BY SOURCE OF FUNDS

Period: July 1, 2024 to June 30, 2025

Applicant:     Ka 'Ahahui 'O Ka Nahahehele    

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				
2. Insurance				
3. Lease/Rental of Equipment				
4. Lease/Rental of Space				
5. Staff Training				
6. Supplies				
7. Telecommunication				
8. Utilities				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
<b>TOTAL OTHER CURRENT EXPENSES</b>				
<b>C. EQUIPMENT PURCHASES</b>				
<b>D. MOTOR VEHICLE PURCHASES</b>				
<b>E. CAPITAL</b>	<b>81,800</b>	<b>0</b>	<b>0</b>	<b>44,000</b>
<b>TOTAL (A+B+C+D+E)</b>	<b>81,800</b>	<b>0</b>	<b>0</b>	<b>44,000</b>
<b>SOURCES OF FUNDING</b>		Budget Prepared By:		
(a) Total State Funds Requested	81,800	Jill Wagner & Aleks Vehlner (808) 325-2377		
(b) Total Federal Funds Requested		Name (Please type or print) Phone		
(c) Total County Funds Requested		<i>Mary C Metcalf</i> 1/19/24		
(d) Total Private/Other Funds Requested	44,000	Signature of Authorized Official Date		
<b>TOTAL BUDGET</b>	<b>125,800</b>	Mary Metcalf, President Name and Title (Please type or print)		



## BUDGET JUSTIFICATION - CAPITAL PROJECT DETAILS

Period: July 1, 2024 to June 30, 2025

Applicant:     Ka 'Ahahui 'O Ka Nahelehele    

FUNDING AMOUNT REQUESTED						
TOTAL PROJECT COST	ALL SOURCES OF FUNDS RECEIVED IN PRIOR YEARS		STATE FUNDS REQUESTED	OTHER SOURCES OF FUNDS REQUESTED	FUNDING REQUIRED IN SUCCEEDING YEARS	
	FY: 2022-2023	FY: 2023-2024	FY:2024-2025	FY:2024-2025	FY:2025-2026	FY:2026-2027
PLANS                      In Kind Donation	5000					
LAND ACQUISITION      In Kind Donation	12000					
DESIGN                      In Kind Donation	5000					
CONSTRUCTION		4000	19800			
EQUIPMENT		16000	62000			
<b>TOTAL:</b>	<b>22000</b>	<b>20000</b>	<b>81,800</b>			
<p><b>JUSTIFICATION/COMMENTS:</b> The Plans and Design were developed and donated by Aleks Vehlner with an estimated value of \$5000 each. Jill Wagner is providing a portion of her land where the seed storage unit will be located with an estimated value of \$12,000. The Atherton Foundation contributed \$20,000 of funds toward this project in 2023. See the next page for the major items in the Equipment and Construction categories.</p>						

## **BUDGET JUSTIFICATION - CAPITAL PROJECT DETAILS**

Period: July 1, 2024 to June 30, 2025

Equipment for this project consists of a 20' container and materials to prepare the foundation and refurbish the container with insulation, paint, flooring, sliding door, air conditioner, dehumidifier, shelving and a work space. It also includes the Photovoltaic plant (PV rack, PV panels and cables), the PV Power Wall System (inverters, batteries, monitors, electrical panel and interconnects), Internal Wiring (outlets and lighting), a backup Generator and Generator Interface, and 4 Commercial Refrigerators and 4 Commercial Freezers. Miscellaneous expenses (connectors, screws, bolts, etc.) are included, and a 10% administration cost.

Construction costs represents the labor to install all of the equipment listed above and to setup the unit for seed storage. It includes travel expense for the contractors, and a 10% administration cost.

## **V. Experience and Capability**

### **1. Necessary Skills and Experience**

HISB has been a program of Nāhelehele since 2015, and prior to that with the Hawaii Forest Institute. HISB stores native seeds for large landowners who are doing native forest restoration, and also stores locally adapted agricultural crop seeds for the Hawaii Seed Growers Network. Jill Wagner, who has a Bachelor's degree in Ethnobotany from UH Hilo, has been managing the HISB since its inception in 2008, and has been restoring Hawaiian native forests for 30 years. Jill is recognized as an expert in seed banking, seed germination, native plant propagation and forest restoration. She works with land stewards and conservation organizations throughout Hawaii. Jill has trained hundreds of volunteers and interns on seed collection in the field, as well as cleaning, drying, packing, and databasing native seed collections. Over 2700 native seed collections are stored in HISB, representing 30 million seeds comprising over 100 native species and supporting 32 native restoration sites.

Dr. Marian Chau, former Seed Bank Manager for the University of Hawaii Lyon Arboretum Seed Lab, and Co-Founder of the IUCN Seed Conservation Specialist Group, is on Nāhelehele's Board of Directors and provides additional expertise and guidance to the Hawaii Island Seed Bank.

HISB has retained the services of electrical engineer Aleks Vehlner, who has 33 years of experience and co-founder of Blue Planet Energy Systems, to be the technical lead and supervisor overseeing the building of the solar powered seed bank. Aleks was the technical lead in the building of HISB's off-grid solar powered seed lab, which was put in service in September 2021 and has performed flawlessly since.

### **2. Facilities**

The Hawaii Island Seed Bank has proven ability in acquiring a highly functioning off-grid, solar powered seed laboratory using a 40' shipping container. The seed lab maintains its temperature and relative humidity day and night with the 16kw solar system that powers it and runs the seed lab equipment. It also has a gas generator for backup which can be used to maintain power in the case of multiple cloudy days. The seed laboratory is located on Kealakaa Street, a central location in Kailua Kona, Hawaii at 650' elevation. The majority of days throughout the year are sunny allowing the solar powered system to maintain a 60% percent battery charge on average.

HISB's existing seed storage capacity in the seed laboratory is very limited, and the seed storage unit at Henk Rogers' ranch is nearing its capacity limit and requiring more maintenance due to its age. Building a new seed storage facility at the site of the HISB's seed laboratory has distinct advantages in efficiency, location, seed storage backup, and ability to store more seeds for forest restoration partners and for longer periods. Access to the site is private, and cars have to enter two gates to come in, thus the site is protected and there have been no problems with security.

## **VI. Personnel: Project Organization and Staffing**

### **1. Proposed Staffing, Staff Qualifications, Supervision and Training**

The proposed staffing pattern at HISB will continue to primarily be Jill Wagner, who is contracted by Nāhelehele to run and manage the HISB. Jill supplements seed banking services by training volunteers, students and interns to help deliver the seed banking services. She plans on growing these services in order to amass the quantity of native seeds needed by HISB partners for post-fire recovery and forest restoration, dependent on volunteer levels and availability of funds to pay for interns.

### **2. Organization Chart**

As a contractor to Nāhelehele, Jill reports to Mary Metcalf, President of Ka 'Ahahui 'O Ka Nāhelehele.

### **3. Compensation**

Officers and directors of Nāhelehele volunteer their time and expertise as board members and none are paid. There are no employees of the organization.

## **VII. Other**

### **1. Litigation**

There is no pending litigation to which Nāhelehele is a party, and no outstanding judgements.

### **2. Licensure or Accreditation**

Jill Wagner has a State of Hawaii Threatened & Endangered Species Possession Permit for seed banking these species at HISB.

### **3. Private Educational Institutions**

The grant will not be used to support or benefit a sectarian or non-sectarian private educational institution.

### **4. Future Sustainability Plan**

The new seed bank storage unit funded by this project does not need additional funding once it is built. The new seed bank is powered by solar power, and any gas needed for infrequent generator backup will come out of seed bank revenue earned from seed storage bin rentals to HISB's forest restoration partners.