

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

Type of Grant Request:

Operating                       Capital

Legal Name of Requesting Organization or Individual: Db:

Garden Island Resource Conservation & Development, Inc. Makauwahi Cave Reserve

Amount of State Funds Requested: \$132,250.00

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

The grant will be used to support the operations of the Makauwahi Cave Reserve. This site is acknowledged globally by scientists as the richest fossil site in the entire Pacific region, a uniquely preserved archeological site. It is one of the first places on the entire planet where scientific studies of the past have been applied directly and very successfully to the design and implementation of a comprehensive program featuring reintroduction and conservation of a wide array of endangered species. It has also spawned a tourism and education facility that features opportunities to participate in a futuristic and eco-friendly development projects on degraded lands.

Amount of Other Funds Available:

State: \$0  
Federal: \$0  
County: \$15,000 (FY 2019)  
Private/Other: \$20,000 (FY 2019)

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

\$107,000 (HTA)

Unrestricted Assets:

\$229,664.46 (GIRC&D)

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:

4253 Rice Street, Suite C

City: Lihue                      State: HI                      Zip: 96766

Contact Person for Matters Involving this Application

Name: Dr. David A. Burney	Title: Professor of Conservation Paleobiology
Email: dburney999@gmail.com	Phone: (808) 651-2479

Federal Tax ID#:

State Tax ID#



Edward J. Kawamura, Treasurer

Authorized Signature

Name and Title

1/15/19

Date Signed

**received**  
1/14/19 8:50am JR

## 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) Certificate of Good Standing (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](#))
  - c) Equipment and motor vehicles ([Link](#))
  - d) Capital project details ([Link](#))
  - e) Government contracts, grants, and grants in aid ([Link](#))
- 7) Experience and Capability
- 8) Personnel: Project Organization and Staffing



AUTHORIZED SIGNATURE

EDWARD J. KAWAMURA, TREASURER

PRINT NAME AND TITLE

1/15/19

DATE



## 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

GARDEN ISLAND RESOURCE CONSERVATION & DEVELOPMENT, INC.

was incorporated under the laws of the State of Hawaii on 01/28/1991 ; 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 08, 2019

*Catherine P. Auwal-Colson*

Director of Commerce and Consumer Affairs



## Public Purpose

**Name of Requesting Organization:** Garden Island Resource, Conservation & Development, Inc. dba Makauwahi Cave Reserve

**Public Purpose for the Grant:** Support education and conservation programs at Makauwahi Cave Reserve, on the south shore of Kaua'i. This site is acknowledged globally by scientists as the richest fossil site in the entire Pacific region, a uniquely preserved archaeological site. It is one of the first places on the entire planet where scientific studies of the past have been applied directly and successfully to the design and implementation of a comprehensive program featuring reintroduction and conservation of a wide array of endangered species. It has also spawned a tourism and education facility that features opportunities to participate in a futuristic and eco-friendly development projects on degraded lands.

**Services to be Supported by the Grant:** The grant will be used primarily to support the salaries for the Maintenance Supervisor and Conservation Trainees. A portion of funds cover maintenance supplies and administrative fees.

**Target Group:** Perpetuating and maintaining this unique site will benefit scientists in their research into our historical and archaeological past. In addition, it will further educate our youth statewide on the importance of protecting historic sites, endangered species, and developing a sustainable plan to care for the land. The Makauwahi Cave Reserve is also unique visitor attraction which modestly assists in the sustainability of the site.

**Cost of the Grant and the Budget:** The request for the grant is \$132,250



Signature of Authorized Official

1/15/19  
Date

Edward J. Kawamura, Treasurer

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

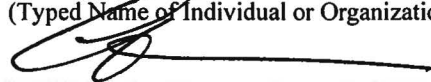
The undersigned authorized representative of the applicant certifies the following:

- 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.

Garden Island Resource Conservation & Development, Inc.  
for Makauwahi Cave Reserve  
(Typed Name of Individual or Organization)



(Signature)

(Date)

1/15/19

Edward J. Kawamura

Treasurer

(Typed Name)

(Title)

## Application for Grants

**If any item is not applicable to the request, the applicant should enter "not applicable".**

### **I. Certification – Please attach immediately after cover page**

#### **1. 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, 2018.

*Attached*

#### **2. Declaration Statement**

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

*Attached*

#### **3. 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](#))

*Attached*

### **II. 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 ***Makauwahi Cave Reserve*** is a non-profit organization, with *Garden Island Resource Conservation and Development, Inc.* (GIRC&D), serving as its fiscal sponsor. GIRC&D is a community-based nonprofit corporation whose mission is to prudently use natural and human resources to improve and enhance Kaua'i County's economy, social fabric, and fragile island environment. GIRC&D was incorporated in January 1991; authorized by Congress in February 1992; and received its 501(c)3 IRS designation in August 1993. A 10-member volunteer Board of Directors, representing diverse facets of the Kaua'i community, directs the organization. Since its inception, GIRC&D has

worked to fulfill its vision: "The community working together towards a harmonious relationship with the environment." Currently, the board oversees 26 projects with seven committees: Agriculture, Community Development, Cultural Awareness, Forestry, Infrastructure, Parks and Recreation, and Invasive Species.

The Makauwahi Cave Reserve site includes the richest fossil site in the entire Pacific Basin region and is a uniquely preserved archeological area. Not only is it a place where scientific studies of the past are applied, but experiments on native species conservation also flourish. Many native plants and a wide array of endangered species have been introduced to the surrounding area. Over nearly three decades, with the help of many volunteers, the Makauwahi Cave Reserve has become a long-term **research** site, a highly regarded **educational** facility, an ecological **conservation & restoration** project area, and a unique **ecotourism** attraction.

2. The goals and objectives related to the request;

The intended objective of the GIA request for \$132,250 from the State of Hawai'i will help facilitate the operating costs to continue to operate this site. The funds will be used to pay salaries for Mr. Joe Kanahele, who is the Maintenance Supervisor, and part-time positions for two Conservation Trainees. A portion of the fund will be applied towards maintenance supplies. Mr. Kanahele and the other staff members are all native Niihauans, who can use their skills to serve in the role to maintain the Makauwahi Cave Reserve.

3. The public purpose and need to be served;

This unique site serves to support education and conservation programs. The Makauwahi Cave Reserve is acknowledged globally by scientists and is one of the first places on the entire planet where scientific studies of the past have been applied directly and successfully to the design and implementation of a comprehensive program featuring reintroduction and conservation of a wide array of endangered species. It has also spawned a tourism and education facility that features opportunities to participate in a futuristic and eco-friendly habitat conservation and restoration on degraded lands.

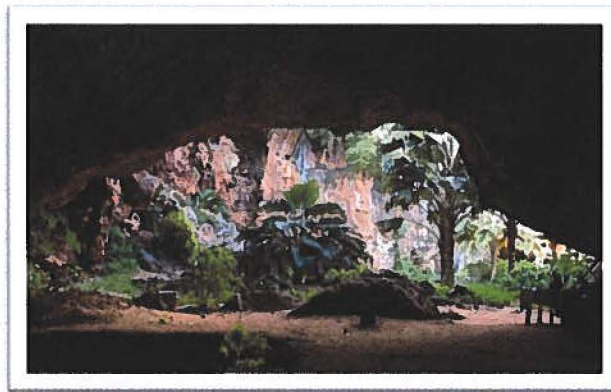
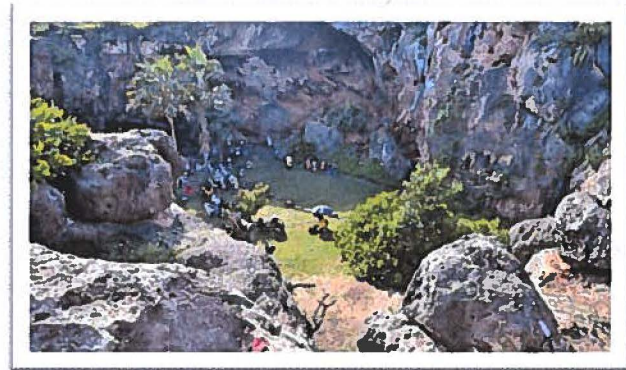
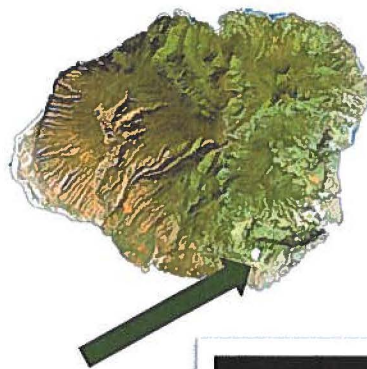
4. Describe the target population to be served; and

The Makauwahi Cave Reserve targets a wide gamut of the population. Scientific research attracts scholars who participate in archeological excavations and biocultural restoration projects. Visits from elementary to university students provide a rich outdoor classroom and laboratory to learn about our past and preserving our future. It is also a popular attraction for local, state, national, and international visitors and

volunteers. This site hosts a total of 40,000 people annually -- 15,000 people for guided tours of the cave and ecological restoration area, while another 25,000 additional visitors wander the premises for self-guided visits.

5. Describe the geographic coverage.

The Makauwahi Cave Reserve is located on Grove Farm lands in the south shore of Kaua'i. Aside from the fossil rich caverns, the Makauwahi Cave Reserve includes an ecological restoration site where native plants are propagated and where restoration of an adjacent limestone quarry and degraded wetlands is ongoing.



### **III. 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;

Critical in understanding the request for funding to continue operating this unique site is understanding the unique features of the Makauwahi Cave Reserve. It is an outdoor

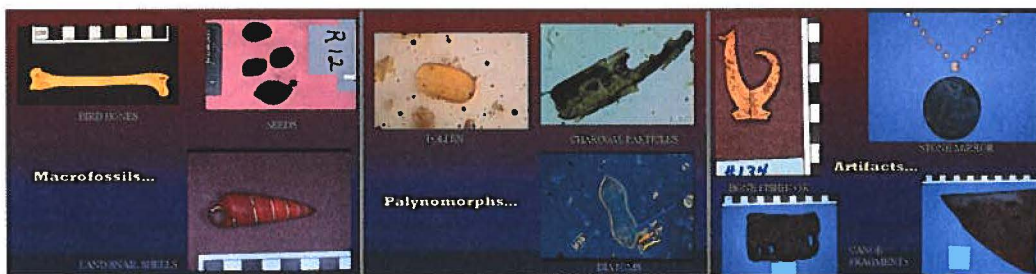


classroom in research and discovery of historic significance. Conservation and preservation of endangered species has become a significant part of the organization's mission. The Makauwahi Cave Reserve staff and volunteers propagate native and Polynesian plants to use for restoration of abandoned agricultural and quarry lands surrounding the cave. In recent years thousands of school children and other visitors have learned through hands-on experience about Kaua'i's ecology, culture, and history – and the importance of caring for the land and its legacy – by helping to plant and maintain over 25 acres on the Reserve.

### Research and Discovery:

The cave is itself a huge fossil, formed in the heart of an ancient sand dune that turned to stone over the ensuing 400,000 years. Groundwater etched away the limestone and dripping water mantled the walls with flowstone formations. About 7,000 years ago, the ceiling in the cave's central room collapsed, leaving behind a freshwater lake in the midst of Hawaii's largest limestone cave. Dead plants and animals that fell into this ancient lake were preserved, making this a world-class site for studying changes in past environments.

Scientists have dug large pits below the water table. What they found included many types of plant and animal fossils, and artifacts from all the stages of human occupation of the island, from the first Hawaiian settlers to the present day. This information has been used to select native plants to grow here that were once part of the prehistoric landscape.



This new model -- studying the past through excavation of fossils and artifacts, then using this unique, site-specific information to restore ecological and cultural values on land with no other current usefulness -- has been highly praised by the scientific and conservation communities and was featured in presentations and field trips hosted as part of the 2016 International Union for Conservation of Nature (IUCN) World Conservation Congress in Honolulu.

Conservation and Restoration of the Wetlands:

The Makauwahi Cave Reserve conservation efforts employ a unique and very successful strategy. The rich fossil and archaeological record from the cave deposits provide a clear view of the natural landscape and its components and dynamics just before human arrival, and the changes that resulted with human colonization about a millennium ago. With this knowledge, we have restored the forests, wetlands, and cave environments on about 25 acres of the site, establishing more than 10,000 native plants and Hawaiian cultivars on abandoned farmland, quarry sites, and degraded wetlands.



Techniques pioneered at the Makauwahi Cave Reserve have been adopted widely in the native plant nursery business throughout the islands, utilizing abandoned farmland to grow out in large quantities many coveted species of rare and beautiful native plants, about 100 species in all. The agricultural experts on the island were quick to recognize the economic and ecological significance of the research here, awarding the “Soil and Water Conservationists of the Year” to the Makauwahi Cave Reserve in two recent years. Projects in advanced water-conserving irrigation, pig exclusion fencing, invasive

species control, and native plant nursery construction have been generously funded by such Natural Resource Conservation Service programs as Wildlife Habitat Improvement Program (WHIP) and Environmental Quality Incentives Program (EQIP).

### Preservation of Endangered Species:

These restored wetlands also feature native wetland plants and four species of endangered Hawaiian water birds, as well as native insects. Our restoration of the spectacular limestone cliffs here provides a natural habitat for nesting seabirds. These newly-created wetlands have been rapidly colonized by native water birds, including four species that are highly endangered and found only in the Hawaiian Islands. The **'Alae 'Ula**, or Hawaiian Moorhen (*Gallinula chloropus sandvicensis*), and **Koloa Maoli**, or Koloa Duck (*Anas wyvilliana*), have by now raised many broods here, nesting among the native sedges. The **Ae'o**, or Hawaiian Stilt (*Himantopus mexicanus knudseni*), and the **Nēnē**, or Hawaiian Goose (*Branta sandvicensis*), stop by almost daily to rest and feed. In the morning and evening, watch for the **'Auku'u** or Black-crowned Night Heron (*Nycticorax nycticorax*). Long-distance migrants such as the **Kōlea** or Pacific Golden Plover (*Pluvialis fulva*) stop to rest and often winter here, as part of their annual 10,000-mile migration from breeding grounds in the Arctic to wintering sites in the tropics. **Bones of all these bird species occur as fossils in the sediment of adjacent Makauwahi Cave, showing that they have thrived here for thousands of years.**

The caves themselves contain an underground ecosystem of highly endangered blind cave organisms.

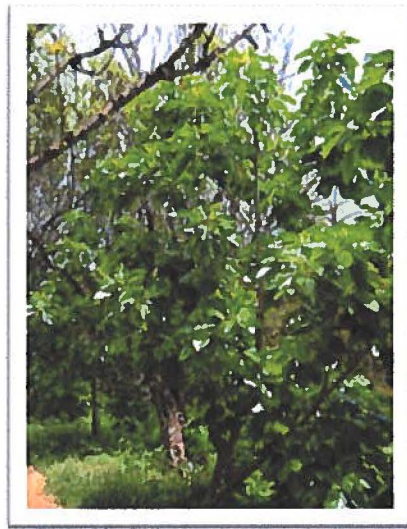


The surrounding uplands now feature about 80 species of native plants, including several endangered species and at least four species otherwise extinct on Kaua'i, but re-established by our group from stock collected elsewhere in the islands. Most of these species occurred on the site until recent centuries, the fossil record shows.

An example of how this unique site preserved species that not only tell us a story of the past but help to perpetuate species into the future is the Kou tree.



5,000-year old kou seed capsules found in Makauwahi Cave show definitively that contrary to previous notions *Cordia subcordata*, is a native plant – Burney et al, 2001, *Ecological Monographs*



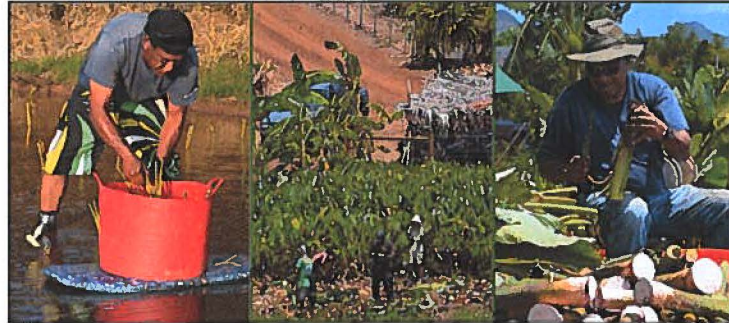
The Kou trees flourish at the ecological restoration site.



### Employment and Learning Opportunities:

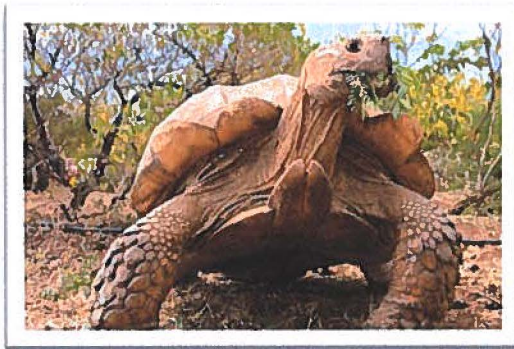
We are also fortunate to have a strong representation of Native Hawaiians, from the island of Ni`ihau, in our group. Together, the team oversees site protocols related to the protected burials and other traditional aspects. Since 2009, the site has provided ongoing job-training opportunities in conservation, horticulture, and tourism, particularly focused on Hawaiian first-language, such as the Ni`ihau `ohana from Westside Kauai. To date, we have been able to offer this training opportunity for 46 unemployed Native Hawaiians, as well as dozens of college interns from three campuses of the University of Hawai`i and 10 other universities from the mainland U.S. and Europe. Our trainees have gone on to jobs in a wide range of scientific and outdoor-oriented professions.

Recently, we created 15 lo'i pond fields that produce kalo (taro) for the local poi mill and general consumption. Many varieties of banana, breadfruit and other Polynesian crops are also being grown.



Pioneering Ideas:

Several ideas pioneered at this site, including the use of giant tortoises in large fenced compounds to control invasive plants in ecological restorations, have served as a model for similar projects the Burneys have participated in at locations as far-flung as Madagascar, Mauritius, and several European countries, as well as Ted Turner's largest scale restorations on his mega-ranches in the western United States.



Visitors come by just to enjoy the friendly herd of giant tortoises and the baby tortoise nursery and to see our latest progress in native plant and wetland restoration efforts

Unique Connection to Civil Defense:

Most surprisingly, our research at Makauwahi Cave has also played a key role recently in Civil Defense preparations for tsunami evacuation. Scientific papers produced in collaboration with staff and affiliates of the *Pacific Tsunami Warning Center* in Honolulu have highlighted the message gleaned from studies of prehistoric tsunami deposits in the cave – that larger tsunamis than any recorded historically have occurred in the islands in recent centuries.

An extreme marine event recorded at the site by deposits excavated and dated to the year 1586 A.D. has prompted revision of the evacuation procedures in the state, so that authorities now employ a two-tiered evacuation strategy. They have studied our papers and acknowledged that based on our group's modeling of earthquake and ocean dynamics generated from fossil evidence, a 9+ Richter Scale earthquake in the eastern Aleutian Islands of Alaska would potentially overwhelm thousands of people crowding the state's previously established evacuation routes, some of which are too low to escape the rising water. The new routes intended to be implemented in the event of these predicted larger tsunamis that we now know are possible -- such as the ones recorded in Japan in 2011 and Indonesia in 2004 -- could save thousands of lives in Hawai'i in the event of this larger run-up, that we now know from evidence at the Makauwahi Cave Reserve is possible.

See <https://www.youtube.com/watch?v=EYbWpcf9XjQ> for a recent televised interview.

2. Provide a projected annual timeline for accomplishing the results or outcomes of the service;

The request for \$132,250 from the State of Hawai'i will help facilitate the operating costs to continue to operate this site. The funds will be used to pay the annual salaries for Mr. Joe Kanahale, who is the Maintenance Supervisor, and part-time positions for two Conservation Trainees. A portion of the fund will be applied towards maintenance supplies. The funds will be allocated relatively consistently over a fiscal year.

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

Dr. David Burney and Lida Pigott Burney have been the pioneers in the discovery, protection and expansion of this unique reserve. They will work closely with GIRC&D in administering funding to ensure the site and its species are protected and sustainable.

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.

Dr. David Burney and Lida Pigott Burney will measure the effectiveness of the grant funds based on the work accomplished by the Maintenance Supervisor and staff of trainees and volunteers. Plans to protect this unique cave reserve, expand the

ecological restoration site and strengthen the reserve's ability to be self-sufficient is an important goal for the immediate future of the Makauwahi Cave Reserve.

#### **IV. Financial**

The state budget forms can be reviewed in Exhibits 1 – 5. The requested funds will be used primarily for salaries and maintenance supplies. There are no expenditures for equipment, motor vehicles or capital projects.

Since 1992, this project has raised a total of about \$1,250,000 from 37 research and conservation grants, as well as donations the Grove Farm Foundation and from enthusiastic individuals. This amount of monies raised averages to roughly \$50,000 per year – to support 40,000 guests. The needs are far greater and the scientific and educational value is significant enough to justify the State's investment.

We are in danger of “tapping out” many of our previous grant sources, especially private foundations and the Hawai'i Tourism Authority. As professional fundraisers like to point out, it is much easier to raise money for exciting new initiatives than for general operating expenses for maintenance. Likewise, we have been least successful at raising money for educational initiatives, which is sad. We have an opportunity to change the paradigm.

Although we have had success raising funds to do ever more scientific research and apply this to our unique conservation initiatives and tourist attractions, few sources are interested in funding us to do the routine things required to maintain our extensive plant restorations, visitor amenities, and historical features, or to fully exploit the huge potential of this project for educating even more students at all levels through experiential learning. We desperately need a steady financial stream to pay salaries for our Native Hawaiian maintenance staff, to purchase supplies for enhancing our unique landscapes, and to safely host an ever-increasing number of school children. The State Grant-In-Aid will go a long way to fulfilling these admirable goals at the Makauwahi Cave Reserve.

The \$132,250 grant will be used as follows:

<u>Budget Item</u>	<u>Annual Costs</u>
Maintenance Supervisor – Joe Kanahele	
Salary	\$41,600
Payroll Taxes	10,400
Conservation Trainees (Two positions)	
Salaries - \$14/hour x 32 hours/week x 52 x 2	\$46,600
Payroll Taxes	11,650
Supplies for Maintenance Activities	10,000
Administrative Fee	<u>12,000</u>
TOTAL	<u>\$132,250</u>

Two person-years, in practice, has served three to eight job trainees per year, as we actively counsel candidates to find more permanent employment, using our contacts in conservation, horticulture, wildlife control, and landscaping industries. Most of our trainees find jobs within a few months, allowing us to offer the trainee position to another candidate. Our focus is entirely on the Ni`ihau `ohana of Westside Kaua`i. These individuals are essentially “environmental refugees,” who have migrated from the island of Ni`ihau seeking employment on Kaua`i. There are currently no employment opportunities on their home island. They generally lack marketable job skills, speak Hawaiian as a first language and are shy about speaking English, and have very limited experience in management of personal finances and navigating the challenges of the world beyond Ni`ihau. Our program teaches them highly marketable skills in conservation, tourism, and agriculture; counsels them in financial and health matters; and introduces them to people in relevant industries who can offer them employment. To date, this program has “graduated” 46 trainees since it was begun in 2009 under federal ARRA (stimulus) funds.

Therefore, we respectfully request funding from the State of Hawaii for our conservation education programs and the habitat restoration for endangered species. As outlined in the above chart, the funds will be used primarily to fund salaries for our caretakers and to buy the materials necessary to protect the site and its thousands of visitors. The administrative fee is paid to *Garden Island Resource Conservation & Development, Inc.* for administering the grant. We will continue to raise funds for our many public programs, from other public and private sources to supplement the hoped-for State Grant-in-Aid monies.



## 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](#)) *Attached*
  - b. Personnel salaries and wages ([Link](#)) *Attached*
  - c. Equipment and motor vehicles ([Link](#)) *Attached*
  - d. Capital project details ([Link](#)) *Attached*
  - e. Government contracts, grants, and grants in aid ([Link](#)) *Attached*
  
2. The applicant shall provide its anticipated quarterly funding requests for the fiscal year 2020.

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Grant
\$33,000	\$33,000	\$33,000	\$33,250	\$132,250

3. The applicant shall provide a listing of all other sources of funding that they are seeking for fiscal year 2020.
  1. Atherton Family Foundation – proposal submitted for \$20,000
  
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 2020 for program funding.
  1. Environmental Management at MCR for \$125,000 – effective April 2017 to March 2019 from the U. S. Environmental Protection Agency
  2. Enhancing the Visitor Experience at MCR for \$15,000 – effective September 2018 to February 2019 from the County of Kaua'i Office of Economic Development
  
6. The applicant shall provide the balance of its unrestricted current assets as of December 31, 2018.

There is no unrestricted current assets as all fund are fully expended or encumbered.

Unrestricted Assets for Garden Island Resource Conservation & Development, Inc. as of December 31, 2018 is \$229,664.46.

## **V. 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 Makauwahi Cave Reserve is under the tutelage of Dr. David Burney and Lida Pigott Burney. Dr. Burney's research has focused on endangered species, paleoenvironmental studies, and causes of extinction. He has over 40 years of practical experience in conservation, including serving as a technical consultant for many conservation organizations and government agencies.

Prior to moving to Kaua`i in 2004 to become Director of Conservation at the National Tropical Botanical Garden, he was a Professor at Fordham University in New York for 15 years. In 2006 he was awarded a Guggenheim Fellowship to write a book on his work at Makauwahi Cave on Kaua`i (*Back to the Future in the Caves of Kaua`i: A Scientist's Adventures in the Dark*. Yale University Press). His research has been featured on National Geographic Television, Discovery Channel, Hawaii Public Television, NOVA, and NPR.

Lida Pigott Burney manages the Makauwahi Cave Reserve, a collaboration with Grove Farm under support from three federal agencies, the Office of Hawaiian Affairs, and the Hawaii Tourism Authority. The site is famous for the spectacular fossil and archaeological finds in the cave, also for the habitat of a rare assemblage of endemic blind cave invertebrates. On the surrounding property, six different management units demonstrate a wide array of restoration techniques, provide critical habitat for endangered plants and animals, and provide an experimental test-bed for ecological applications and cyberinfrastructure.

Her technical expertise includes palynology, aerobiology, sediment coring, excavation, and rare plant conservation. She is the author of numerous publications on the effects of human activities on prehistoric environments, causes of extinction and environmental change, and conservation. Her work at Makauwahi Cave with Dr. David Burney, and a crew of scientific collaborators, college students, and dedicated volunteers, provides educational opportunities for thousands of school children and cave visitors every year.

She co-hosts a college-level field school program each summer for the University of Hawaii and organizes special events and volunteer opportunities for the local community and visitors to the island. She also supervises a jobs program at Makauwahi Cave that trains unemployed native Hawaiians of Ni`ihau descent in conservation techniques and produces native plant seeds and nursery stock for other restoration projects.

## **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.

Not Applicable

## **VI. 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.

Dr. David Burnery and Lida Pigott Burney oversee the Makauwahi Cave Reserve. The day-to-day operations is under the supervision of Niihaun, Joe Kanahele.

The site operates through the hard work of nine part-time staffers, as well as a volunteer corps of docent guides. We are also fortunate to have a strong representation of Native Hawaiians, from the island of Niihau, in our group. Together, the team oversees site protocols related to the protected burials and other traditional aspects.

### **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.

The organization chart for GIRC&D is as follows:

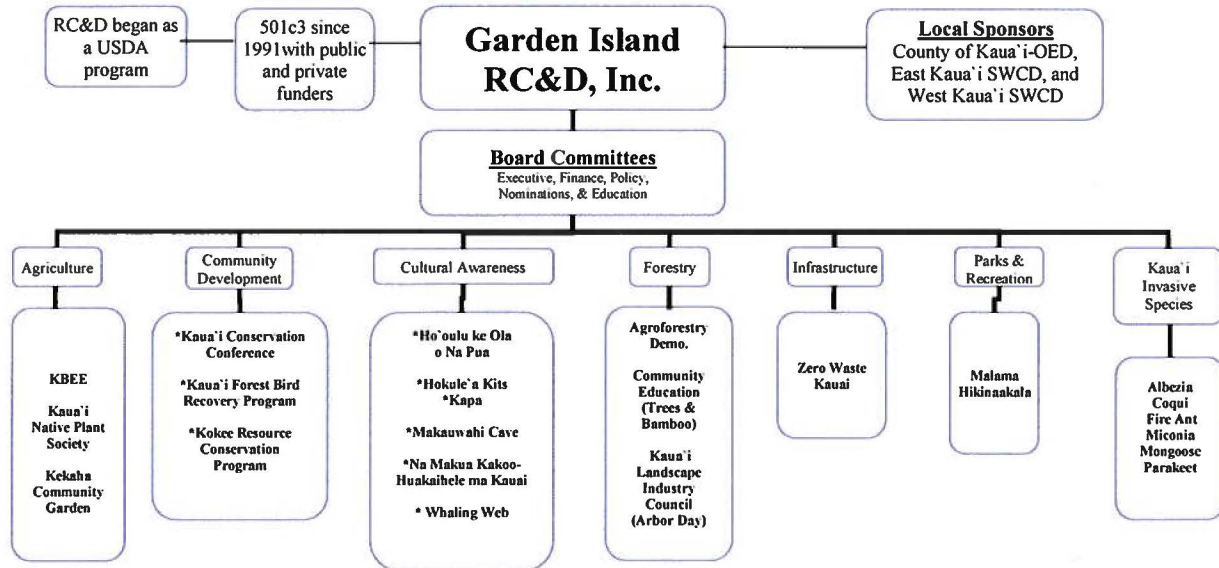


4253 Rice Street, Suite C, Lihu'e, HI 96766-1315

Phone (808) 246-0004, Email: girodnew@gmail.com

**Vision:** Malama "Alua o Kaua'i. The community working together towards a harmonious relationship with the environment.

**Mission:** To carry out a plan for the orderly conservation, development, and prudent use of natural and human resources to improve economic, social, and environmental opportunities for the people of Kaua'i County.



### 3. Compensation

The applicant shall provide an annual salary range paid by the applicant to the three highest paid officers, directors, or employees of the organization by position title, not employee name.

Compensation for GIRC&D is as follows:

Administrator: \$19/hour with no health insurance, part time

All other GIRC&D personnel provide their services and experience on a voluntary basis.

## VII. 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.

Not Applicable

## 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.

Not Applicable

## 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 2019-20 the activity funded by the grant if the grant of this application is:

- (a) Received by the applicant for fiscal year 2019-20, but
- (b) Not received by the applicant thereafter.

Our mission is clear -- the work done at the Makauwahi Cave Reserve is important in discovering and learning of our past and how to protect and perpetuate our historic sites and endangered species. We also learn the importance of restoring and caring for the wetlands, limestone quarry and farmlands. We will continue to work on the following to build the Makauwahi Cave Reserve into a self-sustaining entity:

### Bringing Awareness:

Scientific publications from the site, and a wide range of slide shows, posters, video files, and other educational materials, are available at [www.cavereserve.org](http://www.cavereserve.org). We also publish an e-newsletter several times per year with over 4,000 subscribers, and maintain a popular Facebook page with nearly 2,000 followers. Unique discoveries from the cave deposits, and their impact on current much-discussed topics in “re-wilding,” and “de-extinction” were featured in a TEDx symposium at the National Geographic Society – see <http://www.downyoutubeinmp4.com/watch?v=PDI4S31xIbl> Continued focus on the importance of the work done a Makauwahi Cave Reserve is expected to attract additional donations and grants.

Visitor Sector:

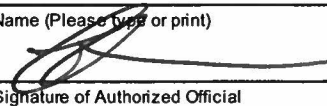
The voluntary donation requests from free tours are not enough to sustain the site. Being that the Makauwahi Cave Reserve receives over 15,000 people each year for our guided tours of the cave and plant restorations and another 25,000 additional visitors come by just to enjoy our friendly herd of giant tortoises and the baby tortoise nursery and to see our latest progress in native plant and wetland restoration efforts, we need to explore other ways to capitalize on these visits.

# # #

## BUDGET REQUEST BY SOURCE OF FUNDS

Period: July 1, 2019 to June 30, 2020

App Garden Island Resource Conservation & Development, Inc. for Makauwahi Cave Reserve

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	88,200			
2. Payroll Taxes & Assessments	22,050			
<b>TOTAL PERSONNEL COST</b>	<b>110,250</b>			
<b>B. OTHER CURRENT EXPENSES</b>				
1. Supplies for Maintenance Activities	10,000			
2. Administrative Fee	12,000			
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<b>TOTAL OTHER CURRENT EXPENSES</b>	<b>22,000</b>			
<b>C. EQUIPMENT PURCHASES</b>				
<b>D. MOTOR VEHICLE PURCHASES</b>				
<b>E. CAPITAL</b>				
<b>TOTAL (A+B+C+D+E)</b>	<b>132,250</b>			
<b>SOURCES OF FUNDING</b>		Budget Prepared By: David A. Burney <span style="float: right;">(808) 651-2479</span>		
(a) Total State Funds Requested	132,250	Name (Please type or print) <span style="float: right;">Phone</span>		
(b) Total Federal Funds Requested				
(c) Total County Funds Requested		Signature of Authorized Official <span style="float: right;">Date</span>		
(d) Total Private/Other Funds Requested		Edward J. Kawamura, Treasurer <span style="float: right;">1/15/19</span>		
<b>TOTAL BUDGET</b>	<b>132,250</b>	Name and Title (Please type or print)		

## BUDGET JUSTIFICATION - PERSONNEL SALARIES AND WAGES

Period: July 1, 2019 to June 30, 2020

Applicant: Garden Island Resource Conservation & Development, Inc. for Makauwahi Cave Reserve

POSITION TITLE	FULL TIME EQUIVALENT	ANNUAL SALARY A	% OF TIME ALLOCATED TO GRANT REQUEST B	TOTAL STATE FUNDS REQUESTED (A x B)
Maintenance Supervisor	1	\$52,000.00	100.00%	\$ 52,000.00
Conservation Trainees      Two Part-time	1	\$58,250.00	100.00%	\$ 58,250.00
				\$ -
				\$ -
				\$ -
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<b>TOTAL:</b>				<b>110,250.00</b>

**JUSTIFICATION/COMMENTS:**      The grant request will be used primarily for salaries for our Maintenance Supervisor and two part-time Conservation Trainees. The day-to-day maintenance of the site is critical to keep the Makauwahi Cave Reserve operable. Mr. Joe Kanahale of Ni'ihau has been our Maintenance Supervisor and oversees our trainees, who are primarily from Ni'ihau. This program enables training of the Niihauans who have re-settled on Kaua'i and have successfully gone on to find jobs in agriculture, tourism and other fields.



## BUDGET JUSTIFICATION - EQUIPMENT AND MOTOR VEHICLES

Period: July 1, 2019 to June 30, 2020

Applicant: Garden Island Resource Conservation & Development, Inc. for Makauwahi Cave Reserve

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

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

**BUDGET JUSTIFICATION - CAPITAL PROJECT DETAILS**

Period: July 1, 2019 to June 30, 2020

Applicant: Garden Island Resource Conservation & Development, Inc. for Makauwahi Cave Reserve

*Not Applicable*

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: 2017-2018	FY: 2018-2019	FY:2019-2020	FY:2019-2020	FY:2020-2021	FY:2021-2022
PLANS						
LAND ACQUISITION						
DESIGN						
CONSTRUCTION						
EQUIPMENT						
<b>TOTAL:</b>						
<b>JUSTIFICATION/COMMENTS:</b>						

**GOVERNMENT CONTRACTS, GRANTS, AND / OR GRANTS IN AID**

Applicant: Garden Island Resource Conservation & Development, Inc. for  
Makauwahi Cave Reserve

Contracts Total: 140,000

	<b>CONTRACT DESCRIPTION</b>	<b>EFFECTIVE DATES</b>	<b>AGENCY</b>	<b>GOVERNMENT ENTITY (U.S. / State / Haw / Hon / Kau / Mau)</b>	<b>CONTRACT VALUE</b>
1	Environmental Management at MCR	Apr-2017 to Mar-2019	EPA	U. S.	125,000
2	Enhancing the Visitor Experience at MCR	Sep-2018 to Feb-2019	Kaua'i Office of Economic Development	County of Kaua'i	15,000
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