

**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:

Malama Maunalua

Amount of State Funds Requested: \$ 268,290

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

The Maunalua Bay (MB) community has requested that MB be designated a Fisheries Management Area (FMA). For the FMA to be successfully managed, recreational fish catch data is required. What this grant proposal is requesting is funds to develop a mobile, recreational fishing application, incorporating community, fishermen, and researcher input. Recreational fishing data is a key piece missing for improved fisheries management statewide, so the grant will use MB as a pilot area - given the established partnerships - to create the app, which will then be usable statewide.

Amount of Other Funds Available:

State:                      \$ 268,290

Federal:                      \$ 0

County:                      \$ 0

Private/Other: \$ 0

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

\$ 100,000

Unrestricted Assets:

\$ 350,000

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:

7192 Kalaniana'ole Hwy, A143A

City:    State:    Zip:

Honolulu    HI    96825

Contact Person for Matters Involving this Application

Name:  
Doug Harper

Title:  
Executive Director

Email:  
dharper@malamamaunalua.org

Phone:  
808.285.7509

Federal Tax ID#:

██████████

State Tax ID#

██████████

  
\_\_\_\_\_  
Authorized Signature

Doug Harper, Executive Director  
\_\_\_\_\_  
Name and Title

01-17-2020  
\_\_\_\_\_  
Date Signed

**received**  
01/15/2020 *zc*

## 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

DOUG HARPER EXECUTIVE DIRECTOR

PRINT NAME AND TITLE

01/17/20

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

**MĀLAMA MAUNALUA**

was incorporated under the laws of Hawaii on 03/31/2010 ; 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 13, 2020

Director of Commerce and Consumer Affairs



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

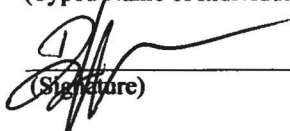
The undersigned authorized representative of the applicant certifies the following:

- 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.

Mālama Maunalua  
(Typed Name of Individual or Organization)

  
(Signature)

1-17-20  
(Date)

Doug Harper  
(Typed Name)

Executive Director  
(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)**

See attached.

**2. Declaration Statement**

See attached

**3. Public Purpose**

The proposed project is for a public purpose to aid the management of fisheries in state waters throughout Hawaii, which benefits all who utilize and/or rely on healthy marine ecosystems for livelihoods and well-being. This meets the public purpose criteria for Section 42F-102.

**II. Background and Summary**

**1. A brief description of the applicant's background;**

Founded in 2006, Mālama Maunalua (MM) is a community-based, non-profit restoring and conserving Maunalua Bay (O'ahu) through community kuleana. MM engages the community in effective, science-based, service learning projects to build the next generation of stewards for the Bay, while restoring the Bay for future generations to have a healthy marine ecosystem.

**2. The goals and objectives related to the request;**

The goal of this project is to **develop a mobile, recreational fishing reporting application which has fishing community support and is essential to ensuring that the State is able to make data based decisions that accommodates sustainable fishing into the future.** Currently, there is no process or mechanism in place that captures non-commercial fish biomass extraction data. Status quo will result in the demise of this natural food source. This is a partnership project involving a state agency (Division of Land and Natural Resources (DLNR)), non-profit conservation organizations (Conservation International Hawai'i (CI Hawai'i), Mālama Maunalua (MM)), and a statewide fisher organization (Hawai'i Fishermen's Alliance for Conservation and Tradition (HFACT)).

The project's objectives are:

- 1. Develop a mobile application that is easy and accessible for recreational and commercial fishermen to use;**
- 2. Incorporate the fishing community, resource managers, and researchers in the development process to ensure the application meets all needs;**
- 3. Integrate fishermen into the data collection and management of fisheries.**

**3. The public purpose and need to be served;**

The value of the non-commercial fishing industry in Hawai'i cannot be understated both in terms of monetary value and livelihood importance. The total annual value of the nearshore fishery in Hawai'i is estimated at \$10.3-\$16.4 million, composed of non-commercial (\$7.2-\$12.9 million) and commercial (\$2.97 million licensed + \$148,500-\$445,500 unlicensed) catch (Grafeld 2017). Hawaii's nearshore fisheries provide >7 million meals annually with most (>5 million) from the non-commercial sector (Grafeld 2017).

For many residents of Hawai'i, non-commercial fishing includes recreational and subsistence fishing, as well as perpetuating cultural values such as providing fish for friends and neighbors and for various gatherings and events. In a 2015 NOAA survey, the majority (66%) of respondents indicated that fishing for food was one of their three most important reasons for fishing, 80% indicated that they always or often share catch with family and/or friends, and 36% of respondents indicated that their catch is extremely important or very important to their regular diet.

Fishing tourism is also an important part of Hawai'i's economy providing fishing opportunities for visitors who book fishing excursion or fish on their own. Between 1980-2000, the Hawai'i tour boat industry had grown more than 300%, with gross revenues increasing from an estimated \$50 million in 1984 to more than exceed \$183.5 million in 2000 (Markrich 2004). With the increase in the tourism industry in recent years, the impacts of tourist fishing activities, as well as a growing population, are putting more strain on nearshore marine resources.

Thus, understanding the extent of non-commercial fishing, the biological impact, and the social importance of recreational and subsistence fishing is a vital part of the management process. Capturing this knowledge helps decision makers develop policies that ensure quality fishing opportunities for future generations. Further, incorporating fishermen in the data collection and management of marine resources is vital to creating stronger policies and enforcement.

Unlike every other state in the country, the State of Hawai'i has no required fishing license for resident and tourist non-commercial fishers. And, in contrast to mandatory catch reports for commercial fishing catch and effort, which has been collected since the late 1940s, non-commercial fishing data has not been collected aside from occasional, short-term surveys. Both commercial and non-commercial data are two critical components needed by resource managers to comprehensively assess the collective effects of fishing on our coastal resources (DLNR website).

The U.S. Fish & Wildlife Service conducts a survey every five years from which the total number of fishers and hunters are estimated for each state. The 2011 survey estimated about 157,000 people over the age of 16 fished recreationally in Hawai'i in that year, of which about two-thirds (or 104,000) were residents. The estimated number of resident non-commercial fishers in 2011 far outnumbered the roughly 3,800 licensed commercial fishers in Hawai'i that same year. Though the average catch and effort of a typical non-commercial fisher may be lower than that of a typical commercial fisher, the combined effect of all non-commercial fishers is significant and predominates for certain fisheries.

Currently, the only program to collect on-going data on non-commercial fishing is the Hawai'i Marine Recreational Fishing Survey (HMRFS) which is funded by DLNR and NOAA Fisheries through the Marine Recreational Information Program (MRIP). For data collection, 1) mail surveys are distributed to random households throughout the State to estimate the number of fishing trips taken by non-commercial shoreline and private boat fishers, 2) DLNR staff collects catch data at various public fishing areas around the State to estimate the number of fish caught. Though the data collected provides a historical account of non-commercial catch and effort since 2001, the data is extremely piecemeal, lacks specificity, and is time consuming to collect.

Compounding the challenge of capturing critical fisher data for effective management, is distrust among many fishermen towards providing data, fearing it will be used for fishing closures. Significant non-commercial fisher concerns are: 1) an absent 'voice' in management decisions, 2) least amount of influence over fisheries policy, and 3) the potential socio-cultural impacts of fisheries regulations. According to the NOAA 2016 survey, 51% of respondents indicated that ensuring equal consideration for non-commercial and commercial fisheries stakeholders in policy-making is "extremely important." At present, only 8% of respondents were extremely satisfied with the incorporation of stakeholder interests in policy making.

The lack of fishing data coupled with fisher distrust has led to poorly managed resources. The ocean provides much to the people of Hawai'i, such as food security, recreation, traditional knowledge and practices, and social cohesion, but the health of Hawai'i's marine environment is at a critical juncture. Fish stocks are low across the main Hawaii Islands. More than 75% of important food fish species are depleted or in critical condition. Monitoring research (e.g., Williams et al. 2008) finds similarly regarding fish biomass:

- 1) Target fishes show clearest trend of decline. Downward biomass trends are clearest for large parrotfishes, red fishes, and apex predators (e.g., jacks).
- 2) Decline of target fishes are correlated to human population. Lowest biomass was at heavily populated locations in Oahu whereas highest biomass is at the most remote locations (e.g., *Ni'ihau*).

Fishers, too, observe the decline in fish stocks: upwards of 65% of respondents indicated that they felt conditions were declining across all fisheries, with the nearshore/coral reef fisheries ranked as the most affected fishery in regard to declining conditions (NOAA 2016).

A fishing application that is mobile and easy to use can help reverse the problem of a disconnected fishing community to fishery management, and improve data collection for fishery managers.

4. Describe the target population to be served; and

While the benefits of improved data collection leading to improved fisheries management will effect everyone in the State, the population targeted for the project are non-commercial fishermen.

5. Describe the geographic coverage.

The application will encompass all waters in the state of Hawai'i, however, the team will first launch the product in Maunalua Bay, Southeast O'ahu, for targeted outreach and engagement. Due to MM's, DLNR's, and HFACT's active engagement with the fishing community in Maunalua Bay, the application development will target this region and serve as the 'roll-out' location to demonstrate the app's value, use, and to utilize the existing relationships as a pilot for providing a blueprint for other locations.

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

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

As described above, fish stocks are low or on the decline in many parts of the State, especially in Maunalua Bay. While every other State in the country requires fishing licenses, Hawai'i does not. As a result, the State lacks key data on number of fishers, locations fished, fish taken, and more. This data are necessary for adequately managing fisheries.

Many of the fishermen express a willingness to report their catch. But, they find the current paper survey method the State employs – outdated and onerous to utilize. Instead, fishers support a survey method that can be remotely uploaded. Given the prevalence of mobile phones, the creation of an application (app) is decidedly the most cost-effective method for gathering non-commercial fishing catch data.

A unique project team has been formed to address this need, which includes the Hawaii Fishermen’s Alliance for Conservation and Tradition (HFACT), Conservation International Hawai‘i (CI Hawai‘i), and Mālama Maunalua (MM). The project team has been helping organize and lead a management process in Maunalua Bay. In an effort led by fishermen, the community worked together for 2 years to develop guiding language for the creation of a Fisheries Management Area (FMA) in Maunalua Bay. Rarely have fishermen, fishing organizations, community leaders, and conservation organizations worked together in this manner in Hawai‘i. In August 2019, the group submitted their formal request to DLNR for the designation of an FMA in Maunalua Bay, providing agreed-to language on rules, geography, and monitoring.

For the FMA to be successful, it is critical that fishermen catch data are collected, and that fishermen are part of the process. Without the data, and without their support, the FMA will lack two of the critical needs for success, and given the leadership role taken by fishermen, a successful FMA will provide incentive for fishermen across the State to get engaged to help lend to improvement resource management. As members of the community best informed on the resource, and their direct impact on the resource, their participation is critical. Therefore, creating an app to aid in that participation, and to demonstrate the value and success of the FMA will serve as a valuable tool to incentivizing and leading similar efforts statewide.

For this project, the app will be developed and piloted in Maunalua Bay prior to being launched statewide. The purpose of this strategy is to slowly introduce the tool, build user confidence, and demonstrate its value to fishers. The value of having an established partnership in Maunalua Bay between fishermen, MM, CI Hawai‘i, and HFACT means soliciting information from fishermen will be easier, and incorporation of the app will be greater. Focusing on a location as heavily used and important as Maunalua Bay from the start will ensure that one location will see heavy use and demonstrate the value to other regions of utilizing the app.

This app will be of great benefit to fishers in the field, as it will:

- Identify saltwater fishing regulations
- Provide images of various species for identification to let fishermen know in real time if a fish is in season at their location, catch limits, size limits, bag/vessel limit, and more
- Include maps of attendant DLNR designated boating and recreation zones
- Provide special announcements

The app will be of great benefit to decision makers or conservation organizations, as it will:

- Capture catch data
- Document the extent of non-commercial fisher activity
- Aid enforcement (fishers can directly inform the DLNR Division of Conservation and Resources Enforcement (DOCARE) if an enforcement need is observed)

In turn, data will be analyzed by DLNR to assist in determining the effectiveness of existing fisheries management and potentially identify the appropriateness for new rules and regulations, such as size limits, catch limits, gear restrictions, and management areas.

Developing the App:



The app development will involve significant community, fishermen, and research outreach. It will also require a sequence of phases and request for feedback at each phase. The team partners will be responsible for bringing the community together to provide the required product feedback. The creation of the app will be outsourced to an app-developer expert. The time to develop the app is approximately 40 weeks, with ample time needed in between each action to consult with the stakeholders.

The specific actions and leads for each are:

*Action 1. Subcontract app development company*

Lead: MM

MM will advertise for and hire a subcontractor (SC) to oversee app development. The SC will be part of the leadership team to ensure the needs of app development are met. Ideal candidates will be those that are on-island and can participate in meetings.

*Action 2: Leadership Team established and plans/schedule set*

Lead: MM

MM will establish a Leadership Team (LT), consisting of a representative from HFACT, CI Hawai'i, the DLNR Division of Aquatic Resources (DAR), SC, and MM. The LT can be expanded as necessary, but will at a minimum, include the identified partners.

The team will be led through a facilitated meeting to solidify goals; agree to the process; identify key community members, including fishermen, researchers, and non-profits; include determination of a schedule of events; and officially set roles and responsibilities. While much of this has been worked through in preparation for this grant application, it is necessary to reaffirm and modify based on new developments and award timing.

While statewide input will be solicited, a heavy emphasis will be placed on including key representatives from Maunalua Bay, and most of the engagement meetings will focus on the Bay.

*Action 3. Kick-off scoping and brainstorming meeting*

Lead: MM

MM will organize and facilitate a kick-off scoping and brainstorming meeting based on the output of Action 2. In addition to the Leadership Team (LT), identified community members will be invited. The group will be split into two: researchers, and fishermen. Both groups will be led by MM through an exercise designed to elicit key information.

For the researcher group, participants will:

1. Determine what data is needed for effective fishery stock management;
2. Identify what data currently exists;
3. Rank what gaps exist between 1 and 2;
4. Determine which gaps are critical, and which are important but not critical.

For the fishermen group, participants will:

1. Identify what data they currently share;
2. Determine what data they are willing, and unwilling, to share;
3. Provide what assurances they need (e.g. data protection) to feel comfortable sharing.

The groups will reconvene and share the output from their breakouts. Discussions will take place around any conflicts between the two groups, namely if the researchers/managers have critical needs that fishermen are not willing to provide. The discussion will revolve around how can that data be obtained, or

Month 6-7	Action 7: Application development	SC
Month 7-8	Action 8: Quality assurance	SC
Month 9-10	Action 9: Software deployment and support	SC
Month 10-12	Action 10: Stakeholder training	LT

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 tasks will be monitored and led by Malama Maunalua’s Executive Director. In-person reviews will take place on at least a monthly timeframe.

In addition, the Malama Maunalua Board of Directors will be informed of all activities on a monthly basis. The Board consists of eight leaders from the community and will serve as a second level of quality assurance and evaluation.

Meetings will include a review of the process with leading managers and researchers to assess that the work is being undertaken in an accurate and effective manner.

In each case, recommendations for improvements will be made, as necessary. The Executive Director will then follow-up to ensure they are implemented as intended to ensure an overall high-level of quality.

And finally, quality assurance of the app will be included in the workplan for the SC, with Alpha and Beta applications assessed, with bugs repaired, prior to publication.

4. The overall measures of effectiveness for this project are:

Month 1-3

- 1 subcontract signed with an app development company;
- 1 kickoff meeting held with Leadership Team
- 1 meeting held with fishermen
- 1 document provided for the SC to begin app development

Month 4-6

- 1 meeting with fishermen and researchers on app interface
- 1 document provided to SC on interface needs

Month 7-9

- Alpha version of app shared with team

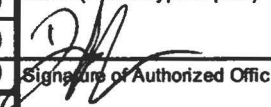
Month 10-12

- 1 Completed and operational app
- 2 meetings held with fishermen and researchers detailing how to utilize the app

## BUDGET REQUEST BY SOURCE OF FUNDS

Period: July 1, 2020 to June 30, 2021

Applicant: \_\_\_\_\_ Malama Maunaloa

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	22,000			
2. Payroll Taxes & Assessments	4,145			
3. Fringe Benefits	3,855			
<b>TOTAL PERSONNEL COST</b>	<b>30,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>B. OTHER CURRENT EXPENSES</b>				
1. Airfare, Inter-Island	0			
2. Insurance	0			
3. Lease/Rental of Equipment	0			
4. Lease/Rental of Space	0			
5. Staff Training	0			
6. Supplies	0			
7. Telecommunication	0			
8. Utilities	0			
9 Contracting	213,900			
10. Indirect	24,390			
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
<b>TOTAL OTHER CURRENT EXPENSES</b>	<b>238,290</b>			
<b>C. EQUIPMENT PURCHASES</b>	<b>0</b>			
<b>D. MOTOR VEHICLE PURCHASES</b>	<b>0</b>			
<b>E. CAPITAL</b>	<b>0</b>			
<b>TOTAL (A+B+C+D+E)</b>	<b>268,290</b>			
<b>SOURCES OF FUNDING</b>		Budget Prepared By:		
(a) Total State Funds Requested	268,290	Doug Harper	808.285.7509	
(b) Total Federal Funds Requested	0	Name (Please type or print)	Phone	
(c) Total County Funds Requested	0		1-27-20	
(d) Total Private/Other Funds Requested	0	Signature of Authorized Official	Date	
<b>TOTAL BUDGET</b>	<b>268,290</b>	Doug Harper, Executive Director		
		Name and Title (Please type or print)		

## BUDGET JUSTIFICATION - PERSONNEL SALARIES AND WAGES

Period: July 1, 2020 to June 30, 2021

Applicant: \_\_\_\_\_ Malama Maunalua \_\_\_\_\_

POSITION TITLE	FULL TIME EQUIVALENT	ANNUAL SALARY A	% OF TIME ALLOCATED TO GRANT REQUEST B	TOTAL STATE FUNDS REQUESTED (A x B)
Executive Director	1	\$93,000.00	16.13%	\$ 15,000
Director of Science and Planning	1	\$64,600.00	23.22%	\$ 15,000
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
<b>TOTAL:</b>				<b>30,000</b>

**JUSTIFICATION/COMMENTS:**  
 The Executive Director will oversee the entire project, while the Director of Science and Planning will be the primary individual organizing the logistics of meetings, and therefore is tasked with a greater percentage of FTE.

# BUDGET JUSTIFICATION - EQUIPMENT AND MOTOR VEHICLES

Period: July 1, 2020 to June 30, 2021

Applicant: \_\_\_\_Malama Maunalua

DESCRIPTION EQUIPMENT	NO. OF ITEMS	COST PER ITEM	TOTAL COST	TOTAL BUDGETED
None			\$ -	
			\$ -	
			\$ -	
			\$ -	
			\$ -	
<b>TOTAL:</b>				

**JUSTIFICATION/COMMENTS:**

DESCRIPTION OF MOTOR VEHICLE	NO. OF VEHICLES	COST PER VEHICLE	TOTAL COST	TOTAL BUDGETED
None			\$ -	
			\$ -	
			\$ -	
			\$ -	
			\$ -	
<b>TOTAL:</b>				

**JUSTIFICATION/COMMENTS:**

## BUDGET JUSTIFICATION - CAPITAL PROJECT DETAILS

Period: July 1, 2020 to June 30, 2021

Applicant: \_\_\_\_\_ Malama Maunaloa

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: 2018-2019	FY: 2019-2020	FY: 2020-2021	FY: 2020-2021	FY: 2021-2022	FY: 2022-2023
PLANS	None	None	N/A	N/A	N/A	N/A
LAND ACQUISITION	None	None	N/A	N/A	N/A	N/A
DESIGN	None	None	N/A	N/A	N/A	N/A
CONSTRUCTION	None	None	N/A	N/A	N/A	N/A
EQUIPMENT	None	None	N/A	N/A	N/A	N/A
<b>TOTAL:</b>						
<b>JUSTIFICATION/COMMENTS:</b>						

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

Applicant: \_\_\_\_\_ Malama Maunalua

Contracts Total: 548,960

	<b>CONTRACT DESCRIPTION</b>	<b>EFFECTIVE DATES</b>	<b>AGENCY</b>	<b>GOVERNMENT ENTITY</b> (U.S. / State / Haw / Hon / Kau / Mau)	<b>CONTRACT VALUE</b>
1	2018 City and County Grant in Aid	Oct 2017-Sep 2018	City and County	City and County	111,394
2	2019 City and County Grant in Aid	Oct 2018-Sep 2019	City and County	City and County	122,660
3	2020 City and County Grant in Aid	Oct 2019-Sep 2020	City and County	City and County	124,906
4	2019 State Grant in Aid	July 2019-June 202	DLNR	State of Hawaii	100,000
5	2020 Marine Education and Training	Oct 2019-Sep 2020	NOAA	Federal	15,000
6	Fish Habitat Partnership Grant	July 2019-June 202	FWS	Federal	75,000
7					
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**IV. Financial**

Organization	Expense	Category	Unit Cost	# of Units	Total Amount
Malama Maunalua	Staff	Salary			30,000.00
HFACT	Staff	Subcontract	15,000.00	2.00	30,000.00
App developer		Subcontract			
	Kick off and technical specification		20,000.00	1.00	20,000.00
	App Designer		10,000.00	1.00	10,000.00
	UI/UX Developer		10,000.00	1.00	10,000.00
	Angular Developers		20,000.00	2.00	40,000.00
	Engineers		20,000.00	4.00	80,000.00
	Quality Assurance Team		15,000.00	1.00	15,000.00
	SSL Cert and Microservices		6,500.00	1.00	6,500.00
	Database Cost		200.00	12.00	2,400.00
<b>Subtotal:</b>					<b>248,900.00</b>
<b>Indirect</b>				<b>.10</b>	<b>24,890.00</b>
<b>Total</b>					<b>268,290.00</b>



**Budget**

1. The applicant shall submit a budget utilizing the enclosed budget forms as applicable, to detail the cost of the request.
  - a. Budget request by source of funds ([Link](#))
  - b. Personnel salaries and wages ([Link](#))
  - c. Equipment and motor vehicles ([Link](#))
  - d. Capital project details ([Link](#))
  - e. Government contracts, grants, and grants in aid ([Link](#))
  
2. The applicant shall provide its anticipated quarterly funding requests for the fiscal year 2021.

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Grant
\$67,072	\$67,073	\$67,072	\$67,073	\$268,290

3. The applicant shall provide a listing of all other sources of funding that they are seeking for fiscal year 2021.
  - National Fish and Wildlife Foundation
  - Atherton Family Foundation
  - Omidyar Foundation
  - National Oceanic and Atmospheric Administration Marine Education and Training Grant
  - City and County Grant in Aid
  - Cooke Foundation
  
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.
 

Malama Maunalua is a 501(c)(3) non-profit and therefore does not receive state or federal tax credits.
  
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 2021 for program funding.
  - 2018 City and County Grant in Aid
  - 2019 City and County Grant in Aid
  - 2020 City and County Grant in Aid
  - 2019 State Grant in Aid
  - 2020 NOAA Marine Education and Training
  - 2020 Fish and Wildlife Service Fish Habitat and Partnership Grant
  
6. The applicant shall provide the balance of its unrestricted current assets as of December 31, 2019.

**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.

Malama Maunalua has been addressing the science and management of Maunalua Bay and its watersheds since 2006. Since its inception, it has had numerous successes and achievements, including:

- MM has created an on-line database for scientific and management documents related to Maunalua Bay. It is a first of its kind for the Bay.
- MM creates hands-on restoration opportunities for over 2,000 volunteers annually. In 2017, there were over 7,000 volunteer hours dedicated to restoration efforts in the Bay. Furthermore, core volunteers spend an average of 500 hours a year monitoring the worksites and updating the data for the Habitat Restoration Program.
- MM has made significant progress at maintaining IAA at one of the three most highly infested areas in the Bay, 28 acres of nearshore habitat at Paiko Beach, through monthly large-scale community restoration events. Research shows that the removal of the IAA allows for the sediment to flow to the open ocean, thereby promoting the return of native algae and seagrass.
- In 2009-2011, MM and The Nature Conservancy were awarded a \$3.4-million NOAA grant to implement large-scale removal of invasive alien algae in Maunalua Bay. This was one of approximately 50 awards out of 800 proposals in the country. The project met all of its objectives on time and on budget. As a result of this project's success, NOAA awarded MM the Environmental Heroes Award.
- In 2012, MM was awarded the one of only 46 (and the only award in Hawaii) Urban Waters grants by the Environmental Protection Agency to install major demonstrations of best practices run-off reduction methods at Koko Head District Park (in partnership with the City & County of Honolulu Departments of Urban Forestry and Environmental Services) and at Koko Marina Shopping Center.
- In 2009-2010, MM was awarded and implemented a grant from the Hawaii Department of Health to develop a plan for the Wailupe Watershed.
- MM has been recognized for our work, including C&C Good Neighbor Award and the Betty Crocker Award.
- MM has managed multiple grants awarded by the Hawaii Community Foundation, including the Wallace Alexander Gerbode Foundation, Harold K.L. Castle Foundation, and the Atherton Family Foundation among others.
- MM has over 7 years of experience in leading community invasive algae removal, such as proposed in this Grant Activity. In addition, MM has developed and implemented maintenance and monitoring protocols to produce meaningful science regarding the effectiveness of the program.
- MM is viewed as a leader in the community on decisions involving the Bay. Our staff is involved with numerous regional committees including Scenic Highways, PacIOOs advisory group, Hawaii Conservation Alliance Watershed Snapshot, Maunalua Recreational Advisory Council, plus attends neighborhood board meetings and others gatherings as needed.
- MM is strong partners with groups and academia in the region, including Hui Nalu, Polynesian Voyaging Society, Livable Hawaii Kai Hui, Hawaii Kai Chamber of Commerce, Fishpond Heritage Center, Division of Aquatic Resources, Hawaii Pacific University, Kapioloni Community College, University of Hawaii, National Oceanic and Atmospheric Institute, Conservation International Hawai'i, and the Nature Conservancy.

**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.

Malama Maunalua will not require any facilities for the implementation of this project. Where space is needed for meetings or workshops, MM will work with partners to secure available space. MM is in the process of securing office space, which may provide space for community meetings and workshops. But in any event, MM will rely on partner conference rooms as it has done successfully in the past.

MM also has a storage unit in Hawaii Kai and one at the Thompson residence in Niu Valley should they be needed.

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

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

The Executive Director of Mālama Maunalua, Doug Harper, will be the overall lead for the grant implementation. Mr. Harper will be overseeing the actions of Director of Science and Planning (DSP), Pam Weiant. The ED will meet monthly, at a minimum, with the DSP and contractors to assess progress and challenges, make modifications as necessary to successfully implement the project.

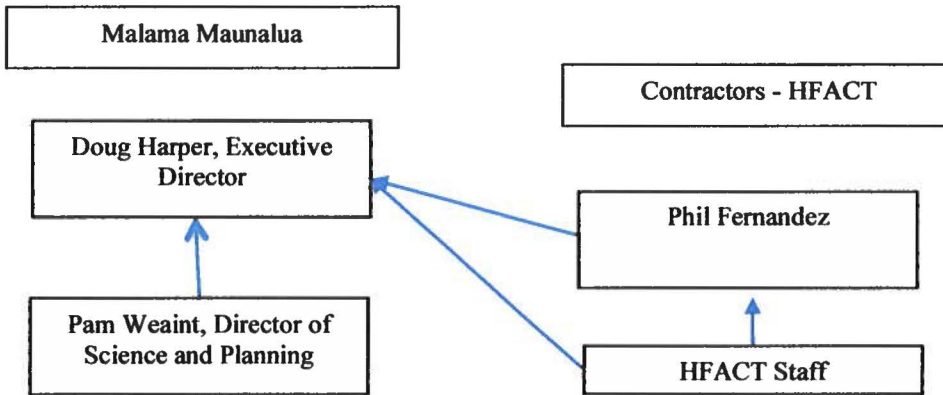
The ED and the DSP are both already on staff and have a track record of successes. Their Curricula Vitae are attached.

The main contractor:

Phil Fernandez, HFACT President. (Matt Ramsey will be the representative from CI Hawai'i, but his involvement is independently funded.) His Curricula Vitae is attached.

**2. Organization Chart**

Mr. Harper will serve as the overall lead of the project. Pam Weiant, who will be assisting Mr. Harper as a staff member with MM, will report directly to him. HFACT will be the main organizational contractor (a separate contractor will do app development) on the project. Phil Fernandez will report to Mr. Harper, who will ensure that all tasks meet project needs. Further, a staff member from HFACT will be assigned to assist. That staff will report to Mr. Fernandez, as well as to Mr. Harper.



**3. Compensation**

Mālama Maunalua  
Executive Director: \$93,000  
Director of Science and Planning: \$60,000  
Habitat Restoration Coordinator: \$42,000

**VII. Other**

**1. Litigation**

There is no active or pending litigation against Malama Maunalua, its staff, or its Board of Directors.

**2. Licensure or Accreditation**

Not Applicable

**3. Private Educational Institutions**

The grant will not be used by a private educational institution.

**4. Future Sustainability Plan**

A key partner in the project is the State of Hawai‘i’s Department of Land and Natural Resources, Division of Aquatic Resources (DAR). DAR has expressed a strong desire to see the app developed, and once the app is completed, it will be handed over the DLNR for their maintenance. A design component of the app

will be to minimize need for continual maintenance, so the costs to DAR post-app completion will be limited.

## **DOUGLAS R. HARPER**

3445 Edna Street • Honolulu, HI 96815 • (808) 285-7509 • DHarper@malamamaunalua.org

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### **Selected Qualification Highlights**

- Over 20 years experience in community planning and resource management, 10 of which focused in the Pacific
- Technical and general background in Pacific climate change risk reduction
- Principles of planning for island biodiversity conservation
- Ridge-to-Reef resource management in a culturally and locally sensitive manner
- Skilled in resource management problem solving

### **Selected Accomplishments**

- **Planning/Management**
  - Co-coordinator of NOAA's Habitat Focus Area ridge-to-reef initiative to protect and restore native habitat. Initiative has secured over \$3 million in funding and is working on linked terrestrial and near-shore restoration in West Hawaii.
  - Coordinates NOAA's Sentinel Site Program managing a network of watersheds to restore traditional practices, restore habitat integrity and adapt to climate change. Focus is Hawaii with two locations identified by President Obama as exemplary examples of community-led partnership initiatives addressing climate change.
  - Served as a liaison to communities seeking advice on Coastal Marine Spatial Planning and was NOAA's Office for Coastal Management's point of contact on the subject.
  - Created a redevelopment plan and helped lead redevelopment efforts in American Samoa post-2009 tsunami.
  - Led training exercises in Hawai'i and Suncheon Bay, South Korea on Coastal Marine and Spatial Planning;
- **Project and Program Management**
  - Created strategic planning documents for the American Samoan Coastal Management Program, NOAA's Coastal Storms Program, Sentinel Site Program, Habitat Focus Area, and American Samoa's Planning Division.
  - Coordinate NOAA's Sentinel Site Program's Hawai'i Cooperative. Organize and lead a team of federal, state, and community scientific and management organizations to address climate change and resilience in Hawai'i.
  - Coordinate NOAA's Habitat Focus Area. Identify management solutions and scientific needs to address habitat degradation and climate change impacts in West Hawai'i. Lead a multi-sectoral team addressing the issues, working to translate needs between the groups.
- **Legal and Policy**
  - Reviewed the legal strength of conservation management areas in American Samoa.

- Assisted with the legal filings of a court case protecting critical habitat in American Samoa.
  - Assisted with the revision of Hawaii's Ocean Resource Management Plan, Hawaii's Climate Change Policy, American Samoa's Rose Atoll Monument request and a process review of its permitting system.
  - Developed American Samoan regulatory recommendations for improved redevelopment post-2009 tsunami.
  - Reviewed and recommended changes to the American Samoa Coastal Management Program's code.
  - Drafted a policy white paper for NOAA's National Marine Sanctuaries Office on Bioprospecting.
- **Community Engagement**
    - Created and led a successful large multi-organizational and community-based climate change resilience planning effort.
    - Facilitated risk assessments for several Hawaiian and American Samoan communities.
    - Organized and led numerous community meetings related to ecosystem management. The community agreed to undertake .
    - Co-led the Pacific Resilience Forum, a web-based Pacific-focused series bringing together managers, researchers, and experts to share management lessons and science on planning related topics.
    - Developed community-driven strategies for environmental and community resilience activities in the face of climate change impacts, hazard identification and assessment, and resource management.

## **Work History**

2017-Current	Malama Maunalua Executive Director, Honolulu, HI
2010-2017	Senior Coastal Planning Specialist The Baldwin Group/NOAA, Honolulu, HI
2008-10	Territorial Planner American Samoa Government, Pago Pago, AS
2007-08	Environmental Planner American Samoa Government, Pago Pago, AS
2004-07	Coastal Management Specialist Perot Systems/NOAA, Washington, D.C.

## **Education and Training**

B.S.	Environmental Studies University of Kansas, 1999
M.A.	Urban and Environmental Planning University of Kansas, 2002
J.D.	International and Environmental Law Emphasis University of Kansas School of Law, 2002

**PAMELA A. WEIANT**

808.927.0392 • pweiant@gmail.com • 5872 Haleola St, Honolulu, HI 96821

**EDUCATION**

**UNIVERSITY OF CALIFORNIA – SANTA BARBARA, Santa Barbara, California**

Ph.D., Interdepartmental Graduate Program in Marine Science, 2005

Thesis: A political ecology of marine protected areas: case of Cabo Pulmo National Park, Gulf of California, Mexico

**YALE UNIVERSITY, New Haven, Connecticut**

M.E.S., School of Forestry and Environmental Studies, 1996

Thesis: Defining meta-population dynamics of the West Indian Manatee (*Trichechus manatus*) in Florida

**VASSAR COLLEGE, Poughkeepsie, New York**

B.A., Geography, 1992 (Honors)

Thesis: The conflict within today's environmental movement: A study of PCB contamination of the Hudson River.

**CONSERVATION PROFESSIONAL/RESEARCH EXPERIENCE**

**Mālama Maunalua / Marine Program Manager**

**2014 – Present**

**Honolulu, HI**

Oversee the organization's marine strategies to align with the organization's priorities launched in 2014.

- Develop community-based planning strategy to engage the community of Maunalua Bay region to develop management recommendations for the conservation of Maunalua Bay.
- Provide scientific guidance to create appropriate management recommendation.
- Create the first repository of knowledge on science for Maunalua Bay in Excel and ArcGIS.
- Build partnerships by serving as point of contact on regional efforts including PACIOOS, Hawaii Conservation Alliance, Maunalua Bay Management Advisory Council.
- Build internal capacity by orchestrating volunteer and paid internships, and strengthening volunteer partnerships with schools and businesses.
- Participate in fundraising strategies including grant writing and reporting, and building relations with business with capacities to donate money.
- Routinely present at conferences, workshops and trainings, and special events.
- Attend professional development training and workshops on a regular basis.

**Mālama Maunalua / Land-Based Program Manager**

**2012 – 2014**

**Honolulu, HI**

Oversee the organization's community-based programs, with emphasis on the Pulama Wai Program that is focused on reducing the amount of land-based pollution to the ocean. Main duties include:

- Develop strategies to mobilize the community in East Oahu, including public and private elementary and high schools, local colleges and universities, clubs and associations, businesses, commercial centers, and neighborhoods.
- Oversee community restoration activities, including partner cultivation, pre-event planning, event support, and post-event wrap up.
- Develop and utilize scientific monitoring protocol to measure the effectiveness of our work.
- Oversee the development of MM's outreach and education initiatives, including the construction of curriculum to further MM's objectives at our partner schools and the organization's monthly newsletter.
- Network with partner agencies, organizations, and academic institutions to develop cutting-edge opportunities to further our mission.
- Assist with the grant writing, grant reporting, and strategic planning.
- Oversee a program of three FTE, 2-7 volunteers, and 25 core volunteer leaders.



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- Routinely present at conferences, workshops and trainings, and special events.
- Attend professional development training and workshops on a regular basis.

**The Nature Conservancy - Hawai'i / Special Marine Projects 4/09-8/12 Honolulu, HI**

- Led TNC's effort to become a sponsor of an In-lieu Fee Sponsor for Hawaii – the first in the state and the first for coral reef ecosystem in the country. Responsible for timely delivery of application; coordinated internal and external meetings; built relationship with government agencies that comprise the Interagency Review Team (IRT) members, and assisted Micronesia Conservation Trust in completing the application for the Guam ILF program.
- Continued to lead the marine ecoregional assessment for the main Hawaiian Islands by furthering partner planning efforts at the state and regional levels. Responsible for data sharing, outreach and education, the coordination of new partnerships, and the implementation of new on-the-ground conservation efforts.
- Helped to develop the program's Coastal Marine Spatial Planning effort. Coordinated with local government and non-governmental agencies; facilitated expert-driven place-based spatial efforts.
- Worked with Philanthropy Department on foundation proposals.

**The Nature Conservancy – Hawai'i / Statewide Marine Planner 1/06-3/09 Honolulu, HI**

- Oversaw planning component of program, including ecoregional assessment, conservation action plans, operational plans, strategic plans, and Geographical Information System.
- Worked with USFWS to create marine management plan for Offshore Islets.
- Served on committees (Land-based Pollution Local Action Strategy, Climate Change and Coral Disease Local Action Strategy, Offshore Islet Restoration Committee).
- Conducted special projects and assisted on marine monitoring at community-based project sites.
- Organized monthly marine bag lunches.

**University of California at Santa Barbara / Dissertation and Pre-Dissertation Research and Field Work**

- A political Ecology of Marine Protected Areas (MPAs) Case of Cabo Pulmo National Park, Sea of Cortez, Mexico (1/03-6/05). A baseline study to determine the effects of the MPA and tourism on the well-being of the participating community and the marine environment, with attention toward the history and politics of the area. Research funded by University of California Pacific Rim Grant and PADI Foundation. Research included: Interviewed stakeholders; documented local marine ecological knowledge; recorded commercial fish catch; monitored the health of the coral reef ecosystem; trained community members on social and biological monitoring methodology.
- Rapid Evaluation of the Duduli/Reregana MPA in Roviana Lagoon, Solomon Islands (4/02-3/03). Conducted a rapid evaluation on the Duduli/Reregana MPA by measuring changes in household livelihood strategies and inner lagoon marine resource use. Research funded by PADI Foundation. Interviewed stakeholders (local households and female marine resource users); Documented the local female marine ecological knowledge; Biological monitored the health of the inner lagoon reef (substrate, fish, invertebrates); and Trained community members on social and biological monitoring methodology.
- Roviana and Vonavona Lagoons Resource management Project, Western Province, Solomon Islands (4/01-6/02). Field researcher. Led project to assess early effects of community based marine closures on two mangrove-associated mollusk populations by comparing trends in abundance and size over time between control and experiment sites. Research funded by Packard Foundation. Trained community on research and monitoring methodology; Monitored eight sites over two

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seasons; Created GIS database; Oversaw four University Research Expedition Program volunteers; and Co-authored reports, papers, and grants. [www.anth.ucsb.edu/faculty/aswani/packard/](http://www.anth.ucsb.edu/faculty/aswani/packard/).

**University of California at Santa Barbara / Assistantships 9/00-6/02 Santa Barbara, CA**

- **Teaching Assistant:** Introduction to Environmental Studies (Environmental Studies 1); The Environment and Developing Countries (Environmental Studies/Anthropology 130).
- **Research Assistant:** Ecotourism and marine based conservation strategies; Relationship between marine protected areas and local food security; Effects of aquaculture on food security in low income food deficit (LIFD) countries.

**The Nature Conservancy – California / Conservation Planner 1/97-9/00 San Francisco, CA**

Co-led five ecoregion-based planning efforts (e.g. Central Valley and Sierra Nevada) and two landscape-based planning efforts (e.g. eastern San Diego Mountains); Synthesized and integrated ecological and land use data; Conducted expert interviews and workshops; Interpreted mapped information and documents; Prepared GIS maps and documents for internal/external use; Oversaw consultants, volunteers, and team progress; Presented TNC's ecoregional planning methodology at universities and conferences; and Created national rapid ecoregion-based planning guidelines.

**National Biological Service- The Sirenia Project / Field Researchers 6/95-9/95 Gainesville, FL**

The West Indian Manatee soft-release enclosure program, Banana River, Kennedy Space Center, FL. Research funded by NBS and the Edna Bailey Sussman Fund. Monitored behavior and feeding habits of 9 semi-captive and 25 free-ranging manatees; Conditioned and rehabilitated captive manatees for release; co developed sound release guidelines; co-wrote reports for science recovery team; assisted in monthly medical examinations; and Supervised 10 volunteers; radio-tracked. Photo identified, and monitored free ranging manatees.

**PRIVATE PROFESSIONAL EXPERIENCE**

**Strategic Environmental Planning LLC (StEP) / Founder 2012-present Honolulu, HI**

Provide consulting services to improve organizational and institutional strategic and natural resource planning, mainly with the focus to improve the health of the marine system. Some recent contracts include: developing Micronesia Conservation Trust's application to be selected Sponsor of an In Lieu Fee Program for the marine resources of Guam, and assisting public and private institutions in Oahu County to develop project-based STEM programs.

**Jocapa Products LLC / Co-Founder and CEO 2003-2007 Boulder, CO**

Company manufactured and sold award-winning keepsake board games - Gamesakes. Managed all areas of the company, including marketing, communications, public relations, sales, product design, and customer relations, and gained extensive experience in building a small company.

**JOURNAL PUBLICATIONS/PRESENTATIONS**

Weiant P. 2012. Generations Connected to the Sea, Washed Away by Sandy

<http://theblogaquatic.org/2012/11/19/generation-connected-to-the-sea-washed-away-by-sandy/>

Weiant P. 2012. The Political Ecology of Cabo Pulmo National Park, Gulf of California,

Mexico. Anthropologies Issue 15, The Baja California Issue.

<http://www.anthropologiesproject.org/2012/11/issue-15.html>

**Phil Fernandez**

75-796 Hiona Street

Holualoa, HI 96725

(808) 327-9758 - Home (808) 937-1040 - Cell

email phil@philfernandez.com

**Professional Experience**

2013 - Present

**Hawaii Fishermen's Alliance for Conservation and Tradition, Inc. – President**

Lead a state-wide fishermen's advocacy organization by coordinating through island representatives and interacting with State and Federal administrators and with the State Legislators. Appointed to sit and/or lead a number of federal and state natural resource committees, including:

**Hawaiian Islands Humpback Whale National Marine Sanctuary – Sanctuary Advisory Council (NOAA National Ocean Service)**

Council member filling the Fishing Seat (2010 to Present) Volunteer of the Year 2012, Chair of the Ad Hoc Offshore Development Committee, Member of the Research Subcommittee

**Fisher's Working Group & 30 by 30 Steering Committee – Division of Aquatic Resources, DLNR, State of Hawaii**

Represent HFACT and the larger Hawaii fishing community on fisheries matters subject to DLNR jurisdiction (2017 – present)

**State Marine & Coastal Zone Council – Hawaii State Office of Planning, DBEDT**

Represent the West Hawaii region on matters related to Coastal Zone Management, Special Management Areas and the State of Hawaii's Ocean Resource Management Plan. The Council operates under authority of HRS 205A-3.5. Chair of the Ocean Resource Committee (2011 to 2018), Council Vice-Chair (2018 to Present)

**Hawaiian Monk Seal Recovery Team – NOAA Pacific Islands Regional Office, NMFS**

As member of the Endangered Species Act and Marine Mammal Protection Act's species recovery team, assist, advise, and monitor the National Marine Fisheries Service on the implementation of the Monk Seal Recovery and Management Plan. (2014 to Present)

1996 - 2006

**Management Consultant, Self-employed, Camp Sherman, Oregon**

Consultant for manufacturing, food, and, agriculture companies, focusing on turnaround and troubled companies. Technical assistance provider for Oregon Department of Agriculture and Oregon Economic & Community Development Department (Representative clients: Coos Bay Trawlers Assc., Coquille Tribe Economic Development Council, Painted Hills Natural Beef)

1994 – 2004

**Chief Executive Officer & President, Janus Biosystems, Inc., West Lafayette, Indiana**

Specialty phospholipid development company for dermatological and *in vivo* therapeutic drugs

Prior to 1994

**Co-Founder & Chief Finance Officer, Integrated Manufacturing Engineering, Beaverton, OR**  
**Technology Business Management Consultant**

Cadic Inc., Beaverton, OR (Semiconductor Test Systems)

Magni Systems, Inc., Beaverton, OR (HDTV Broadcast Equipment)

**Director, Finance, Weitek Corp., Sunnyvale, CA (Graphics Co-processor Chips)**

**Acquisition Manager & Division Finance Manager, Tektronix Inc., Beaverton, OR (Computer Systems)**

**Director of Worldwide Marketing, GE/CALMA, Santa Clara, CA (Software Systems)**

**Manager, Marketing Planning and Research; Division Controller, Tektronix Inc., Beaverton, OR**

**Corporate Finance Analyst, Portland General Electric, Portland, OR**

### Disaster Services Experience:

- Since 2014      Volunteer - Disaster Services Finance – American Red Cross  
Disaster Cycle Services, Fairfax, Virginia
- Respond and deploy, as Assistant Director – Finance, as part of a Disaster Response Management Team
- Since 2012      Volunteer – American Red Cross  
Hawaii Chapter
- Senior Disaster Responder
- 2010 - 2012      Volunteer & Team Leader – Kailua-Kona Community Emergency Response Team (CERT)
- Lead a team of 35+ disaster response volunteers
  - Provide disaster preparedness presentations to neighborhood groups
  - Coordinate with Hawaii County Civil Defense Agency

### Disaster Deployment

Tropical Storm Iselle, Hilo 2014  
Cyclone Vongfong 2015  
East Iowa Floods, 2016  
Hurricane Harvey, Texas 2017  
Thomas Fire, Ventura and Santa Barbara, CA 2017  
Cyclone Gita, 2018  
Kilauea Volcano, Hilo 2018  
Hurricane Florence, North Carolina 2018  
Cyclone Yutu, 2018

### Education and Training:

Oregon State University  
BS (Economics, 1975)  
MBA (1976)

### Federal Emergency Management Administration:

ICS 100, 200 – Incident Command System (2010)  
ICS 700 – National Incident Management System (2010)  
**ICS 300 – ICS for Expanding Incidents (2011)**  
**ICS 400 – Advanced ICS for Complex Incidents (2011)**

### American Red Cross:

Fundamentals of the American Red Cross (2012)  
Disaster Assistance Team Basics (2012)  
Mass Shelter Simulation (2012)  
Shelter Operations (2012)  
Emergency Operations Center Liaison (2013)  
**Government Operations (2014)**  
Collaborating Essentials (2014)  
Disaster Services Finance Basics (2014)  
CAC Monitoring (2014)  
**Evaluating a Level III Control Environment (2014)**  
DSF Desktop Deployment Basics (2014)

### FCC:

Amateur Radio Operators License – WH6DWM

**(Bold = Advanced Training)**