# **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

Carole Takaha Cu

CAROLL TAKAHASHI, PRESIDENT

JANUARY 20, 2023 Date

AUTHORIZED SIGNATURE

PRINT NAME AND TITLE

T (0	10.1					
l ype of Gr	Type of Grant Request:					
	Capital					
Legal Name of Requesting Organization or Individual: Oceanit Research Foundation	Dba:					
Amount of State Funds Reque	ested: \$250,000	denie Diores				
Brief Description of Request (Please attach word document CLIMATE CHANGE TOOLKIT FOR HAWAI'I'S COASTAL youth with knowledge and tools to understand and adapt to Foundation would partner with a non-profit organization der social environments. Please see attached for more information	t to back of page if extra s COMMUNITIES is a pilot o climate change impacts dicated to helping our kei ation.	space is needed) t program design in our coastal co iki thrive in our ph	ed to empower our ommunities. The nysical, cultural and			
Amount of Other Funds Available: State: \$	Total amount of Stat Fiscal Years: \$_\$649,725	e Grants Recei	ved in the Past 5			
County: \$	Unrestricted Assets:					
Private/Other: \$	\$					
New Service (Presently Does Not Exist)	Existing Service	(Presently in (	Operation):			
Type of Business Entity:	Mailing Address:					
Type of Business Entity: 501(C)(3) Non Profit Corporation	Mailing Address: 828 Fort Street Ma	III, Suite 600	7:			
Type of Business Entity: 501(C)(3) Non Profit Corporation Other Non Profit Other	Mailing Address: 828 Fort Street Ma City: Honolulu	III, Suite 600 State: HI	Zip: 96813			
Type of Business Entity: 501(C)(3) Non Profit Corporation Other Non Profit Other Other Contact Person for Matters Involving this Applicat	Mailing Address: 828 Fort Street Ma City: Honolulu	III, Suite 600 State: HI	Zip: 96813			
Type of Business Entity: 501(C)(3) Non Profit Corporation Other Non Profit Other Contact Person for Matters Involving this Applicat Name: Caroll Takahashi	Mailing Address: 828 Fort Street Ma City: Honolulu tion Title: President	ull, Suite 600 State: HI	Zip: 96813			
Type of Business Entity: Type of Business Entity: 501(C)(3) Non Profit Corporation Other Non Profit Other Contact Person for Matters Involving this Applicat Name: Caroll Takahashi Email: Caroll Takahashi <ctakahashi306@gmail.com></ctakahashi306@gmail.com>	Mailing Address: 828 Fort Street Ma City: Honolulu tion Title: President Phone: (808) 383-1783	III, Suite 600 State: HI	Zip: 96813			

Authorized Signature

Name and Title

Date Signed



# CLIMATE CHANGE TOOLKIT FOR HAWAI'I'S COASTAL COMMUNITIES

# **PILOT PROJECT**

REQUEST	Oceanit Research Foundation (ORF) is seeking a grant-in-aid to conduct a pilot program targeting climate change and its impacts on Hawaii's coastal communities. The program would provide students with hands-on experiences as well as a toolkit that will provide a dynamic learning experience to help them develop the skills that are necessary to navigate climate change related issues as the stewards of tomorrow.				
GOAL 1	To empower students of all ages with scientific knowledge and experiential activities that will help them understand the severe prorelated to climate change and its effects on Hawai'i's coastal com				
	OBJEC	TIVES			
	1.1	Provide scientific information on climate change and its effects on our islands and coastal communities			
	1.2	Provide students opportunities for learning about climate change using a hands-on approach involving technological tools such as Artificial Intelligence (AI) cameras, drones etc.			
GOAL 2	To inst creativ	ill confidence and leadership skills that will enable participants to ely navigate options and solutions to adapt to climate change			
	OBJEC	TIVES			
	2.1	Identify tools and options that are current or may be available in the future to help communities adapt to climate change			
	2.2	Guide participants in selecting tools and options to explore, design, apply solutions as a team			
	2.3	In team projects, guide and encourage participants to be innovative, creative and inclusive in designing their projects and telling their stories about their experiences			

### **OVERVIEW** Network with organization(s) dedicated to helping students thrive in our physical, cultural and social environments. Facilitate conversations with organization(s) that will help to stir interest in pilot program, garner participation, and provide a framework for meeting goals and objectives. Engage people with expertise on climate change, impacts on coastal communities, adaptation tools and options and storytelling. Coordinate pilot project that would be participant-guided to achieve goals and objectives **DELIVERABLES** Report on pilot project Produce and make available video and / or written experience. **PROJECT TIME FRAME – 9 MONTHS** Months 1 and 2: Partner and coordinate with organization; facilitate contact with organizational network and set up teams Months 3 through 7: Information sessions, team formulation and • selection of adaptation strategies and project activity, incorporate technological tools (website, video, Al cameras, etc.), team activities Months 8 and 9: Finalize teamwork products, produce videos and finalize website, prepare final report **ORF SERVICES** Partner with organization to collaborate with and establish teams and programs Develop the scientific framework that is accessible to students and community, scalable across the state, with the ability to organically add to the domain knowledge of mitigating climate change Provide informational resources, including specialized speakers, climate change information, tools and strategies to adapt to climate change along coastal communities, ways to document participants story Introduce and empower participants with rapidly developing technological tools (Artificial intelligence, Machine learning, Data gathering, etc.,) along with the ability to collaborate across all stakeholders Facilitate and coordinate team activities Provide technical support, including AI cameras, drones, website development, etc.

- Guide and motivate participants to collaborate, maintain an innovation mindset, and develop an ability to access, understand, and reframe the problem
- Develop effective ways to tell "The Story" of the pilot program
- Submit regular and final reports

# CLIMATE CHANGE TOOLKIT FOR HAWAI'I'S COASTAL COMMUNITIES PILOT PROJECT

# **I**. CERTIFICATION

# **Certificate of Good Standing**



#### 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

#### OCEANIT RESEARCH FOUNDATION

was incorporated under the laws of Hawaii on 03/24/1995; 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 17, 2023

Nadinil flado

Director of Commerce and Consumer Affairs

To check the authenticity of this certificate, please visit: http://hbe.ehawaii.gov/documents/authenticate.html Authentication Code: 451596-COGS\_PDF-99350D2

### Declaration Statement of Oceanit Research Foundation Pursuant to Chapter 42F, Hawai'i Revised Statutes

The undersigned authorized representative of the applicant certifies the following:

- 1) The applicant meets and will comply with all of the following standards for the award of grants pursuant to Section 42F-103, Hawai'i Revised Statutes:
  - a) Is licensed or accredited, in accordance with federal, state, or county statutes, rules, or ordinances, to conduct the activities or provide the services for which a grant is awarded;
  - b) Complies with all applicable federal and state laws prohibiting discrimination against any person on the basis of race, color, national origin, religion, creed, sex, age, sexual orientation, or disability;
  - c) Agrees not to use state funds for entertainment or lobbying activities; and
  - d) Allows the state agency to which funds for the grant were appropriated for expenditure, legislative committees and their staff, and the auditor full access to their records, reports, files, and other related documents and information for purposes of monitoring, measuring the effectiveness, and ensuring the proper expenditure of the grant.
- If the applicant is an organization, the applicant meets the following requirements pursuant to Section 42F-103, Hawai'i Revised Statutes:
  - a) Is incorporated under the laws of the State; and
  - b) Has bylaws or policies that describe the manner in which the activities or services for which a grant is awarded shall be conducted or provided; and
- If the applicant is a non-profit organization, it meets the following requirements pursuant to Section 42F-103, Hawai'i Revised Statutes:
  - a) Is determined and designated to be a non-profit organization by the Internal Revenue Service; and
  - b) Has a governing board whose members have no material conflict of interest and serve without compensation.
- 4) The use of grant-in-aid funding complies with all provisions of the Constitution of the State of Hawaii (for example, pursuant to Article X, section 1, of the Constitution, the State cannot provide "... public funds ... for the support or benefit of any sectarian or nonsectarian private educational institution...").

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

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

Oceanit Research Foundation

(Typed Name of Individual or Organization)

Cawle Takakadu

January 20, 2023

(Signature)

(Date)

Caroll Takahashi

President

(Typed Name)

(Title)

## **Public Purpose**

The Oceanit Research Foundation (ORF) mission is to transform lives through education, and positive environmental and social change. The proposed pilot project is one of the efforts to realize the Foundation's mission.

The pilot project is a significant step in empowering students of all ages with the scientific knowledge and experiential activities that help them understand climate change and its impacts on Hawai'i's coastal communities. With the help of this grant, ORF will design, develop, and implement a pilot program and refine the process to scale successfully across the state of Hawai'i. Participants would be empowered with scientific knowledge and hands-on skills to understand and develop strategies to deal with climate change especially along Hawai'i's coastal communities. Further, the pilot program will be designed to instill confidence and leadership skills that will enable participants to creatively navigate options and solutions to adapt to climate change.

Services that would be supported by the grant include the following:

- Partnering with organization and work within its framework to conduct pilot program dedicated to helping students thrive in our physical, cultural, and social environments
- Developing a scientific framework that is accessible to the students and community, scalable across the state, with the ability to organically add to the domain knowledge of mitigating climate change
- Providing informational resources, including specialized speakers, climate change information, tools and options to adapt to climate change along coastal communities, and ways to document participants story
- Introducing and empowering participants with rapidly developing technological tools (Artificial intelligence, Machine learning, Data gathering, etc.,) along with the ability to collaborate across all stakeholders.
- Facilitating and coordinating team activities
- Providing technical support, including AI cameras, drones, website development, etc.
- Guiding and motivating participants to collaborate, maintain an innovation mindset, and develop an ability to access, understand, and reframe the problem
- Developing effective ways to tell "The Story" of the pilot program
- Providing administrative support including billings, progress reports and a final reports

# CLIMATE CHANGE TOOLKIT FOR HAWAI'I'S COASTAL COMMUNITIES PILOT PROJECT

# **II.** BACKGROUND AND SUMMARY

# 1. Description of Oceanit Research Foundation Background

ORF is a 501(c)(3) organization focused on positively impacting our community–and all of humanity–through lifelong learning, innovation curriculum development, community outreach, and STEM missions that benefit all learners, young and old. The core initiatives or ORF are built upon innovating new ways to impact learners with future-proof critical thinking, creative, and STEM skills such Computer Science, Coding, Artificial Intelligence, and more. Fundamental to these skills is a framework of team building and collaboration.

# 2. Goals and Objectives Related to This Request

**Goal 1**: To empower students of all ages with scientific knowledge and experiential activities that will help them understand the problems related to climate change and its effects on Hawai'i's coastal communities

#### **Objectives**

- 1.1 Provide scientific information on climate change and its effects on our islands and coastal communities
- 1.2 Provide students opportunities for learning about climate change using a handson approach involving technological tools such as Artificial Intelligence (AI) cameras, drones etc.

**Goal 2:** To instill confidence and leadership skills that will enable participants to creatively navigate options and solutions to adapt to climate change

#### **Objectives**

- 2.1 Identify tools and strategies that are current or may be available in the future to help communities adapt to climate change
- 2.2 Guide participants in selecting tools and strategies to explore, design, apply solutions as a team
- 2.3 In team projects, guide and encourage participants to be innovative, creative and inclusive in designing their projects and telling their stories about their experiences

## 3. Public Purpose and Need to be Served

The pilot project is a significant step in empowering students of all ages with the scientific knowledge and experiential activities that help them understand climate change and its impacts on Hawai'i's coastal communities. With the help of this grant, ORF will design, develop, and implement a pilot program and refine the process to scale successfully across the state of Hawai'i. Participants would be empowered with scientific knowledge and hands-on skills to understand and develop strategies to deal with climate change especially along Hawai'i's coastal communities. Further, the pilot program will be designed to instill confidence and encourage thinking skills that will enable participants to creatively navigate options and solutions to adapt to climate change.

# 4. Target Population to be Served

The immediate target population comprises the organization and its network of participants in this pilot project. As they share their knowledge and tell their story, the target population will expand to encompass their friends, 'ohana, neighborhoods and communities – everyone who is concerned about the impacts of climate change along our shores.

# 5. Geographic Coverage

Possible geographic coverage include coastal areas on O'ahu that have experienced significant coastal erosion and hazards. Further geographic coverage should afford easy and convenient access and parking, as well as high visibility to the general parking to peak public interest and conversations. The following are candidate locations

- Koʻolaupoko: Kaiona Beach Park (near Pahonu, Waimanalo Beach Park, Kualoa Beach Park, Kailua Beach Park near Kaelepulu Canal
- North Shore: Haleiwa Alii Beach Park, Sunset Beach Park
- West Shore: Makaha Beach Park, Pokai Bay Beach Park

# CLIMATE CHANGE TOOLKIT FOR HAWAI'I'S COASTAL COMMUNITIES PILOT PROJECT III. SERVICE SUMMARY AND OUTCOMES

# 1. Scope of Work, Tasks and Responsibilities

The scope of work that would be funded by this grant-in-aid include the following tasks:

- 1. Partner with organization and work within its framework to conduct a pilot program dedicated to helping students thrive in our physical, cultural, and social environments
- 2. Develop the scientific framework that is accessible to the students and community, scalable across the state, with the ability to organically add to the domain knowledge of mitigating climate change
- 3. Provide scientific informational resources, including specialized speakers, climate change information, tools and options to adapt to climate change along coastal communities, and ways to document participants story
- 4. Introduce and empower participants with rapidly developing technological tools (Artificial intelligence, Machine learning, Data gathering, etc.,) along with the ability to collaborate across all stakeholders.
- 5. Facilitate and coordinate team activities
- 6. Provide technical support, including AI cameras, drones, website development, etc.
- 7. Guide and motivate participants to collaborate, maintain an innovation mindset, and develop an ability to access, understand, and reframe the problem
- 8. Develop effective ways to tell "The Story" of the pilot program
- 9. Administer the project per funding requirements, including work plans, documentation, progress and final reports

# 2. Projected Timeline – 9 Months

#### Months 1 and 2

- Partner and coordinate with organization
- Facilitate interaction with organizational network to set up teams

#### Months 3 through 7

- Conduct information sessions that present science-based climate change adaptation strategies and incorporate technological tools, e.g. website, video, AI cameras, etc.
- Guide, monitor, and mentor team projects

#### Months 8 and 9

- Assist teams in telling their stories
- Finalize videos and website
- Prepare final report

## 3. Quality Assurance and Evaluation Plan

The quality assurance and evaluation plan includes specific outcomes and metrics to be evaluated as follows:

- Effectiveness of science and technological tools in obtaining and recording data
  - Quantitative assessment

     Do the technological and online tools achieve their purposes of providing a means to observe, record and document? What adjustments to technological and online tools need to be made to improve effectiveness?
  - Qualitative assessment
     Are tools easy to use by the instructors and students?
     What percentage of students and instructors are able to use the tools. What additional training and adjustments need to be made to facilitate use?
- Level of organizational and team participation over time
  - With organization, identify criteria to assess the level of interest and engagement over time.
  - Develop testing and other methods to gauge increased knowledge about the subject matter.

# 4. Measures of Effectiveness to be Reported to State Agency

ORF will submit the following to measure the project's effectiveness.

- Work plan to the expending agency for review and input
- Monthly progress reports based on work plan and quality assurance and evaluation plan. Effectiveness criteria to include:
  - Status of tasks and participation levels
  - Percent completion
  - Adjustments needed to complete project
  - Documentation of meetings and significant communications
- Final report identifying participants, summarizing activities and evaluating effectiveness of project in meeting goals and objectives

# CLIMATE CHANGE TOOLKIT FOR HAWAI'I'S COASTAL COMMUNITIES PILOT PROJECT IV. FINANCIAL

# BUDGET REQUEST BY SOURCE OF FUNDS

Period: July 1, 2023 to June 30, 2024

#### Applicant: Oceanit Research Foundation

BUDGET	Total State	Total Federal	Total County	Total Private/Other
OATEGORIEG	(a)	(b)	(C)	(d)
A. PERSONNEL COST				
1. Salaries				
2. Payroll Taxes & Assessments				
3. Fringe Benefits				
TOTAL PERSONNEL COST	37,500			
B. OTHER CURRENT EXPENSES				
1. Contractual	212,500		2	
2. Insurance				
3. Lease/Rental of Equipment				
4. Lease/Rental of Space		ũ.		
5. Staff Training				
6. Supplies				
7. Telecommunication				
8. Utilities				
9				
10				
11				
12				
13				
14				
15				
17				
10				
10		2		
TOTAL OTHER CURRENT EXPENSES	212,500			
C. EQUIPMENT PURCHASES				
D. MOTOR VEHICLE PURCHASES				
E. CAPITAL				
TOTAL (A+B+C+D+E)	250,000			
		Budget Prepared	Bv:	
SOURCES OF FUNDING				
(a) Total State Funds Requested	250,000			
	200,000	U Caroli Takahashi Name (Dease type or print)		
(b) Total Federal Funds Requested				
(c) Total County Funds Requested				
(d) Total Private/Other Funds Requested		Signature of Authorized Official Da		
		Caroll Takahashi, Exec	utive Director	
TOTAL BUDGET	250,000	Name and Title (Please	e type or print)	

#### BUDGET JUSTIFICATION - PERSONNEL SALARIES AND WAGES Period: July 1, 2023 to June 30, 2024

#### Applicant: Oceanit Research Foundaton

POSITION TITLE	FULL TIME EQUIVALENT	ANNUAL SALARY A	% OF TIME ALLOCATED TO GRANT REQUEST B	TOTAL STATE FUNDS REQUESTED (A x B)	
				\$ -	
	il.			\$ -	
		$(C_{2})$	IE	\$ -	
		000		\$ -	
				\$ -	
				\$ -	
USTIFICATION/COMMENTS:					

#### BUDGET JUSTIFICATION - EQUIPMENT AND MOTOR VEHICLES

Period: July 1, 2023 to June 30, 2024

Applicant:

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

DESCRIPTION	NO. OF	COST PER	TOTAL	TOTAL	
OF MOTOR VEHICLE	VEHICLES	VEHICLE	COST	BUDGETED	
			\$-		
			\$-		
			\$-		
			\$ -		
			\$-		
TOTAL:					
JUSTIFICATION/COMMENTS:					

Application for Grants

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

Period: July 1, 2023 to June 30, 2024

Applicant:

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: 2021-2022	FY: 2022-2023	FY:2023-2024	FY:2023-2024	FY:2024-2025	FY:2025-2026
PLANS						
LAND ACQUISITION						
DESIGN	ta	00	LC2	able	-	
CONSTRUCTION						
EQUIPMENT						
TOTAL:						
IUSTIFICATION/COMMENTS:						

## 2. Anticipated Quarterly Funding Request for FY 2024

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Grant
\$50,000	\$100,000	\$100,000	-0-	\$250,000

## 3. Other Sources of Funding Being South for FY 2024

The Foundation is not seeking other sources of funding for this project.

## 4. Listing of State and Federal Tax Credits Granted in Prior Years, and Possible Future State and Federal Tax Credits for Capital Project

ORF has no tax credits granted in prior years and no possible future tax credits for Capital Projects.

# 5. Listing of All Federal, State and County Government Contracts, Grants and Grants-In Aid in Prior Three Years and for Program Funding in FY 2024

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

Ap	plicant: Oceanit Research Foundation	Contracts Total:	649,725		
	CONTRACT DESCRIPTION	EFFECTIVE DATES	AGENCY	GOVERNMENT ENTITY (U.S./State/Hawaii/ Honolulu/ Kauai/ Maui County)	CONTRACT VALUE
1	Pathway to Purpose Innovation (PSPI) project for Governor Emergency Education Relief (GEER) for Grant Work based Learning Program	Fiscal Year 2021	Department of Education	State of Hawai'i	\$449,725.00
2	Altino Grants In Aid	Fiscal Year 2018	Department of Education	State of Hawai'i	\$200,000.00

# 6. Balance of Unrestricted Current Assets As of December 31, 2022

There are no unrestricted current assets as of December 31, 2022.

# CLIMATE CHANGE TOOLKIT FOR HAWAI'I'S COASTAL COMMUNITIES PILOT PROJECT

# V.

# **EXPERIENCE AND CAPABILITY**

## 1. Necessary Skills and Experience

Oceanit Research Foundation is a 501(c)(3) organization focused on positively impacting our community–and all of humanity–through lifelong learning, innovation curriculum development, community outreach, and STEM missions that benefit all learners, young and old. The Foundation's core initiatives are built upon innovating new ways to impact learners with future-proof critical thinking, creative, and STEM skills like Computer Science, Coding, Artificial Intelligence, and more.

Via Social Utilization of Resource for the Future, or SURF, the Oceanit Research Foundation, hopes to be part of an evolution in our State's standard school curriculums. We hope to shift learning towards future skills. We do this by creating fundamental system change through teacher and education transformation. The educators who learn from SURF workshops and other events will become advocates for seeding Design Thinking, Computer Science, and Artificial Intelligence superpowers in our students of tomorrow. Through curriculum evolution, we will weave these superpowers into courses and classes that have not truly innovated in decades. Educators will lead the charge to empower students to pursue new disciplines never before taught in Hawai'i schools. These educators and collaborators will create the next generation, who in turn will launch and lead our future economy.

Examples of the Oceanit Research Foundation Projects are as follows:

• Aloha Al is a collaborative infrastructure/service for students to use as they learn the fundamentals of machine learning, deep learning neural networks, and computer vision. Oceanit developed the Aloha Al Network to put the power of novel Al capabilities into the hands of students and teachers. Designed to be student-friendly yet, but industrial strength, the Aloha Al Network consists of three parts: Toolbox "edge" hardware devices that are setup locally, in depth training and eLearning tools from Oceanit experts, and cloud platform services to process captured data in a shareable, collaborative way. Aloha Al's edge system allows student users to learn about, develop, and build simple machine learning models for object detection.

Through a collaborative dashboard, students share their learnings and build new custom dashboards or mobile and web applications. For example, students can use Aloha Al's object detection capabilities to tally the number of people in the school library to answer questions like, how many people use the library on an average daily basis or what is the busiest time of day/week/month.

Aloha Al has other built-in object detection models that allow students to tally the number and and types of vehicles used at their school such as cars, trucks, motorcycles, and buses. This counting and identification data can be analyzed by students to estimate the carbon footprint of transportation at their school, or optimize their parking assignments, or even to redesign the school's parking lot and thru-traffic systems. As students progress, they can learn to build their own custom detection models.

Aloha AI is the most recent program of the three core programs. Launched in 2020, Oceanit has recently created the first installation of the Aloha AI at Waipahu High School and will soon launch a second installation at the Kamehameha Schools Kapalama Upper campus.

• Altino is a revolutionary coding platform which Oceanit has championed since 2017 to bring creative problem-solving skills and mindsets to all K-12 schools in Hawai'i and

beyond. Altino autonomous cars can use a multitude of programming languages— Android, Arduino, Python, and C++—that can be effectively utilized to make codelearning interactive, inspiring, and fun.

Computer science and coding are not only 21st century career skills; they are pathways to improved critical thinking, collaboration and problem-solving skills. For educators and students, Altino is an engaging and fun way to learn in the familiar context of driving a car. Since 2017, Oceanit has trained over 550 teachers from almost 200 schools using Altino. Approved by the Hawaii Department of Education, Altino is a PDE3 approved 3-day, 3-credit course for educators which covers coding as well as lesson plan development to incorporate coding into any subject areas, like history, social studies, English, art, and even PE.

### 2. Facilities

The administrative headquarters for the Oceanit Research Foundation is the Oceanit main office located at 828 Fort Street Mall, Suite 600, Honolulu, Hawai'i. In that the Foundation's actual work is conducted in classrooms and the outdoors, there is no need to secure other facilities.

# CLIMATE CHANGE TOOLKIT FOR HAWAI'I'S COASTAL COMMUNITIES PILOT PROJECT

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# VI.

# PERSONNEL: PROJECT ORGANIZATION AND STAFF

# 1. Proposed Non-ORF Specialists, Their Qualifications, and Project Tasks

ORF has no paid staff and will seek the services of outside specialists. The following lists the consultant specialists, their qualifications and project tasks. Training will be ongoing as needed.

Non-ORF Specialist	Qualification	Project responsibilities
Berna Senelly	Senior Regulatory and Community Lead	Project coordinator and manager, responsible for all aspects of the proposed project
		Interface with organization
Linyan Goo	Coastal Engineer	Engineering and science advisor
Catherine Hanna	Civic Engineer	Creative engagement with partner and pilot project teams
Mark Kimura	Al Scientist and Senior Software Engineer	Design and implementation of AI and other technology tools
Ravi Pare	Design Thinking Strategist	Develop approaches that encourage critical and innovative thinking and team building
James Yehambaram	Videographer and Storyteller	Creative director

# 2. Organization Chart

### Climate Change Toolkit for Hawai's's Coastal Communities Pilot Project Organization Chart



# 3. Compensation

ORF has no paid employees or staff and will seek services of non-ORF specialists.

# CLIMATE CHANGE TOOLKIT FOR HAWAI'I'S COASTAL COMMUNITIES PILOT PROJECT OTHER

## 1. Litigation

ORF has no pending litigation to which we are a parting, and has no outstanding judgment.

### 2. Licensure or Accreditation

ORF has no special qualifications, including but not limited to licensure or accreditation relevant to this request.

### 3. Private Educational Institutions

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

# 4. Future Sustainability Plan

ORF plans to seek funding from the National Oceanic and Atmospheric Agency (NOAA) to expand the program to a statewide level so that young people on al islands have access to the climate change toolkit for coastal communities.