

Applicant Napili Bay & Beach Foundation  
Inc.

## 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

Pat B. Lindquist  
AUTHORIZED SIGNATURE

Pat B. Lindquist, President  
PRINT NAME AND TITLE

1/7/2020  
DATE

# NAPILI

*Bay and Beach Foundation*

*PO Box 10823  
Lahaina, HI 96761*

January 7, 2020

Chairman Dela Cruz and Honorable Members  
Senate Committee on Ways and Means  
State Capitol, Room 208  
Honolulu, HI 96813

Napili Bay and Beach Foundation (NBBF), in partnership with Napili Surf and Napili Shores resorts, has been working on replacing old concrete public access stairs at south end of Napili Beach, with a well-engineered and more resilient structure. The Hawaii State Legislature was supportive of our FY 2020 Grant in Aid application, which resulted in a \$75,000.00 award. Mahalo nui loa for that help.

We must now apply for a FY2021 Grant in Aid to get the job done. Here's why: a King Tide combined with prolonged South swell action in June, July and August 2019, completely obliterated the old stair structure due to extreme beach erosion/coastal headland erosion. The shift to Winter swells for past couple of months has brought sand back into the area, but the cycle will repeat, as it always does, and the underlying structures and headland are damaged beyond repair or non-existent.

In September, we met with an architect and coastal geologist to evaluate the damage at the site and consider best alternatives for new path/stairs, with public safety and coastal erosion as key factors.

## Outcomes:

- we need to move the stairs a bit more mauka, tucked back where they won't be as exposed to incoming waves => means a longer and modified path at top of headland
- the beach shower which has been at the top of these stairs for more than 25 years, also must be removed due to its location where the path to stairs now needs to be relocated. Further, evidence on the path makai of shower indicates that it is also being damaged by erosion and causing coastal erosion due to an old drainage system – creating an accident 'waiting to happen'.

These two factors will result in greater scope of work than originally envisioned => a greater amount of money to get the job done.

To date, the architectural plans are in place, with structural engineer's construction drawings in process. These planning phases of the project are being funded by money donated by Napili Surf and Napili Shores resorts, with project planning/management provided by NBBF, pro-bono.

But, the necessary changes to scope of work on construction means \$75,000.00 won't cover the costs to get the essential work done, AND, we have just been notified that **if** we can't get the stairs and essential parts of the path that must be replaced completed with the original Grant in Aid, plus any additional money we can raise, **no money** will be awarded. **We were also advised that if we are awarded additional Grant in Aid funds that allow completion of the new path, stairs and shower removal and relocation, we can use the \$75,000.00 as part of completing the whole project.**

Pat B. Lindquist, President  
Norm Runyan, Director

Gregg Nelson, Vice-President  
Jamie Lung-Ka'eo, Director

Nane Aluli, Secretary  
Dana Reed, Director

We are requesting your support again during the upcoming legislative session, as we submit a FY 2021 Grant in Aid that will allow us to provide safe public access to Napili Beach...all located on State lands. Maintenance of the structures and land lease costs will be continued by Napili Surf and Napili Shores resorts as has been the case for more than 30 years.

Sincerely,



Pat B. Lindquist, President , Napili Bay and Beach Foundation

cc: Senator Roz Baker ; Senator J. Kalani English; Senator Gilbert Keith-Agaran

*We are a non-profit organization formed to protect and improve the health of Napili beach and bay, tax ID # 20 5394259*



I.

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:

Napili Bay a Beach Foundation, Inc.

Amount of State Funds Requested: \$ 137,000.00

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

We are requesting supplemental funds to remove & replace public beach access stairs at Napili Beach, Maui. The scope of work had to be increased, on advise of coastal geologist, after extensive coastline erosion in late June & July, 2019.

Amount of Other Funds Available:

State: \$ 75,000.00

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

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

Private/Other: \$ 30,000.00

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

\$ 75,000.00

Unrestricted Assets:

\$ 11,317.63

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

Type of Business Entity:

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

Mailing Address:

P.O. Box 10823

City: Lahaina

State: HI Zip: 96761

Contact Person for Matters Involving this Application

Name: Ms. Pat B. Lindquist

Title: President

Email: pblindquist@gmail.com

Phone: 650-303-3150

Federal Tax ID#:

State Tax ID#

[Redacted]

[Redacted]

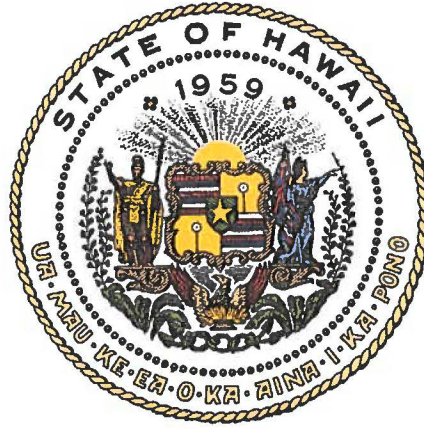
Pat B. Lindquist  
Authorized Signature

Pat B. Lindquist President  
Name and Title

1/7/2020  
Date Signed



I.1.



## 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

**NAPILI BAY AND BEACH FOUNDATION INC.**

was incorporated under the laws of Hawaii on 08/01/2006 ; 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: December 19, 2019

Director of Commerce and Consumer Affairs

I. 2.

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

Napili Bay & Beach Foundation, Inc.  
(Typed Name of Individual or Organization)

Pat B. Lindquist  
(Signature)

Jan. 7, 2020  
(Date)

Pat B. Lindquist,  
(Typed Name)

President  
(Title)

**§42F-102 Applications for grants.** Requests for grants shall be submitted to the appropriate standing committees of the legislature at the start of each regular session of the legislature. Each request shall state:

- (1) The name of the requesting organization or individual; *Napili Bay & Beach Foundation, Inc.*
- (2) The public purpose for the grant; *Public access to Napili Beach*
- (3) The services to be supported by the grant;
- (4) The target group; and
- (5) The cost of the grant and the budget. [L 1997, c 190, pt of §3; am L 2014, c 96, §6]

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Hawaii State Grant-in-Aid (GIA)  
Fiscal Year 2021 Application

**II. Background and Summary**

1. Napili Bay and Beach Foundation, Inc. (NBBF) is a 501 (c) 3 non-profit organization formed in late 2006 with a mission of protecting and improving the health of Napili beach and bay. We are community-based with solid participation and support from the resorts and businesses comprising the Makai neighborhood at Napili. Major accomplishments of our Foundation since incorporation include: fund-raising, planning and implementation of two large infrastructure remediation projects; helping create and underwrite an excellent DOH-approved Water Quality monitoring program here, and obtaining a HI State FY 2020 Grant in Aid to help defray costs of replacing public beach access stairs.

2. The goals and objectives of the project proposed here align well with two of the "17 Sustainable Development Goals" established by the United Nations to guide development plans and actions for a better world future, i.e. Goal 13: Climate Action, and Goal 11: Make ... human settlements ... resilient and sustainable.)

The specific goals of this project are to complete construction of the well-engineered and more resilient public beach access stairs and path, the plans for which were started in 2019. The original scope of work (as outlined in our proposal for Grant in Aid #OCS 19.2773) was to install beach access stairs which were designed and engineered to be more resilient to coastal erosion driven by rising sea levels. At the beginning of 2019, our proposal stated – "Future heavy wave action has high potential to tear them away from the beach altogether, as has happened to several sea walls, revetments, and other coastline structures on West Maui, where El Nino effects have been particularly destructive". The old structure had been severely damaged during 2017, but was able to be used carefully until June, 2019. At that time, King Tides and a south swell completely tore the structure apart and off the headland (see photos VII.5.a,b, and c). The erosion damage in Summer of 2019 caused us to consult again with a coastal geologist and an architect and decide to slightly relocate the proposed new stairs for better protection from south swell wave actions, and to remove the old beach shower and the path in that area due to evidence that erosion is causing structural failure there (see plans VII.6.a and b).

Overall objectives for this project are to continue to provide safe public access to the many residents and Maui visitors who enjoy Napili Beach, and to do so in a way that creates a structure that is more resilient to effects of rising sea levels due to climate change (UN Goals 13 and 11). Hawaii State legislators supported the scope of work as proposed in January 2019 through award of a Grant in Aid for \$75,000.00, In May, 2019, setting a good example of the State's intentions to take actions on the Sustainable Development Goals outlined by the United Nations (UN Goal 13 and 11). However, this very good news was quickly followed by the King Tide and South Swell events of June/July 2019, which led to the necessary changes in plans and increased scope of work and costs.

3. This project meets the need of providing safe beach access to the public, for both residents and visitors. Napili is a very popular West Maui sandy beach, used by an estimated 200,000 people a year (~50,000 local residents and ~150,000 visitors). Diminishing public access to Maui's beaches has raised concerns from island residents who have seen coastlines developed by large resorts, sometimes blocking the fisherman's paths and recreational paths they used to follow to fishing spots and to the beach.

Applicant: Napili Bay and Beach Foundation, Inc.

The sheer numbers of residents and guests who use this access point to Napili Beach requires having a well designed, engineered and constructed structure. Not to do so will mean further damage to the coastal headland, which, in the face of Climate Change effects results in collateral damage to the reef life at Napili Bay due to degraded water quality (see photos VII.6. d). Further, taking no action will also lead to a beach unsafe for many recreational activities and to property loss during seasonal high tides and/or storm wave action events (see photos VII.5. e, f, and g) (UN Goal #13 and #11). Napili's beach and clear waters are also major drivers to our economic success: in FY 2018, Napili beach community contributed \$5.76M in HI State GET and TAT taxes.

Resorts on Napili Bay were developed in the early to mid 1970's and two public access paths were put in place in parallel with this development period. Napili beach resort guests have access from their properties onto the beach, but the many local residents and visitors who love the sandy beach, snorkeling, paddle boarding, surfing, swimming, and other ocean activities 'get to' the beach on this path/stairway at the Makai end of a hui road, Napili Place, or at a second access point mid-beach. Keeping Napili beach accessible to the public has been respectfully built into Napili's culture, as can be seen with this example:

- These stairs were put in place in the early 1990's in order to facilitate safe public access to Napili Beach from the elevated headland on the south end of the beach. As tourist guest numbers increased, the foot traffic and travel up and down the headland contributed to erosion, while increasing the safety concerns involved with accessing Napili Beach for recreation. Community members leased the State property and installed the stairs, as well as a beach users' shower, and have maintained both for ~ 25 years. The resort closest to this structure has paid for all the water used by public (their guests have a different beach shower) for all these years. A meter installed at the time of construction showed as of 2016, that 1 million gallons of water have been used, and paid for, as a public service by this resort.

Continuing to keep Napili beach accessible to the public is important to Napili's culture, but these structures are now showing severe signs of 'old age' and effects of old concrete materials and styles of construction. The option of simply closing off this heavily damaged public access point to the beach could be considered, but the community preference is to replace the unsafe stairs with a structure that is SAFER due to more modern engineering techniques and because it is built with newer materials that are more resilient to effects of climate change on the island coastline. (UN Goals 13 and 11)

4. The population to be served are many local West Maui residents and more and more tourists from nearby West Maui beaches that have suffered such severe erosion (e.g. Kahana, Honokowai) that there are no beaches left there. We are also getting visitors from other parts of Maui beach who have seen Napili beach rated as a 'beautiful beach and bay' in Travel magazines or on Travel websites. The people who have lived, worked, or visited Napili Beach regularly over many (20 or 30) years, have testified that the beach has never been so crowded and busy as it has been in the past two or three years. This makes replacing these damaged public access stairs more important than ever.

5. Napili Bay and Beach is on the northwest coast of Maui, in the Kahana watershed region of the Northwest Maui Priority Area, also designated in April 2015 as a Resilient Land and Waters Initiative site by DOI, EPA and NOAA. Napili beach is ~ 5 miles north of Ka'anapali beach, and is bordered on the north by Kapalua Beach. The GPS coordinates are 20° 59' 44.11" N, 156° 40' 00.82" W. Visitors to Napili Beach range from international tourists on vacation, to Maui residents.

Applicant: Napili Bay and Beach Foundation, Inc.

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

1. The Scope of Work encompasses (a) removal and replacement of public access stairs and installation of above grade path to top of stairs at south end of Napili beach. Please see supporting plans appended below (VII.6.b).

a. Soil Investigation: Soil samples of the headland area where new stairs will be installed has been contracted to Robert Gibbens, a licensed and bonded geotechnical consultant. This information on the subsurface conditions will be used to guide final design and construction of the new beach access stairs.

b. Design: Jeremy Stoddart, a licensed and bonded architect with Pili Design, Maui, has been contracted to develop best design for new path and stairs to the south end of Napili Beach from the existing public access path. "Best" is defined here as safest for all beach visitors and using materials which are more resilient to seasonal fluctuations in beach sand level, and DO NOT cause further coastal or beach erosion.

c. The Napili Bay and Beach Foundation members, in consultation with DLNR and Maui County, have reviewed and approved final conceptual design.

d. Scot Listavich, Structural Engineering LLC, is in process of preparing construction documents which will be used to obtain definitive construction cost estimates.

e. Chris Ondatje, Alliance LLC has provided cost estimates based on experience constructing similar structures on Maui coastline, according to engineering specifications and following DLNR & Maui County BMPS. NBBF Board is responsible for all necessary Maui County and State DLNR permits.

2. Pending successful approval of funding through this State Grant in Aid, we anticipate completion of these public access stairs and above grade path, during Fiscal Year 2021, working as weather allows. If we are also granted matching funds from Maui County budget, we will replace the ongrade path portion with Trex type deck walk to further 'lighten' the footprint on the headland. A three way partnership (State, County, and private sector) will be a good example of cooperation needed to replace old infrastructure with properly engineered, more resilient structures in locations that are State owned, but interface with private properties governed by County planning and permitting regulations.

3. In terms of Quality Assurance, all contractors hired for this project will be licensed and bonded firms with extensive experience performing many sensitive shoreline projects in conjunction with the DLNR OCCL. Hiring qualified contractors has worked very well for Napili Bay and Beach Foundation (NBBF) in previous infrastructure improvement projects. Further, NBBF will continue funding the ongoing Water Quality monitoring program by Hui O Ka Wai Ola, a program of Maui Nui Marine Resource Council, to ensure no negative impact of the new structure on Napili Bay's reef life.

One of the desired outcomes for this new stairway is that it is less prone to causing and being affected by undercutting/erosion damage due to beach erosion (seasonal and ongoing) processes. This is of utmost importance for safe public access to the beach as well as for protecting Napili coastal land and marine resources. (UN Goal 13) Photographs will be taken before construction, during construction, and upon completion, to document 'as built' condition. Further, construction drawings will be provided, with material specifications, to document 'as built' conditions.



Applicant: Napili Bay and Beach Foundation, Inc.

4. Effectiveness will mean: ability to safely convey public beach visitors to the south end of Napili Beach. We can provide photographs taken during Summer and Winter high tourist seasons for an agreed-to reasonable number of years following installation of this new structure. Effectiveness will also mean that the stairs are engineered to withstand wave forces and beach erosion to which they will be exposed, minimizing any loss of structural integrity. Photographs, twice yearly (Summer and Winter swells) can be submitted over the course of an agreed-to number of years.

**IV. Financial**

1. All Budget Request Forms (a – e) are inserted at end of this section IV. In addition, a more detailed cost estimate breakdown of the essential components of this project, for which we will use State GIA funding is at the end of the Budget Request Form section.

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
\$50,000.00	\$79,000.00	\$8000,00		\$137,000.00

3. All other sources of funding being sought in FY 2020/FY 2021:

NBBF has applied for \$130,000.00 in matching funding toward this project as a FY 2021 Community Budget Request from Maui County.

NBBF will apply for private foundation grants to cover cost of relocating and replacing existing public beach shower (\$16,000.00), and to repair any landscape damage caused by the project.

4. NBBF, a 501 (c) 3 non-profit foundation, has not received any state or federal tax credits other than being exempt from paying taxes on federal grant monies and private donations received and expended for projects which protect and improve the health of Napili beach and bay. NBBF has not applied for, nor do we anticipate applying for them for any capital project.

5. In 2019, NBBF was awarded a Grant in Aid of \$75,000.00 from Hawaii State Legislature for purposes of replacing the old concrete public beach access stairs to the south end of Napili Beach with a well engineered, more resilient stair structure. Subsequent erosion of beach and coastline has caused expansion the scope of work needed to make the access path and stairs more sustainable and less likely to cause or be damaged by further erosion.

A complete listing of our government grants/contracts with an asterisk by the ONE that is for funding this project, can be found on in the section on Financials, inserted at the end of Section IV of this application.

6. Our current assets consist of bank accounts at First Hawaiian Bank. Funds are used for operating expenses (liability insurance, bank and post office costs), and for program support (meeting matching obligations for Federal grants, creating educational materials, financing water quality monitoring and marine biology monitoring programs). The balance of unrestricted current assets as of 12.31.19 is \$11,317.63. Funds restricted to use on the new public access stair project =\$14,955.00.

IV. a.

## BUDGET REQUEST BY SOURCE OF FUNDS

Period: July 1, 2020 to June 30, 2021

Applicant:          Napili Bay and Beach Foundation, Inc.

BUDGET CATEGORIES	Total State Funds Requested (a)	Total Federal Funds Requested (b)	Total County Funds Requested (c)	Total Private/Other Funds Received* (d)
<b>A. PERSONNEL COST</b>				
1. Salaries	0	0	0	0
2. Payroll Taxes & Assessments	0	0	0	0
3. Fringe Benefits	0	0	0	0
<b>TOTAL PERSONNEL COST</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>B. OTHER CURRENT EXPENSES</b>				
1. Airfare, Inter-Island	0	0	0	0
2. Insurance	0	0	0	0
3. Lease/Rental of Equipment	0	0	0	0
4. Lease/Rental of Space	0	0	0	0
5. Staff Training	0	0	0	0
6. Supplies	0	0	0	0
7. Telecommunication	0	0	0	0
8. Utilities	0	0	0	0
9				
10 Soils engineer	0	0	0	7,500
11 Architectural Design/plans	0	0	0	11,000
12 Structural /Construction Drawings	0	0	0	6,500
13 Permits, SMA, SSA ROE	0	0	0	620
14 Project Planning/management **	0	0	0	25,000
15 Construction ***	137,000	0	130,000	0
16 Building permit				2,663
17				
18 * Private funds received				
19 ** Donation in kind from NBBF				
20 *** Construction costs above \$75K last year's GIA				
<b>TOTAL OTHER CURRENT EXPENSES</b>	<b>137,000</b>		<b>130,000</b>	<b>53,283</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>137,000</b>		<b>130,000</b>	<b>53,283</b>
<b>SOURCES OF FUNDING</b>		Budget Prepared By:		
(a) Total State Funds Requested	137,000	Pat B. Lindquist <span style="float: right;">650-303-3150</span>		
(b) Total Federal Funds Requested	0	Name (Please type or print) <span style="float: right;">Phone</span>		
(c) Total County Funds Requested	130,000	<i>Pat B. Lindquist</i> <span style="float: right;">1/9/2020</span>		
(d) Total Private/Other Funds RECEIVED	55,000	Signature of Authorized Official <span style="float: right;">Date</span>		
<b>TOTAL BUDGET</b>	<b>322,000</b>	Pat B. Lindquist, President		
		Name and Title (Please type or print)		





IV.2.

### BUDGET JUSTIFICATION - EQUIPMENT AND MOTOR VEHICLES

Period: July 1 2020 to June 30, 2021

Applicant: Napili Bay & Beach Foundation, Inc

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

JUSTIFICATION/COMMENTS:

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

JUSTIFICATION/COMMENTS:

# BUDGET JUSTIFICATION - CAPITAL PROJECT DETAILS

Period: July 1 2020 to June 30, 2021

III  
D.

Applicant: \_\_Napili Bay and Beach Foundation, ll

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
PROJECT PLANNING AND MGMT*	0	25000	0	0		
LAND ACQUISITION	0	0	0	0		
DESIGN and PERMITS**	0	30000	0	0		
CONSTRUCTION***	0	75000	137000	130000	<i>None</i>	<i>planned</i>
EQUIPMENT	0	0	0	0		
<b>TOTAL:</b>		<b>130000</b>	<b>137,000</b>	<b>130,000</b>		

**JUSTIFICATION/COMMENTS:**

\* Project planning & management costs have been donated, in kind, by NBBF  
 \*\* Design, soil & structural engineering & permit costs have been donated by 2 Napili resorts.  
 \*\*\* Construction costs will be covered by a) FY 19-20 GIA, b) FY 2020-21 GIA (this request).  
 A request to Maui County will be used (if granted) as needed.

*1/9/2020*



IV.e.

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

Applicant: Napili Bay and Beach Foundation, Inc.

Contracts Total: \$ 167,700.00

	<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	Replace outlet valve on desilting basin	2010-2012	NFWF/NOAA	U.S.	\$ 24,000.00
2	Ephemeral streambed cleanout/replant	2013 - 2015	NFWF/NOAA	U.S.	\$ 23,500.00
3	Ephemeral streambed cleanout/replant	2013-2015	HCF/NOAA	State/U.S.	\$ 20,200.00
4	Reduce pollutant runoff	2016-2018	NFWF/NOAA	U.S.	\$ 25,000.00
5	Replace public beach access stairs	FY 2020	HI Grant in Aid	State of Hawaii	\$ 75,000.00
6					
7					
8	NBBF has also received multiple non-government grant from local agencies , e.g. Tri Isle RCD, Alexander and Baldwin Foundation				
9	Honua Kai West Maui Benefit Fund, North Beach West Maui Community Fund.				
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Applicant: Napili Bay and Beach Foundation, Inc.

## **V. Experience and Capability**

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

Napili Bay and Beach Foundation has established a solid track record of identifying issues which threaten the health of the beach and bay at Napili, Maui, then raising federal and non-federal funds to mitigate these threats through infrastructure changes or by implementation of environmental monitoring programs. The Board members are comprised of local residents who are General Managers of the resorts along Napili Beach (who are very aware of the threats and issues addressing those threats), a retired engineer who brings technical expertise to the water quality and marine biology monitoring programs), and a retired Program Manager with science background who is capable of managing projects with professional contractors, federal and non-federal granting agencies, county and state department heads. Since 2011, we have

- replaced a non-functional outlet valve in a desilting basin above the bay,
- removed invasive streambed plants and restored with native plants
- funded and implemented DOH approved, ongoing water quality monitoring program for Napili Bay (2017 – present; renewed for 2020).
- funded and conducted offshore sand confirmation study (2018), beach profile and shoreline survey study (2019), benthic environmental assessment monitoring study (2019), and real time high resolution camera study of beach/wave action mechanisms (2019).

Details of these accomplishments:

1. Using 2011 funds from Federal grants, local granting agencies, and private donors, we successfully worked with Federal, State and County agencies to have a fully functional outlet valve designed and installed in Napili 4-5 desilting basin above the south end of Napili beach. The old outlet valve had disappeared in the open position, buried in silt, thus resulting in repeated runoff of heavily sedimented water into Napili Bay from 1993 to early 2011. A copy of the letter from David Goode, Dept. of Public Works Maui, attests to our success. (Supporting Document (S.D. 2.0)

2. A final summary report from the NFWF/NOAA grant (Fall, 2015) can be found as S.D. 3.0. This report captures results of our second major infrastructure project in which invasive Albizia trees, and shrubs were removed/replaced by native streambed plantings in the ephemeral stream makai of desilting basin, Napili 4-5. This project was funded by two Federal grants, and supported by our matching efforts and dollars.

3. Our initiation of a regular Water Quality monitoring program at Napili Bay, fostered development, under Dana Reed's able leadership, into a HDOH approved program (Hui O Ka Wai Ola) that operates at multiple sites on the West Coast and South Shore of Maui. NBBF continues to support all sampling at Napili Bay with private funds. <https://www.huiokawaiola.com>

4. A summary of results from the 2019 marine environmental assessment study conducted by "Rising Tide Engineering", under contract to NBBF. (S.D. 4.0)

For all of these projects, NBBF has worked with professional subject matter experts who bring the technical expertise needed for the projects undertaken.

Applicant: Napili Bay and Beach Foundation, Inc.

## **2. Facilities**

NBBF has no facilities of its own and no plan to secure facilities. The resort members of the Board of Directors provide space for team and community meetings and educational activities we sponsor.

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

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

Soil Engineering, Architectural and Structural Engineering consultants have been retained for design and construction drawings of new public access stairs, pathway changes and beach shower location changes. RFPs will be issued to construction firms with experience in working on projects at the shoreline, final choice of contractor to be responsibility of Napili Bay and Beach Foundation members. Napili Bay and Beach Foundation is providing project management expertise and will pay invoices using private donation funds, State Grant in Aid funds, and any other monies received for purposes of this project, up to the total cost of the project.

There will be no NBBF 'paid staffing': project staffing will be provided by the firms under contract. This is a model which has worked well for us in our previous, successful infrastructure improvement projects, as well as our projects to support restoration of Napili Beach:

- a. 2011 replacement of functional outlet valve and installation of grassed waterway at desilting basin, Napili 4-5. Arita Poulson, contractors.
- b. 2014 removal of invasive trees, shrubs from ephemeral stream to Napili Bay, and replacement with native streambed plantings. Convergent Conservation, contractor.
- c. 2018 offshore sand quantity and quality assessment. Rising Tide Engineering, contractor.
- d. 2019 beach profile, benthic environmental assessment, and beach mechanism studies. Rising Tide Engineering, contractor.

### **2. Organization Chart**

#### Board of Directors:

- Pat B. Lindquist, President – Program Manager (retired)
- Gregg Nelson, Vice-President – General Manager, Napili Kai Beach Resort
- Nane Aluli, Treasurer – General Manager, The Mauian
- Jamie Lung Ka'eo, Director – General Manager, Hale Napili
- Dana Reed, Director – Hui O Ka Wai Ola lead, Electrical Engineer (retired)
- Norm Runyan, Director – General Manager, Napili Shores Resort

#### Members at Large:

- Frederick Hidalgo – General Manager, Napili Sunset Beach Resort
- Tano Taitano – General Manager, Napili Surf Beach Resort
- Scott Ullrich – General Manager, Napili Surf Beach Resort (retired)

Applicant: Napili Bay and Beach Foundation, Inc.

### **3. Compensation**

NBBF is an all volunteer organization; there are no salaried positions. Requested funds will be used to compensate contractors, per terms of contract.

## **VII. Other**

### **1. Litigation**

No litigation past or pending.

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

- Project Planning and Management – Pat B. Lindquist (see resume attached, S.D.1)
- Architectural Design – Jeremy Stoddart, Pili Design+Build, LLC  
<http://www.pilidesignbuild.com>
- Scot Listavich , Structural Engineering, LLC  
<https://slsemaui.com>
- Robert Gibbens, Hawaii Geotechnical Consulting, Inc.  
<https://www.linkedin.com/in/robert-gibbens-p-e-80652664/>
- Chris Ondatje, Alliance LLC (licensed, bonded contractor in Maui) has provided initial cost estimates. 14 N Iwa Pl., Lahaina, HI 96761

### **3. Private Educational Institution**

Not Applicable

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

NBBF will provide yearly update photos of public using new structures during 2020, 2021, 2022.

NBBF does not expect further State funding for these structures beyond completion of construction, as described in the Scope of Work here.

### **5. Photos**

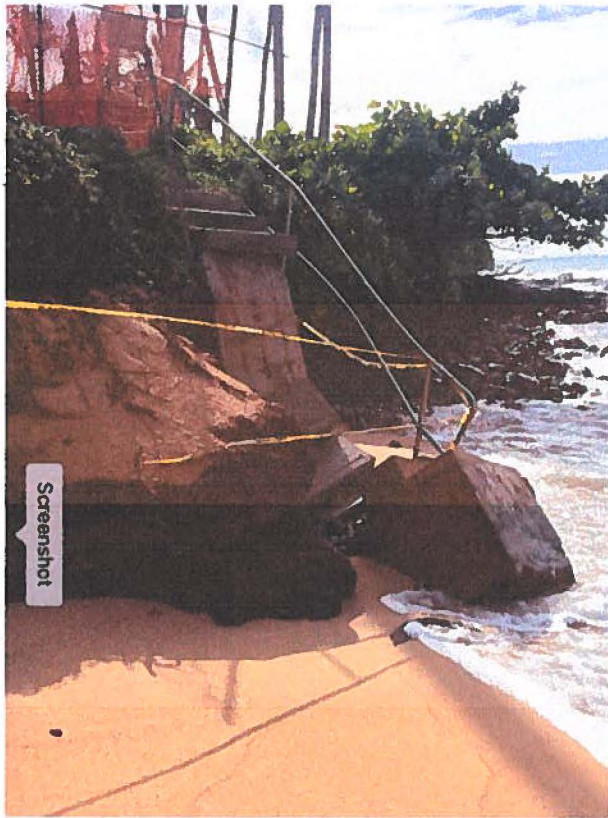
- a. Stairs in July, 2019, during South Swell and King Tide damage





Applicant: Napili Bay and Beach Foundation, Inc.

b. Stairs by end of Summer, 2019



c. Stair Debris close-up in Summer, 2019

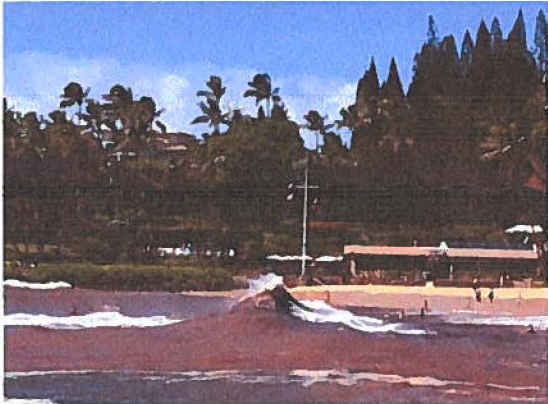
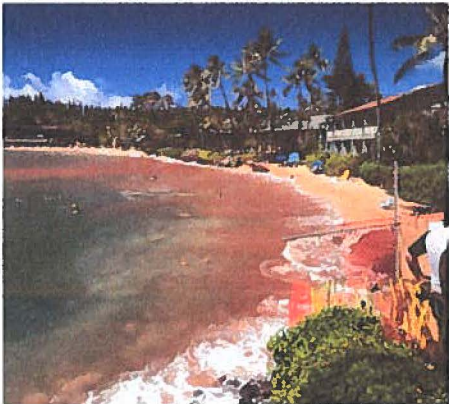




Applicant: Napili Bay and Beach Foundation, Inc.

d. Impact of erosion events on Water Quality at Napili, July 2019

# Coastal Erosion Impact on Water Quality, Summer 2019



e. Beach goes wondering how to get up the headland, July 2019

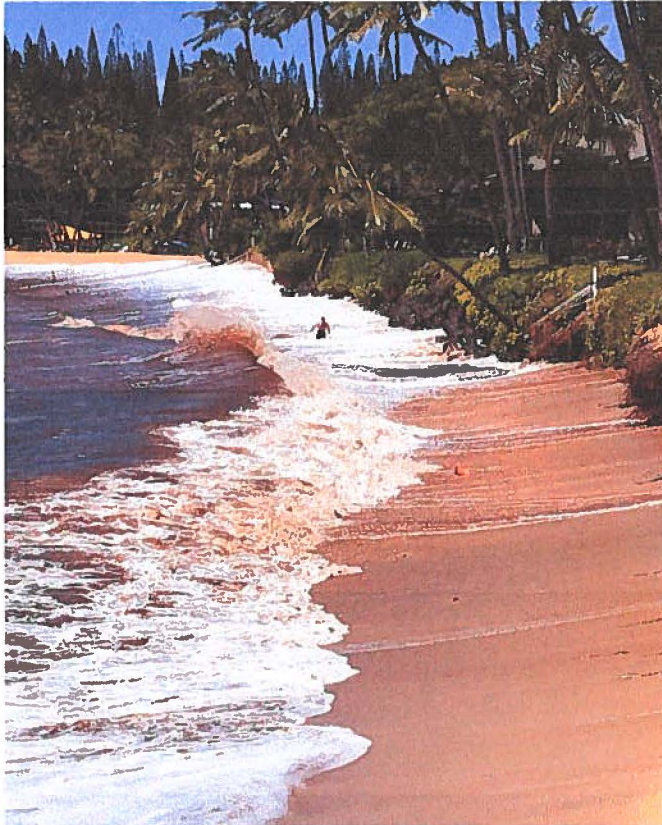


Applicant: Napili Bay and Beach Foundation, Inc.

f. Seriously eroded beach from south end, July 2019



g. Beach unsafe for recreational activities, Summer, 2019

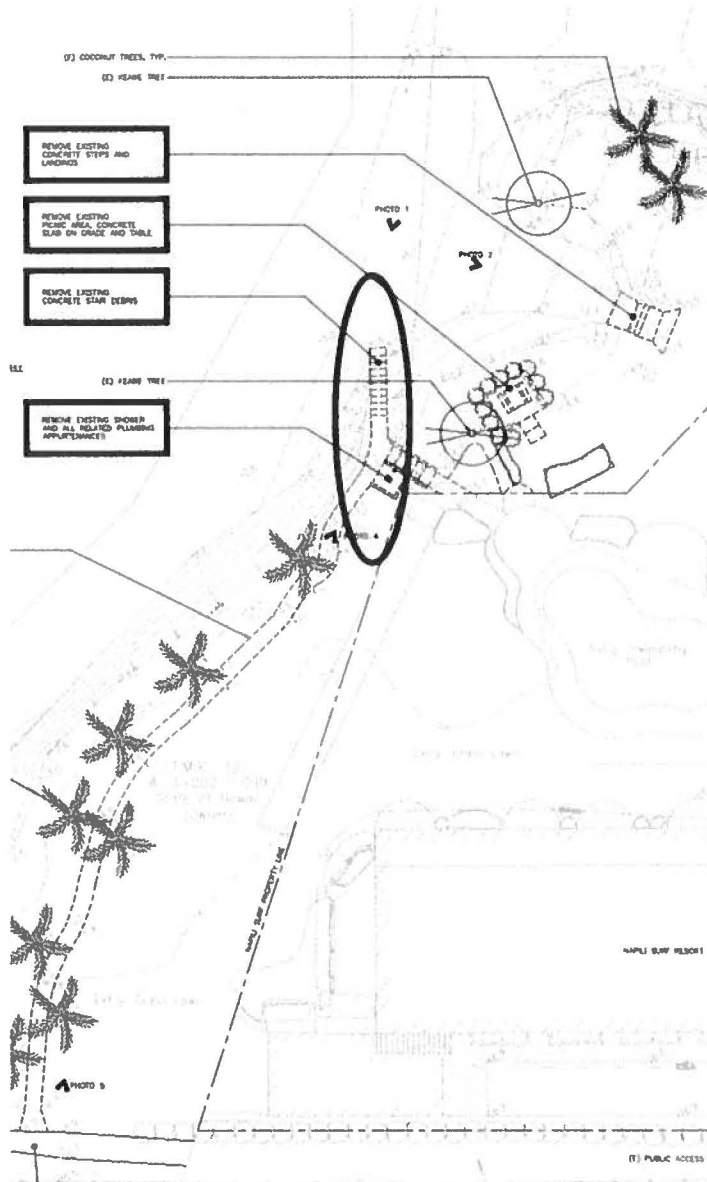




Applicant: Napili Bay and Beach Foundation, Inc.

### 6. Drawings/Plans

a. Architectural drawings, old path, stairs, shower (2019)







**Pat Brown Lindquist**  
1038 B Calle Sastre  
Santa Barbara, CA 93105  
Mobile: (650) 303-3150;  
Email: pblindquist@gmail.com

## **EXPERIENCE**

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Extensive experience in Research and Development organizations in roles of progressively increasing responsibility. Broad background in a variety of operational settings: non-profit and for-profit entities, international collaborative research projects, product development project teams, research administration programs/structures.

**December 2006  
- present**

**NAPILI BAY AND BEACH FOUNDATION, INC.  
President**

- Leading a community-based NGO in various projects to improve the health of Napili bay and beach, Maui. Work has included raising private funds, obtaining Federal and non-Federal grants, arranging contracts, administering grants over their life cycle, educating community members as to importance of making improvements to protect our coastal reef life, and other facets of running an active organization.

**September 1998  
- present**

**LINDQUIST BIOTECH CONSULTING  
Principal**

- Consulted with biotechnology and pharmaceutical companies as well as with other for profit and non-profit businesses with emphasis on project management training, project planning at strategic and tactical levels, and applied project management.

**1985 - 1998**

**GENENTECH, INC. So. San Francisco, CA  
Senior Project Manager (1/97 - 8/98)**

- Managed Development project team to:
  - Build effective extramural collaboration
  - Create streamlined project development plan
  - Create fast-track strategy for Phase II/Phase III transition
- Managed Project Managers in therapeutic area to:
  - Successfully present project strategies/plans to upper management
  - Keep projects on track, moving efficiently
- Led Department initiatives in breakthroughs in project management and increasing productivity

**Associate Director, Research Admin., Liaison to Roche (10/93-1/97)**

- Built solid interactive relationship with scientists and management of Roche's International R & D organization
- Facilitated interactions between project team members at Roche and Genentech
- Managed high visibility staff with varied operational roles to:
  - Streamline contracting processes
  - Create internet link for extramural reagent exchange program
  - Create relational database to manage multiple research administration functions
  - Write more effective reports
  - Revive intramural seminar program

**Resource Manager, Research (7/90 - 10/93)**

- With a major focus as staff to Vice-President of Research, created and implemented:
  - Effective Research Review process (scientific peer review)
  - Useful methods for tracking research projects
  - Rational space allocation for Research; relocation of Research organization into new Research center
  - Effective presentations of Research strategy and programs
- Streamlined operations for extramural Research seminar program
- Leadership team member for planning and implementing Research Directors' meetings

**Project Team Coordinator (8/88 - 7/90)**

- Managed four preclinical projects at various stages of development.

**Research Associate, Molecular Biology (3/85 - 8/88)**

- Molecular biology and mammalian cell culture research

**EDUCATION**

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<b>1982</b>	<b>San Francisco State University</b> Master of Arts, Cell and Molecular Biology
<b>1976</b>	<b>Sonoma State University</b> Bachelor of Arts, Biology

**PUBLICATIONS**

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- Fifteen published scientific articles in peer reviewed journals; list available on request.

VII - S.D. 2.0

ALAN M. ARAKAWA  
Mayor

DAVID C. GOODE  
Director

ROWENA M. DAGDAG-ANDAYA  
Deputy Director

Telephone (808) 270-7845  
Fax (808) 270-7955



COUNTY OF MAUI  
**DEPARTMENT OF PUBLIC WORKS**  
200 SOUTH HIGH STREET, ROOM NO. 434  
WAILUKU, MAUI, HAWAII 96793

RALPH NAGAMINE, L.S., P.E.  
Development Services Administration

CARY YAMASHITA, P.E.  
Engineering Division

BRIAN HASHIRO, P.E.  
Highways Division

September 29, 2011

Ms. Pat Lindquist  
Napili Bay and Beach Foundation, Inc.  
P. O. Box 10823  
Lahaina, Maui, Hawaii 96761

Dear Ms. Lindquist:

On behalf of the County of Maui Department of Public Works, I would like to take this opportunity to thank you and the Napili Bay and Beach Foundation for the time, effort, and work invested into the Napili 4/5 Outlet Modification project.

We also thank you for working with our Department, the Natural Resources Conservation Service and the West Maui Soil and Water Conservation District in developing solutions for mitigating storm runoff damage in the area.

The Department commends your organization's efforts in protecting neighboring downstream properties, our shoreline, and our reef areas. The installation of the educational sign near the project site will also inspire community members, and most especially the youth, to protect our natural resources by keeping our stream beds clean and clear. Congratulations!

Sincerely,

DAVID C. GOODE  
Director of Public Works

DCG:RMDA:jso  
s:\rowena\plindquist\_napili\_4\_5 outlet modification thanks





## Final Programmatic Report Narrative

**Instructions:** Save this document on your computer and complete the narrative in the format provided. The final narrative should not exceed ten (10) pages; do not delete the text provided below. Once complete, upload this document into the online final programmatic report task as instructed. **Please note** that this narrative will be made available on NFWF's Grants Library and therefore should provide brief context for the need of your project and should not contain unexplained terms or acronyms.

### 1. Summary of Accomplishments

In four to five sentences, provide a brief summary of the project's key accomplishments and outcomes that were observed or measured. This can be duplicative to the summary provided in the reporting 'field' or you can provide more detail here.

Our grant proposal included three long term conservation outcomes:

- a) Further reduction of sediment laden runoff into Napili Bay by stabilizing the badly eroded streambed, 'Napili Kahawai'
- b) Protecting and encouraging viability of coral reef benthic habitat at Napili Bay
- c) Educating community members as to best management practices regarding the streambed and the benthic habitat

a) We achieved the first outcome by cleaning out debris, removing all invasive woody plants that have been causing streambank/streambed erosion, and replanting these areas with native plants suitable for erosion control of streambank. Ongoing plant maintenance and weeding activities are being funded by Napili Bay and Beach Foundation (NBBF) with non-Federal money.

a & b) We know that the streambanks are no longer eroding, based on sediment/turbidity monitoring following some very heavy Winter storms in 2015. Those data were shown in an interim report (February, 2015), and new data gathered this Summer are shown in the Project Documents section of this final report, "P.D. 1 Nutrient – Napili Bay".

c) Through a training workshop for Napili resort staff members and posts on our Facebook page, we have educated the community regarding the relationship of damage to the streambed and resulting damage to the reef.

### 2. Project Activities & Outcomes

#### Activities

- Describe the primary activities conducted during this grant and explain any discrepancies between the activities conducted from those that were proposed.

a) We proposed to obtain necessary State and County permits, permissions from local landowners, and contract removal of all woody invasive, non-native plants from 410 linear feet of the ephemeral streambed we have called "Napili Kahawai" (Napili Stream, in Hawaiian). We proposed to either trim the very large Albizia trees (major cause of bank loading and erosion on southern streambank), or, if we could raise an extra \$9,000.00 of community funds, we would have the trees removed. The latter action was deemed a better outcome by our contractor and by Sustainable Resources Group International, Inc. (srgii), our consultants on the restoration plan for this stream bed.

We accomplished all of these actions, including raising the extra funds from the neighboring property owners and having the Albizia trees removed.

b) We proposed to expand the scope of our Water Quality (WQ) monitoring program so that levels of common nutrient runoff pollutants (ammonium, total phosphorus, nitrates/nitrites) for which Hawaii's Department of Health Clean Water Board (HIDOH CWB) has listed Napili as 'out of compliance' with Clean Open Coastal Water standards could be assessed.



This activity did not proceed as we had envisioned (twice yearly monitoring through Q3, 2015). It has, however, developed into a more robust program as a local group (Maui Nui Marine Council) has worked with HDOH CWB to develop standardized protocols, Quality Controls, and prepare volunteer training protocols. This will enable regular water quality (WQ) monitoring of these and other nutrient pollutants at more frequent intervals and at more sites, particularly in West Maui waters. By end of our grant cycle (August 20, 2015), thirty samples had been taken from 3 different locations in the bay, to help us establish baseline levels of nutrients which can cause damage to our coral reef habitat. Data from this work can be found in the Project Document Section of this report, "P.D. 1 Nutrient – Napili Bay" and provide us with a good baseline against which we can measure progress toward clean 'Open Coastal Water' standards set by HDOH and EPA. In this report, the Open Coastal Water standards that Napili Bay should achieve are shown by the yellow baselines on the Geometric Mean tables. What you can see is that we have more work to do for several of these parameters. Also note the large differences between DOH measurements and our measurements for Ammonium and Nitrates/Nitrites. Differences in sampling methodology are a known variable; further discussions as to possible reasons for these discrepancies are ongoing.

I am pleased to report that the equipment we purchased for turbidity, salinity, and pH testing is being used at twelve other monitoring sites on the West Coast of Maui. Dana Reed, our Water Quality project leader, is now the Chair of Maui Nui Clean Water Committee, and has also reported that our funding of the nutrient monitoring has provided a great beta test case upon which other such monitoring of Maui coastal waters will be built.

c) Our third goal was to educate community members as to best management practices regarding the streambed and our benthic habitat at Napili Bay. We proposed to achieve this through training workshops, or by providing scholarships to workshops being offered by West Maui Watershed Ridge2Reef program.

We presented a training workshop on May 6, 2015, attended by 14 staff members from Napili bay resorts, one BOD member from neighboring bay (Kahana) and 4 other Napili stakeholders. The curriculum was prepared and presented by myself, Tova Callender and Liz Foote. A flyer with purposes and outline of the workshop and a copy of the Powerpoint presentation I made can be found in the Project Documents (P.D. 2, 3) section of this report.

This workshop was well received by participants and has led to participants' offers of help for maintaining the streambed plantings and for monitoring WQ and marine biology in Napili Bay.

Our Facebook page has also become an effective educational tool (see further details in **Dissemination** section, below).

## Outcomes

- Describe progress towards achieving the project outcomes as proposed. and briefly explain any discrepancies between your results compared to what was anticipated.

As indicated above, our streambed cleanout/restoration of flora project was completed successfully and, to this date (18 months after completion), there have been no breakthrough muddy runoff events into the bay, even following some very heavy storms. We consider this a complete and successful achievement of our first proposed outcome.

Our water quality monitoring program achieved the goals of determining effectiveness of remediation to the streambed/streambanks as a means of mitigating sedimented runoff into the bay, onto the reef. Although several student training days were held, the best data were generated by a local adult who took the first training course we offered and then took the initiative to gather samples / assay them for turbidity. She was able to monitor after particularly heavy rainfall events that would have sent muddy runoff into the bay, in former years (we have photos back to 1993). Thus, our initial plan of training local high school students and



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doing the water quality monitoring twice yearly has been discontinued in favor of a more effective methodology which is more spontaneous, but 'owned by' a local WQ leader (Dana Reed) who receives a stipend provided by Napili Bay and Beach Foundation. What you can see in the data presented in this report is that the south end of Napili Bay continues to have the highest levels of turbidity, even though no muddy water is running into the bay. Several explanations that don't involve sedimented runoff are possible, and are being/will continue to be evaluated.

We also outlined and had initiated discussions with a WQ expert here in Maui, to expand the monitoring to include nutrient pollutants. That effort was overtaken by a larger effort on Maui to develop a more cohesive and comprehensive WQ monitoring program, described in the previous section, (b). We are very pleased with the results of this 'different approach', and are supporting our WQ coordinator's efforts in this regard. We anticipate that the broader program will involve local volunteers as the program grows. Our expectation is to continue to support this activity and future efforts to mitigate causative actions/agents, which can damage the reef here at Napili Bay.

- Provide any further information (such as unexpected outcomes) important for understanding project activities and outcome results.

The Water Quality results, in terms of turbidity/sedimentation after heavy storms has been dramatic enough to be able to say, WE HAVE IMPROVED THIS PARAMETER OF BAY HEALTH. However, HIDOH did not do WQ sampling at Napili bay for their 2014 report on impaired waters, so that part of this goal was not achieved.

However, we are not, at this time, able to make any scientific conclusions about improvements to the benthic habitat. We've seen positive signs (fish species not seen in Napili for a number of years; diversity in species, as observed by Fish Identification Network (FIN) volunteers, and fish keikis (babies). However, the time it takes and the amount of data needed to draw substantiated conclusions about changes to the health of Napili Bay's benthic habitat have not been achieved – really cannot be achieved in the less than two year period of this grant cycle. The data collected have been entered into REEF.org database, but our coordinator has also kept detailed records in an EXCEL spreadsheet, comparing current findings with those made in 2008 (AECOS). This spreadsheet can be seen in the Project Documents (P.D. 4) section of this report. Discussions on getting expert help for coral species identification have begun.

### **3. Lessons Learned**

Describe the key lessons learned from this project, such as the least and most effective conservation practices or notable aspects of the project's methods, monitoring, or results. How could other conservation organizations adapt similar strategies to build upon some of these key lessons about what worked best and what did not?

#### **Things we did WELL, which had a positive effect on outcomes:**

- We had an expert consultant carefully outline what needed to be done to remediate the badly eroded streambed/streambanks
- We had local experts do training of marine biology and water quality monitoring techniques
- We got VERY LUCKY to engage community members with a real love of the environment to head up the streambed restoration and our Water Quality and Marine Biology monitoring programs. The stipends we provide do not cover the amount of time and effort they put forth on behalf of our goal to protect and improve Napili Bay health, but hopefully they do demonstrate that we greatly value their contributions.

#### **Things we did, which ultimately worked, but took much more time/effort than anticipated:**

- Getting State Right of Entry permits. This required many meetings/conversations and pressure from other government agencies to finally get through the steps needed. Old baggage regarding who was responsible for which actions, infringements in the distant past threatened to 'hammer' the whole process. Our advice would be to keep your message / goals clearly out there, keep getting it out in front of the 'gate keeper', and don't be afraid to ask for support from other government officials who can see the merit of what you are trying to achieve. Secondly, be sure you plan enough lead time into the project so that the actual work can be achieved ... even with a long permitting time.



#### Things we wouldn't recommend to others, or repeat ourselves:

- Not plan for how plantings will be maintained over time – weeding doesn't appeal to many folks, and baby plants need lots of weeding and watering before they get established.
- Count on high school students to generate reliable data on marine life of various kinds. We learned that our efforts with them were GREAT in terms of raising their awareness/teaching them about marine life, but the data generated was not really reliable info for monitoring relative abundance of fish/other species, as a measure of reef health. For reliable data, our coordinator has involved Fish Identification Network adults, expert volunteers .

#### 4. Dissemination

Briefly identify any dissemination of project results and/or lessons learned to external audiences, such as the public or other conservation organizations. Specifically outline any management uptake and/or actions resulting from the project and describe the direct impacts of any capacity building activities.

The most effective information about our project/project results has been disseminated through our Facebook page. In the past few months, thanks to the networking help provided by Liz Foote and Tova Callender, our Facebook following has really grown – from about 70 people to over 400. We have told the dramatic story of clear water after heavy Winter Storm, and compared it to the same day/event and samples taken just to the north of Napili at Honokahua Bay (also known as DT Fleming beach, below the Ritz Carlton Hotel). We have shown some of the photos of coral and reef fish, we have advertised workdays on the streambed and why working there is helpful to health of the reef in the bay. It's been a most powerful tool during 2015, especially.

During the Kahekili Birthday Bash event in August, 2014, we also prepared a flip book with the story of our projects at Napili Bay. A copy of that book was uploaded into NFWF EZ grants in an interim report July 17, 2014.

We have built our capacity to fund actions (e.g. monitoring, maintenance of new plantings, educational workshops) through participation in an annual Charity Walk sponsored by Maui's resort and hotel industry. This has been key to our ongoing financial viability.

In September, 2014, we were invited to present the story of Napili Bay and Beach Foundation's successful projects (Napili 4-5 desilting basin and Napili Kahawai remediation) to a group of County Planners from across the State of Hawaii. This entailed a site visit, an oral presentation and informational handouts for all participants. The overall theme of this meeting was coastal zone management, with good and bad examples. The summary I prepared from the meeting was distributed to Napili community and others, and can be found in Project Documents (P.D. 5) of this report. A copy of my handout for that meeting was submitted to NFWF in September, 2014; it is available again, on request.

We continue to have strong support from Maui County (Planning and Dept. of Public Works), from UH SeaGrant program (Tara Miller Owens), from State legislator Roz Baker, from West Maui Watershed Ridge2 Reef (Tova Callender and Liz Foote, in particular), and have built support from the General Managers at all the resorts on Napili Bay.

#### What's Next for Napili Bay and Beach Foundation?

As you are aware, the US Coral Reef Task Force designated West Maui Watersheds as a priority partnership in the Pacific in 2011, beginning with Wahikuli and Honokōwai, and now including **Kahana**, Honokahua and Honolua, from the summit of Pu'u Kukui to the outer reef. In April 2015, West Maui was designated as a *Resilient Land and Waters Initiative* site by the Department of the Interior, the Environmental Protection Agency and the National Oceanic and Atmospheric Administration. The Watershed Management Plan for Wahikuli and Honokōwai is now in the implementation phase. Planning for **Kahana**, Honokahua and Honolua Watersheds is underway and will be completed by early 2016. **As Napili is located in the Kahana** watershed region, we contributed input to the overview based on our own experiences. We have now turned our attention to the overall plan to identify the hot spots where we need to focus our next efforts. We are well positioned to continue to build on the improvements we have made to this point in time and hope to partner with NFWF/NOAA on these efforts to protect and improve the health of Napili Bay.



VII: S.D.3, p.5

#### #5. Project Documents

Include in your final programmatic report, via the Uploads section of this task, the following:

- 2-10 representative photos from the project. Photos need to have a minimum resolution of 300 dpi. For each uploaded photo, provide a photo credit and brief description below;
- Photo 1.0 The streambed BEFORE the cleanup began (same day as project start)
- Photo 2.0 Another view of the streambed BEFORE the cleanup... taken from road, showing south bank
- Photo 3.0 View of southbank as of January, 2015
- Photo 4.0 Streambed photo taken August, 2015
- Photo 5.0 Heavily silted runoff into Honokahua Bay, January 3, 2015
- Photo 6.0 Napili bay near mouth of Napili Kahawai stream, January 3, 2015
- Photo 7.0 Forcepsfish flaring ... August 2014; a fish we haven't seen much at Napili
- Photo 8.0 Healthy coral and a blennie from Marine Biology monitoring December, 2014
- Report publications, Power Point (or other) presentations, GIS data, brochures, videos, outreach tools, press releases, media coverage;
- P.D. 1 Nutrient – Napili Bay
- P.D. 2 NBBF Overview – Workshop 5.6.15
- P.D. 3 Staff Training Workshop flyer
- P.D. 4 Napili Species list gold copy
- P.D. 5 Email summary of Planners Conference 9.10.14
- Any project deliverables per the terms of your grant agreement.

**POSTING OF FINAL REPORT:** *This report and attached project documents may be shared by the Foundation and any Funding Source for the Project via their respective websites. In the event that the Recipient intends to claim that its final report or project documents contains material that does not have to be posted on such websites because it is protected from disclosure by statutory or regulatory provisions, the Recipient shall clearly mark all such potentially protected materials as "PROTECTED" and provide an explanation and complete citation to the statutory or regulatory source for such protection*



## Napili Bay Environmental Assessment



Prepared for:  
Rising Tide Engineering on behalf of  
Napili Bay and Beach Foundation

Prepared by:  
Kyle Aveni-Deforge  
Ecological Monitoring and Analysis LLC

## EXECUTIVE SUMMARY

In response to high long-term and short-term rates of sand loss and shoreline erosion in Napili Bay, the Napili Bay and Beach Foundation (NBBF), representing the interests of property owners in Napili Bay, has proposed conducting a small scale beach nourishment project (SSBN II) to return sand from offshore sand deposits to the nearshore environment, protecting the shoreline, enhancing recreational use and protecting water quality and natural resources of the bay. In order to evaluate any short-term or long-term positive or negative project related effects on the composition of benthic substrate and biological communities and to comply with the requirements of an SSBN II Category II, it is necessary to survey and document the existing conditions in the bay. Further, by establishing baseline benthic conditions, project related best management practices (BMPS) can adequately address the environmental conditions of the bay and minimize any project related impacts.

The present work provides an Environmental Assessment and establishes a monitoring program that documents the current state of substrate composition and benthic occupancy at: two sand sources under consideration for use in the project, the nearshore and the mid-bay; future surveys will document patterns of natural change in these parameters, and later document any project-related effects. This work was accomplished through photographic analysis of benthic occupancy and substrate composition in transects of the seafloor.

We found that substrate composition at the sand sources was typically medium grained sand; there were no large bodied invertebrates or macro-algae in transects. Hard substrate at N3 was present in fingers of reef emerging from a variably thick layer of sand. This emergent substrate had a mixture of macro-algae with very few corals. *Halimeda* was the dominant macro-algae; *Halimeda* stands were sparse, diminutive and rich with epibiota. Although coral was present, only 4 colonies were found in survey transects, all of which were *Porites lobata*. Although coral was rare in our transects, some large, healthy heads of *Pocillopora meandrina* were seen in nearby habitat; they hosted diverse invertebrate and fish communities. If this sand source is used for the project, a dredge polygon specifying the area to be dredged will allow biologists to survey the adjacent community to identify any specific resources at risk.

The mid-bay was documented in two sets of transects. Two 50 meter CRAMP transects extended from the southern edge of N1 south-ward across the bay. Three cross-shore 20 m transects were pulled from the makai edge of the solvent bench to the north-west. Transects in these two areas had broadly similar composition. Substrate was a mixture of consolidate reef rock, basalt and sand. There was low abundance of other substrate types, including gravel, rocks and boulders. Macro-algae and turf were common wherever stable substrate was present. There were patches of coral, but its abundance did not rise above 25% in any individual quadrat. Across the mid-bay coral cover averaged 6%. Diseased and dying coral was present along all transects, and there were few colonies larger than 200 cm<sup>2</sup> untouched by disease. This was most notable in massive corals, such as *Porites lobata*, and spreading corals, like *Porites compressa*, where large (500cm<sup>2</sup>) colonies were cut into mosaics of living tissue by patches of algae.

Both areas surveyed by mid-bay transects could potentially experience effects from an SSBN II. Turbidity may be generated at N1, should it be used as a sand source, or at the shoreline, as sand is dewatered and placed during the projects. How this turbidity may move through the bay is not yet known. High surge in the region of the cross-shore transects may reduce their risk to sedimentation of suspended solids. The CRAMP transects were in somewhat deeper water, and may have more risk of sedimentation, especially near a source of turbidity. Although coral cover is low, and the area is subject to poor water quality during rainfall and coastal erosion events, monitoring during project activity should be sensitive to this possibility.

Somewhat positively, throughout the mid-bay there was an abundance of small coral colonies with areas less than 5 cm<sup>2</sup>. Although mature colonies are suffering, there is still larval supply to the area. If the stressors that have been negatively affecting larger coral colonies can be positively changed, there is a chance for recovery.



VII. S.D.4.0, p.3

## Napili Bay Environmental Assessment

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Work done by the Hui O Ka Wai Ola has documented water quality every three weeks since June 2017. These data are highly valuable for establishing an understanding of the health of the bay. Adding decision unit based monitoring for several nearshore water volumes would be a good step forward for establishing a range of baseline water quality parameters in the project area that are consistent with the methodology that will be applied during project execution.

Ongoing work by Rising Tide Engineering for the NBBF has placed shoreline monitoring cameras in the bay and may help add further context to the dynamics of water quality and shoreline erosion and beach volume.

VII. S.D. 3.0, p.1



## University of Hawai'i Sea Grant College Program

2525 Correa Road • HIG 238 • Honolulu, Hawai'i 96822 • Phone: (808) 956-7031 • <http://seagrant.soest.hawaii.edu>

School of Ocean and Earth Science and Technology

Senate Committee on Ways and Means

Attn: GIA

Hawaii State Capitol, Rm. 208

415 South Beretania Street

Honolulu, HI 96813

January 10, 2019

Re: Support for the State Grant-in-Aid application from the Napili Bay and Beach Foundation

Aloha Senate Committee on Ways and Means,

As you consider applications for the FY2019 Grant-in-Aid program, we would like to express our support for the application submitted by the Napili Bay and Beach Foundation (NBBF) to promote public shoreline access and beach preservation at Napili Bay.

The University of Hawai'i Sea Grant College Program (Hawai'i Sea Grant) is one of 33 Sea Grant programs nationwide that comprise a functional network within our nation's universities and colleges. Hawai'i Sea Grant's goal is to promote enhanced understanding, conservation, and wise use of marine and coastal resources for sustainable coastal economies. Our partnership with the County of Maui was established over twenty years ago and continues to provide on-site specialized expertise and technical assistance to support planning and decision-making related to coastal management and coastal hazards. In this role, I have been working with the NBBF for nearly 9 years as they have partnered with County Departments, subject matter experts, and local stakeholders to pursue a range of projects to restore and enhance the overall health of Napili Bay. The NBBF has a successful track record of bringing stakeholders together to develop common goals and then following through to achieve an outcome.

In this case, the NBBF is proposing to use grant-in-aid funding to supplement local support to provide much needed beach preservation and shoreline access improvements at Napili Bay. This is in line with our collective programmatic goals, including a major tenant of the Hawaii coastal zone management program to provide public shoreline access. Moreover, this comes at a very critical time in West Maui when the impacts of high waves and shoreline erosion are already severe and impacting the existence of access to and along the shoreline. The public access at the south end of Napili Bay has been periodically undermined by erosion and seasonal beach changes and we know that these conditions will increase in frequency. However, proactive steps can be taken now to improve shoreline

*The University of Hawai'i Sea Grant College Program supports an innovative program of research, education, and extension services directed to the improved understanding and stewardship of coastal and marine resources of the state, region, and nation.*

*Science serving Hawai'i and the Pacific since 1968.*

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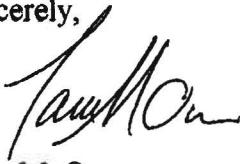
VII. S.D. 5.0, p. 2

conditions and public infrastructure so we continue to provide adequate public access to Napili Bay.

Given limited resources, public/private partnerships have become a keystone for maintaining and improving our coastal resources. The State grant-in-aid program is a good opportunity to develop a public-private initiative and this proposed project is a good example of a partnership where resources can be leveraged to benefit all stakeholders.

Please consider this proposal with our enthusiastic support! If it would be helpful to your deliberations, please feel free to reach out with questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Tara M. Owens". The signature is fluid and cursive, with the first name being the most prominent.

Tara M. Owens  
Coastal Processes and Hazards Specialist  
University of Hawaii Sea Grant College Program  
County of Maui Planning Department



S.D.b

## Contractor's Cost Estimates for Constructing New Public Beach Access Stairs, 2020

### Entire site Demo

(Dumpsters must be close to the demo site )

1) Best management (silt barrier , construction orange fence )	\$8,166
2) landscape protection	\$4,790
3) Dumpsters and hauling	\$11,950
4) Remove existing stairs 2 locations , landings , shower , picnic area ,	\$18,973
5) Remove existing sidewalk	<u>\$10,799</u>
	<b>\$54,678.00</b>

Note: I reduced this estimate by \$4,678. as we won't do the on-grade path replacement UNLESS we also obtain Maui County Community Budget funding.

### New stairs and Landings

6) excavation for new wood piles (no compaction or base material )	\$9,392
7) New treated wood 6x6 buried structure supports ( new stairs and landing)	\$8,558
8) new treated wood framing (new stairs and landing )	\$11,685
9) New trex planks	\$14,466
10) 42 inch post and guard rails (treated wood)	\$10,488
11) 36 inch high handrail	\$4,941
12) railing and framing top flashing ,paint	\$6,200
13) Site detail and Clean up	<u>\$5,540</u>
	<b>\$71,270.00</b>

Note: This will be completely covered by the FY 2020 GIA of \$75,000. received in May.

### New Beach Dune raised pathway

19) excavation for new wood piles (no compaction or Base material )	\$6,392
20) New treated wood 6x6 buried structure supports	\$7,435
21) new treated wood framing	\$9,685

<b>22) New trex planks</b>	<b>\$10,846</b>
<b>23) 42 inch post and guard rails (treated wood)</b>	<b>\$11,925</b>
<b>24) 36 inch high handrail</b>	<b>\$2,941</b>
<b>25) railing and framing top flashing ,paint</b>	<b>\$4,200</b>
<b>26) Site detail and Clean up</b>	<b><u>\$4,000</u></b>
	<b>\$57,424.00</b>
<b>Sales Tax</b>	<b>\$ 8,160.00</b>
<b>Contractor's Fees</b>	<b>\$ 22,000.00</b>