

From: fongf001@hawaii.rr.com
To: [DLNR.BLNR.Testimony](#)
Cc: WWSRainbow@gmail.com; lwdo04u@gmail.com; richturbin@turbin.net; rfried@croninfried.com; FONGF001@hawaii.rr.com; fongf004@hawaii.rr.com; bonnie.w.fong@gmail.com; mindypennybacker@hotmail.com
Subject: [EXTERNAL] FW: BLNR meeting 6/23/2023, Opposition to the dismantling of the DD Breakwater
Date: Tuesday, June 20, 2023 4:31:47 PM
Attachments: [FW Richard Turbin's public testimony letter 482021.msg](#)
[FW Richard Turbin's Star-Advertiser article on Doris Duke Breakwater 4142021.msg](#)
[FW Kahala Diamond Head Neighborhood Board George N. West.msg](#)
[FW CDUA diagram of Breakwater boulders moved to stabilize DD's seawall .msg](#)
[FW Breakwater photos.msg](#)
[FW photo 2 DD harbor Sun afternoon 111316.msg](#)
[FW photo 3 high tide 51918 3 ft 12 seconds south swell.msg](#)
[FW photo 4 high tide 51918 3 feet 12 second intervals south swell.msg](#)

Frederick Fong submits his written testimony for the DLNR meeting on 6/23/2023, regarding opposition of item K-2, CDUA OA-3913, Diamond Head Breakwater Safety Project:

1. Email to blnr.testimony@hawaii.gov
2. By postal mail to: Board of Land and Natural Resources, P.O Box 621, Honolulu, Hawaii 96809

Dear BLNR Chairperson Chang and Board Members,

Members of the BLNR will again decide on **committing the State to spend upwards of \$5 million of unallotted funds** to dismantle the Breakwater and **"Use the boulders from the breakwater to stabilize the existing reinforced concrete seawall.."** for the **benefit of private landowner, Doris Duke**, as a safety initiative. This application was twice denied by the BLNR in 2018.

I would like to draw your attention to some important points regarding the **CDUA presented by DLNR/Tiger Mills**. Despite the well-scripted presentation and congratulations offered, it is crucial that you approach this analysis with an open mind. The facts and contradictions presented in the current CDUA are largely **unchanged from the ones presented by DDFIA in 2018**, which were previously **twice denied by the BLNR** in majority votes. It is important to understand the reasons behind the BLNR's previous denials.

Here is an abbreviated timeline of events:

I. In **2018, DDFIA submitted** a CDUA to dismantle the Diamond Head Breakwater and **"Use the boulders from the breakwater to stabilize the existing reinforced concrete seawall.."** (Exhibit 5, page 41) This constructed revetment and armoring of the seawall is described under the guise of a "cohesive restoration" for safety purposes.

Due to strenuous community opposition and numerous contradictory facts found in DDFIA's own consultants' report, the BLNR denied DD's CDUAs twice in 2018.

However, **DD's agents convinced the DLNR to twice resubmit a similar CDUA** to dismantle the breakwater that had already **been twice denied by the BLNR**.

This begs the question as to how the State ended up in this predicament?

After DD's CDUAs were denied, **DD withdrew its initial request for a Contested Case Hearing** in the BLNR's morning session on June 14, 2018. However, during the reconvened session after lunch, the BLNR **unexpectedly announced DD's offer to transfer the Breakwater and Submerged Lands to the State**.

DLNR accepted this offer from DDFIA, **against the advice of its own department**. The transfer of land to the State was finalized through a Quick Claim Deed on Sept. 23, 2020.

Past BLNR Chair **Susan Case** said that she was instrumental in the **transfer of DD's Breakwater and Submerged Lands to the State**, stating she felt it was not fair for the BLNR to deny a private landowner the right to remove an attractive nuisance even after due consideration of contested contradictory data. So now the State may bear the liabilities and associated costs.

DD also offered to donate \$1 million to the State in a time-sensitive MOA, intended to offset the State's estimated ballooning costs of \$5 million for dismantling the Breakwater. The initial estimated costs provided by DD in 2015 were \$2.5 million, which, when **adjusted for inflation** and considering additional permits, **would today likely exceed \$5 million to be borne by the State**. (It is worth noting that the BLNR withdrew \$5 million in public funding to support the private landowners' Kaanapali Beach Hotels' restoration project in March 2023. The BLNR stating that there is "a sense of responsibility by the board to not use public funds to benefit private property owners. Granted that private landowner DDFIA did manage to transfer their Breakwater and Submerged lands to the State, however, the intended purpose of the dismantling project is unchanged.)

II. The proposed Breakwater dismantling may introduce additional dangers to the swim basin, as was previously cautioned by the BLNR's majority decisions in 2018.

Given the limited time for discussion, I will briefly acknowledge some contestable facts related to previous CDU applications, but defer discussions for later:

- Disregard of two Neighborhood Boards' unanimous votes against dismantling the Breakwater
- Dismissal of concerns for marine habitat, fauna and flora, Hawaii Historic Registry, ocean and surf data, silt turbidity screens, and challenges of the 2017 FONSI.
- Opposition from the public, with over 1,400 signed acknowledgments opposing the dismantling.
 - Inability to accurately predict loss of adjoining sandy beaches through shoreline current modeling.
 - Obtaining the CDUA before acquiring all required U.S. Army Corps of Engineers'

permits

- Differing opinions from SHPD and HHF regarding permitting.
- Overtopping in the protected swim basin

Attorney **Bill Saunders** raised concerns about a dangerous situation for swimmers in the basin. Removing the west end drainpipe and basin wall down to the level of the dike would expose unsuspecting or thrill-seeking swimmers to potential harm, as large wave periods could easily sweep them over the rocky west sided ledge separating the inner swim basin from the outer ocean. A self-explanatory photo illustrates this.

DD incorrectly implied by using skewed statistic that jumping activity increased 133% after the barrier fence was installed in 2015. However, DD's own consultant's report documented a substantial decrease of 83% after the fence was installed. (see pages 2-5)].

The primary objective of this meeting, as expressed by **DD's attorney Joe Stewart**, is to prioritize safety and prevent litigation. We can achieve this by implementing simple modifications to the protective fence to prevent dangerous jumping activity while preserving the swim basin. One practical solution is to add additional two-inch-long metal piping between the existing fence poles, which would effectively deter jumping from the fence top and fulfill the fence's intended purpose as a deterrent against injuries. This idea was previously dismissed by the DD security chief as ineffective. Other proposals, such as increasing the fence height or adding barbed wire topping, are not permissible in a residential neighborhood.

Contest most of the following paragraph of statements made by Doris Duke's agents:

While both appreciated and considered fully, these alternatives were determined by Doris Duke's agents to be ineffective measures to address the projects purpose, and eliminate it. Suggested modifications of the ledge and fence do not address jumping from all areas, and therefore, is a limited suggestion of potentially reducing the number of people from continuing unsafe behaviors. DDFIA does not want to generate additional situations that create or compound existing hazards with alterations to the fence as suggested. **(Rebuttal: DD determined where to build the fence that resulted in increased potential for dangerous jumping. The fence should be modified to achieve its intended purpose. Why not try?)**

Susan Case and Joe Stewart have rightly emphasized the **need to explore reasonable alternative solutions** rather than dismissing them outright to achieve DD's dismantling objective. The choice before the Board is whether to commit \$5 million in expenses to dismantle the Breakwater and relocate the boulders, or to implement simple fence modifications that would achieve the intended purpose of the fence. By dismissing feasible alternatives without proper consideration, we stand to lose on multiple fronts.

As Board Member **Riley Smith has noted**, DD will still bear liability for any dangerous activity originating from their walkway and fence, while the State will assume new liabilities

by changing the protective breakwater and incurring significant expenses for dismantling. Additionally, beachgoers would lose a significant portion of a beautiful registered historic site that has brought joy to generations of families.

In conclusion, I respectfully request that you thoroughly consider the concerns and evidence presented before making any irrevocable decisions regarding the dismantling of the breakwater. It is vital to prioritize public safety while also preserving the historical and environmental significance of this site. Thank you for your careful consideration of this matter.

Respectfully,

Friends of the Doris Duke Swim Basin

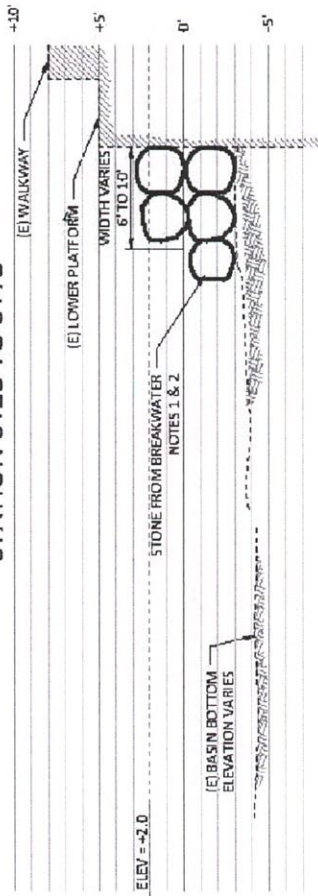
Frederick Fong, Honolulu resident
1380 Lusitana St., Suite 514
Honolulu, Hawaii 96813
Office phone (808) 531-7551, Fax (808) 537-3652, Cell (808) 277-6786
Email FongF001@hawaii.rr.com

Attachments:

- Two letters from Kahala Neighborhood Board Chair Richard Turbin expressing opposition to dismantling the Breakwater.
- Letter from Diamond Head Neighborhood Board Chair George West advising against dismantling without considering reasonable alternative solutions.
- Breakwater photos of overtopping by waves
- Graph of skewed jumping statistics
- Photo of cranes and barges
- Diagram of the Breakwater boulders used to stabilize DD's seawall

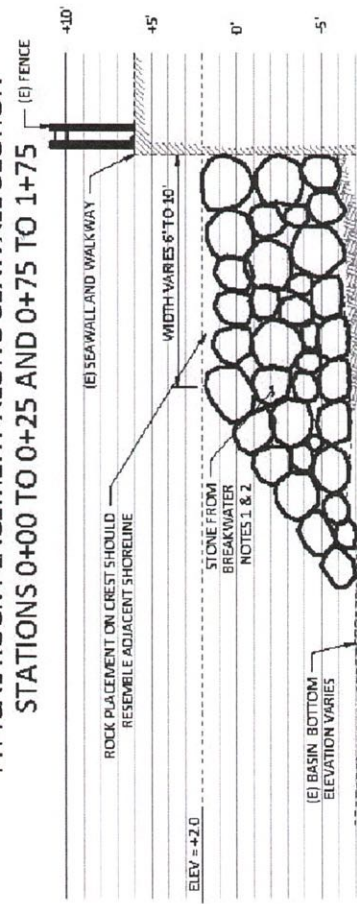
CC: Richard Turbin
Bill Saunders
Leigh Wai Doo
Mindy Pennybacker

TYPICAL ROCK PLACEMENT AT LOWER PLATFORM
STATION 0+25 TO 0+75



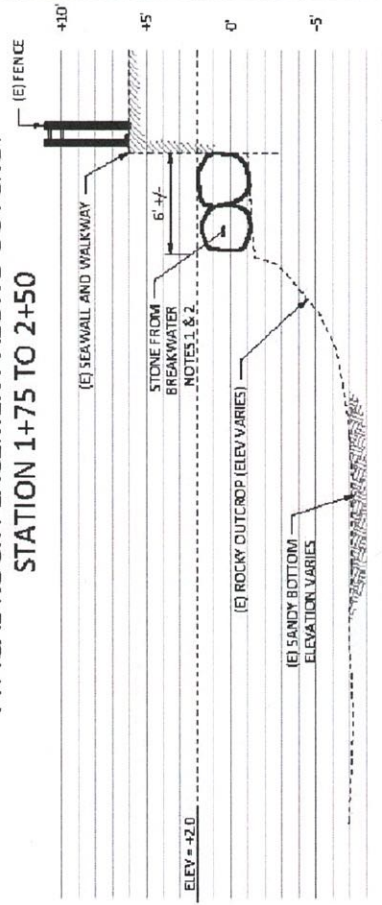
A SECTION
C-05
SCALE: 1"=5'

TYPICAL ROCK PLACEMENT ALONG SEAWALL SECTION
STATIONS 0+00 TO 0+25 AND 0+75 TO 1+75



B SECTION
C-06
SCALE: 1"=5'

TYPICAL ROCK PLACEMENT ALONG OUTCROP
STATION 1+75 TO 2+50



C SECTION
C-06
SCALE: 1"=5'



CONCEPTUAL DRAWINGS
ISSUED: 2015-03-20
NOT TO BE USED FOR CONSTRUCTION



Prepared by: moffatt & nichol





DIAMOND HEAD/KAPAHULU/ST. LOUIS HEIGHTS NEIGHBORHOOD BOARD NO. 5

c/o NEIGHBORHOOD COMMISSION OFFICE • HONOLULU HALE, ROOM 406 530 SOUTH KING STREET
HONOLULU, HAWAII 96813 TEL: (808) 768-3710 • FAX: (808) 768-3711 • INTERNET: www1.honolulu.gov/nco

May 15, 2018

Hawai'i State Department of Land and Natural Resources
Kalanimoku Building
1151 Punchbowl Street
Honolulu, Hawai'i 96813

To the Attention of:

The Board of Land and Natural Resources
Chairperson Suzanne Case and Board Members
Stanley H. Roehrig, Christopher Yuen, Thomas Oi,
Keith "Keone" Downing, James A. Gomes,
Samuel "Ohu" Gon III

Subject: Conservation District Use Application OA-3809

Aloha Chairperson Case and Board Members:

The Diamond Head/Kapahulu/St. Louis Heights Neighborhood Board applauds the Board of Land and Natural Resources decision on April 27, 2018, to deny the Conservation District Use Permit requested by the Doris Duke Foundation for shoreline alterations to Cromwell's Beach at Diamond Head. This permit would have allowed the destruction of the historic seawall and swimming basin by reducing the breakwater and filling the basin with boulders in an effort to achieve a safety initiative.

The Diamond Head/Kapahulu/St. Louis Heights Neighborhood Board was presented with the larger community's concerns on April 12, 2018. These concerns included irreversible loss of the historic resource, the significant impact on the beauty and function of the recreational swimming basin, and the environmental effects on endangered sea turtles and live coral habitats.

We agree with the Kahala Neighborhood Board that better alternatives, including those proposed by the community as well as members of the Board of Land and Natural Resources can, and must, be considered to address public safety within and around this treasured historic site and shoreline community recreational space.

Therefore the Diamond Head/Kapahulu/St. Louis Heights Neighborhood Board voted on May 10, 2018, to commend the Board of Land and Natural Resources for being diligent in this matter and protecting the historic resource, with better alternatives to be considered to address the safety initiative.

Sincerely,



George N. West, Chairperson
Diamond Head/Kapahulu/St. Louis Heights Neighborhood Board

Cc: Kahala Neighborhood Board #3
Architecture Branch Chief of the State Historic Preservation Division
Director of the State Office of Environmental Quality Control



Save Doris Duke pool and Cromwell's

By Richard Turbin

4/14/21

The people of Hawaii breathed a sigh of relief three years ago when Hawaii's Board of Land and Natural Resources (BLNR) voted twice to deny the Doris Duke Foundation's petition to dismantle the breakwater at the popular swimming hole fronting the Doris Duke estate at Diamond Head (Shangri La). This courageous and sensible action saved the beloved Doris Duke pool and the adjoining Cromwell's surf site from destruction.

But now, sadly and surprisingly, we once again face the desecration of this extremely important recreational swimming asset because the state, through its Department of Land and Natural Resources (DLNR), has adopted the position of the Doris Duke Foundation that the pool and Cromwell's site must be destroyed.

How did this bizarre and absurd turn of events come about? It's a plot line worthy of a "Magnum, P.I." episode. Shortly after its failure to win the BLNR vote in 2018, the foundation asked the state to take over ownership of the Doris Duke pool, the breakwater and the underwater sea basin fronting Shangri La.

DLNR accepted, and the property was "quitclaimed" to the state. Shortly afterward, the Doris Duke Foundation promised to pay the state \$1 million of the cost of dismantling the breakwater.

The DLNR has apparently decided to go ahead with the plan and is pre-

paring to petition the BLNR for the go-ahead to dismantle the breakwater.

What are the reasons for this turnabout, where the state is ignoring the two prior votes of its own BLNR to reject the project? The primary reason offered is the fear of liability lawsuits because of injuries from swimmers diving off the 7-foot-high breakwater or the seawall that borders the other side of the pool.

However, that concern is misplaced. First, under Hawaii law there is little likelihood that an injured swimmer or diver would win such a lawsuit, provided that proper signage was put by the state warning of the dangers of diving into the pool. Second, a large fence was already erected by the Doris Duke Foundation on top of the seawall, which has largely eliminated the diving.

Although it has been observed that some risk-takers climb on top of the fence to jump, for little expense that fence could be modified to make it virtually impossible to jump. In fact, experts believe that dismantling the breakwater would make swimming in the area more dangerous. Without the breakwater, dangerous currents, high tides and storm surf would make swimming extremely risky and cause potential drownings and far more injuries.

Then there are money concerns. In

ISLAND VOICES



Richard Turbin is a Hawaii lawyer and chairs the Waialae-Kahala Neighborhood Board; the views expressed here are his own.

2018, the estimated cost for the dismantling was \$2.6 million, which was regarded as unrealistically low. Now it is more likely to cost \$5-7 million, so the \$1 million contributed by the Doris Duke Foundation would barely make a dent in solving the fiscal burden to the state taking on the project. At a time when Hawaii is suffering from a fiscal crisis, it would make much more sense to use the money for our present challenges of solving homelessness, climate

change and educating young citizens.

Lastly there are serious environmental concerns. Having huge aquatic bulldozers, cranes and other construction equipment in the Diamond Head waters will be unsightly and stir up and transfer underwater debris down the Diamond Head and Waikiki coastline and beaches, negatively impacting recreational swimming and surfing in Diamond Head, Waikiki and Kahala.

Now is the time for the people of Hawaii to raise the "hue and cry" to Hawaii's political leaders, opinion makers and environmental groups to stop this misguided, costly and destructive project from ever occurring. We must save our beloved Doris Duke pool and Cromwell's surf site from being destroyed so future generations can enjoy what we have enjoyed.

RE: DLNR Meeting on Shoreline breakwater project fronting Shangri La
Meeting Date: Friday, June 23, 2023

I would like to express my sincere gratitude to the Honorable DLNR members for considering this project.

I am in strong support of the Breakwater Safety Project.

I live about 110 ft right above the Doris Duke Estate. I can see kids dangerously playing on top of the breakwater. I have also seen videos of adult-kids enjoying beer parties while diving into the sea water pool formed by the breakwater and the retaining seawalls. I am not concerned about adult-kids taking their own risks, but it always worries me that some young Hawaiian kids could jump or fall into the ocean side of the breakwater when no one is watching. These kids do not appear in the videos. The breakwater has become a dangerous "attractive nuisance" that has been magnified by the undue publicity.

Having an open and uniquely beautiful sea water diving pool in our neighborhood certainly adds value to our property. However, no amount of property value bonus is worth the life of an innocent young kid--or the enjoyment of life for the rest of their lives. For very selfish reasons, I used to secretly hope that the breakwater will stay. Shame on me!

As an immediately adjacent neighbor to the Doris Duke Estate for almost three decades, I have personally known many of it's staff members to be very friendly, caring, and down to the earth people. In addition to always being a responsible neighbor, Shangri La staffs are also very responsive to our community concerns. I am confident that the Doris Duke Foundation will competently assist our State to make this place safer and actually more enjoyable, by dismantling the breakwater and restoring the shorelines to more natural conditions.

Again, it is clear to me that the benefits of this project strongly outweigh any perceived negative impacts. I appreciate the board's consideration of the project and I thank you for prioritizing on the lives of innocent young kids.

Hawaiian Kids' Lives Matter!

Respectfully submitted

Wei-Chang Liauh
4119 Papu Circle

From: [Blake D. McElheny](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Blake McElheny Testimony Opposing CDUA OA-3913 (June 23, 2023 Agenda Item K-2)
Date: Thursday, June 22, 2023 7:51:20 AM

Please see my testimony opposing CDUA OA-3913 regarding Agenda Item K-2 for the BLNR Meeting June 23, 2023:

June 22, 2023

Blake McElheny
59-272 Pupukea Road
Haleiwa, HI 96712
(808)638-8484
blakemcelheny@yahoo.com

Board of Land and Natural Resources

In the Matter of CDUA OA-3913, Shangri La Breakwater Demolition

Testimony of Blake McElheny in Opposition to Proposed Breakwater Demolition, CDUA OA-3913, and other Permits and Approvals

I am a lifelong Oahu resident and although I live on the North Shore, I regularly swim at the Shangri La Breakwater location with our three children.

My children and I (and their friends) have also engaged in other ocean and coastal activities in and adjacent to the project area including surfing, foiling, and diving. The calm area provided by the breakwater even allows for my daughters to practice waterpolo and we can safely throw the ball back and forth.

As someone who has enjoyed this area since I was a teenager, I am familiar with the ocean conditions in and around the Shangri La harbor and breakwater.

Based on my experiences, observations, and knowledge, this poorly thought-out and destructive project must be rejected.

This proposed project, while supposedly aimed at safety will actually create significantly more hazardous swimming conditions for my children and I and will place other Oahu residents, swimmers, and surfers at substantially greater risk of harm.

This is because the design is flawed and no one took the time to diligently investigate and evaluate the actual ocean conditions in the area.

In addition, the plan will drastically limit recreational ocean and coastal use of the harbor and will surely deprive the public of recreational resources they are entitled to as matter of Hawaiian custom and constitutional and statutory law.

This is not to mention the proposed project's adverse effects on the unique aquatic life in the area.

In conclusion, I must strongly object to the purposeful destruction of an invaluable swimming and recreational area enjoyed by Oahu's families and youth.

I encourage members of the Board to come and swim in the area and observe the joy this area in its current state brings to children like my own.

Common sense dictates that there are other less drastic and destructive steps the BLNR could take toward its stated goal of protecting public safety that are more in alignment with the BLNR's mission to care for Hawaii's sacred resources.

Thank you.

Sincerely,

Blake McElheny
(808)638-8484

William W. Saunders, Jr.
4111 Black Point Rd.
Honolulu, HI 96816
(808) 375-3588
WWSRainbow@gmail.com

Interested Party

STATE OF HAWAII

BOARD OF LAND AND NATURAL RESOURCES

**In the Matter of
Conservation District Use Application (CDUA) OA-3913,
Shangri La Breakwater Demolition**

Testimony of William W. Saunders, Jr.

and

Exhibits A through K

(For BLNR Meeting on June 23, 2023, Agenda Item K-2)

TMK: (1) 3-1-041: seaward of 005

INDEX

- Exhibit A NOAA Tide Prediction vs. Actual Sea Level Observation Data for Honolulu, April, May, June and July 2017

- Exhibit B Photographs of Brown’s Surf Spot, Southwest Swell, September 14, 2014

- Exhibit C Printouts from Wannasurf.com Website

- Exhibit D Excerpts from Chapter 205A, Hawaii Revised Statutes, Coastal Zone Management Act

- Exhibit E Excerpts from Chapter 25 Revised Ordinances of Honolulu

- Exhibit F Final Environmental Assessment, Figure 2.3 Simulated After Views

- Exhibit G DLNR Fact Sheet on Opihi

- Exhibit H Recent Articles on Sea Level Rise

- Exhibit I December 13, 2016 Email from William Saunders to DLNR, DDF and HHF

- Exhibit J Project Area Maps from EA

- Exhibit K January 19, 2018 Letter from Historic Hawaii Foundation to Sam Lemmo

Testimony of William W. Saunders, Jr. - June 20, 2023

**in Opposition to Proposed Shangri La Breakwater Demolition,
Conservation District Use Application OA-3913 and Other Permits and Approvals
at 4055 Papu Circle, Kahala, Oahu; Tax Map Key: (1) 3-1-041:005 (seaward)**

INTRODUCTION

I am a lifelong Oahu resident and I have lived in the immediate area of the project for most of the last 60 years. Throughout that time I have regularly and consistently surfed, swam, fished, kayaked, picked opihi and engaged in other ocean and coastal activities in and adjacent to the project area. I have also been a member of Save Our Surf (“SOS”), an ocean-oriented environmental protection organization, since the mid-1960's. As a member of SOS, I was involved in the statewide inventory of surfing sites and personally worked with founder John Kelly on mapping the location of surfing sites between the Kahala Hotel and *Tongg's* surf break at the East end of Kalakaua Avenue. I also worked as a gardener at the Shangri-La estate in 1971 and '72. As such, I am intimately familiar with the ocean conditions in and around the Shangri-La harbor and breakwater and I present the following testimony, legal authority and discussion based on my personal knowledge.

In short, this project proposed, while supposedly aimed at safety and designed to prevent “reckless” people from injuring themselves by diving off of the walkway and breakwaters at the Shangri-La Harbor, will actually create significantly more hazardous swimming conditions and place even careful recreational harbor users at substantially greater risk of harm. This is because the design is flawed by shoddy science and a failure to take reasonable steps to diligently investigate and evaluate actual ocean conditions in the area.

In addition, the plan will seriously curtail recreational ocean and coastal use of the harbor and deprive the public of recreational resources they are entitled to as matter of Hawaiian custom and constitutional and statutory law, and will adversely affect unique aquatic life in the area.

Dated: Honolulu, Hawaii, June 21, 2023,



William W. Saunders, Jr.

SUMMARY

A. This identical proposal was twice rejected *on the merits* by the BLNR due to safety concerns and it is improper and highly irregular to keep bringing it back before them without any changes.

B. The proposal would virtually eliminate safe swimming within the harbor, thereby endangering the public (not just reckless divers) and violating H.R.S. Chapter 205A which requires all agencies to preserve and enhance - not reduce - coastal recreational activities

C. The Environmental Assessment is flawed and outdated (preparation apparently began in 2014 or earlier) and does not adequately take into account the more recent science on climate change, global warming, and sea level rise.

a. The section on ocean conditions was based on models and assumptions, rather than actual detailed observations of the wave and current conditions in the area. It therefore made many erroneous conclusions.

Those errors were the basis for the determination that there would be no significant impact on the environment, which is clearly erroneous.

b. Removal of the groin will significantly impact and likely increase the longshore currents in the area which is already suffering from beach erosion.

c. The cost analysis is outdated and grossly understates the expense of the project, especially since taxpayers will now be picking up the majority of the expense. Therefore, a new updated EA should be required.

d. The original EA was prepared by and for a private party for private lands and does not take into consideration the additional concerns which are raised by this being a project proposed by the State using State Funds on State submerged lands.

D. The analysis and discussion of sea life in the vicinity of the proposed demolition was inadequate and failed to recognize the green sea turtle feeding grounds just outside the harbor, the presence of opihi on the jetty boulders, and the fact that monk seals are frequently spotted in and have beached themselves in the area.

E. The proposal involves action on lands within the SMA which will change the intensity of use of the harbor area, therefor it requires an SMA Major Permit

F. There has been no adequate consideration of other alternatives.

DISCUSSION

- A. This identical proposal was twice rejected *on the merits* by the BLNR for *safety reasons* and it is improper and highly irregular to keep bringing it back before them without any changes.**

There are a number of procedural irregularities with the way this application has been brought after already being rejected twice on the merits by the BLNR five years ago. For some reason the Land Department seems to have a reason for championing this disgraced project, and perhaps believes that the change in membership of the Board will allow it to go through this time despite the folly of trying to push it through a third time - UNCHANGED! Based on the discussion below, as well as all the evidence previously submitted, doing so is clearly not in the public interest and is likely in contravention of the governing law and administrative rules. I will be strenuously raising these procedural objections in the event this application goes any further.

It is imperative to note the reason this project was twice rejected previously: There was grave concern over the likelihood that the "safety" project would actually make swimming at the Harbor MORE DANGEROUS, if not impossible. See Minutes of BLNR meetings of April 27, 2018 at pp 14-15, and May 25, 2018 at pp. 13-19.

- B. The Current Project Configuration Will Create a Hazardous Situation for Swimmers, Snorkelers and Others Within the Harbor and Will Eliminate the Currently Safe Swimming Conditions.**

As discussed more fully below, the existing ocean conditions at the project site have not been properly assessed or evaluated. Currently, during higher tides and with any kind of South to Southwest swell, waves hit the outer face of the Diamond Head breakwater and, even at its current height of 8-feet above mean sea level, wash over the top and into the swimming area almost daily. In addition, surge enters the mouth of the harbor and causes significant rise and fall of water levels in that protected corner of the basin, which is where the vast majority of swimming occurs. When the water surges into the basin there is also a strong outflow through the approximately 3-foot diameter pipe at that end. If you are standing close to that pipe, you will feel the significant rush of water out through the pipe, as well as a strong push in through the pipe when the surge retreats. These factors and conditions are not currently a significant threat to the swimmers there, but they do add a bit of excitement.

The top of that breakwater is currently close to 8 feet above mean sea level. (See EA Appendix B, at p. 21.) The proposal is to lower that breakwater to 3 feet or less and to make it significantly narrower and less substantial, as shown in the EA renderings (See Exhibit F). If this were done, those waves that currently wash over the 8-foot breakwater will do so with significantly more force and volume and change entirely the protected nature of that swimming area. It would be awash with strong wave action and increased surge, making it very dangerous and unfit for anyone but the most daring and experienced swimmer.

Already, on an almost daily basis, waves overtop the Diamond Head breakwater, even at low tide in moderate surf conditions. Video from the Duke Foundation's security cameras will support this, as the following video I recorded on March 26 and 29, 2021.

a. **March 26, 2021**, recorded between 6:27 and 6:29 PM from about 25-35 yards offshore of the breakwater:

<https://www.dropbox.com/s/lfbftfwsg7kk75m/3-26-21%20Water%20Video.mp4?dl=0>

The clips in this video were taken between 6:27 and 6:29 PM on March 26. At the time, the tide was quite low, approximately 0.2 feet, and the surf was a below-average 2 to 3 feet.

As you'll see, I was unexpectedly overtaken from behind by several waves as I was filming from my surfboard. In-between you'll also see that, at low tide with a modest swell, the waves are already washing repeatedly over the breakwater.

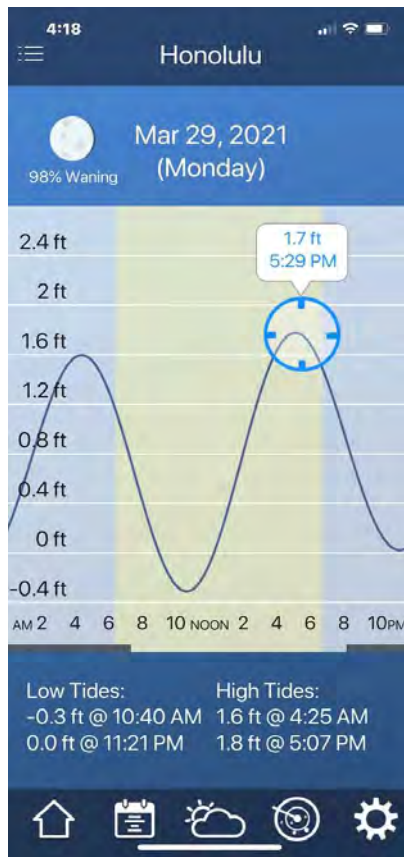
b. **March 29, 2021**, recorded between 5:10 and 5:35 PM from the west end of the Diamond Head breakwater:

<https://www.dropbox.com/s/a96s690xuz736rj/3-29-21%20Land%20Video.mp4?dl=0>

These clips here were taken between 5:10 and 5:35 PM on March 29, when the tide was medium-high, approximately 1.7 feet, and the swell was about average for this time of year - 2 to 4+ feet, as reported on the NWS Surf Observations webpage:

<https://www.weather.gov/hfo/surfreports>

As you'll see, the waves are again repeatedly over-topping the breakwater. If the breakwater height were to be taken down 5+ feet as described and shown in the mock-up photography, the swim basin would be constantly awash in turbulent waves and current and be totally unsafe for swimming.



The bottom line is that this project would actually eliminate the protection from the wind, waves, currents and sea level rise that the Diamond Head breakwater currently provides for the swim basin and make it entirely unusable. There will be so much wave action and danger in that area the majority of the time that the State (the Duke Foundation if they contribute to the plan) will be faced with an even greater liability problem than is currently presented. Even non-risktakers will be in danger if they try to swim in the harbor once that protective breakwater is demolished.

In addition, the proposal is to remove entirely the West-end of the breakwater containing the 3-foot pipe. (See EA at “Summary,” p. 6) If this were done, there would be a very strong in-and-out rush of water over the sharp rocks to the west of that area when the water surges. This would create a thru-current and the strength of the rushing water would be like a river rapids such that it would carry people onto, and smash them into, those rocks.

The surge, current and out-rush are currently contained, tempered, limited and moderated by the relatively small opening of the pipe. But if that protective western breakwater wall was removed entirely, anyone standing or swimming at that end of the basin would be subject to the full force of the ocean’s surge and would be unable to withstand its push and pull. Despite their best efforts, they would not be able to avoid serious injury.

The basin is popular precisely because it is protected, unlike the surrounding sharp coral and lava shoreline which is exposed to waves and tidal surge and is dangerous for the general public. But surprisingly, DLNR wants to remove that protected area and states that “*the design is intended to match the intertidal conditions of the nearby shoreline.*” (See EA, “Summary,” at p. 6)

It is eminently clear to me that this design will create significantly more risk of danger to the “innocent” swimmer, even if it is successful in deterring the “reckless” diver. Is that a wise move? Injuries will be more frequent, more significant and will affect far more users of this area. This is a very, very bad design which is not supported by even the most cursory observation of ocean conditions in the area, something which the “scientists” do not appear to have ever conducted.

I tell you this as a person intimately familiar with this area. It has been my backyard for 60 years. If the object of this whole exercise is safety, I don’t believe you could design a more dangerous “solution.” If this project is permitted, you can expect numerous serious injuries to the public. You can also expect this, my testimony, to be “Exhibit A” in the lawsuits against the State and the Foundation which follow. When that happens, there will be no choice but to entirely close the area to public use, which is an entirely unacceptable and illegal solution under Hawaii law. Part of me questions whether that is the ultimate desire of some who support this proposal.

What is especially significant is that these resources are uniquely local, they are used intensively by local families and at-risk youth and they are not replaceable or available elsewhere in the Honolulu area. There is no place anything like this swimming basin anywhere else on Oahu. Teenagers and young adults from Kapahulu, Kaimuki, Palolo, East Oahu, Manoa, Hawaii Kai and surrounding areas take the bus here, get off at Triangle Park and walk down the road to access the Duke breakwater area. This is a vulnerable demographic. The effect of allowing the proposed project will be to deprive these kids of a safe, healthy, and unique local cultural and recreational opportunity. It will create instead a dangerous, uninviting, unprotected area which is over-run with waves, surge and current. This would be directly contrary to the intent, spirit and letter of Hawaii law.

C. The EA Relies on Erroneous and Outdated Tide, Sea Level Rise, Bathymetry, Wave Height and Surf Spot Location Data.

The breakwater demolition proposal, and the analysis in the EA supporting it, relies entirely on Appendix B, a document prepared by “Moffat & Nicol” entitled “Shangri La Shoreline Evaluation Nearshore Wave and Current Modeling.” While on the surface the study may appear comprehensive, a closer look shows it is seriously flawed and any reliance upon it for safety assurances would be highly imprudent. Even more significantly, there is no indication these contractors made any actual on-site observations of actual sea conditions at the site. Further, it appears there were no interviews of, or consultations with, people knowledgeable about the area, despite offers of information from myself.

1. It Appears No Actual Wave, Tide or Current Condition Observations or Surveys Were Conducted and No Knowledgeable Sources Were Consulted

The physical oceanography study makes no mention of any observations or measurements of actual ocean conditions at the site. There are no photographs, charts, table or figures and no narrative discussion of actual conditions observed there or in the vicinity. This is a further critical flaw in the wave/surge/current analysis since this site is unique in the various ways discussed above. It is appalling that a study relied on so heavily for a project purported to be aimed at public ocean safety has absolutely no content based on actual ocean conditions present at the site. Instead, there is a lot of scientific modeling based on numerous erroneous assumptions with no observational verification or validation whatsoever.

In addition, there do not appear to have been any interviews of neighbors, surfers, fishermen, swimmers, “wall-divers” or any other ocean users with the slightest amount of personal knowledge about ocean and coastal conditions in the area. In December 2016, not long after publication of the DEA, I wrote an email to DDF and HHF expressing my concern about the assumptions and conclusions reached in the study.

“My concern is that the analysis of surfing spots and conditions was based on inaccurate and incomplete data from the “wannasurf” website. That site’s information is useful for some things but it is known to be inaccurate for many regions, especially in Hawaii, as it is published elsewhere and contains primarily selected random anecdotal information. While I have not fully reviewed the voluminous DEA yet, I have skimmed the surf impact analysis, I feel it is incomplete and inadequately sourced, and I would like the opportunity to provide some additional relevant information and possibly suggestions for consideration. In particular, there are a number of other surfing sites close to the project area which have not been listed and could be impacted, especially by the expected erosion and redistribution of sand and the reflective and refractive wave action caused by the breakwall removal.”

(See Exhibit I) , There was no response to my email or to my offer to provide more accurate information.

It is telling that even back in 1937, when this harbor construction was first being planned, the engineers recognized and provided for the rigorous ocean conditions when designing the Diamond Head breakwater.

"We have all been convinced that it is necessary to buttress the outside line of the boat basin with a very heavy wall as shown by the sections on this drawing. The original intention of using the old dike and building on, and inside of it, could not be carried out since the dike has been weakened by blasting and drilling the basin and parts of it have given away in the last few months by nothing more than wave action." Excerpt from Drew Baker's letter of June 4, 1937 regarding construction progress of the boat basin.

See EA, Appendix B at p. 5

“The original waterfront engineer deemed it necessary to reinforce the dike with large armor stones to provide protection for the boat basin.”

Id.

For some reason, the current engineers have chosen to ignore this wisdom which resulted in a sturdy historic structure that has withstood 85 years of ocean assault and protected four generations of swimmers enjoying its inner safety.

In short, it is my strongly held opinion, based on my 60 years of direct, frequent, consistent and intensive ocean experience in the subject area, that the study of waves, currents and surge at the harbor and its analysis of the safety of the proposed configuration - with its greatly diminished protective seawall - are so lacking in accuracy, credibility and scientific rigor that it would be grossly negligent for DLNR to rely upon it when performing its duty to protect public safety in State waters.

2. The Tidal Analysis Relies Entirely on “Predictions” and Totally Ignores Readily-Available NOAA Data Showing Actual Observed Tide Levels That Are Significantly Higher

The EA cites and relies on tidal predictions from the National Oceanic and Atmospheric Administration’s (NOAA) website. However, that website also contains data showing *actual observed water levels that are significantly higher than the predictions*. No mention was made of these discrepancies or the fact that in the last year tides have run much higher than the predictions. While the EA Sites the tide predictions as the basis for its statement that states that maximum tidal heights are in the range of 2.5 feet, actual validated NOAA observations reveal that tidal water levels around this time last year were significantly higher than these predictions and approached and exceeded 3 feet on a number of occasions in April, May and June 2017. (See Exhibit A hereto, printouts from <https://tidesandcurrents.noaa.gov/waterlevels.html>)

The EA’s analysis relies on these erroneous tide level predictions and significantly underestimates and understates the actual sea level heights that will directly impact the amount of water and the strength of waves washing over the greatly reduced breakwater and affecting the swimming basin under the current proposal.

3. The Studies Relied Upon for Sea Level Rise are Obsolete

In a similar striking failure to use accurate data, the 50 and 100-year sea level rise predictions relied upon in the EA are based on observations and science from 2006, 2009 and 2012 and a publication from 2014. See EA Appendix B at pp. 11, 35. Those predictions are obsolete and significantly understate the amount of sea level rise expected in the next 50-100 years under currently accepted scientific analysis. The most recent scientific predictions, based on updated conditions, trends and modeling, have significantly increased and are now nearly twice as high as those which were predicted as recently as 2013. (See Exhibit H)

Again, the EA has relied on demonstrably incorrect data in its modeling concerning wave and current conditions at the proposed project with its greatly reduced breakwater. This directly affects their notion that the harbor will be safe for swimming in the new configuration.

The City's and State's climate change planning documents (most of which were published after the 2018 denial of this project the first and second times) all call for a fresh and more aggressive look at the new data showing sea level will be even greater than anyone expected a few years ago - and much more rapid. The wave and current analysis in the prior EA is over half a decade old and doesn't come close to the current coastal planning guidelines, recommendations and requirements promulgated by the City, State, SOEST, NOAA, the University of Hawaii **and DLNR itself!** (Notably, DLNR Staff, including Sam Lemmo, appear to have contributed to at least one of these publications.)

DLNR:

<http://climate.hawaii.gov/wp-content/uploads/2020/12/Guidance-for-Using-the-Sea-Level-Rise-Exposure-Area.pdf>

<https://dlnr.hawaii.gov/?s=climate%20change&type=network&searchblogs=1,3,4,5,6,7,8,9,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,37,38,39,40,41,43,44,45,46,48,49,50,51,52,53,54,55,56,58,59,60,61,62,63,64,65>

Hawaii Emergency Management Agency:

<https://dod.hawaii.gov/hiema/sert-resources/hazard-mitigation/>

State Climate Change Portal:

<https://climate.hawaii.gov/climate-change-reports/>

<http://climate.hawaii.gov/state-sea-level-rise-resources/>

SOEST/Sea Grant:

<https://seagrant.soest.hawaii.edu/facing-the-storm/>

<https://seagrant.soest.hawaii.edu/guidance-using-slr-exposure-in-local-planning-permitting/>

<https://seagrant.soest.hawaii.edu/center-for-coastal-climate-science-resilience/>

U.S. Climate.gov:

<https://www.climate.gov/teaching/national-climate-assessment-resources-educators/hawaii-and-pacific-islands-region>

C&C Honolulu Resilience Office:

<https://resilientoahu.org/resilience-strategy>

DLNR's Koloa Iki:

<https://www.koloaiki.net/>

<https://www.koloaiki.net/2021/02/22/rising-sea-levels/>

<https://www.koloaiki.net/2020/10/15/almost-gone-hard-truths-about-the-future-of-hawaii-beaches/>

Hawai'i Climate Change Mitigation and Adaptation Commission:
<https://dlnr.hawaii.gov/blog/2020/12/16/nr20-197/>

The PACIOOS and UH have an interactive website that shows what areas are at risk from sea level rise under different scenarios. Even the most conservative scenarios show serious inundation of the harbor area and demonstrate that the prior EA's analysis of the waves, currents and sea level cannot be counted on in a situation like this which involves serious implications for public safety.

<https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/>,
See also: <https://coast.noaa.gov/digitalcoast/tools/flood-exposure.html>

4. Surf Spot Location and Wave Condition Information Is Taken from a Foreign Social Media Website Which is Erroneous and Unreliable

The EA states at page 8 of Appendix B that:

“Information on conditions for Cromwell’s were obtained from wannasurf.com and indicate swells in the 2- to 6-foot range from the south or southeast direction are preferred. No information was available for Brown’s but it can be expected ideal conditions are similar to the other breaks in the region.”

This is another serious flaw in the study’s wave height analysis and illustrates the generally unreliable nature of its conclusions. The “wannasurf.com” website is a social media website hosted and proctored outside of Hawaii, is not in any way recognized as an authority on Hawaiian surfing or surf conditions and clearly has no accurate or relevant data for the subject area. (*See* Exhibit C) It is anecdotal and entirely unreliable for scientific purposes, especially in Hawaii. It incorrectly locates the Brown’s surfing area, it makes no mention of the nearby Mahoney’s or Patterson’s surfing areas and grossly understates the size of waves that regularly break at Cromwell’s and Brown’s.

Both Brown’s and Cromwell’s are spots referred to as “zones of maximum refraction” in local surf reports, including those hosted by NOAA (*See* https://uhslc.soest.hawaii.edu/outreach/vary/why_surf_varies.html) and waves there are often much larger than elsewhere on the South Shore. They are not “similar to the other breaks in the region,” as incorrectly assumed in the study, and wave heights there very frequently exceed the 2 to 6-foot range claimed by wannasurf and accepted as scientific fact by the study.

Attached as Exhibit B is the photograph I took of the Brown’s surf spot during a Southwest well on September 14, 2014. In my estimation, that wave has a face over 20-feet and a “Hawaiian” surfer height between 10 and 15 feet – far, far larger than the heights assumed in the study.

**5. Assumptions of Wave Dissipation on “Fringing Reef”
Are Clearly Erroneous and Ignore Offshore Bathymetry**

Another erroneous assumption made and relied upon in the EA is that waves will break on the “offshore fringing Reef and dissipate much of their energy in the process.”. *See* Appendix B at p. 23. It goes on to predict in Figure 17 that the wave heights in the harbor vicinity will be only 2.5 feet.

In fact, there is no fringing reef at this site as a deep channel lies directly offshore, between the Cromwell’s and Brown’s surf breaks. Waves do not break in that channel except during the largest of south swells. Instead, the wave energy is funneled into the channel and directed toward the north end of that channel which is the Duke harbor. That deep channel is precisely the reason the harbor was located where it was to accommodate Miss Duke’s launch. As a result of this erroneous assumption, the analysis and calculations of wave height and overtopping are seriously flawed. I myself regularly observe waves and surge over-topping the existing 8-foot-high breakwater during higher tides when there is any significant south swell.

But, surprisingly, the study seems unconcerned with waves coming over the breakwater. Its modeling appears to only address “over-topping” of the seawall walkway and does not even address the issue of large waves coming over the breakwater and pouring into the swimming basin. *See* EA Appendix B at pp. 30-32.

6. The original EA does not take into consideration additional concerns which are raised by this being a project proposed by the State on State lands and submerged lands.

State law requires that projects using State funds and on State lands undergo rigorous environmental and fiscal analysis. The original project and EA was created by and for a private party for private lands and private funds. Therefore, it did not and does not take into consideration the additional concerns which are raised by this being a project proposed by the State on State lands and submerged lands. In addition, the cost estimates for this proposal are based on 2014 assumptions and are totally obsolete and invalid for a project to be built 10 years later.

In a time of decreased State revenues and impending budget cuts, allowing this project to go forward without an updated cost estimate would be irresponsible and contrary to the letter and spirit of HRS Chapters 205A and 343.

D. Species Protection

There are several important and endangered native species, including endangered sea turtles and monk seals, that frequent the area.

The prior EA gave only passing mention and no analysis of the impact on these animals. The discussion of sea turtles was shockingly shallow and devoid of any rigorous analysis. *See*, e.g., page 3-39 ("no marine mammals or turtles were observed . . ." and "However, no green sea or hawksbill turtles were observed during the course of underwater surveys . . ."), and page 4-21 ("No endangered or protected species were observed in the vicinity of the project site, and the area does not appear to be a preferred habitat for these species")

I hereby submit a compilation video taken at the same time as those noted above. I didn't realize it until I looked at the clips later that there are three turtles visible in my videos from these 2 days. *See* <https://www.dropbox.com/s/kezw0ko39f5aew8/Compiled%20Turtle.mp4?dl=0>

The first two clips here (one is slow-mo) are from the water on 3/26 and a turtle is clearly visible right in front of my location as I'm floating on my surfboard.

The second two clips (one is slow-mo) are from the breakwater on 3/29 and show one turtle surfacing near the center of the video and then another one popping up out toward the Koko Head breakwater a couple seconds later.

These videos clearly establish that sea turtles regularly feed in the area directly off the Diamond Head breakwater. This is precisely where one of the barges contemplated by project is to be anchored. There needs to be a discussion of the impact on this protected species.

The breakwater also contains a significant "reservoir" population of opihi which cling both to accessible rocks and to inaccessible crevices between rocks. The inaccessible animals continue to reproduce, send out nearly invisible offspring and populate the accessible area - not only at Shangri La but also elsewhere along this rocky coastline. This is similar to the reservoir populations which inhabit the rocks along the Hilo Bay and Kahului Harbor breakwaters. Disturbing those rocks (which are now in the intertidal littoral zone which is ideal for opihi) and placing them underwater against the current sea wall will destroy a significant amount of their existing habitat in the harbor.

These animals should be protected under Chapter 205A as they are a unique aquatic population on O'ahu's South Shore and represent a traditional and cultural resource which is worthy of separate protection. *See* DLNR Fact Sheet on Opihi, Exhibit G

E. Allowing the Current Proposal Would Contravene the Requirements of Hawaii Law.

1. The Project Is Inconsistent with the Objectives, Policies and Guidelines Under HRS Chapter 205A Relating to Conservation of Marine Ecosystems, Preservation of Historic Sites, Protection of Cultural Practices and Protection and Enhancement of Coastal Recreational Opportunities

HRS Chapter 205A, the Coastal Zone Management Act, sets forth a number of mandatory Objectives, Policies and Guidelines **which ALL AGENCIES must follow** when taking actions

which impact resources in the Coastal Zone Management Area, as provided in the following sections:

HRS Section 205A-4; Implementation of objectives, policies, and guidelines

(a) In implementing the objectives of the coastal zone management program, the agencies shall give full consideration to ecological, cultural, historic, esthetic, recreational, scenic, and open space values, and coastal hazards, as well as to needs for economic development.

(b) The objectives and policies of this chapter and any guidelines enacted by the legislature shall be binding upon actions within the coastal zone management area by all agencies, within the scope of their authority.

HRS Section 205A-5; Compliance.

(a) All agencies shall ensure that their rules comply with the objectives and policies of this chapter and any guidelines enacted by the legislature.

(b) All agencies shall enforce the objectives and policies of this chapter and any rules adopted pursuant to this chapter.

Paramount among those requirements, in addition to protection of the environment itself, is the provision, protection and restoration of “coastal recreational opportunities” and “Historic resources . . . in the coastal zone management area that are significant in Hawaiian and American history and culture.” The requirement to protect and enhance coastal recreational resources and the public’s access to them appears no less that 18 times in the Objectives and Policies of Section 205A-2 alone! See Exhibit D.

The effect of this project will be to remove the safe swimming area now available at Shangri La harbor and replace it with an unprotected shoreline area lined with rocks and regularly awash in waves, surge and currents. Permitting the current configuration will run directly afoul of the Coastal Zone Management obligations imposed upon the DLNR and create a public hazard instead of a public resource.

In addition, the harbor contains a population of opihi which should also be protected under Chapter 205A as they are a unique aquatic population on O’ahu’s South Shore and represent a traditional and cultural resource which is worthy of separate protection. See DLNR Fact Sheet on Opihi, Exhibit G.

What is especially significant is that these resources are uniquely local, they are used intensively by local families and at-risk youth and they are not replaceable or available elsewhere in

the Honolulu area. There is no place anything like this swimming basin anywhere else on Oahu. Based on my experience living in this area for over 50 years and using the area frequently through that period, I know that teenagers from Kapahulu, Kaimuki, Palolo, East Oahu, Manoa, Hawaii Kai and surrounding areas take the bus here, get off at Triangle Park and walk down the road to access the Duke breakwater area. This is a vulnerable demographic. The effect of allowing the proposed project will be to deprive these kids of a safe, healthy, and unique local cultural and recreational opportunity. It will create instead a dangerous, uninviting, unprotected area which is over-run with waves, surge and current. This would be directly contrary to the intent, spirit and letter of Hawaii law.

2. An SMA Permit Is Required Because the Project Area Includes On-shore Aspects Which Constitute “Development” Within the SMA, the Cumulative Effect of Which, Considering the ENTIRE Project, Will Be Significant.

It is conceded in the EA that a number of aspects of the project work will take place on land, within the designated Shoreline Management Area (“SMA”). (*See* EA, p. 308) They will be staging and storing equipment and materials there, they will be installing signs and other directional devices there, there will be significant daytime parking in the neighborhood, their personnel will be directing operations from there and actually working from there and it is likely that they will need to alter, remove and later replace or modify existing fencing located there pursuant to a prior SMA permit. In addition, their own charts demonstrate that the project area extends into the SMA, which includes the shoreline walkway and other on-land areas of the Shangri La property. (*See* Exhibit J) Most importantly, the project will create significant impacts within the SMA of the type which triggers the SMA permit requirements under the applicable Statutes and Ordinances.

H.R.S. Section 205A prohibits anyone and any agency from conducting "development" within the SMA unless they have first complied with the procedures set forth in H.R.S. §205A and, on O`ahu, R.O.H. Chapter 25, including obtaining the required SMA permit.

This project constitutes "development" within the meaning of H.R.S. Sec. 205A-22 and R.O.H. Sec. 25-1.3 in that it:

- A. Constitutes "**placement or erection of any solid material**" within the SMA,
- B. Will cause a significant "**change in the density or intensity of use of land**" including but not limited to the walkway which is within the SMA, as well as the shoreline and ocean adjacent thereto, and
- C. Will cause a significant "**change in the intensity of use of water, ecology related thereto, or of access thereto**" in areas adjacent to the basin which lie within the SMA.

In addition, this is a historic site which requires separate consideration and protection. (*See* Exhibit K)

DLNR may argue that the actions which will take place on land within the SMA are transient and minimal when compared with the overall project, but Hawaii law is clear that their impact may not be considered incrementally. Rather, the entire project must to be included in any analysis or determination as to requirements under State and City environmental statutes, ordinances and administrative rules.

3. This “Shoreline Stabilization” Project Benefits a Private Party at Taxpayer Expense and “Armors” the Private Shoreline in Contravention of DLNR Policy.

DLNR has coyly tried to change the name of this project to obfuscate the fact that it is still a **“Shoreline Stabilization Project”** as described in all of the documentation. The stabilization here will benefit solely a private party at public expense. It will also (supposedly) reduce the Duke Foundation’s liability for injuries sustained from diving off its property.

The Duke Foundation’s offer to contribute \$1 million toward the project is paltry when the cost is likely to be closer to \$10 million than the 2014 figure of \$2.5 million.

This is an improper and irregular use of precious public funds and resources. It also contravenes newly established DLNR policy against armoring private shoreline property! *See* also <https://dlnr.hawaii.gov/docare/coastal-policy/>

CONCLUSION

I respectfully submit that science, law and common sense require that the current proposal to allow demolition of the outer Diamond Head Breakwater be denied and that DLNR be permitted to submit an alternate plan which retains the historic harbor and its safe swimming basin, in its current configuration and proposes some other solution to achieve its stated goal of protecting public safety.

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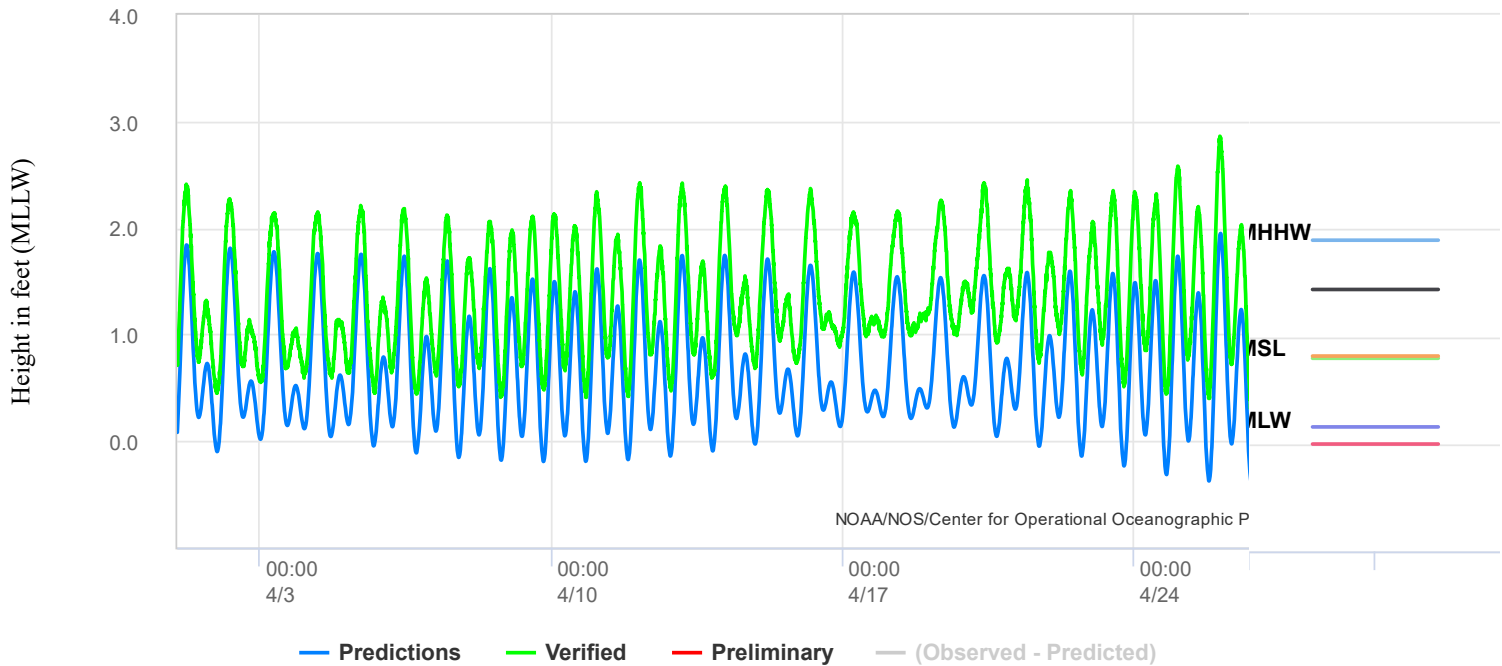
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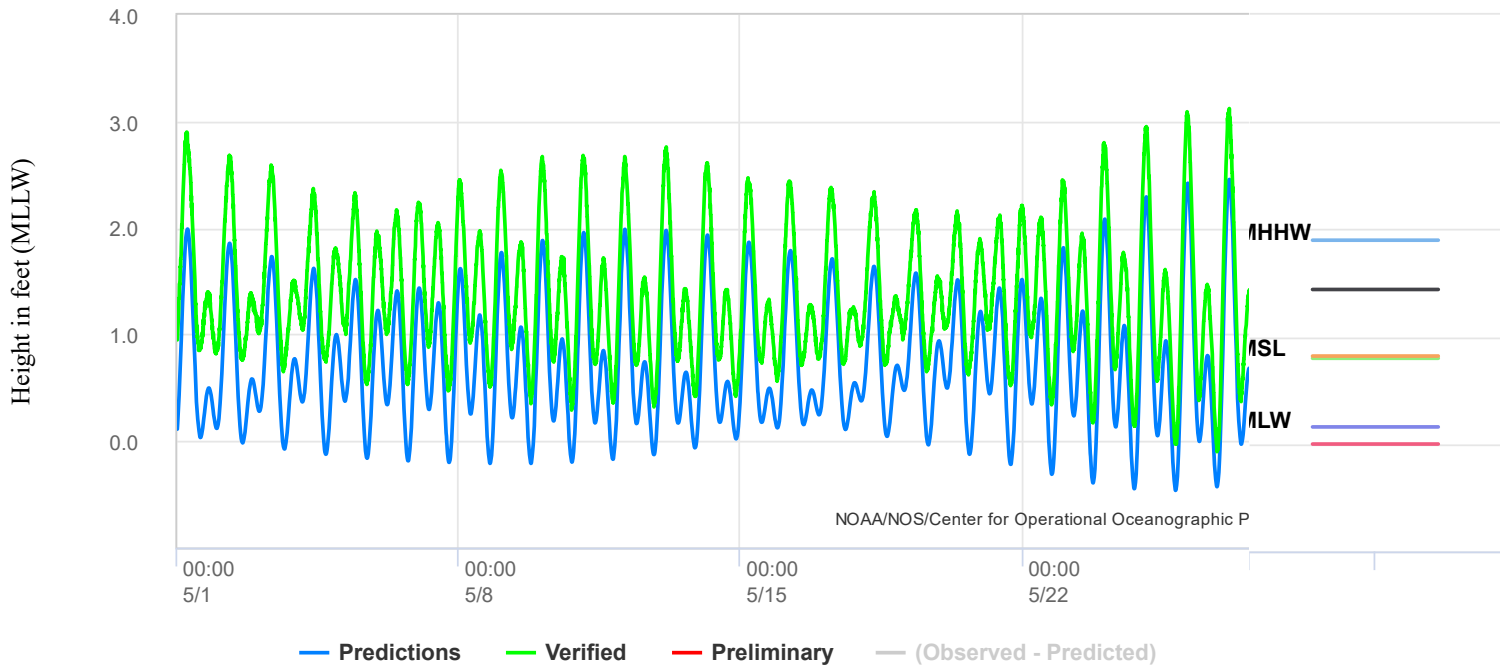
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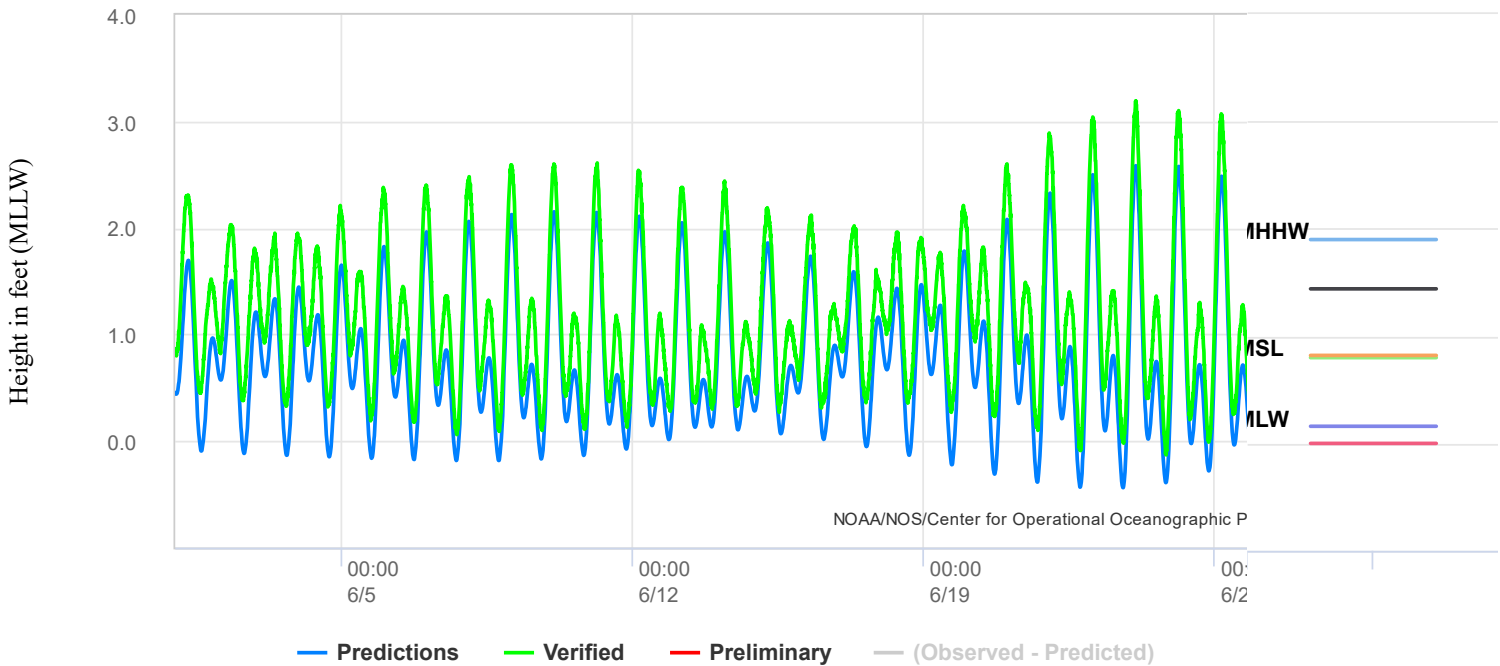
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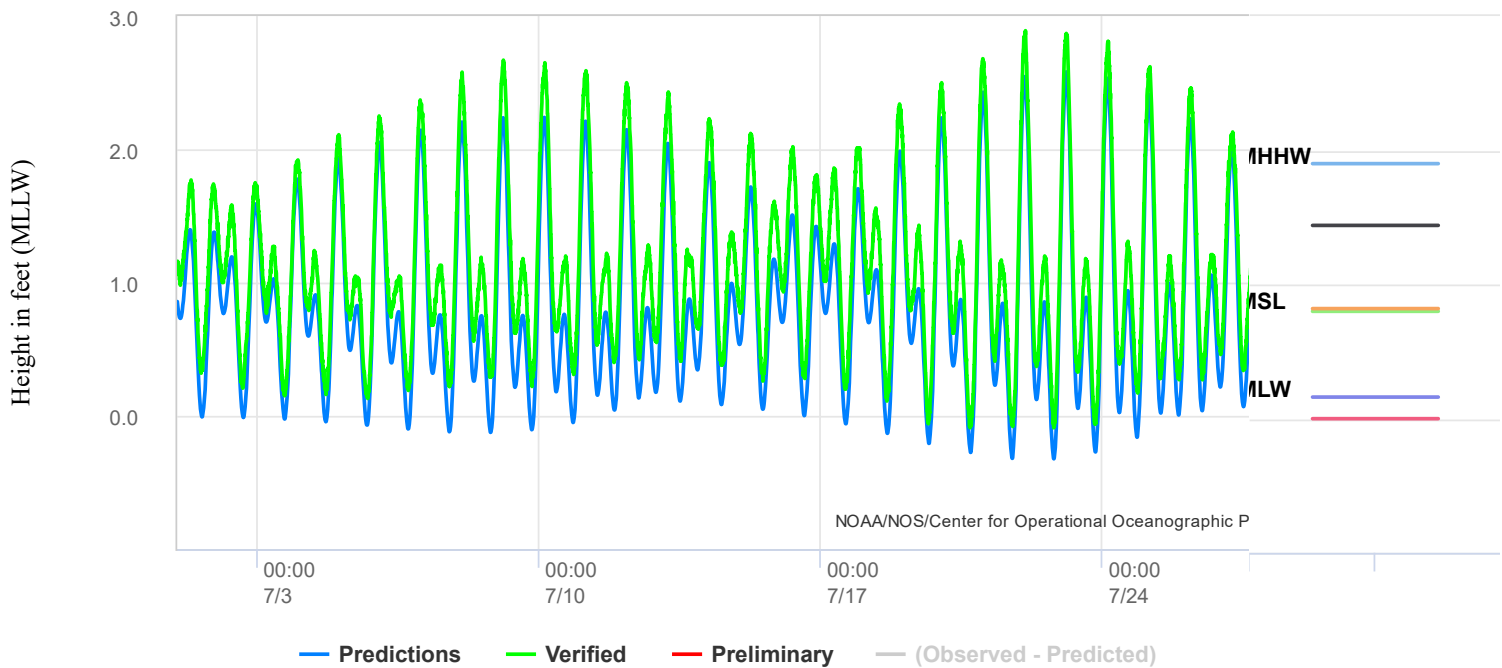
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SEA LEVEL**TRENDS**

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[U.S. Stations \(/sltrends_us.html\)](#)

[Global Stations \(/sltrends_global.html\)](#)

Trend Tables

Select

[U.S. Trends Map \(/slrmap.html\)](#)

[U.S. Regional Trends](#)

Select

[Global Regional Trends \(/sltrends](#)

[/globalregionalcomparison.html\)](#)

Anomalies

Select



<https://tidesandcurrents.noaa.gov>

Station Info

Tides/Water Levels

Meteorological Obs. (/met.html?id=1612340)

[Phys. Oceanography \(/physocean.html?id=1612340\)](#)

Relative Sea Level Trend

Interannual Variation

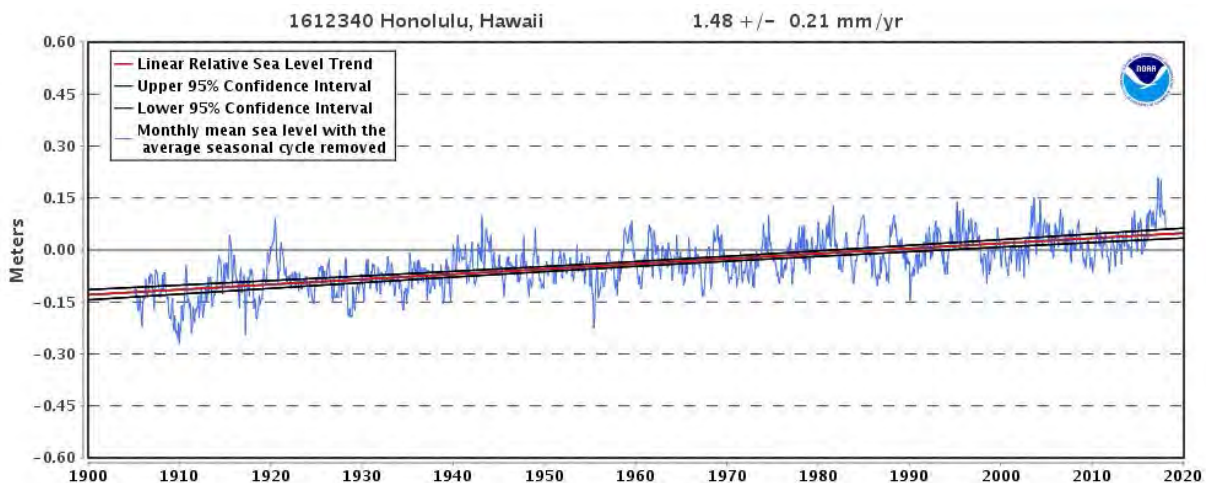
Average Seasonal Cycle

Variation Of 50-Year

Previous RSL Trends

RSL Trends

Relative Sea Level Trend 1612340 Honolulu, Hawaii



[EXPORT TO TEXT \(DATA/1612340_MEANTREND.TXT\)](#)

[EXPORT TO CSV \(DATA/1612340_MEANTREND.CSV\)](#)

[SAVE IMAGE \(PLOTS/1612340_MEANTREND.PNG\)](#)

The relative sea level trend is 1.48 millimeters/year with a 95% confidence interval of +/- 0.21 mm/yr based on monthly mean sea level data from 1905 to 2017 which is equivalent to a change of 0.49 feet in 100 years.

The plot shows the monthly mean sea level without the regular seasonal fluctuations due to coastal ocean temperatures, salinities, winds, atmospheric pressures, and ocean currents. The long-term linear trend is also shown, including its 95% confidence interval. The plotted values are relative to the most recent Mean Sea Level datum established by CO-OPS (https://tidesandcurrents.noaa.gov/datum_options.html). The calculated trends for all stations are available as a [table in millimeters/year and in feet/century \(mslUSTrendsTable.htm\)](#) (0.3 meters = 1 foot). If present, solid vertical lines indicate times of any major earthquakes in the vicinity of the station and dashed vertical lines bracket any periods of questionable data

EXHIBIT A, pg. 5



EXHIBIT B, pg. 1

EXHIBIT B, pg. 1

EXHIBIT B, pg. 2



EXHIBIT B, pg. 2

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WHAT'S UP

- 4yr 12 [No Type] [Rubiolo Marine, Curacao]
- 4yr 12 [No Type] [Piscu Loco, UK, Cornwall Beach]
- 4yr 12 [No Type] [Lush Coast, El Lute]
- 4yr 12 [No Type] [New York Beach, Korea]
- 4yr 12 [No Type] [Area, Rio de Janeiro, Guanabara]
- 4yr 12 [No Type] [Jaco, Costa Rica, Curacao]
- 4yr 11 [Fish] [Burlingame, Spain, Pico Verde, Costa]
- 4yr 11 [Fish] [Rubiolo Marine, Curacao]
- 4yr 11 [Fish] [Lush Coast, Curacao, January 2018]
- 4yr 11 [Fish] [Lush Coast, Curacao, January 2018]
- 4yr 11 [Fish] [Lush Coast, Curacao, January 2018]
- Mar 22 [Fish] [Pi-Ringo Marine, Elmer, Nagati]
- Mar 22 [Fish] [Pi-Ringo Marine, Elmer, Nagati]
- Mar 22 [No Type] [Pi-Ringo Marine, Elmer, Nagati]
- Mar 22 [Fish] [Rubiolo Marine, Curacao]
- Mar 22 [No Type] [Rubiolo Marine, Curacao]
- Mar 22 [No Type] [Rubiolo Marine, Curacao]
- Mar 22 [Fish] [Rubiolo Marine, Elmer, Nagati]
- Mar 22 [No Type] [Rubiolo Marine, Elmer, Nagati]
- Mar 22 [Fish] [Dorobon Marine, Elmer, Nagati]
- Mar 22 [No Type] [Dorobon Marine, Elmer, Nagati]
- Mar 22 [No Type] [Dorobon Marine, Elmer, Nagati]
- Mar 22 [Fish] [Rubiolo Marine, Elmer, Nagati]
- Mar 22 [Fish] [Rubiolo Marine, Elmer, Nagati]

BEST VIDEOS



Dorobon Marine, Elmer, Nagati



Newport, RI, United States of America



Piscu Loco, Cornwall



La Roca, Pisco

BEST PHOTOS



Piscu Loco, Cornwall



La Roca, Pisco




EXHIBIT C, pg. 1

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HELP

ATLAS

This site is designed to provide a **World surf atlas**. Actually, we create the environment for posting details and photos of your local surf spot - its up to you to add the data - via the interactive form. **New surf spots are being continuously added as they are submitted from surfers around the world.**

Have a look at those areas which are already beginning to be detailed - and you'll see the great potential. Now when you read about diving at surf spot X in distant country Y, you'll be able to look it up and see how it really is. Not only are there data-sheets for each surf spot, but also messages and a full interactive forum.

Not all zones are active yet - we will bring areas on-line as data are submitted by surfers. In the Add a surf spot form vastly more 'Zones' are active than in the Atlas - submit surf spot for these zones anyway, they will be included when the Zone is put on-line. If you can't find a zone corresponding to your area - tell us about it by [mail](#) or via the [Add-a-Spot form](#).

Wanna-know-more? Read the FAQs and other help documents, or just have a look at some of the active Zones.

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- [FAQ World surf atlas - surf spot guide](#)
- [Add surf spot tutorial](#)
- [GPS & Datum help](#)
- [Howto find GPS coordinates of a surf spot without a GPS ?](#)
- [Howto use the Wannasurf.com RSS feeds](#)
- [Howto browse this atlas on your mobile device?](#)

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CROMWELLS
USA, HAWAII, OAHU

COMMENTS

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1 2 3

By haole , 30-11-2004

Kaikos - This spot rips -- not that often tho. Walk on rocks out to break, then jump off rocks and in... Enjoy and stay outta my way.

By local resident , 01-06-2004

Cromwells/Kaikios/Helemanos - Its all good. The people are friendly as long as you know what you are doing and not a jack-ass. More good times.

By suckemup , 09-05-2004

Beginners go somewhere else - This is a super mellow spot that only gets good once in a while. When it gets good these days its as crowded as any other major town break. It's not the easiest wave to surf, and its no place for a beginner. So for all you beginners, go somewhere else and learn to surf.

By anonymous , 13-11-2003

no title - when conditions are right cromwells has one of the best rights on the south shore and its usually uncrowded

By anonymous , 03-11-2003

no title - surf this wave so much i own it hahaha
..lets keep its dignity and not expose it to everyone if you can find it paddle and see if you catch a wave

By anonymous , 03-08-2003

no title - Its Helemanos you jack-ass.(which means house of the shark)Crowded with haoles that think they are heavy local boiz.Its never good.Needs a very specific swell direction to get good. Fun and rippable and very crowded when its on.Located in towm but gets good during winter.

By cromwells is swell , 03-08-2003

Cromwells is good, and you.....uh.....aren't - Cromwells is super good, just so you know. The reason why it is super good is because its super duper long, super rippable, it has a really cool bowl section in the beginning. Problem is that when it gets good, its super crowded. If you want to get there, go around the road on diamond head, and continue on the road that goes closest to the ocean, but doesn't go down to the ocean. I'm pretty sure this is called diamond head road (I don't pay attention, sorry) Anyway, when you see a pink house, turn up the road. Continue up the loop till you see a road going down, and you should be able to see the ocean, with the swells coming in. Go down the road and you should see the beach access to your left at the bottom of the road. If you continue, there will be another loop. You can't park anywhere down there legally, so you will have to go back up to the first loop if you want to park.

By hartmannr001@hawaii.rr.com , 06-07-2003

Croms - Where exactly is Cromwells? How do I find it? Please respond!! No directions on the site.

By anonymous , 17-10-2002

was good today - uh... yeah. croms was pretty nice today. got barrelled a couple of times... did a nice air... good times :)

By fat , 11-09-2002

gonja - surfed cromwells 6 foot all by myself in 95 or 96, the wave just reforms and reforms. long rides that day.

Kaikos used to be fun back then .havent been there for a while...still any good?

1 2 3

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Excerpts from Chapter 205A, Hawaii Revised Statutes

§205A-2 Coastal zone management program; objectives and policies.

(a) The objectives and policies in this section shall apply to all parts of this chapter.

(b) Objectives.

(1) Recreational resources;

(A) Provide coastal recreational opportunities accessible to the public.

(2) Historic resources;

(A) Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

(3) Scenic and open space resources;

(A) Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.

(4) Coastal ecosystems;

(A) Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

* * * *

(9) Beach protection;

(A) Protect beaches for public use and recreation.

(10) Marine resources;

(A) Promote the protection, use, and development of marine and coastal resources to assure their sustainability.

(c) Policies.

(1) Recreational resources;

(A) Improve coordination and funding of coastal recreational planning and management; and

(B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:

- (i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;
- (ii) Requiring replacement of coastal resources having significant recreational value including, but not limited to, surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;
- (iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
- (iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;
- (v) Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;
- (vi) Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;
- (vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and
- (viii) Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of section 46-6.

* * * *

(4) Coastal ecosystems;

- (A) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;
- (B) Improve the technical basis for natural resource management;
- (C) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;
- (D) Minimize disruption or degradation of coastal water ecosystems by

effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and
(E) Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.

§205A-4 Implementation of objectives, policies, and guidelines

(a) In implementing the objectives of the coastal zone management program, the agencies shall give full consideration to ecological, cultural, historic, esthetic, recreational, scenic, and open space values, and coastal hazards, as well as to needs for economic development.

(b) The objectives and policies of this chapter and any guidelines enacted by the legislature shall be binding upon actions within the coastal zone management area by all agencies, within the scope of their authority.

§205A-22 Definitions

"Development" means any of the uses, activities, or operations on land or in or under water within a special management area that are included below:

- (1) Placement or erection of any solid material or any gaseous, liquid, solid, or thermal waste;
- (2) Grading, removing, dredging, mining, or extraction of any materials;
- (3) Change in the density or intensity of use of land, including but not limited to the division or subdivision of land;
- (4) Change in the intensity of use of water, ecology related thereto, or of access thereto; and
- (5) Construction, reconstruction, demolition, or alteration of the size of any structure.

* * * *

provided that whenever the authority finds that any excluded use, activity, or operation may have a cumulative impact, or a significant environmental or ecological effect on a special management area, that use, activity, or operation shall be defined as "development" for the purpose of this part.

§205A-26 Special management area guidelines.

(3) The authority shall seek to minimize, where reasonable:

(A) Dredging, filling or otherwise altering any bay, estuary, salt marsh, river

mouth, slough or lagoon;

(B) Any development which would reduce the size of any beach or other area

usable for public recreation;

(C) Any development which would reduce or impose restrictions upon public

access to tidal and submerged lands, beaches, portions of rivers and streams within the special management areas and the mean high tide line where there is no beach;

Excerpts from Chapter 25, Revised Ordinances of Honolulu

Sec. 25-1.3 Definitions.

* * * *

“Development” means any of the **uses, activities or operations** on land; in or under water,

within the special management area that are included below, but not those uses, activities, or

operations excluded in paragraph (2).

(1) “Development” includes but is not limited to the following:

(A) The placement or erection of any solid material or any gaseous, liquid, solid or thermal waste;

(B) Grading, removing, dredging, mining or extraction of any materials;

(C) Change in the density or intensity of use of land, including but not limited to the division or subdivision of land;

(D) Change in the intensity of use of water, ecology related thereto, or of access thereto; and

(E) Construction, reconstruction, demolition or alteration of the size of any structure.

* * * *

(3) Cumulative Impact. Whenever the authority finds that any use, activity, or operation excluded in paragraph (2) is or may become part of a larger project, the cumulative impact of which may have a significant environmental or ecological effect on the special management area, that use, activity, or operation shall be defined as “development” for the purpose of this chapter.

(4) Significant Effect. Whenever the authority finds that a use, activity, or operation excluded in paragraph (2) may have a significant environmental or ecological effect on the special management area or special wetlands areas, that use, activity, or operation shall be defined as “development” for the purposes of this chapter.



Current View of Diamond Head Breakwater from Balcony



Simulated View After Breakwater Dismantling



Current View of Breakwater and Basin



Simulated View After Breakwater Dismantling

2-10 EXHIBIT F

SHANGRI LA BREAKWATER SAFETY INITIATIVE AND SHORELINE STABILIZATION PROJECT
 Figure 2.3 - Visual Simulations of Project Improvements

Honolulu, Hawai'i

EXHIBIT F





Cellana sandwicensis
Courtesy Keoki Stender

Marine Invertebrates

'Opihi or Limpets

Cellana exarata

Cellana melanostoma

Cellana sandwicensis

Cellana talcosa

SPECIES STATUS:

IUCN Red List - Not considered
Endemic

SPECIES INFORMATION: The endemic 'opihi makaiauli or black foot 'opihi (*C. exarata*), the green foot 'opihi (*C. melanostoma*), the 'opihi 'alinalina or yellow foot 'opihi (*C. sandwicensis*), and the 'opihi ko'ele or giant 'opihi (*C. talcosa*) are all protected by fishing regulations. All 'opihi graze on algae and most may creep about to graze, but return to their "home scar" after feeding. Both 'opihi 'alinalina and 'opihi ko'ele often are covered with seaweed. Gametes are shed into the water where fertilization is external. Veligers have a short planktonic life. Spawning occurs mainly in December and January for 'opihi makaiauli and 'opihi 'alinalina. Spawning information is unknown for the green foot 'opihi and 'opihi ko'ele. 'Opihi makaiauli grows to 40 millimeters (1.6 inches) in diameter, the green foot 'opihi to 43 millimeters (1.7 inches), the 'opihi 'alinalina to 32 millimeters (1.3 inches), and 'opihi ko'ele to 90 millimeters (3.5 inches). Besides eating them, native Hawaiians used the shells as scrapers and tools.

DISTRIBUTION: The primary ranges for the 'opihi makaiauli, 'opihi 'alinalina, and 'opihi ko'ele are along the basalt shorelines of the Main Hawaiian Islands; however, the 'opihi makaiauli has been found on La Perouse Pinnacle and 'opihi 'alinalina on Necker and Nihoa. The green foot 'opihi is found primarily in the Northwestern Hawaiian Islands, but it has been occasionally collected from Kaua'i. Historically, it was found on O'ahu and Maui as well.

ABUNDANCE: The abundance of 'opihi makaiauli and 'opihi 'alinalina have declined in the past decades. 'Opihi ko'ele is rare, especially so on Kaua'i and O'ahu. About 3,175 kilograms (7,000 pounds) of 'opihi were collected in the commercial fishery in 2003, which is a decline of about 2,268 kilograms (5,000 pounds) from recent years. The recreational fishery catch is unknown.

LOCATION AND CONDITION OF KEY HABITAT: Primary habitat for all 'opihi is the intertidal zone to ten feet deep waters. 'Opihi makaiauli thrives in the spray zone, although it may be found seaward to the calcareous algal zone. It is well suited for this variable environment due to its ability to ventilate its mantle cavity when it is dry. 'Opihi 'alinalina are found on and below the zero tide mark where there is a steady splash, and they are often on coralline algae. 'Opihi ko'ele are found below the tide mark from 0.5 to three meters (one to ten feet) deep, often between boulders.

EXHIBIT G, pg. 1

THREATS:

- Localized heavy fishing pressure is the most significant threat to all 'opihī species, especially 'opihī ko'ele. Populations in the wild have decreased greatly and this can impact their reproductive success;
- Climate change, habitat disturbance, and nearshore pollution are also potential threats.

CONSERVATION ACTIONS: The goals of conservation actions are to not only protect current populations, but to also establish further populations to reduce the risk of extinction. In addition to common statewide and island conservation actions, specific actions include:

- Maintain healthy populations with appropriate fishing regulations, enforcement, and education;
- Restore habitat.

MONITORING:

- Survey for populations and distribution in known and likely habitats.

RESEARCH PRIORITIES:

- Research the impact of nearshore habitat disturbance and destruction;
- Improve understanding of factors affecting the species population size and distribution, especially for green foot and giant 'opihī.

References:

- Gulko D. 2005. Hawai'i endemic species status chart spreadsheet. Honolulu, HI: Hawai'i Division of Aquatic Resources.
- Gulko D. 2004. Hawaiian marine species for ESA Candidate listing revised Candidate list. Honolulu, HI: Division of Aquatic Resources, State of Hawai'i.
- Hoover JP. 1998. Hawaii's sea creatures, A guide to Hawaii's marine invertebrates. Honolulu, HI: Mutual Publishing. 366 pp.
- Kay AE. 1979. Hawaiian marine shells reef and shore fauna of Hawaii, section 4: Mollusca. Honolulu, HI: Bishop Museum Press. 653 pp.

EXHIBIT G, pg. 2

The Washington Post

Capital Weather Gang

Study: Sea-level rise is accelerating, and its rate could double in next century

By [Jason Samenow](#) February 13 [✉Email the author](#)

Global warming has caused the world's oceans to rise over the past 150 years. Warming seas expand, and water from melting glaciers and ice sheets have had nowhere to go but into the oceans. The rising seas have slowly and steadily eaten away at coastlines.

But a new study finds that in recent decades, the pace of sea-level rise has picked up and coastal real estate could be under water faster and faster in the coming decades.

This has important implications for the coasts: It is much harder to plan for and adapt to accelerating sea-level rise than it is for seas rising at a constant rate.

Before this study was [published Monday in the Proceedings of the National Academy of Sciences](#), scientists had suspected that sea-level rise was accelerating but did not have the data yet to prove it.

Satellite data showed a rise in sea levels over the last 25 years of 2.7 inches (7 centimeters), a rate of roughly 0.12 inches (0.3 cm) per year. Over this short time period, the rate of sea-level rise waxed and waned, and it was difficult to tease out whether its pace was steady or picking up.

But it was only a matter of time before an accelerating trend would become clear, scientists thought. "A detectable acceleration is likely to emerge from the noise of internal climate variability in the coming decade," a [study](#) concluded in 2016.

[Seas aren't just rising, scientists say — it's worse than that. They're speeding up.]

The study published Monday suggests that enough data is now available to confirm that sea-level rise is in fact speeding up. The authors' analysis, which took into account cyclical changes in the oceans' temperatures and measurement uncertainty, found that the chance that sea-level rise is not accelerating is less than 1 percent.

"So far, the difficulty in measuring sea level has made detecting acceleration very hard," said [Joseph Majkut](#), a climate scientist at the Niskanen Center, a libertarian think tank that favors climate action. "This new paper seems to have done it." Majkut, who was not involved in the study, cautioned, however: "It's only one paper, so we'll see if it holds up."

The study authors said the acceleration they calculated is consistent with climate models. If this acceleration is extrapolated into the future, they said, it equates to an increase in average sea level of roughly 26 inches (65 cm) by 2100. This signifies a tripling in the amount of sea-level rise compared to the last century (roughly 8 inches globally). By 2100, the rate of sea-level rise would be double what it is now, the authors reported.

These projections could even be too low. A huge wild card in predicting future sea-level rise is how the Greenland and Antarctic ice sheets will respond to rising temperatures in the coming decades. Their internal dynamics are complex and an area of active research. Processes could kick in that cause the ice to disintegrate faster than models predict.

"If sea level begins changing more rapidly, for example due to rapid changes in ice sheet dynamics, then this simple extrapolation will likely represent a conservative lower bound on future sea-level change," the study said.

[Scientists nearly double sea level rise projections for 2100, because of Antarctica]

The rather steady sea-level rise observed to date, just starting to accelerate, has already proven disruptive in many U.S. coastal areas.

The [frequency of so-called nuisance flooding events](#), caused by astronomically high tides and/or minor storms, has increased up to several hundred percent. In other words, areas that used to flood only during major storms are now seeing inundation of roads and businesses during much lesser tidal events, sometimes even on sunny days.

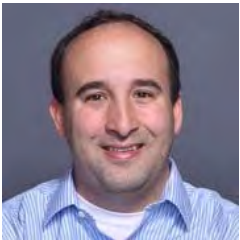
During big storms, the implications of rising seas have proven even more severe. During the January "bomb cyclone," [Boston observed its highest tide in recorded history](#). Superstorm Sandy delivered the highest-recorded water level [at the Battery in New York City](#) in 2012.


Exhibit H

Another [study in the Proceedings of the National Academy of Sciences](#), published in 2017, found that, due to sea-level rise, flood heights that used to occur every 500 years in New York City now occur every 25 years and are projected to occur every five years over the next three decades.











[New York City's fate is closely tied to Antarctic ice, climate scientists warn]


 **30 Comments**




Jason Samenow is The Washington Post's weather editor and Capital Weather Gang's chief meteorologist. He earned a master's degree in atmospheric science and spent 10 years as a climate change science analyst for the U.S. government. He holds the Digital Seal of Approval from the National Weather Association.  Follow @capitalweather

At a Glance

<p>Thu.</p>  <p>64° / 84°</p>	<p>Fri.</p>  <p>65° / 88°</p>	<p>Sat.</p>  <p>68° / 87°</p> <p> 60%</p>
<p>Sun.</p>  <p>71° / 86°</p> <p> 50%</p>	<p>Mon.</p>  <p>69° / 82°</p> <p> 60%</p>	<p>Tue.</p>  <p>68° / 83°</p> <p> 50%</p>

Forecast by National Weather Service 

National Airport	Dulles	BWI
<p>Right Now</p> <p>65.0 ° (18.3° C)</p>  <p>Weather Fair</p> <p>Wind North at 4.6 mph</p>		

Dew Point	57.0 F
Pressure	1019.9 mb

Last updated: May 24 2018, 4:52 a.m.

2018 Heat Tracker

4 90-degree days so far

Average Year-To-Date	1
Yearly Average	36
Record Most	67 (1980,2010)
Record Fewest	7 (1886,1905)
Last Year	43

Tweets by @capitalweather

D.C. Area Almanac

May ▾ 23 ▾ Submit

	National	Dulles	BWI
Avg. High	77	76	76
Avg. Low	58	52	54
Rec. High	97 (1925)	92 (1964)	98 (1925)
Rec. Low	45 (1961)	39 (2002)	39 (1961)
Sunrise	5:48 am	5:49 am	5:46 am
Sunset	8:21 pm	8:23 pm	8:20 pm

°F | °C

The Washington Post

Energy and Environment

Scientists nearly double sea level rise projections for 2100, because of Antarctica

By [Brady Dennis](#) and [Chris Mooney](#) March 30, 2016 [✉ Email the author](#)

This story has been updated.

Sea levels could rise nearly twice as much as previously predicted by the end of this century if carbon dioxide emissions continue unabated, an outcome that could devastate coastal communities around the globe, according to [new research](#) published Wednesday.

The main reason? Antarctica.

Scientists behind a new study published in the journal *Nature* used sophisticated computer models to decipher a longstanding riddle about how the massive, mostly uninhabited continent surrendered so much ice during previous warm periods on Earth. They found that similar conditions in the future could lead to monumental and irreversible increases in sea levels. If high levels of greenhouse gas emissions continue, they concluded, oceans could rise by close to two meters in total (more than six feet) by the end of the century. The melting of ice on Antarctica alone could cause seas to rise more than 15 meters (49 feet) by 2500.

The startling findings paint a far grimmer picture than current consensus predictions, which have suggested that seas could rise by just under a meter at most by the year 2100. Those estimates relied on the notion that expanding ocean waters and the melting of relatively small glaciers would fuel the majority of sea level rise, rather than the massive ice sheets of Greenland and Antarctica.

[The alarming science driving much higher sea level projections for this century]

The projection “nearly doubles” prior estimates of sea level rise, which had relied on a “minimal contribution from Antarctica,” said Rob DeConto of University of Massachusetts, Amherst, who authored the study with David Pollard of Penn State University.

The research already has created a buzz in the community of scientists studying Antarctica, and experts largely praised the new model as thorough and impressive, while noting its remaining uncertainties.

“People should not look at this as a futuristic scenario of things that may or may not happen. They should look at it as the tragic story we are following right now,” said Eric Rignot, an expert on Antarctica’s ice sheet and an earth sciences professor at the University of California, Irvine, who was not involved in Wednesday’s study. “We are not there yet ... [But] with the current rate of emissions, we are heading that way.”

Should the new research prove correct, it could trigger a “tectonic shift” in expectations for the speed and severity of the sea level problem, said Ben Strauss, director of the program on sea level rise at Climate Central, an independent organization of scientists based in New Jersey. He said that while the study’s findings represent potentially grave problems for many coastal areas in the decades ahead, the century beginning in 2100 could see truly catastrophic shifts, unless societies make sharp cuts in greenhouse gas emissions.

“Under the high emissions scenario, the 22nd century would be the century of hell,” Strauss said. “There would really be an unthinkable level of sea rise. It would erase many major cities and some nations from the map ... That century would become the century of exodus from the coast.”

[Scientists say Antarctic melting could double sea level rise. Here's what that looks like]

Places as far flung as South Florida, Bangladesh, Shanghai, Hampton Roads in Virginia and parts of Washington, D.C., could be engulfed by rising waters, Strauss said. Even by 2100, Miami Beach and the Florida Keys could begin to vanish. New Orleans essentially could become an island guarded by levees. Floods that pushed as far inland as the surge from Hurricane Sandy could ravage parts of the East Coast with far greater frequency.

The researchers behind Wednesday’s study make clear that their model has limitations and that human behavior can alter

New science suggests the ocean could rise more — and faster — than we thought



In this Sept. 10, 2017, photo, waves crash over a seawall at the mouth of the Miami River from Biscayne Bay, Fla., as Hurricane Irma passes by in Miami. (Wilfredo Lee / AP)

By **Chris Mooney**

Washington Post

OCTOBER 26, 2017, 3:00 PM

Climate change could lead to sea level rises that are larger, and happen more rapidly, than previously thought, according to a trio of new studies that reflect mounting concerns about the stability of polar ice.

In one case, the research suggests that [previous high end projections](#) for sea level rise by the year 2100 — a little over three feet — could be too low, substituting numbers as high as six feet at the extreme if the world continues to burn large volumes of fossil fuels throughout the century.

"We have the potential to have much more sea level rise under high emissions scenarios," said Alexander Nauels, a researcher at the University of Melbourne in Australia who led one of the three studies. His work, co-authored with researchers at institutions in Austria, Switzerland and Germany, was [published Thursday](#) in *Environmental Research Letters*.

The results comprise both novel scientific observations - based on high resolution seafloor imaging techniques that give a new window on past sea level events — and new modeling techniques based on a better understanding of Antarctic ice.

The observational results, from Texas and Antarctica, examine a similar time period - the close of the last Ice Age a little over 10,000 years ago, when seas are believed to have risen very rapidly at times, as northern hemisphere ice sheets collapsed.

Off the Texas coast, this would have inundated ancient coral reefs. Usually, these reefs can grow upward to keep pace with sea level rise, but there's a limit — one observed by a team of scientists aboard a vessel called the Falcor in 200 foot deep waters off the coast of Corpus Christi.

These so-called drowned reefs showed features that the researchers called "terraces," an indicator of how the corals would have tried to respond to fast rising sea levels. Because the organisms must maintain access to a certain amount of sunlight, they would have tried to grow higher to keep up with fast rising seas — but they wouldn't have been able to do so over a very large area. And so their growth became concentrated in progressively smaller, stepped regions.

"The reef under stress often has a tendency to kind of shrink to this higher elevated area," said André Droxler, one of the authors of the study in *Nature Communications* and a researcher at [Rice University](#). "It creates this pyramid-like system." (Droxler completed the research with colleagues from Rice and [Texas A&M University](#), Corpus Christi.)

The youngest drowned corals date to the end of the last ice age, around 11,500 years ago — corresponding to what scientists believe were large warming events in the northern hemisphere and so-called meltwater pulses from now melted ice sheets. And multiple drowned reefs off Texas show a similar pattern — and terminate in similar water depths.

"Over 120 kilometers, the reefs behaved the same way. It's difficult to find any other reason why they would do this," Droxler said.

Droxler thinks the reef structures suggest eras when sea level was rising by tens of millimeters annually, far beyond the current, roughly 3 millimeters per year. (A 50 millimeter annual sea level rise would produce a meter, or over 3 feet, of rise every 20 years.) The new study therefore concludes that during the last ice age, there were multiple bursts of fast sea level rise - and implies that our future could hold something similar.

"The steady and gradual sea-level rise, observed over the past two centuries [may] not be a complete characterization of how sea level would rise in the future," the study concludes.

Meanwhile, far away in the Southern hemisphere, a team of scientists used a very similar seafloor mapping technology to detect ancient iceberg "plough marks" etched deep into the seafloor of Pine Island Bay, an ocean body that currently sits in front of one of West Antarctica's most worrying glaciers, Pine Island. The

results were published in the journal *Nature* on Wednesday by researchers at the University of Cambridge, the British Antarctic Survey, and the Bolin Center for Climate Research in Stockholm.

The seafloor grooves, the researchers believe, were made during a similar era to the Texas coral steppes (the close of the last ice age), and signal a very rapid retreat of Pine Island over roughly a thousand years.

What's critical about the markings, explains lead study author Matthew Wise of the University of Cambridge, is their maximum depth — 848 meters, or around 2,800 feet. Because ice floats with 10 percent of its mass above the surface and the remaining 90 percent below it, this suggests that when the ice broke from the glacier, close to 100 meters (over 300 feet) of it was extending above the water surface.

That's a key number, because scientists are converging on the belief that ice cliffs of about this height above the water level are no longer sustainable and collapse under their own weight — meaning that when you get a glacier this tall up against the ocean, it tends to crumble and crumble, leading to fast retreat and potentially fast sea level rise.

"If we think about how thick these icebergs would have needed to be considering these float with 90 percent of their mass and thickness beneath the sea," Wise said, "we think of an ice cliff that was at the maximum thickness implied by the physics of the ice."

The problem is that if it happened then, well, it could happen again. Both Pine Island glacier and its next door neighbor, Thwaites, are known to get thicker as one travels inland away from the sea, which means they are capable of once again generating ice cliffs taller than the critical size detected by the current study.

"If a cliff even higher than the ~100 m subaerial/900 m submarine cliffs were to form, as might occur with retreat of Thwaites Glacier in West Antarctica, it might break repeatedly with much shorter pauses than now observed, causing very fast grounding line retreat and sea level rise," explained Richard Alley, a glaciologist at Penn State University, by email after reviewing the current study for the Post.

The [final study](#), released Thursday morning in *Environmental Research Letters*, takes a different approach but provides perhaps the most sweeping verdict.

The study used five "shared socioeconomic pathways" that analyze possible futures for global society and its energy system, and resulting climate change, over the course of this century. These scenarios will feed into the next report of the United Nations Intergovernmental Panel on Climate Change, the most influential scientific body that assesses climate change, according to the University of Melbourne's Alexander Nauels, the lead author of the current study

The research combined these scenarios with tools to project future sea level rise in light of recent science suggesting that Antarctic ice in key regions could collapse relatively rapidly. That includes possible fast retreat at Pine Island and Thwaites glaciers due, in part, to the problem of ice cliff instability.

The result was that in one scenario assuming high fossil fuel use and strong economic growth during the century, the study predicted that seas could rise by as much as 4.33 feet on average — with a high end possibility of as much as 6.2 feet — by 2100. That includes possibly rapid sea level rise as high as 19 millimeters per year by the end of the century. These numbers are considerably higher than high end projections released in 2013 by the Intergovernmental Panel on Climate Change.

(It is important to emphasize that the highest sea level numbers presented in the new study would result from human choices to pursue large fossil fuel exploitation and economic growth with little attempt to slow climate change. It is far from clear that this is the path the world will actually take.)

On the other hand, if the world limits global warming to the Paris climate agreement emissions target, the study finds that sea level rise might be held as low as 1.7 feet by 2100, on average.

When the IPCC undertakes a similar analysis, Nauels said, it could produce results like these. "I think the numbers will go up," he said of the body's report, which is expected in 2021.

So in sum — new research is affirming that seas have risen quite rapidly in the planet's past, and that major glaciers have retreated quickly because their enormous size makes them potentially unstable. Meanwhile, additional modeling projects these kinds of observations forward and suggests that the century in which we are now living could — could — see similar changes, at least in more severe global warming scenarios in which the world continues to burn high volumes of fossil fuels.

But unlike those submerged corals off the coast of Texas, the difference is that we know this could be coming — which gives us a chance to stop it.

RELATED:

[Misplaced monarchs: Clusters of butterflies stuck up north](#)

[Climate change already costing U.S. billions, GAO report says](#)

[EPA yanks scientists' conference presentations, including on climate change](#)

[Trump to nominate climate change doubter as top environmental adviser](#)

[Weather Service forecasts third straight mild winter for much of U.S.](#)

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This article is related to: [Environmental Science](#), [Climate Change](#), [Marine Science](#), [Scientific Research](#), [Antarctica](#), [Rice University](#), [Texas A&M University](#)

the possible outcomes. For instance, the worst-case scenario — of seas rising nearly 4 feet due to Antarctic ice loss alone by 2100 — assumes that very high emissions continue for carbon dioxide and other greenhouse gases.

In Paris late last year, world leaders forged an [historic agreement](#) to begin scaling back such emissions in coming years. They embraced the goal of holding global warming “well below” 2 degrees Celsius above pre-industrial levels, but at the same time, it has been widely noted that current country-level commitments to cut emissions fall far short of this target.

But even under a more moderate emissions scenario, Wednesday’s study found that the Antarctic contribution to sea level rise still could reach about two feet by 2100, and much more by 2500. Only if countries sharply reduce emissions does the model show that it’s possible to preserve Antarctica in roughly its current state.

“This research highlights the importance of doing even much better than the Paris agreement if we’re going to save our coastal cities,” Strauss said.

DeConto and Pollard arrived at their projections about future sea level rise by first turning to the past. Their study is based on an improved understanding of two past warm eras in Earth’s history that featured much higher seas, known as the Pliocene and the Eemian. The Pliocene was a warm period about 3 million years ago, when atmospheric carbon dioxide levels are believed to have been about what they are now — 400 parts per million. Sea levels are believed to have been significantly higher than now — perhaps 30 feet or more. The Eemian period, between 130,000 and 115,000 years ago, also featured sea levels 6 to 9 meters above current levels, with global temperatures not much warmer than our current era.

[Why some Antarctic glaciers are disappearing faster than we thought]

Sea level rise on the scale seen in those eras likely required a loss of ice not just from Greenland, but also from Antarctica. But previous computer models of Antarctica have failed to accurately reproduce such scenarios. Scientists had spent “years of struggling to be able to simulate tens of meters of sea level rise in the Pliocene,” DeConto said. “This has been a longstanding problem for us. And we had known for years that we’re probably missing some important underlying physics.” Scientists already knew that key parts of Antarctica, and especially West Antarctica, feature a condition called “marine ice sheet instability.” That is, vast glaciers are already rooted below sea level and lie on downward sloping seabeds. Warm water can not only melt them from below, but as the glaciers retreat, more and more ice will be exposed to melting. The new study factors in not only this process, but two new ice processes that have scientists already have seen destabilize several glaciers in Greenland: “hydrofracture,” in which water formed by the melting of snow and ice atop a glacier’s stabilizing ice shelf causes it to break up; and “cliff collapse,” in which a sheer ice cliff 100 meters or more above sea level becomes unstable and crashes repeatedly into the ocean below. Both phenomena can speed up the pace of ice loss from glaciers and cause sea level rise.

“Build a little sand castle and it is fine; too high and it may break,” said Richard Alley, a glaciologist at Penn State University who has published previously with DeConto and Pollard, describing the revelations regarding ice cliff collapse.

Knut Christianson, a glaciologist at the University of Washington in Seattle, said the new work will spur additional research to determine precisely what happens at glaciers where cliff collapses and so-called “calving” occur. “It’s a more comprehensive analysis than before, and it certainly indicates that we should look more closely to see whether or not the way they treat these processes in the model is accurate in the real world,” he said.

The research further undermines a string of sea level projections from the United Nations’ Intergovernmental Panel on Climate Change, which have been faulted for being too conservative.

In 2013, the body [projected](#) that for the same high-end emissions scenario used in the current study, sea level rise by the year 2100 would be between 0.52 and 0.98 meters (1.7 and 3.22 feet), relatively little of which would come from the ice sheets of Greenland and Antarctica. It noted that beyond this likely range, only Antarctica’s marine-based regions could conceivably contribute a lot more, but the panel found that “there is medium confidence that this additional contribution would not exceed several tenths of a meter.”

The new study challenges that reasoning. It also emerges as mounting research has pointed at one region of Antarctica in particular — the Amundsen Sea sector of remote West Antarctica, centered on the enormous, [marine-based Thwaites glacier](#) — as particularly vulnerable.

If the projections in Wednesday’s study prove correct, they could present especially bad news for U.S. coasts. [The reason is gravity](#): Antarctica’s enormous mass pulls the ocean toward it, and when it loses significant mass, seas would surge back

toward the opposite end of the world.

“Sea level rise is not going to be felt evenly over the surface of the Earth. It’s really bad for New York, Boston. We are sort of in the bullseye,” DeConto said.


Read more at Energy & Environment:


[What Florida’s ancient past tells us about sea level rise today](#)


[The enormous carbon footprint of food that we never even eat](#)

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 **2261 Comments**

Brady Dennis is a national reporter for The Washington Post, focusing on the environment and public health issues. He previously spent years covering the nation’s economy. Dennis was a finalist for the 2009 Pulitzer Prize for a series of explanatory stories about the global financial crisis.  Follow @brady_dennis

Chris Mooney covers climate change, energy, and the environment. He has reported from the 2015 Paris climate negotiations, the Northwest Passage, and the Greenland ice sheet, among other locations, and has written four books about science, politics and climate change.  Follow @chriscmooney




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Dow 24,886.81	Today  0.21%
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NASDAQ 7,425.96	Today  0.64%

Last Updated:05/23/2018



Bill Saunders <wwsrainbow@gmail.com>

ShangriLa Project Concerns

1 message

Bill Saunders <wwsrainbow@gmail.com>

Tue, Dec 13, 2016 at 4:29 PM

To: natalie.a.farinholt@hawaii.gov, kng@ddcf.org, rsato@hhf.com

Bcc: "Nathan P. Roehrig" <roehrig@bsds.com>

Dear Natalie, et al:

I will try to leave voice messages for each of you today, but I am writing to request that you re-open to comment period for the ShangriLa Draft Environmental Assessment for an additional 21 days to allow additional input from surfers and other users of the area's ocean resources regarding this proposed project. I apologize but I was not aware the Draft EA had been published until three days ago.

To summarize, I am a 50+ year resident of Black Point, I have surfed at all of the breaks near Cromwell's for that whole time, I have been a member of the Save Our Surf environmental organization since 1965 and I worked as a gardener at Shangri La in 1971 and 1972.

My concern is that the analysis of surfing spots and conditions was based on inaccurate and incomplete data from the "wannasurf" website. That site's information is useful for some things but it is known to be inaccurate for many regions, especially in Hawaii, as it is published elsewhere and contains primarily selected random anecdotal information. While I have not fully reviewed the voluminous DEA yet, I have skimmed the surf impact analysis, I feel it is incomplete and inadequately sourced, and I would like the opportunity to provide some additional relevant information and possibly suggestions for consideration. In particular, there are a number of other surfing sites close to the project area which have not been listed and could be impacted, especially by the expected erosion and redistribution of sand and the reflective and refractive wave action caused by the breakwall removal.

I am not necessarily opposed to the project but it is a big one and I feel all possible impacts on ALL the nearby surfing areas should be considered and properly mitigated.

Thank you for considering my request.

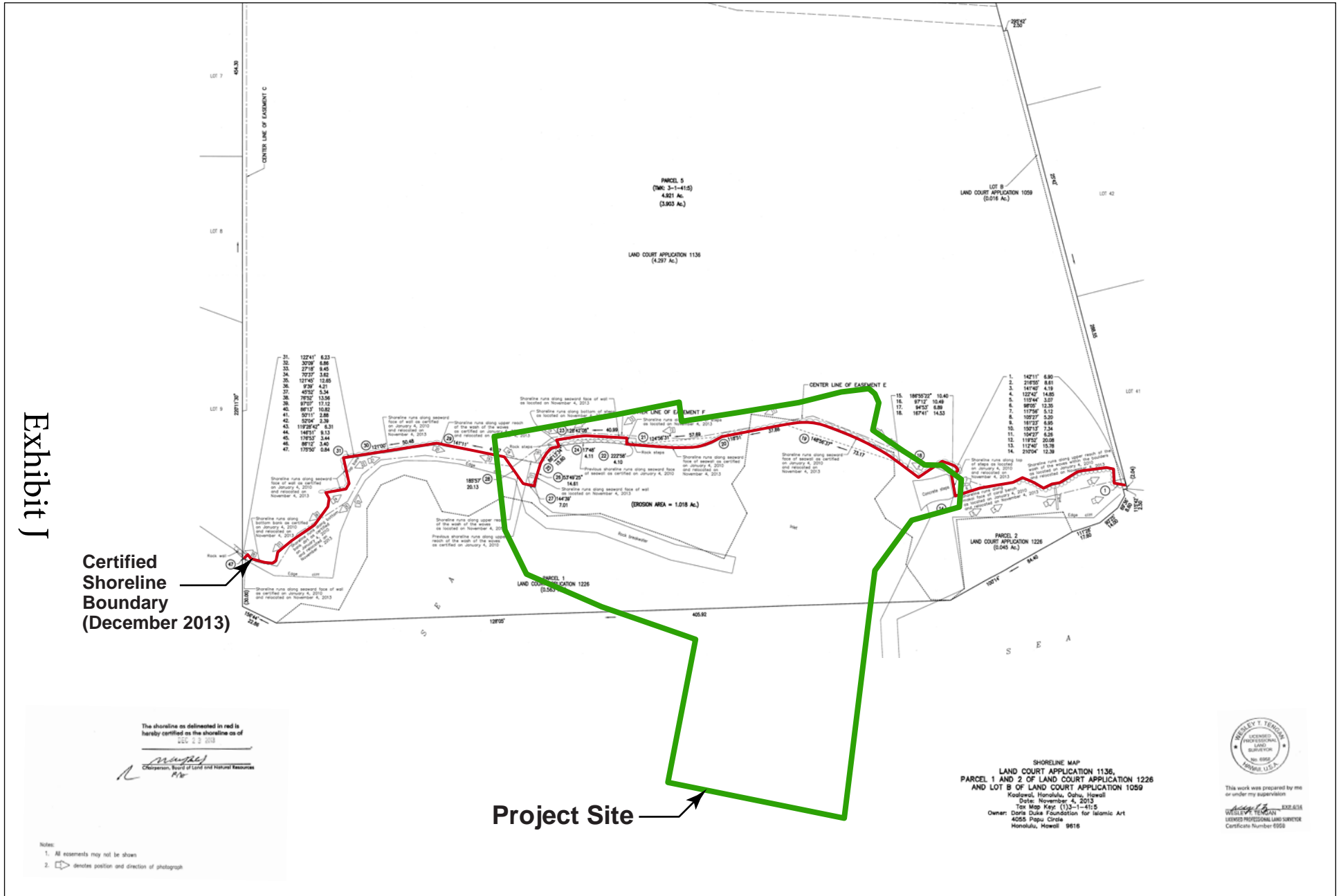
Bill Saunders
4111 Black Point Rd.
Honolulu, HI 96816

808-375-3588

Exhibit I

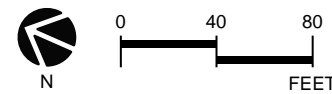
Exhibit J

1-21



SHANGRI LA BREAKWATER SAFETY INITIATIVE AND SHORELINE STABILIZATION PROJECT
 Figure 1.6 - Shoreline Survey Map

Honolulu, Hawaii



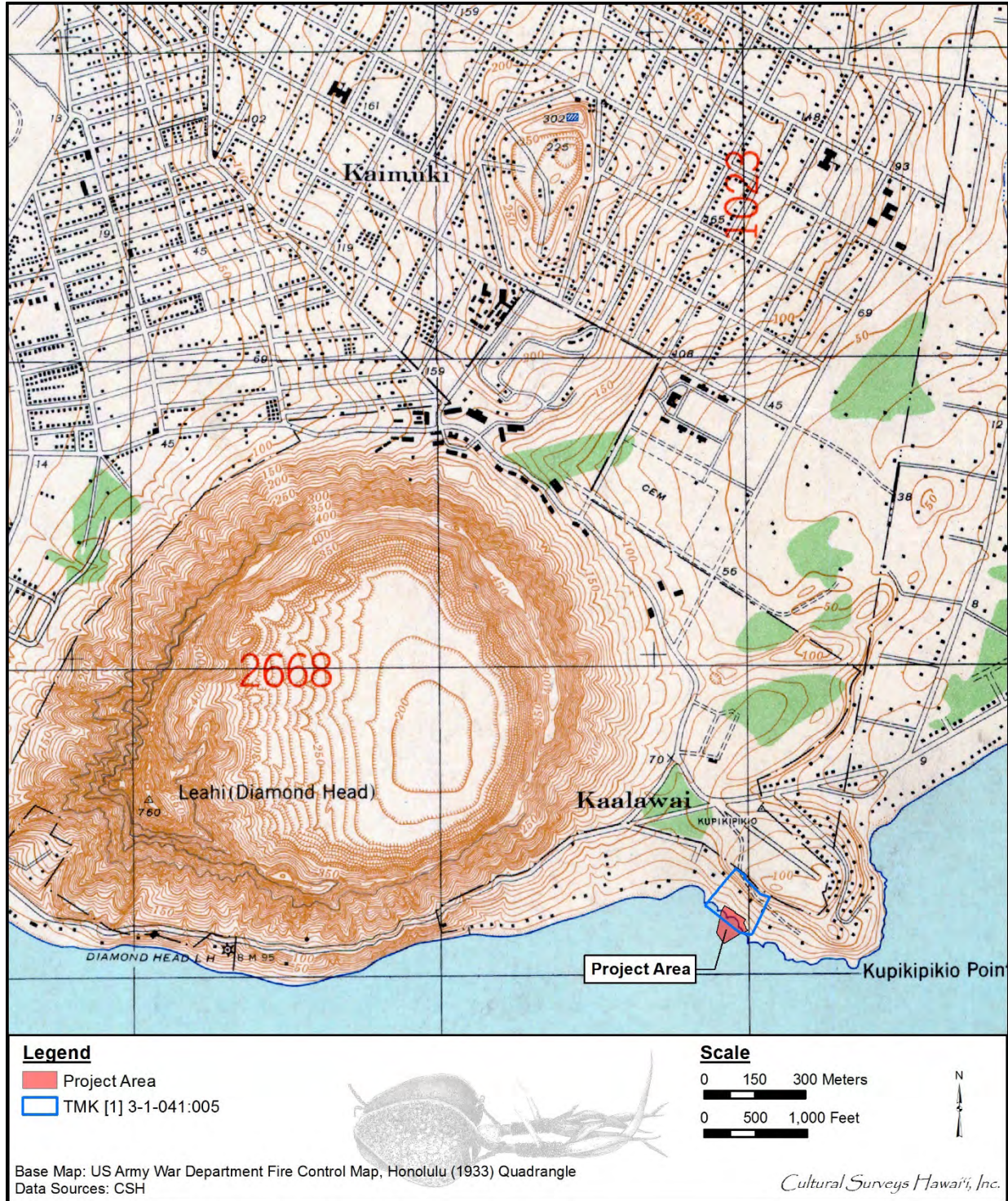


Figure 12. 1933 U.S. Army War Department Fire Control map, Honolulu Quadrangle, showing the location of the Shangri La parcel and the project area

HISTORIC HAWAII FOUNDATION

DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

2018 JAN 22 P 12:00

RECEIVED
OFFICE OF CONSERVATION
AND COASTAL LANDS

January 19, 2018

Mr. Samuel J. Lemmo, Administrator
State of Hawai'i, Department of Land and Natural Resources
Office of Conservation and Coastal Lands
1151 Punchbowl Street, Room 131
Honolulu, HI 96813

Email: Sam.J.Lemmo@hawaii.gov

**Re: Comments on Conservation District Use Application OA-3809
Shangri La Breakwater Safety Initiative and Shoreline Stabilization Project
Honolulu (Kona) District, Waikiki Ahupua'a, Island of O'ahu
TMK: [1] 3-1-041:005 por.**

Dear Mr. Lemmo:

Historic Hawai'i Foundation (HHF) is providing comments on the Conservation District Use Application (CDUA) for the proposed partial demolition of the Diamond Head Breakwater at the Doris Duke Foundation for Islamic Art (DDFIA) whose property is known as "Shangri La."

Interests of Historic Hawai'i Foundation

Historic Hawai'i Foundation is a statewide organization established in 1974 to encourage the preservation of sites, buildings, structures, objects and districts that are significant to the history of Hawai'i.

Coordination with Section 106 and Federal Permit

The CDUA notes that the project requires a permit from the Army Corps of Engineers (ACOE), which is an undertaking that requires compliance with Section 106 of the National Historic Preservation Act (NHPA).

By letter to the Office of Conservation and Coastal Lands (OCCL) and ACOE on December 8, 2016, HHF previously requested to be included as consulting party pursuant to the implementing regulations of the NHPA at 36 Part 800.2(c)(5) as an organization with a demonstrated interest in the undertaking and a concern for the effects on historic properties.

Historic Hawai'i Foundation

680 Iwilei Road, Suite 690 • Honolulu, HI 96817 • Tel: 808-523-2900 • FAX: 808-523-0800 • www.historichawaii.org

Page 1 of 5

Exhibit K

Exhibit 8: Written comments

HHF notes it is necessary to comply with Section 106 *before* final approval of other permits in order to avoid foreclosure of options as described in 36 CFR §800.02(c) & 800.16(j). HHF believes that the CDU permit approval sequence may be out of order, as the ACOE is prohibited from taking “an action that effectively precludes the [Advisory Council on Historic Preservation] from providing comments which the agency official can *meaningfully consider* prior to the approval of the undertaking” (emphasis added).

In other words, ACOE must consider a full range of options to avoid the adverse effect on a historic property prior to issuing a permit. If the Conservation District Use Permit (CDUP) is issued before that process is complete, it forecloses options. Either the ACOE would not be in compliance with Section 106, or the eventual resolution reached through the Section 106 process would necessarily result in a new application for a Conservation District permit and repetition of the current permit review process.

HHF’s previous letter of December 8, 2016 also provided notification that HHF would participate in the historic preservation consultation pursuant to HRS 6E and its implementing rules. Hawai’i Administrative Rules 13-275 and 13-274 provide for participation of interested persons in the historic preservation review process. Despite that notice, the State Historic Preservation Division (SHPD) has not notified HHF of any such opportunities for participation and consultation.

Undertaking: The project proposes to dismantle most of the Diamond Head Breakwater in the ocean fronting Shangri La, constructed in 1936-1938 as part of the original construction. The stated purpose is to decrease high risk activities “such as diving and jumping from the top of the shoreline walkway and the Diamond Head Breakwater into shallow water, particularly during low tide – result[ing] in serious injuries”¹.

APE: The Area of Potential Effect (APE) includes the entire Boat Harbor historic site, as well as some submerged portions beyond the breakwater.

Identification of Historic Resources: The Shangri La Boat Harbor site is a recognized historic property designated as the Shangri La Boat Harbor SIHP #50-80-14-7839, and identified in Appendix A, page A-54 and Figure 19 of the CDUA.

- **Evaluation of Significance:** The “Intensive Level Resource Inventory Survey and Report” (contained in Appendix C of the Final EA) indicates that the Boat Harbor has significance in the development of the property and its context in Local and National history.

¹ Final EA Shangri La Breakwater Safety Initiative and Shoreline Stabilization Project, June 2017, p.2-1.

The breakwater and harbor is recommended to be significant under the following criteria²:

- Under Criterion “B” (associated with the lives of persons significant in our past),
- Under Criterion “C” (embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic value), and
- Under Criterion “D” (have yielded, or may be likely to yield, information important in prehistory or history)

Please note that HHF does not agree with the applicant’s conclusion that the boat harbor lacks historic significance due to a lack of “artistic merit,” which was asserted in the CDUA and supplemental materials.

“Artistic merit” is only one of several components that comprise criterion C. While the boat harbor is not of the same high artistic value as the main property, it still embodies distinctive characteristics that contribute to the overall historic significance.

- **Integrity:** The historic assessment notes that, “the boat basin and breakwaters were constructed during the initial 1936-1938 development of the property and although subject to minor repairs and alterations, they retain their historic integrity.”
- **Determination of Eligibility:** The entire Shangri La property was determined to be eligible for the National Register of Historic Places (NRHP) in 2008³. The Boat Harbor is individually assessed as SHIP #50-80-14-7839.

Description of Historic Properties

Character-Defining Features: SIHP # 50-80-14-7839 consists of the boat basin and breakwaters at the Shangri La estate on Black Point. The harbor consists of:

Feature 1: Diamond Head Breakwater

Feature 2: Koko Head Breakwater

Feature 3: Boat loading platform

Feature 4: Concrete slab for outrigger canoes

Feature 5: Concrete foundation for unknown building

Feature 6: Concrete steps to the outrigger platform

² Breakwater Final EA, Appendix C: Draft AIS, Section 8, p. 69.

³ *Historic Structure report for Shangri La*, Historic Resources Group, 2008

Feature 7: Strainer pit and associated pipe for strainer pit

Feature 8: Drainage culvert in Diamond Head Breakwater

Feature 9: Outflow pipes

Feature 10: Buoy

Feature 11: Rock landing and walkway around harbor basin

All features listed above are mapped in the Final EA, Chapter 3 (pages 3-24 through 3-29, including figure 3.4). Features affected by the proposed undertaking are emphasized in **bold** and described in Appendix A of the CDUA (pages A-54 & A-57).

Determination of Effect: The Final EA was published with a Finding of No Significant Impact (FONSI) on June 23, 2017 further described as:

“Dismantling the breakwater would result in only a *minor loss of historic character* associated with the entire Shangri La property based upon the archaeological study conducted.”⁴
(emphasis added).

Historic Hawai'i Foundation disagrees with this characterization and finds the proposed undertaking would result in an adverse effect to the identified historic resource.

The removal of a historic feature is an “adverse effect” on a historic property. As described in 36 CFR 800.5 & 11 adverse effects on historic properties include:

- Demolition [(1) physical destruction]
- Alteration of character-defining features [(iv) Change of the... physical features... that contribute to its historic significance]

While the CDUA asserts a “minor loss of character [relative to] the Shangri La property”, HHF maintains that the proposed undertaking constitutes a major adverse effect on the Boat Harbor site, which is a historic property in its own right and not just a portion of the overall site of Shangri La.

Measures to Avoid Adverse Effects

HHF recognizes the need to provide safety measures and supports reasonable modifications to improve safety.

However, HHF believes that there may be alternatives that address safety concerns while minimizing the adverse effect and without removing the historic features.

⁴ Breakwater Final EA, Section 7.2.1

The applicant proposes adding materials to the swim basin to deter jumping. HHF does not oppose adding new materials, but recommends that they come from another source and not by destruction of a historic feature. This alternative would consist of:

- Adding imported rocks within the basin as proposed to create a deterrence to high-risk diving and for repairs to the existing seawall as required.
- Keep the Diamond Head Breakwater intact
- Block the opening to the culvert to prevent swimming through the opening.

Measures to Mitigate Adverse Effects

If the above recommendation is not incorporated and the project proceeds, the adverse effect to the historic property needs to be mitigated.

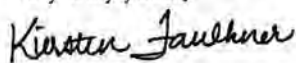
Although the documentation contained in Appendix C: Draft AIS, sub-appendices B & C by Mason Architects (Intensive Level Historic Resource Inventory Survey Form and Report) provides an excellent resource and documentation, documentation of the historic property is not the only mitigation measure that should be considered.

On its own, documentation does not sufficiently mitigate the loss of historic properties and features. Additional measures to avoid, minimize and mitigate the effect on the historic resources are necessary to address the destruction of a unique historic resource.

Until these issues are resolved, HHF recommends that the CDU permit should not be issued.

Historic Hawai'i Foundation looks forward to resolving the outstanding issues and adverse effects on the Shangri La Boat Harbor.

Very truly yours,



Kiersten Faulkner, AICP
Executive Director

June 20, 2023

Board of Land and Natural Resources
Via Email: blnr.testimony@hawaii.gov

RE: Public Comment on CDUA OA-3913

Diamond Head Breakwater Safety Project

Aloha,

As a retired police officer and the former security manager at the Shangri La Museum of Islamic Art, Culture & Design, I can say with a high degree of credibility and concern that the Diamond Head Breakwater poses a continued catastrophic risk to residents and visitors using the area recreationally.

The boat basin presents a serious and frequent danger. During my eight years at Shangri La, I personally witnessed near-daily participation in perilous activities, amounting to thousands of individuals exposing themselves to life and limb-threatening situations.

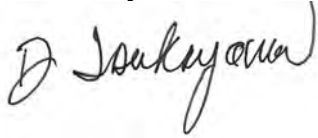
Despite our efforts to educate and warn people, they continue to scale the fence and dive into the shallow basin, not understanding the speed at which the conditions change drastically and dangerously. The underwater drainage pipe alters the water level rapidly as the waves go in and out. This effect catches people by surprise and creates injury when they jump into waters far shallower than anticipated. The surge resulting from the flow of water through the drainage pipe also drags people into the boulders of the breakwater. Current mitigation measures are insufficient at preventing people from engaging in this far too dangerous behavior. The best way to put an end to needless injury is to disassemble the artificial breakwater and return the coastline to its original state before the boat basin was constructed for private use.

In 1968-72, I was a student at the Kamehameha Schools Kapālama when a fellow student, George Terry Kanalua Young, returned to school after being absent for over a year due to an accident he sustained at “Cromwell’s” that left him a quadrapaligic. After graduating from Kamehameha, George went on to earn many distinguished awards for his community services, and educational degrees in Psychology, Counseling & Guidance and a PH.D., in History with emphasis on Pacific Island History. Dr. Young shares his story about the day he dove into the shallow waters at Cromwell’s in an interview with Ehu Kekahu Cardwell, Director of the Koani Foundation. Assisting George at the Kamehameha Schools campus was my first introduction to Cromwell’s. The interview is titled “Hawaiian Superman” and can be found on “YouTube” along with many examples of dangerous behavior by “thrill-seeking” visitors at Cromwell’s. As a quadrapaligic on a campus built on the side of a hill with very little wheelchair accessible accommodations, George and his wheelchair needed to be carried up and down stairs and taken from class-to-class by his classmates. George’s story could be anyone’s story who jumps into the waters at Cromwell’s and unfortunately, many others have suffered life changing injuries at this beautiful but deceptively dangerous swimming hole.

The shoreline restoration plan in the application demonstrates that in addition to the reduction of risk, swimming conditions would otherwise remain the same. All those who love the area for swimming can continue to do so safely. Additionally, the restoration of the coastline will minimize shoreline erosion in the future.

In my opinion, a project that increases safety while maintaining what people love about a recreational area is good for our community and everyone who enjoys it. I support the Diamond Head Breakwater Safety Project fully, and I hope the Board will as well.

Mahalo for your consideration,

A handwritten signature in black ink, appearing to read "D Tsukayama". The signature is written in a cursive, flowing style.

Derrick Tsukayama
Retired Officer for the Honolulu Police Department
Former Security Manager, Shangri La

From: [Rich Turbin](mailto:Rich.Turbin)
To: fongf001@hawaii.rr.com; DLNR.BLNR.Testimony
Cc: WWSRainbow@gmail.com; lwdo04u@gmail.com; rfried@croninfried.com; fongf004@hawaii.rr.com; bonnie.w.fong@gmail.com; mindypennybacker@hotmail.com
Subject: [EXTERNAL] RE: BLNR meeting 6/23/2023, Opposition to the dismantling of the DD Breakwater
Date: Wednesday, June 21, 2023 9:27:03 AM

Dear BLNR Board Chair Chang and Board Members,

Please regard this as my personal opposition to the proposal to remove the breakwater at the Doris Duke pool. It also represents the opposition of the Waiialae-Kahala Neighborhood Board which has voted twice against the same proposal previously brought. I also incorporate the article and previous letter from myself on this issue which was attached to Dr. Fred Fong's testimony in opposition.

Below I present a summary of our opposition on certain salient points:

- 1- The State of Hawaii cannot afford to spend upwards of \$6,000,000 dollars (which will probably wind up being over \$10,000,000) for a project of dubious value which will not only mar the beauty of an iconic Hawaii surf and swimming area but result in the area becoming far more dangerous.
- 2- The run-off of mud and debris from the destruction of the breakwater will travel to the Waikiki beaches and ruin Hawaii's most important tourist area with mud and other debris brought westward by the prevailing currents.
- 3- Assuming, hypothetically, that the fence put up by the Doris Duke Foundation encourages jumping off the seawall it is a far easier and cheaper fix, to raise the height of the fence, place barbwire on top, install better signage and hire a security guard to chase potential jumpers away.
- 4- My research of the court records indicate that three lawsuits regarding serious injuries have been filed in the approximate 85 years since the breakwater was established. That's approximately one serious injury (and law suit) every 28 and one/half years. That's a far better safety record than for Sandy Beach, the North Shore beaches, Waikiki, and other surf and swimming areas in Oahu. To put it more succinctly it is positively "brainless" to spend over \$6,000,000 on a problem that doesn't truly exist!
- 5- I won't get into here how wrong-headed it was for the State to accept the Doris Duke Foundation's "quit-claim" of the breakwater area but there is no question that this project is being pushed by the Doris Duke Foundation's lawyers who, I believe, reside in New Jersey. They are not Hawaii residents and I believe that it is very wrong for the State to spend millions of dollars from the tax payers of Hawaii to ameliorate, possibly, the professional responsibility of lawyers for the Doris Duke Foundation.
- 6- In fact ocean experts have opined that with the destruction of the breakwater which safeguards Shangri-La, storm surf will crash against the Shangri-La wall, erode and damage it and possibly cause it to collapse. Thus, the destruction of the breakwater could jeopardize the future safety and viability of the historic Shangri-La Villa which houses the beautiful and historic Islamic Art Museum.
- 7- With the breakwater destroyed swimmers will come to a far more dangerous swim and surf area and there will probably be far more serious injuries and even drownings. Furthermore if people want to jump off the wall in high tide the rocks will be unseen under the wall and serious injuries from jumping will increase not decrease from their present level of one serious injury every 30 years!

For these and other reasons I am opposed to the proposal to remove the breakwater. Thank you for considering my opposition.

Sincerely,
Richard Turbin

Richard Turbin
Turbin Chu Heidt, Attorneys at Law
737 Bishop Street, Suite 2730
Honolulu, Hawaii 96813
(808) 528-4000 (office)
(808) 599-1984 (fax)



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From: fongf001@hawaii.rr.com <fongf001@hawaii.rr.com>

Sent: Tuesday, June 20, 2023 4:26 PM

To: blnr.testimony@hawaii.gov

Cc: WWSRainbow@gmail.com; lwdo04u@gmail.com; richturbin@turbin.net;
rfried@croninfried.com; FONGF001@hawaii.rr.com; fongf004@hawaii.rr.com;
bonnie.w.fong@gmail.com; mindypennybacker@hotmail.com

Subject: FW: BLNR meeting 6/23/2023, Opposition to the dismantling of the DD Breakwater

Frederick Fong submits his written testimony for the DLNR meeting on 6/23/2023, regarding opposition of item K-2, CDUA OA-3913, Diamond Head Breakwater Safety Project:

1. Email to blnr.testimony@hawaii.gov
2. By postal mail to: Board of Land and Natural Resources, P.O Box 621, Honolulu, Hawaii 96809

Dear BLNR Chairperson Chang and Board Members,

Members of the BLNR will again decide on **committing the State to spend upwards of \$5 million of unallotted funds** to dismantle the Breakwater and **"Use the boulders**

from the breakwater to stabilize the existing reinforced concrete seawall..” for the benefit of private landowner, Doris Duke, as a safety initiative. This application was twice denied by the BLNR in 2018.

I would like to draw your attention to some important points regarding the **CDUA presented by DLNR/Tiger Mills**. Despite the well-scripted presentation and congratulations offered, it is crucial that you approach this analysis with an open mind. The facts and contradictions presented in the current CDUA are largely **unchanged from the ones presented by DDFIA in 2018**, which were previously **twice denied by the BLNR** in majority votes. It is important to understand the reasons behind the BLNR's previous denials.

Here is an abbreviated timeline of events:

I. In **2018, DDFIA submitted** a CDUA to dismantle the Diamond Head Breakwater and **“Use the boulders from the breakwater to stabilize the existing reinforced concrete seawall..”** (Exhibit 5, page 41) This constructed revetment and armoring of the seawall is described under the guise of a "cohesive restoration" for safety purposes.

Due to strenuous community opposition and numerous contradictory facts found in DDFIA's own consultants' report, the BLNR denied DD's CDUAs twice in 2018.

However, **DD's agents convinced the DLNR to twice resubmit a similar CDUA** to dismantle the breakwater that had already **been twice denied by the BLNR**.

This begs the question as to how the State ended up in this predicament?

After DD's CDUAs were denied, **DD withdrew its initial request for a Contested Case Hearing** in the BLNR's morning session on June 14, 2018. However, during the reconvened session after lunch, the BLNR **unexpectedly announced DD's offer to transfer the Breakwater and Submerged Lands to the State**.

DLNR accepted this offer from DDFIA, **against the advice of its own department**. The transfer of land to the State was finalized through a Quick Claim Deed on Sept. 23, 2020.

Past BLNR Chair **Susan Case** said that she was instrumental in the **transfer of DD's Breakwater and Submerged Lands to the State**, stating she felt it was not fair for the BLNR to deny a private landowner the right to remove an attractive nuisance even after due consideration of contested contradictory data. So now the State may bear the liabilities and associated costs.

DD also offered to donate \$1 million to the State in a time-sensitive MOA, intended to offset the State's estimated ballooning costs of \$5 million for dismantling the Breakwater. The initial estimated costs provided by DD in 2015 were \$2.5 million, which, when **adjusted for inflation** and considering additional permits, **would today likely exceed \$5 million to be borne by the State**. (It is worth noting that the BLNR withdrew \$5 million in public funding to support the private landowners' Kaanapali Beach Hotels'

restoration project in March 2023. The BLNR stating that there is “a sense of responsibility by the board to not use public funds to benefit private property owners. Granted that private landowner DDFIA did manage to transfer their Breakwater and Submerged lands to the State, however, the intended purpose of the dismantling project is unchanged.)

II. The proposed Breakwater dismantling may introduce additional dangers to the swim basin, as was previously cautioned by the BLNR's majority decisions in 2018.

Given the limited time for discussion, I will briefly acknowledge some contestable facts related to previous CDU applications, but defer discussions for later:

- Disregard of two Neighborhood Boards’ unanimous votes against dismantling the Breakwater
- Dismissal of concerns for marine habitat, fauna and flora, Hawaii Historic Registry, ocean and surf data, silt turbidity screens, and challenges of the 2017 FONSI.
- Opposition from the public, with over 1,400 signed acknowledgments opposing the dismantling.
 - Inability to accurately predict loss of adjoining sandy beaches through shoreline current modeling.
 - Obtaining the CDUA before acquiring all required U.S. Army Corps of Engineers' permits
 - Differing opinions from SHPD and HHF regarding permitting.
 - Overtopping in the protected swim basin

Attorney **Bill Saunders** raised concerns about a dangerous situation for swimmers in the basin. Removing the west end drainpipe and basin wall down to the level of the dike would expose unsuspecting or thrill-seeking swimmers to potential harm, as large wave periods could easily sweep them over the rocky west sided ledge separating the inner swim basin from the outer ocean. A self-explanatory photo illustrates this.

DD incorrectly implied by using skewed statistic that jumping activity increased 133% after the barrier fence was installed in 2015. However, DD's own consultant's report documented a substantial decrease of 83% after the fence was installed. (see pages 2-5)].

The primary objective of this meeting, as expressed by **DD's attorney Joe Stewart**, is to prioritize safety and prevent litigation. We can achieve this by implementing simple modifications to the protective fence to prevent dangerous jumping activity while preserving the swim basin. One practical solution is to add additional two-inch-long metal piping between the existing fence poles, which would effectively deter jumping from the fence top and fulfill the fence's intended purpose as a deterrent against injuries. This idea was previously dismissed by the DD security chief as ineffective. Other proposals, such as increasing the fence height or adding barbed wire topping, are not permissible in a residential neighborhood.

Contest most of the following paragraph of statements made by Doris Duke's agents:

While both appreciated and considered fully, these alternatives were determined by Doris Duke's agents to be ineffective measures to address the projects purpose, and eliminate it. Suggested modifications of the ledge and fence do not address jumping from all areas, and therefore, is a limited suggestion of potentially reducing the number of people from continuing unsafe behaviors. DDFIA does not want to generate additional situations that create or compound existing hazards with alterations to the fence as suggested. **(Rebuttal: DD determined where to build the fence that resulted in increased potential for dangerous jumping. The fence should be modified to achieve its intended purpose. Why not try?)**

Susan Case and Joe Stewart have rightly emphasized the **need to explore reasonable alternative solutions** rather than dismissing them outright to achieve DD's dismantling objective. The choice before the Board is whether to commit \$5 million in expenses to dismantle the Breakwater and relocate the boulders, or to implement simple fence modifications that would achieve the intended purpose of the fence. By dismissing feasible alternatives without proper consideration, we stand to lose on multiple fronts.

As Board Member **Riley Smith has noted**, DD will still bear liability for any dangerous activity originating from their walkway and fence, while the State will assume new liabilities by changing the protective breakwater and incurring significant expenses for dismantling. Additionally, beachgoers would lose a significant portion of a beautiful registered historic site that has brought joy to generations of families.

In conclusion, I respectfully request that you thoroughly consider the concerns and evidence presented before making any irrevocable decisions regarding the dismantling of the breakwater. It is vital to prioritize public safety while also preserving the historical and environmental significance of this site. Thank you for your careful consideration of this matter.

Respectfully,

Friends of the Doris Duke Swim Basin

Frederick Fong, Honolulu resident
1380 Lusitana St., Suite 514
Honolulu, Hawaii 96813
Office phone (808) 531-7551, Fax (808) 537-3652, Cell (808) 277-6786
Email FongF001@hawaii.rr.com

Attachments:

-Two letters from Kahala Neighborhood Board Chair Richard Turbin expressing opposition to dismantling the Breakwater.

-Letter from Diamond Head Neighborhood Board Chair George West advising against dismantling without considering reasonable alternative solutions.

-Breakwater photos of overtopping by waves

-Graph of skewed jumping statistics

-Photo of cranes and barges

-Diagram of the Breakwater boulders used to stabilize DD's seawall

CC: Richard Turbin

Bill Saunders

Leigh Wai Doo

Mindy Pennybacker

From: [Leigh Wai Doo](#)
To: [DLNR.BLNR.Testimony](#)
Cc: [Leigh Wai Doo](#)
Subject: [EXTERNAL] The Doris Duke swim basin is her lasting legacy in Hawaii and an Icon of Hawaii's Hollywood era; .stare decisis -res judicata
Date: Thursday, June 22, 2023 12:17:50 AM

Subject: The Doris Duke swim basin is her lasting legacy in Hawaii and an Icon of Hawaii's Hollywood era.

Aloha Chair Ching, and Board members of the
Department of Land and Natural Resources-Hawaii.

I am In opposition to the demolition of the Breakwater at Doris Dukes and incorporate all prior testimony in opposition albeit by substance, by procedure, and by applicants' misinformation. Today afresh,

I emphasize principles being violated by this DLNR application and process that will reverberate to all agencies and boards throughout the state. The topic is not isolated to Doris Duke breakwater, nor DLNR, but to all agencies and departments of the state which have regulatory boards. Stare Decisis and Res Judicata..are the principles upon which our American society is built.

Stare decisis is a Latin term meaning "stand by things decided" . It promotes public legitimacy in the decision making to follow principles rather than personal proclivities. Our American jurisprudence is based on common sense, and what a reasonable person should do in similar circumstances. That is the principle in common law, and encouraged for all the public to regulate itself rather than a proliferation of laws and rules. We are responsible for our own risk behavior. And bear the consequences of that choice.

the Doris Duke swim basin is over 90 years old, unchanged and providing several generations of Hawaii youth and visitors enjoyment. Our decisions should promote common sense, reasonable behavior, and bear responsibility for our choices.

Res Judicata is the principle that a matter that has been decided , adjudicated may not be pursued further by the same parties.. the Doris Duke application to demolish the Breakwater was considered

twice and denied twice. The opportunity of a contested case presentation was withdrawn by the applicant Doris Duke Foundation ;

DLNR administration has now resubmitted fundamentally the same application submitted previously by the Doris Duke foundation several years ago. No new facts, no new arguments no new changes other than the transfer of ownership. The application is the same.

The application had previously been decided, twice, and was denied twice. It must not be pursued further by principle of Res Judicata.

The Doris Duke swim basin is fundamentally the same as in all prior ninety years of its existence. The Breakwater has not moved nor has there been a need for its repair. no one has been injured in over 90 years by fault of the structure – the swim basin created by the breakwater. Injuries occurred by human error. And people learn from that, and by common sense, and being reasonable. The prior decision of the board of the department of land and natural resources must stand.

The very few injuries that have occurred happened when three youth, in the course of decades did not use common sense and behaved irrationally at their own peril. They knew that they should not have acted as they did. Compassion for them yes due to their injuries but legal liability no . No state employee negligence. The Doris Duke swim basin having been in the same condition and form for the prior 90 years. relieves the state from tort responsibility.

Ironically however , in my opinion, if the state changes the condition by implementing the application-removing the breakwater height and further, placing new boulders Mauka against the Doris Duke walkway,- the state opens itself up for charges of employee negligence. If someone is hurt or property damaged by the new proposed application with moved break water boulders .. then the state would have been the active agent, creating new conditions, exposing the state to new liability due to its engineers and actions.

Leaving the swim basin as it has existed for the prior 90 years without change is the safest course of action plus it is a fabulous legacy to enhance the iconic image of a healthy, romantic Hawaii as a Pacific Shangri-La.

Approval by the board of DLNR would embroil this Existing board of directors to many new issues not yet raised nor investigated. Why the rush? Was there collusion between the DLNR and the Doris Duke foundation? Was there a violation of the open government law, sunshine law of Hawaii? why no openness to seeking or public hearing on new approaches to preventing the jumping? Should Doris Duke's agent, or the states agent, have filed a disclosure as a lobbyist? Should not all or most of the many permits required -with attendant investigations -be done before presentation to the board?

Could not the Doris Duke swim basin be made a regulated park with closed hours and an adopted park by a third-party group? Why

the extraordinary effort to prevent jumping at the Doris Duke swim basin, and yet simultaneously tolerate the enormous number of jumping off of the Kapahulu groin? Waimea bay rock? 100 broken necks at Sandy beach? Hiking on unauthorized trails with numerous deaths and injuries? The list could go on with no enforcement and yet the Doris Duke swim basin is the only location focused upon for prevention?

Finally, the question every volunteer considering an appointment to a state or county board may ask: Should I volunteer - no pay - and spend dozens of hours studying for board meetings If my decisions with the board are reversed in two or four years? No sense. Why try hard? Why volunteer? Got plenty other things to do! However, My decisions will have an impact if we continue Americans long-standing practice of the principles of stare decisis And Res Judicata. For then, my decisions and volunteer time will have lasting impact and meaning. For that I gladly volunteer.

To this board of directors of DLNR, please deny the application of the DLNR administration , and preserve the Doris Duke swim basin as it is now ; That includes being open to all new ideas deliberately, and for the long run, including Doris Duke's fabulous legacy of happily living, surfing and swimming in her yacht basin in Hawaii.

Respectfully submitted by Leigh-Wai Doo
Former Honolulu City Councilmember for the area
Retired attorney, Harvard Law'71 JD
Founding assistant dean UH Law School 73-'77