Testimony Presented to the House Committee on Finance Tuesday, March 1, 2022 at 11:00 a.m. by

Vassilis L. Syrmos, Vice President for Research and Innovation University of Hawai'i System

HB 2229 HD1 – RELATING TO COASTAL EROSION

Chair Luke, Vice Chair Yamashita, and Members of the Committee:

The University of Hawai'i (UH) is in support of HB 2229 HD1 as it establishes and appropriates funds for UH to conduct a two-year study on the impacts of sand bag walls on sand movement patterns and coastal erosion at 'Ehukai Beach Park on O'ahu.

In addition to Hawai'i Sea Grant's excellent research, education and policy efforts, UH Mānoa's College of Engineering has a Coastal Erosion Shoreline Team that possess research expertise in geotechnics, transportation, infrastructure and shoreline hardening that can provide working, technical solutions to this important study.

Thank you for the opportunity to testify on this measure.

DAVID Y. IGE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

OFFICE OF CONSERVATION AND COASTAL LANDS POST OFFICE BOX 621 HONOLULU, HAWAII 96809

> **Testimony of SUZANNE D. CASE** Chairperson

Before the House Committee on FINANCE

Tuesday, March 01, 2022 11 a.m. Conference Room 308 & Videoconference

In consideration of **HOUSE BILL 2229, HOUSE DRAFT 1** RELATING TO COASTAL EROSION

House Bill 2229, House Draft 1, proposes to appropriate funds to the University of Hawaii to study the impact of sandbag walls, or "sand burritos," on sand movement patterns and coastal erosion on public trust resources, including beach access, coastal water quality, and recreation, at Ehukai Beach Park; including from the shoreline area near Ke Iki road to Sunset beach. The Department of Land and Natural Resources (Department) appreciates that the Legislature is addressing coastal erosion, and offers the following comments:

Hawaii Administrative Rules Chapter 13-5 currently allow the Chairperson of the Board of Land and Natural Resources to issue emergency permits when there is an imminent threat to public health or safety. This has been an important tool for the Department when addressing short-term emergencies such as floods, landslides, tsunami, and storms.

Temporary erosion control devices with sandbag walls, or "burritos," and tarp systems can have similar effects as concrete and rock seawalls and other hardening structures. As such, emergency permits are designed to be temporary in nature, and to provide landowners time with the conditioned expectation that they work on short, mid, and long-range options.

In the proposed study area, the Department has authorized fifteen permits for emergency shoreline protection, fronting approximately twenty-eight parcels. We have attached an exhibit listing these permits, along with their current status, to assist the Committee in decision making.

SUZANNE D. CASE

CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA

M. KALEO MANUEL

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONNEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND CASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
EMORERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

The Department notes that one of the structures has been removed, and the authorizations for the remaining structures have expired. The Department's Office of Conservation and Coastal Lands is currently investigating potential permit non-compliance with each of the remaining erosion control structures. Alleged issues include the failure of the permit holders to secure the proper land disposition from either the Department's Land Division or the County Department of Parks and Recreation, failure to file a completion report, failure to clean debris from failed structures, and the use of unauthorized materials.

We do not know the outcome of the investigation at this time and cannot guarantee that the sandbags will remain for the duration of the proposed study period.

The Department also notes that landowners have engaged in both authorized and unauthorized "sand pushing" in the study area, that is, removing sand from a stream mouth or the nearby beach to create temporary berms fronting their property. These can also impact beach processes.

Given the above, the Department would recommend the following addition to the Bill (underlined):

Section 1. (a) The University of Hawaii shall establish and implement a two-year program to study the impact of the installation or removal of sandbag walls, often referred to as "sand burritos", as well as the impact of sand pushing, on sand movement patterns and coastal erosion and on public trust resources, including beach access, coastal water quality, and recreation, at Ehukai Beach Park, including from the shoreline area near Ke Iki Road to Sunset Beach.

While our preference is that proposed appropriations be directed to developing more appropriate avenues of implementable and cross-jurisdictional near-term adaptive management and planning, the Department acknowledges the value in studying the specific impacts of sandbag walls and sand pushing on a specific beach.

Thank you for the opportunity to comment on this measure.

Тах Мар	Address	Date, permit number	Status as of February 9, 2022
5 9 002 002	59-147 Ke Nui Rd	13-Aug-18	Permit expired; under investigation for alleged
5 9 002 003		Emergency CDUP OA-19-06	non-compliance with permit conditions
5 9 002 004	59-149 Ke Nui Rd	18-Jul-18 Emergency CDUP OA-19-01	Permit expired; under investigation for alleged non-compliance with permit conditions
5 9 002 005	59-151 A Ke Nui Rd	18-Jul-18 Emergency CDUP OA-19-02	Permit expired; under investigation for alleged non-compliance with permit conditions
5 9 002 008	59-155 Ke Nui Rd	29-Oct-18 Emergency CDUP OA-19-14	Permit expired; under investigation for alleged non-compliance with permit conditions
5 9 002 011	59-161 Ke Nui Rd	16-Oct-19	Permit expired; under investigation for alleged
5 9 002 012	59-163 Ke Nui Rd	Emergency CDUP OA-20-07	non-compliance with permit conditions
5 9 002 017	59-165 D Ke Nui Rd	25-Sep-18 Emergency CDUP OA-19-05	Permit expired; under investigation for alleged non-compliance with permit conditions
5 9 002 018	59-165 B Ke Nui Rd	17-Oct-13 Emergency Permit OA-14- 01	Permit expired; under investigation for alleged non-compliance with permit conditions
5 9 002 027	59-175 B Ke Nui Rd	21-Sep-18 Emergency CDUP OA-19-07	Permit expired; under investigation for alleged non-compliance with permit conditions
5 9 019 047	59-269 Ke Nui Rd		
5 9 019 048	59-271 Ke Nui Rd		
5 9 019 049	59-275 Ke Nui Rd	25-Jan-18	Permit expired; under investigation for alleged
5 9 019 050	59-279 Ke Nui Rd	Emergency CDUP OA-18-07	non-compliance with permit conditions
5 9 019 051	59-281 Ke Nui Rd		
5 9 020 001	59-145 Ke Nui Rd		
5 9 020 006	59-297 Ke Nui Rd	03-Jul-19 Emergency CDUP OA-19-23	Permit expired; under investigation for alleged non-compliance with permit conditions
5 9 020 008	59-305 Ke Nui Rd	23-May-19 Emergency CDUP OA-19-19	Permit expired; under investigation for alleged non-compliance with permit conditions
5 9 020 007	59-301 Ke Nui Rd		
5 9 020 010	59-309 Ke Nui Rd	21-Sep-18 Emergency CDUP OA-19-09	Permit expired; under investigation for alleged non-compliance with permit conditions
5 9 020 011	59-311 Ke Nui Rd		
5 9 020 013	59-317 Ke Nui Rd		
5 9 020 014	59-3119 Ke Nui Rd		
5 9 020 017	59-329 D Ke Nui Rd		
5 9 020 020	59-165 Ke Nui Rd	18-Jun-19 Emergency CDUP OA-19-22	Landowner reports that structure removed
5 9 020 057	59-297 Ke Nui Rd	18-Jun-19 Emergency CDUP OA-19-21	Permit expired; under investigation for alleged non-compliance with permit conditions
5 9 020 058	59-199 D Ke Nui Rd	11-Jul-19 Emergency CDUP OA-19-24	Permit expired; under investigation for alleged non-compliance with permit conditions

DAVID Y. IGE GOVERNOR

EMPLOYEES' RETIREMENT SYSTEM
HAWAI'I EMPLOYER-UNION HEALTH BENEFITS TRUST FUND

OFFICE OF THE PUBLIC DEFENDER



CRAIG K. HIRAI

GLORIA CHANG DEPUTY DIRECTOR

STATE OF HAWAI'I DEPARTMENT OF BUDGET AND FINANCE P.O. BOX 150

HONOLULU, HAWAI'I 96810-0150

ADMINISTRATIVE AND RESEARCH OFFICE BUDGET, PROGRAM PLANNING AND MANAGEMENT DIVISION FINANCIAL ADMINISTRATION DIVISION OFFICE OF FEDERAL AWARDS MANAGEMENT (OFAM)

WRITTEN ONLY

TESTIMONY BY CRAIG K. HIRAI
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
TO THE HOUSE COMMITTEE ON FINANCE
ON
HOUSE BILL NO. 2229, H.D. 1

March 1, 2022 11:00 a.m. Room 308 and Videoconference

RELATING TO COASTAL EROSION

The Department of Budget and Finance (B&F) offers comments on this bill.

House Bill No. 2229, H.D. 1: requires the University of Hawai'i (UH) to study the impact of sandbag walls on sand movement patterns and coastal erosion at Ehukai Beach Park; appropriates an unspecified amount of general funds for FY 23 to UH for the study, and extends the lapse date of the appropriation to June 30, 2024; and mandates a report to the Legislature.

B&F notes that, with respect to the general fund appropriation in this bill, the federal Coronavirus Response and Relief Supplemental Appropriations Act requires that states receiving Elementary and Secondary School Emergency Relief (ESSER) II funds and Governor's Emergency Education Relief II funds must maintain state support for:

 Elementary and secondary education in FY 22 at least at the proportional level of the state's support for elementary and secondary education relative to the state's overall spending, averaged over FYs 17, 18 and 19; and Higher education in FY 22 at least at the proportional level of the state's support for higher education relative to the state's overall spending, averaged over FYs 17, 18 and 19.

Further, the federal American Rescue Plan (ARP) Act requires that states receiving ARP ESSER funds must maintain state support for:

- Elementary and secondary education in FY 22 and FY 23 at least at the proportional level of the state's support for elementary and secondary education relative to the state's overall spending, averaged over FYs 17, 18 and 19; and
- Higher education in FY 22 and FY 23 at least at the proportional level of the state's support for higher education relative to the state's overall spending, averaged over FYs 17, 18 and 19.

The U.S. Department of Education has issued rules governing how these maintenance of effort (MOE) requirements are to be administered. B&F will be working with the money committees of the Legislature to ensure that the State of Hawai'i complies with these ESSER MOE requirements.

Thank you for your consideration of our comments.



Testimony Presented Before the HOUSE COMMITTEE ON FINANCE March 1, 2022

By Andrew Wycklendt, President Hawai'i Shore and Beach Preservation Association

In consideration of House Bill 2229 RELATING TO COASTAL EROSION.

Chair Luke and Committee Members:

The Hawai'i Shore and Beach Preservation Association (HSBPA) **supports the intent of HB 2229** with recommendations for amendments provided below.

This measure appropriates money for the University of Hawai'i to study the impact of sandbag walls, or "sand burritos," on sand movement patterns and coastal erosion at Ehukai Beach Park. HSBPA offers the following comments and suggestions to strengthen this bill.

- The HSBPA supports the intent to study the impacts of the sandbag structures.
- The bill identifies Ehukai Beach Park as the proposed study area. HSBPA suggests broadening the scope to include Rocky Point and "Kammies" near Sunset Beach on the North Shore of O'ahu, where recent beach erosion is currently threatening dwellings.
- 3. It may also be appropriate to include a solution-oriented coastal adaptation plan that includes a hazard risk and vulnerability assessment of the area, an

- evaluation of adaptation pathways, and the development of a sediment budget to better understand transport pathways, trends, and volume changes necessary to support sand management in the study area.
- 4. Include a complimentary effort to develop a beach and dune management plan for this important stretch of beach to identify potential sediment management techniques and coastal dune restoration and management strategies. A beach and dune management plan could potentially identify low cost management measures that can be implemented immediately to help address the severe coastal erosion that threatens the area. This plan would likely benefit both local government and privately-lead beach and dune management actions that are ongoing in the area.

The HSBPA supports the intent of HB 2229 and recommends consideration of the above-mentioned amendments. Thank you for the opportunity to testify on this measure.

Sincerely,

Andrew Wycklendt

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President, Hawai'i Shore and Beach Preservation Association

The Hawaii Shore and Beach Preservation Association (HSBPA, https://asbpa.org/hawaii/), formed in 2014, is an organization of private sector, academic, and government professionals, students, and local community members dedicated to the preservation and restoration of Hawaii's beaches and coastal environments. The HSBPA was formed to facilitate improved understanding and knowledge by bringing together various members of the coastal community to foster dialogue and cooperation on beach and coastal resource conservation, management, and regulation; supporting professional development of chapter members; and providing education to students and community members on Hawaii's beaches and coastal environments. The HSBPA is dedicated to preserving, protecting, and restoring our coasts by merging science with public policy.



Before the House Committee on Finance

Tuesday, March 1, 2022 11:00am State Capitol, Conference Room 308, Via Videoconference

In consideration of House Bill 2229 HD1 RELATING TO COASTAL EROSION

Conservation Council For Hawaii supports the intent of HB 2229 HD1.

Beach and shoreline erosion is a persistent problem across our islands, it is imperative that nature-based solutions aimed at mitigating threats to public safety while protecting the natural environment are implemented. Historically, much of the shoreline on parts of Oahu, Maui and Kauai have been armored as a reactive response to coastal erosion. Alternatives to shoreline hardening such as beach and reef ecosystem restoration, dune enhancement, erosion accommodation, and managed retreat may be feasible in some cases.

Thank you for the opportunity to support HB 2229 HD1.

February 27, 2022

Aloha Chair Luke, Vice Chair Yamashita, and Members of the Finance Committee,

I write in strong support of <u>HB2229 HD1 - RELATING TO COASTAL EROSION</u> and suggest one clarifying amendment.

The clarifying amendment would amend Page 1, lines 2-3 and lines 14-15, as follows: "to study and to test the feasibility of alternative solutions with willing landowners, in collaboration with the relevant state and county agencies, to avoid the impact of sandbag walls or "sand burritos"

I greatly appreciate that my Representative Sean Quinlan introduced this bill as one of many steps to address a severe shoreline erosion problem on the North Shore of Oʻahu and to consider the statewide implications for public trust resources of these kinds of failing "bandaid" erosion control measures.

I have lived on the North Shore of O'ahu since 1990, and for the first five years, I lived on Ke Iki Road, in the 'Ehukai to Sunset area where the beaches have been heavily eroding for the past decade, threatening homes and impairing beach access, water quality, and recreation.

From living in the area, and walking, swimming, and snorkeling along these beach for years, I am familiar with the deteriorating shoreline conditions for these beachfront homes and the major shifts in sand movement from the seasonal swells, wind, and severe weather events. Climate change and sea level rise will only exacerbate all of the erosion trends we have witnessed in recent years.

I am also a member of the <u>North Shore Coastal Resilience Working Group</u>, an inter-agency, UH Sea Grant, NGO/community inclusive group started in 2021, which is studying this specific area and the issues discussed in the bill.

The UH study proposed by this bill is very important as one of many steps to address the severe erosion problem in this area and threats to public and private property.

This area has gone from one of the most spectacular scenic wide sand beaches in the State, with outstanding water quality, to a "war zone" of soft and hard erosion control measures, heavy equipment desperately sand pushing, "borrowing" sand (which belongs to the public trust) from stream mouths to protect private home frontage, the shocking blocking of public access points due to hazardous drop offs, sandbags, and obstruction, and debris from homeowners' "temporary" erosion-control measures ending up in the nearshore waters.

The area is really a **disaster scene.** Here is a photo from January 30, 2022 of the erosion along the Ke Iki Road area near "Kammies" surf break. As you can see, the "burritos" can be ineffective, can block public access, and the collapsed deck of the house on the left indicates that either historic or new "band aid," "sandbag," or "burrito" measures will not protect these beachfront homes from the inevitable scouring that has now been set in motion by a domino

effect of haphazard homeowner "remedies." This is just one snapshot of the shoreline erosion tragedies that have beset this coastal area and caused substantial interference with public access and public trust resources.



This bill, <u>if appropriately funded</u>, will go a long way to assisting a number of ongoing efforts to come up with mitigation measures and solutions for this accelerated and tragic erosion problem.

In addition, as suggested by Sea Grant testimony on the original bill, the impacts are fairly well understood. It is the solutions that need to be tested and implemented. Therefore, see the amendment proposed above to encourage alternative solutions with willing landowners.

I appreciate your consideration and passage of HB2229 HD1.

Mahalo,

Denise Antolini Pūpūkea Resident

Randolph G. Moore 2445-A Makiki Heights Drive Honolulu Hawaii 96822

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February 27, 2022

The Honorable Sylvia Luke, Chair and members of the Committee on Finance House of Representatives State Capitol Honolulu, Hawaii

Dear Representative Luke and members of the Committee:

Subject: HB 2229 HD 1 (relating to coastal erosion)

I encourage your support of HB 2229 HD 1, which would establish a two-year study by the University of Hawaii of the "sand burritos" that property owners have installed at Sunset Beach to protect their property from erosion. It needs an appropriation sufficient to conduct the proposed study.

The study would look at the effects of the "sand burritos" on sand movement patterns and coastal erosion and on public trust resources, including beach access, coastal water quality, and recreation, at Ehukai beach park, including from the shoreline area near Ke Iki Road to Sunset Beach.

The study would inform city and state policy-makers, decision-makers, property owners and the general public on how to mitigate the coming effects of sea level rise and coastal erosion. At this time, there is a lack of scientific information on which to make decisions that will affect the long-term future, not only of the affected public and private properties in the study area, but of beachfront property around the state.

Full disclosure: I own beachfront property in the proposed study area and with a permit from the Department of Land and Natural Resources installed "sand burritos" in front of my property, which had eroded to within 12 feet of one of the posts supporting my house.

Mahalo for your consideration.