



STATE OF HAWAII
DEPARTMENT OF DEFENSE
HAWAII EMERGENCY MANAGEMENT AGENCY

TESTIMONY ON HOUSE BILL 2302, HD1
RELATING TO THE UNIVERSITY OF HAWAII SEA GRANT COLLEGE PROGRAM

BEFORE THE HOUSE COMMITTEE ON
FINANCE
BY

Luke P. Meyers
Administrator, Hawaii Emergency Management Agency (HI-EMA)

FEBRUARY 25, 2022

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

Thank you for the opportunity to submit testimony in **SUPPORT** of HB2302, HD1

House Bill 2302, HD1 appropriates moneys for the continued operation and disaster preparedness outreach efforts of the University of Hawaii Sea Grant College Program.

The University of Hawaii College Sea Grant Program has been and continues to be an important partner with the Hawaii Emergency Management Agency (HI-EMA) in preparing readiness materials for the people of Hawaii. Past projects include the "Homeowner's Handbook to Prepare for Natural Disasters," which was, in part, funded by grants administered by the HI-EMA; as well as other emergency preparedness public outreach avenues.

These continued education measures to help Hawaii residents be prepared for, mitigate against, and recover from disasters are vital to the safety and resiliency of the state.

The HI-EMA supports this bill provided that the appropriation does not conflict with the Governor's budget priorities.

Thank you for the opportunity to provide testimony on House Bill 2302, HD1.

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UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
House Committee on Finance
Friday, February 25, 2022 at 11:00 a.m.

By
Darren T. Lerner, PhD
Director
University of Hawai'i Sea Grant College Program
And
Michael Bruno, PhD
Provost
University of Hawai'i at Mānoa

HB 2302 HD1 – RELATING TO THE UNIVERSITY OF HAWAII SEA GRANT COLLEGE PROGRAM

Chair Luke, Vice Chair Yamashita, and members of the committee:

The University of Hawai'i Sea Grant College Program (Hawai'i Sea Grant) supports HB 2302 HD1, provided that its passage does not replace the priorities as indicated in the University's Board of Regents Approved Budget.

This Bill is urgently needed because there is more hazard risk than people realize, particularly with regard to hurricanes. Note the following:

- 1) A Pacific Disaster Study conducted after the near hit of Hurricane Lane in 2018, estimated a Category 2 strike on O'ahu would result in 52,000 displaced households and 27 billion dollars in damage.
- 2) A 2019 Hurricane Behavioral Study by FEMA, the Army Corps of Engineers and the Hawaii Emergency Management Agency found the average citizen was ill-prepared and had not properly gathered their supplies or readied their homes. The number one recommendation was increased education and outreach. The second was help in hardening homes. Both are important to make the State resilient.
- 3) A 2019 Communication Outreach and Education Study conducted by Hawai'i Sea Grant, at the request of the 2017 HI State Legislature, concluded that education and outreach should be significantly increased with traditional and non-traditional methods on a continuous long-term basis to inform and prepare citizens in the State. The report was submitted to the 2020 Legislature and is available online at the link below.
- 4) In 2020 Hurricane Douglas threatened the Hawaiian Islands and a Hurricane warning was called for O'ahu for the first time in recent history. A 2021 presentation

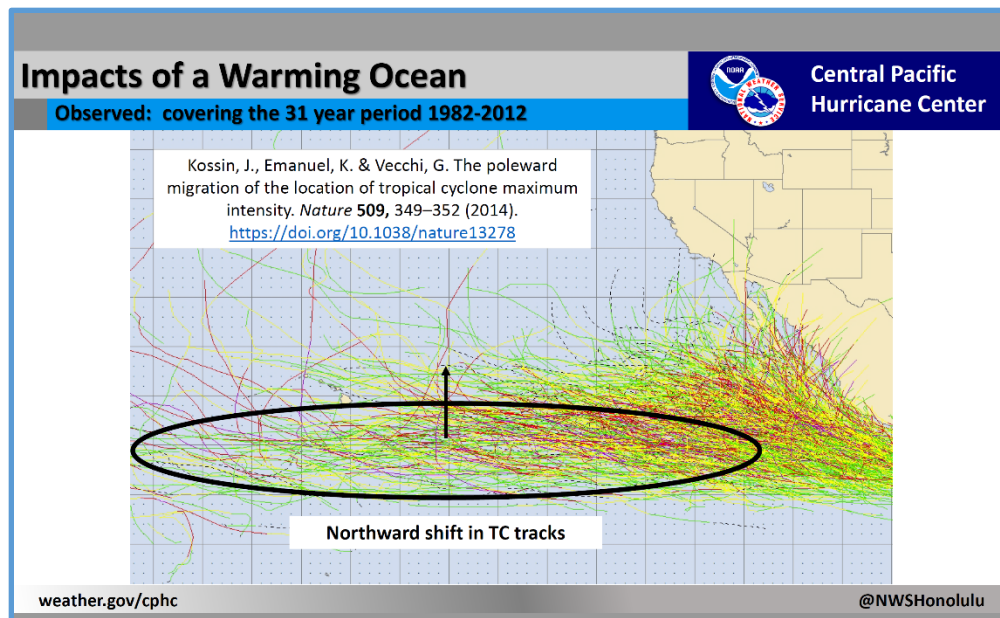
by the Central Pacific Hurricane Center indicates tropical cyclone tracks may shift north in the future attributed to warming waters and climate change. See graphic below. This would increase the risk of Hurricanes such as Douglas impacting the State.

Hawai'i Sea Grant is well positioned to continue and increase its education and outreach of hurricane risk and preparation around the State. The *Homeowner's Handbook to Prepare for Natural Hazards – 4th Edition* (link below) provides useful tips regarding readiness for natural hazards such as tsunamis, earthquakes, floods and hurricanes. The handbook lists local civil defense and emergency management agency information, provides guidance on emergency supplies, evacuation planning, and explains various measures to reduce property damage through home retrofit. This publication has gone through ten print runs with over 100,000 copies and has been modified for thirteen U.S. states and other countries based off the Hawai'i book. The 4th Edition, released in late 2019, was a major update with more options on home retrofit, as well as evacuation planning guidance and sections on volcanoes and climate change.

In the last three years, Sea Grant has participated in over 100 outreach events, and given almost 30,000 Homeowner's Handbooks. We have provided free books to individual homeowners as well as large organizations such as: (Catholic Charities – 280), (AARP – 63), (Be Ready Mānoa - 80), (Zephyr Insurance – 200), (Kāhala Emergency Fair – 80), (Cross Island Resilience Network consisting of 17 Communities on O'ahu – 2,800), Hawai'i Public Library System – 480 with another 600 requested for all 51 public libraries around the State). All Emergency Management and Civil Defense Agencies have received an initial allotment of 1,000 books. Maui Emergency Management Agency has requested another 600. It is estimated about 7,000 homes have been retrofitted since 2007, through the education and outreach of many organizations, including Hawai'i Sea Grant. Many homeowners who retrofit plan on using their locations to shelter their families and/or friends, so there is a multiplier in the relief on hurricane shelter demand.

Hawai'i Sea Grant is committed to continued partnership with all emergency management and civil defense agencies at the State and county level in order to make our communities more resilient and foster a greater culture of preparedness in Hawai'i.

Thank you for the opportunity to testify on this measure.



Homeowners Handbook to Prepare for Natural Hazards – 4th Edition

<http://seagrantsoest.hawaii.edu/homeowners-handbook-to-prepare-for-natural-hazards/>

Communication Plan and Outreach Strategy Submitted to the 2020 Legislature

<https://seagrantsoest.hawaii.edu/wp-content/uploads/2020/09/Communication-Strategy-Outreach-Plan-V.1.pdf>

DAVID Y. IGE
GOVERNOR



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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. 2302, H.D. 1

February 25, 2022
11:00 a.m.
Room 308 and Videoconference

RELATING TO THE UNIVERSITY OF HAWAII SEA GRANT COLLEGE PROGRAM

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

House Bill No. 2302, H.D. 1, appropriates an unspecified amount of general funds for FY 23 for the continued operation and disaster preparedness outreach efforts of the University of Hawai'i Sea Grant College Program.

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.

HB-2302-HD-1

Submitted on: 2/24/2022 12:31:05 PM

Testimony for FIN on 2/25/2022 11:00:00 AM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Dr. Kioni Dudley	The Friends of Makakilo	Support	No

Comments:

Testimony for HB 2302

I am Dr. Kioni Dudley. I organized a major meeting on “our great unpreparedness for hurricanes” for our Makakilo-Kapolei-Honokai Hale Neighborhood Board in December. We brought in experts to talk on the facts I will discuss below.

First of all, if we have a major hurricane, local emergency management agencies tell us that as many as 300,000 of our people will seek shelters, but we have only 38 shelters altogether on O’ahu. And we have no shelters whatsoever on O’ahu for a Category 3 or above. There is simply no safe place to go in a Category 3, 4, or 5.

People will stay in their homes. But 184,000 homes are extremely unsafe. That’s what this bill is all about. If we get a Category 5 hurricane, hundreds of thousands may die in their homes. If they don’t die, HI-EMA tells us that 300,000 to 700,000 may become homeless. We need massive programs of retrofitting homes and building safe rooms. And we need them now. This bill addresses retrofitting. But we also need many millions for safe rooms.

Why are we suddenly asking for all this hurricane preparation? Climate change has caused more spawning of hurricanes in the Central Pacific, rather than over below Baja California. And with warmer seas farther north, their paths have come north. Twice as many are now aimed at us as in previous years. Climate change has also made hurricanes much broader, much stronger, and faster to develop. And there's another great problem: As hurricanes move north, there have always been tradewinds which tear them apart. But we have lost two trade wind days a year for fifty years; we now have tradewinds on a hundred less days than we did fifty years ago; we now have no trade winds on just over half of the days of the year. Should a hurricane move toward us during half the days of the year, there now will be nothing to stop it.

Hurricane Lane, a Category 5, passed south of the Big Island and headed directly toward O’ahu before turning away 2017. It’s only a matter of time. We need so much. Billions rather than millions, in order to be ready. This is a good bill. A good start. Can you do more?

TESTIMONY PRESENTED BEFORE THE
COMMITTEE ON FINANCE
February 25, 2022 11:00 AM

By

Dennis Hwang
HB2302 – RELATING TO THE UNIVERSITY OF HAWAII SEA GRANT COLLEGE
PROGRAM

Chair Rep. Sylvia Luke, Vice Chair Rep. Kyle T. Yamashita and members of the committee:

I am Dennis Hwang, Faculty at the UH Sea Grant College Program. Since 2007, I have helped Sea Grant with hazard education and outreach related to the Homeowner's Handbook to Prepare for Natural Hazards. In 2020, we also sent to the Legislature an Education and Outreach Plan to Prepare Hawaii for Natural Hazards. The Plan was based on Lessons Learned from conducting over 300 outreach/education events and concepts of Social Science. The links for both the Handbook and Communication Plan are found below.

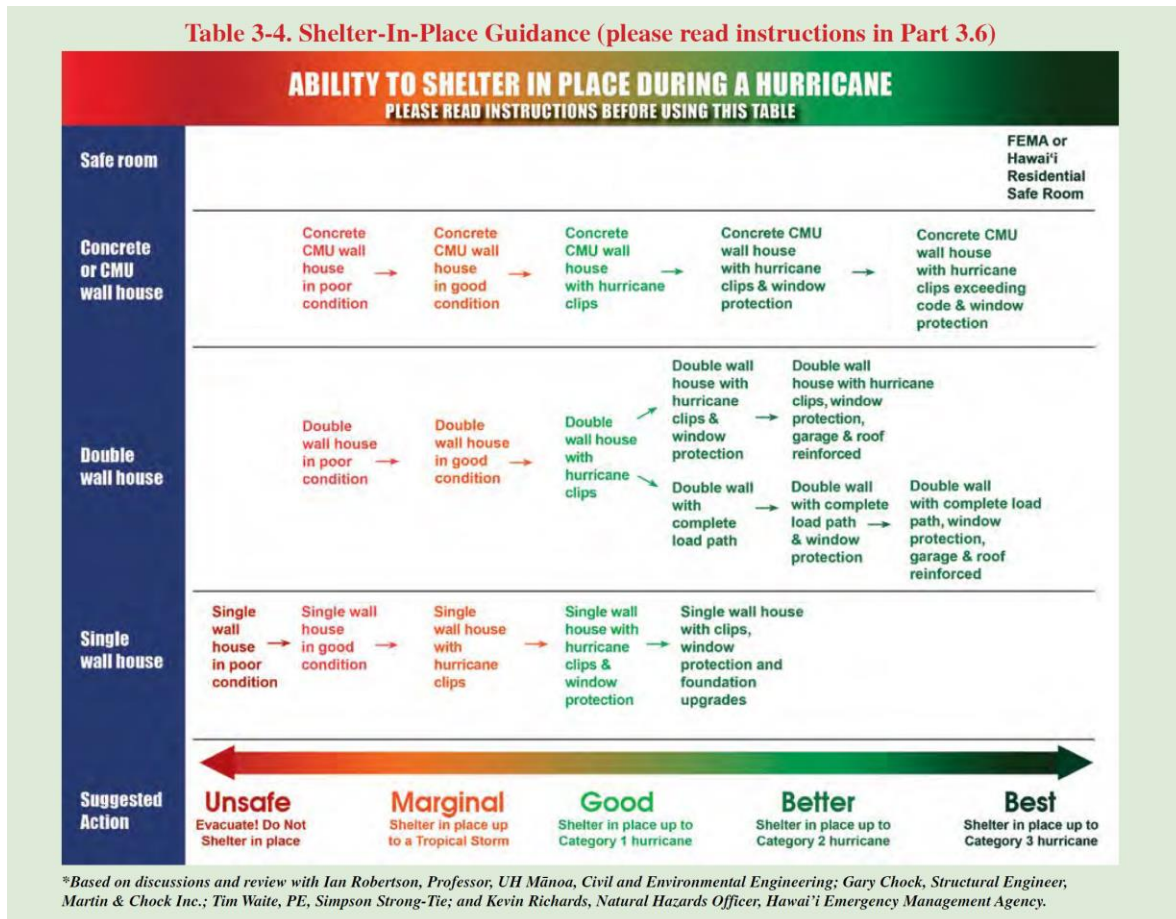
Today I am speaking as a private citizen. I support HB2302 as there is more risk than the general public realizes. To make our community more resilient, it will take a concentrated effort using traditional education/outreach methods as well as concepts of Social Science. Sea Grant is well suited to carry out this mission as shown by the resources provided below.

Please note:

- 1) Through research, field work and partnerships – the Handbook provides the most up to date mitigation measures to reduce hurricane damage to homes. We work with structural engineers and architects, as well as agencies such as the FEMA Building Science Branch and Institute of Building and Home Safety. We have participated in field assessments after Hurricane Harvey hit Texas in 2017 and Hurricane Ida struck Louisiana in 2021. The Handbook provides guidance measures that are hazard resilient, environmentally sustainable and adaptive to a changing climate.
- 2) There is strong demand for the book. Kauai Emergency Management Agency and Hawaii County Civil Defense each received 1,000 books. The City Emergency Management Agency and the Office of Climate Change, Sustainability and Resilience received 11,000 books, many going to city employees. Maui Emergency Management Agency recently asked for 600 books after receiving an initial 1,200. The Hawaii Public Library System, which distributes to all 51 of their libraries around the State on all islands recently asked for 600 books after receiving an initial 480. The Cross Island Resilience Network which consists of 17 resilience organizations around Oahu (Aina Haina, Foster Village, Hauula, Kaaawa, Kahuku, Kailua, Kalihi, Kaneohe/Kahuku, Laie, Leeward Oahu, Manoa, Mililani, North Shore, Pearl Harbor/Hickham, Wahiawa/Whitmore Village, Waikiki, and Waimanalo) requested

and picked up 2,800 books. Catholic Charities and the Lanakila Multi-Purpose Senior Center asked for 300 books. Then there are the hundreds of books we give to individual homeowner's who seek advice on how to prepare family evacuation plans or strengthen their homes for a hurricane.

- 3) A major vulnerability for Hawaii is shelter space for a hurricane. Through education with our partners approximately 7,000 homes have been retrofitted. While more needs to be done, this is significant since many of these homeowners plan to shelter relatives during severe weather. This will relieve demand on shelter space.
- 4) In general, Hawaii residents need to be better educated on where to go during a hurricane. In the Handbook, there is a shelter in place table which provides scientific and engineering based guidance on when people can shelter in their homes (see below). During a hurricane, many people may shelter in homes that are not sufficiently strong. Systematic and sustained education/outreach which HB2302 provides can help homeowner's create sound evacuation/emergency plans.



For the reasons above, I support HB2302 - Thank you for the opportunity to testify.

Dennis Hwang
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Homeowners Handbook to Prepare for Natural Hazards – 4th Edition

<http://seagrant.soest.hawaii.edu/homeowners-handbook-to-prepare-for-natural-hazards/>

Communication Plan and Outreach Strategy Submitted to the 2020 Legislature

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HB-2302-HD-1

Submitted on: 2/23/2022 6:20:24 PM

Testimony for FIN on 2/25/2022 11:00:00 AM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Alice Saul	Individual	Support	No

Comments:

Testimony on HB2302 HD1 Relating to the University of Hawaii Sea Grant College Program

Please support the passage of the provision in HB2302 HD1 which aims to facilitate the distribution of TheHomeowners Handbook to Prepare for Natural Hazards. This is the single most informative, practical, and productive publication available on disaster preparation as it addresses directly the hazards specific to Hawaii.

I am personally engaged in seeing that anyone in my community of over 220 families who might not be able to readily access the information digitally can have this important reference source available to them. The University of Hawaii Sea Grant program has been very helpful in this regard.

Thank you.

Aloha.

Alice Saul
Kuapa Isle, Hawaii Kai
Honolulu