



STATE OF HAWAII
HAWAII CLIMATE CHANGE MITIGATION & ADAPTATION
COMMISSION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

Testimony of
Anukriti Hittle
Coordinator, Hawaii Climate Change Mitigation and Adaptation Commission

Before the House Committees on
ENERGY AND ENVIRONMENTAL PROTECTION
and
WATER, LAND and HAWAIIAN AFFAIRS

Thursday, February 6, 2020
9:15 AM
State Capitol, Conference Room 325

In support of
HOUSE BILL 2266
RELATING TO SEA LEVEL RISE

House Bill 2266 proposes to direct the Hawaii Climate Change Mitigation and Adaptation Commission to address areas already impacted by sea level rise, identify vulnerable critical public infrastructure, create a plan for mitigation and adaptation to sea level rise, and provide policy direction to the legislature on funding and strategies to address the impacts of climate change on the state. **On behalf of the Hawaii Climate Change Mitigation and Adaptation Commission (Commission) I offer the following comments in support of this measure, provided that its passage does not replace or adversely impact priorities indicted in the Department of Land and Natural Resources' Executive Supplemental Budget.**

The Hawaii Climate Change Mitigation and Adaptation Commission “recognizes the urgency of climate threats and the need to act quickly. It promotes ambitious, climate-neutral, culturally responsible strategies for climate change adaptation and mitigation in a manner that is clean, equitable and resilient.” The Commission, established by Act 32 SLH 2017 to uphold the United States’ pledges under the Paris Agreement, is the coordinating body for policies on climate change mitigation and adaptation for the state. It is a high-level multi-jurisdictional body that guides the priorities of the state’s climate response. Co-chaired by DLNR and Office of Planning, it consists of 20 members—chairs of four legislative committees, and executive department heads at the county and state levels.

At its September 2018 meeting, the Climate Commission agreed to five priority recommendations for countering impacts of sea level rise, including requesting that all new development, redevelopment, and modifications be directed away from beach areas; urging counties to

Co-Chairs:
Chair, DLNR
Director, Office of Planning

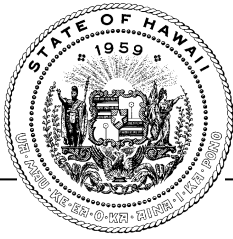
Commissioners:
Chair, Senate AEN
Chair, Senate WTL
Chair, House EEP
Chair, House WTH
Chairperson, HTA
Chairperson, DOA
CEO, OHA
Chairperson, DHHL
Director, DBEDT
Director, DOT
Director, DOH
Chairperson, DOE
Director, C+C DPP
Director, Maui DP
Director, Hawai'i DP
Director, Kaua'i DP
The Adjutant General
Manager, CZM

incorporate the 3.2 foot sea level rise exposure area (SLR-XA) as detailed in the Hawaii Sea Level Rise Vulnerability and Adaptation Report (Hawaii Sea Level Rise Report) into their general and community plans; and bring resources to assist in planning and implementing for sea level rise and other climate related impacts.

This measure acts on the Commission’s priority recommendations, and is a crucial component of Hawaii’s adaptation to the impacts of sea level rise. Since several of these components are already being initiated as part of the Commission’s “Climate Ready Hawaii” initiative, the following comments are offered to help align legislative and executive action—which is one of the main purposes of the Commission:

1. For item (1), Page 2 Line 16: instead of directing the Commission to conduct said inventory, it might be more appropriate for the Commission, in keeping with its role as a coordinating body, to bring resources to the various agencies and departments in the form of best practices, formulating guidance, and providing a coordinating structure and timeframe within which to work, and I recommend modifying the language in this part to support the Commission’s role in assisting agencies and departments in this manner;
2. For item (2), Page 3 Line 1: I believe this task has already been completed with the issuance of the State’s Sea Level Rise report, and recommend it be removed from this measure;
3. For item (3) Page 3 Line 5: the Commission’s staff is working with partners to operationalize sea level rise exposure areas into county planning and permitting, and can provide a status update in its Annual Report to the Legislature, and it is recommended that the measure’s language reflect this;
4. For item (4) Page 3 Line 9: while this measure is helpful in underscoring the need to incorporate sea level rise into various plans, the Commission is working to enhance, uniformize, and support the work of the counties, rather than be seen as “interfering” in their jurisdictions. It is therefore recommended that the current language be replaced with “Work to enhance, uniformize, and support the work of the state and county agencies in their development of sea level rise adaptation plans utilizing the sea level rise vulnerability and adaptation report”;
5. For item (5) Page 3 Line 12: This task would be an outcome of the previous task, and therefore, perhaps not appropriately placed in this measure—it might be more appropriate as a “Phase 2” task, once the above tasks have been completed; and recommend this be stricken from this measure, and considered at a future time; and
6. For item (6) Page 3 Line 18: this work is considered a baseline for the tasks listed in this measure, and could be formulated into one of the white papers that will emerge from them; I recommend this be reflected in the measure’s language somewhere as an output from the tasks above.

Thank you for the opportunity to offer comments in support of this measure.



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DAVID Y. IGE
GOVERNOR

MARY ALICE EVANS
DIRECTOR
OFFICE OF PLANNING

Statement of
MARY ALICE EVANS
Director, Office of Planning
before the
**HOUSE COMMITTEES ON ENERGY & ENVIRONMENTAL PROTECTION AND
WATER, LAND, & HAWAIIAN AFFAIRS**

Thursday, February 6, 2020
9:15 AM

State Capitol, Conference Room 325

in consideration of
HB 2266
RELATING TO SEA LEVEL RISE.

Chairs Lowen and Yamane, Vice Chairs Wildberger and Todd, and Members of the House Committees on Energy & Environmental Protection and Water, Land, & Hawaiian Affairs,

The Office of Planning (OP) appreciates the intent of HB2266, and defers to DLNR on its capacity to implement the six component programs, provided the bill does not displace executive budget priorities.

OP commends the Legislature for prioritizing climate change initiatives for the State. The OP Coastal Zone Management Program (OP-CZM) has taken an active role in providing policy direction to inform planning for climate change in Hawaii including:

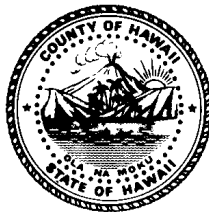
- Facilitating the development of Hawaii Revised Statutes (HRS) § 226-109 Climate Change Priority Guidelines, establishing climate change as an area of statewide concern (2012),
- Supporting past and current research with the University of Hawaii, identifying historical coastal erosion rates for the islands of Oahu, Maui, and Kauai, which have been used by the counties to inform shoreline setbacks in their respective jurisdictions, thus facilitating new development to be sited further from coastal hazards;
- Identification of statewide considerations for managed retreat as one of three adaptation options in response to sea level rise, as published in the report *Assessing the Feasibility and Implications of Managed Retreat Strategies for Vulnerable Coastal Areas in Hawaii* (2019); and,
- Funding research-based riparian and coastal setbacks for Hawaii County's unique coastal geology.

Additionally, the OP serves as the lead agency to coordinate overall implementation of the Hawaii ocean resources management plan (Plan) as mandated by HRS § 205A-2. The Plan is used to prioritize resolving coastal problems not adequately addressed by existing laws and rules and is currently undergoing an update slated to be finalized in Spring 2020. Upon Plan completion, 1 of the 3 focus areas will include work towards developing a statewide integrated shoreline management strategy with key partners such as the Department of Land and Natural Resources and County Planning Departments, both of whom share regulatory responsibilities in areas impacted by coastal hazards such as sea level rise.

As a lead agency with an oversight for a land-based impacts from climate change, such as sea level rise, OP looks forward to playing a key role in contributing towards the work that is being tasked to the Climate Commission in this measure.

Thank you for the opportunity to testify on this measure.

REBECCA VILLEGAS
Council Member
District 7, Central Kona



PHONE: (808) 323-4267
FAX: (808) 323-4786
EMAIL: Rebecca.villegas@hawaiicounty.gov

HAWAI'I COUNTY COUNCIL

West Hawai'i Civic Center, Bldg. A
74-5044 Ane Keohokalole Hwy.
Kailua-Kona, Hawai'i 96740

LATE

February 6, 2020

TESTIMONY OF REBECCA VILLEGAS
COUNCIL MEMBER, HAWAI'I COUNTY COUNCIL
ON HB 2266, RELATING TO SEA LEVEL RISE
Committee Energy & Environmental Protection
Committee on Water, Land, Hawaiian Affairs
Thursday, February 6, 2020
9:15 a.m.
Conference Room 325

Aloha Chair Lowen, Chair Yamane, and Members of the Committees:

I thank you for the opportunity to testify in support of HB 2266, relating to sea level rise. My testimony is submitted in my individual capacity as a member of the Hawai'i County Council, and Chair of the Hawai'i County Council Public Safety Committee.

The purpose of this measure is to appropriate funds and to direct the Hawai'i climate change mitigation and adaptation commission to continue their efforts in identifying sea level rise impacts in the State of Hawai'i. Hawai'i is already experiencing impacts of climate change, including sea level rise. The Hawai'i climate change mitigation and adaptation has supplied a report in 2017 and has identified areas that are susceptible to the impacts of sea level rise. It is to the benefit of Hawai'i to have this commission continue their work and assist all of us on how we can all adapt safely to the impacts of climate change, and sea level rise.

For the reasons stated above I urge the Committee on Energy & Environmental Protection, the Committee on Water, Land, and Hawaiian Affairs to support this measure as well. Should you have any questions, please feel free to contact me at (808) 323-4267.

Mahalo for your consideration.

Rebecca Villegas
Council Member, Hawai'i County Council

HB-2266

Submitted on: 2/4/2020 3:43:00 PM

Testimony for EEP on 2/6/2020 9:15:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Henry Curtis	Life of the Land	Support	Yes

Comments:

HB-2266

Submitted on: 2/4/2020 9:55:58 PM

Testimony for EEP on 2/6/2020 9:15:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ted Bohlen	Climate Protectors Coalition	Support	No

Comments:

Planning now for sea level rise is necessary and prudent. Please pass this bill!

HB-2266

Submitted on: 2/4/2020 10:32:21 PM

Testimony for EEP on 2/6/2020 9:15:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Alexandra Kahn	Surfrider Oahu	Support	No

Comments:



SIERRA CLUB OF HAWAI'I

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

HOUSE COMMITTEE ON WATER, LAND, & HAWAIIAN AFFAIRS

February 6, 2020 9:15 AM Room 325

In SUPPORT of HB2266: Relating to Sea Level Rise

Aloha Chair Lowen, Chair Yamane, and members of the committees,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawai'i **strongly supports HB 2266** Relating to Sea Level Rise.

This bill provides specific guidance to the State of Hawaii Climate Mitigation and Adaptation Commission and funds the work of the Commission through June of 2022.

The impacts of sea level rise and the related coastal hazards, including flooding, storm surges, high tides, and accelerated coastal erosion are already being felt in low-lying coastal areas throughout the state. These impacts will increase in coming years as sea level rise continues and eventually accelerates, potentially placing significant numbers of lives, properties, cultural and natural resources at risk in the absence of effective adaptation strategies. The impacts will occur in different areas at different times and will require different adaptation strategies depending upon the nature and location of coastal properties being impacted. The resources to address these impacts will be very substantial and must be phased in over time based on the priorities to be established by the Commission as specified in the bill.

As documented in its report to the legislature, the Commission has evolved into a very effective body for coordinating the efforts of state and county agencies, in consultation with a variety of stakeholders, including non-governmental organizations such as Sierra Club. It has sponsored well-attended climate change conferences which have brought climate change mitigation and adaptation experts from across the nation to Honolulu, and promoted education and outreach on climate change issues among our citizens.

Often the communities most impacted by climate change are vulnerable communities lacking the resources more affluent communities can bring to bear for climate adaptation. Importantly, the Commission has stressed the need for climate equity as the lens through which climate adaptation strategies must be evaluated.

While the state of Hawaii has adopted very ambitious goals for mitigation of climate change, including goals for clean and renewable energy to reduce our carbon emissions, much work remains for developing and implementing the adaptation strategies we will need in this era of climate change. HB2266 provides needed guidance and resources for these efforts, and we urge its adoption.

Thank you very much for this opportunity to provide testimony on **HB2266**.

Mahalo,

A handwritten signature in black ink, appearing to read "Dave Raney". The signature is fluid and cursive, with the first name "Dave" and last name "Raney" clearly distinguishable.

Dave Raney
Co-Chair
Sierra Club Climate Adaptation and Restoration Team



MAUI
CHAMBER OF COMMERCE
VOICE OF BUSINESS

**HEARING BEFORE THE HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL
PROTECTION AND THE COMMITTEE ON WATER, LAND & HAWAIIAN AFFAIRS
HAWAII STATE CAPITOL, HOUSE CONFERENCE ROOM 325
THURSDAY, FEBRUARY 6, 2020 AT 9:15 A.M.**

To The Honorable Nicole E. Lowen, Chair;
The Honorable Tina Wildberger, Vice Chair; and
Members of the Committee on Energy & Environmental Protection,

To The Honorable Ryan I. Yamane, Chair;
The Honorable Chris Todd, Vice Chair; and
Members of the Committee on Water, Land & Hawaiian Affairs,

TESTIMONY IN SUPPORT OF HB2266 RELATING TO SEA LEVEL RISE

Aloha, my name is Pamela Tumpap and I am the President of the Maui Chamber of Commerce, with approximately 650 members. I am writing share our support of HB2266.

While we are not experts in this area, it does not take an expert to see that sea level rise is a growing problem. Sea level rise is already affecting our beaches and shorelines for residents, hotels and resort areas, and our roadways. Also, we appreciate that the commission includes experts and representatives from the counties. Therefore, we support this bill to identify critical public infrastructure and priority areas that are vulnerable to sea level rise and design impact zone maps to develop a comprehensive and long-range plans (as short term measures like sea walls have unintended impacts for neighboring properties) and make recommendations to the State Legislature. This is vital so they can properly appropriate funding and address these critical need areas.

We appreciate the opportunity to testify on this matter and ask that this bill be passed.

Sincerely,

Pamela Tumpap

Pamela Tumpap
President

To advance and promote a healthy economic environment for business, advocating for a responsive government and quality education, while preserving Maui's unique community characteristics.



LATE

HB 2266, RELATING TO SEA LEVEL RISE

FEBRUARY 6, 2020 · HOUSE ENERGY AND ENVIRONMENTAL PROTECTION COMMITTEE AND HOUSE WATER, LAND, AND HAWAIIAN AFFAIRS COMMITTEE · CHAIRS SEN. NICOLE E. LOWEN AND REP. RYAN I. YAMANE

POSITION: Support.

RATIONALE: IMUAlliance supports SB 2266, relating to sea level rise, which directs the Hawai'i Climate Change Mitigation and Adaptation Commission to address areas already impacted by sea level rise, identify vulnerable critical public infrastructure, create a plan for mitigating and adapting to sea level rise, and provide policy direction to the legislature on funding and strategies to address the impacts of climate change on the State.

According to a report produced by the Hawai'i Climate Change Mitigation and Adaptation Commission, global sea levels could rise more than three feet by 2100, with more recent projections showing this occurring as early as 2060. In turn, over the next 30 to 70 years, approximately 6,500 structures and 19,800 people statewide will be exposed to chronic flooding.

Additionally, an estimated \$19 billion in economic loss would result from chronic flooding of land and structures located in exposure areas. Finally, approximately 38 miles of coastal roads and 550 cultural sites would be chronically flooded, on top of the 13 miles of beaches that have already been lost on Kaua'i, O'ahu, and Maui to erosion fronting shoreline armoring, like seawalls.

Furthermore, according to research conducted by Michael B. Gerrard from Columbia Law School, modern-day slavery tends to increase after natural disasters or conflicts where large numbers of people are displaced from their homes. In the decades to come, says Gerrard, **climate change will very likely lead to a significant increase in the number of people who are displaced and, thus vulnerable, to human trafficking.** While the Paris Climate Agreement of 2015 established objectives to limit global temperature increases and several international agreements are aimed at combating modern-day slavery, it is highly uncertain whether they will be adequate to cope with the scale of the problem that is likely to occur as a result of climate change.

As we work to reduce carbon emissions and stave off the worst consequences of climate change, we must begin preparing for the adverse impact of sea level rise on our shores. We are now quantifying the speed at which we must act. We cannot continue to develop the 25,800-acre statewide sea level rise exposure area—one-third of which is designated for urban use—without risking massive structural damage and, potentially, great loss of life.

Therefore, our state should take steps to protect Hawai'i's coastal areas, including by identifying vulnerable public infrastructure and creating a plan for mitigating and adapting to sea level rise. For the sake of our keiki, we cannot afford to wait to solidify strategies to preserve our island home for generations to come.

HB-2266

Submitted on: 2/4/2020 5:46:01 PM

Testimony for EEP on 2/6/2020 9:15:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Benton Kealii Pang, Ph.D.	Individual	Support	No

Comments: