



STATE OF HAWAII
HAWAII CLIMATE CHANGE MITIGATION & ADAPTATION
COMMISSION
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HONOLULU, HAWAII 96809

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

**Before the Senate Committees on
WATER AND LAND
and
AGRICULTURE AND ENVIRONMENT**

**Monday, March 16, 2020
1:20PM
State Capitol, Conference Room 224**

**In consideration of
HOUSE BILL 1856, HOUSE DRAFT 1
RELATING TO SEA LEVEL RISE**

House Bill 1856, House Draft 1 proposes to direct the Hawaii Climate Change Mitigation and Adaptation Commission, in collaboration with the office of planning CZM program, to conduct certain activities to address the impacts of sea level rise and report to the legislature before the 2022 regular session; and appropriates funds for the commission's activities and extends the lapse date to June 30, 2022. **On behalf of the Hawaii Climate Change Mitigation and Adaptation Commission (Commission) I appreciate the intent of this measure, and offer the following comments for consideration. I appreciate the appropriation intent as well, 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 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

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, Kauai DP
The Adjutant General
Manager, CZM

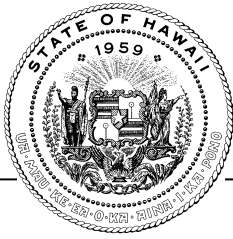
community plans; and bring resources to assist in planning and implementing for sea level rise and other climate related impacts.

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 14: 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 2 Line 20: 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 3: 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 6: 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"; and
5. For item (5) Page 3 Line 9: 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 in a work plan, once the above tasks have been completed; and recommend this be stricken from this measure, and if necessary, considered at a future time.

I am, further, supportive of language in Senate Bill 2683 Senate Draft 1 and Senate Bill 2162 Senate Draft 1 for which I provided the following clarification to the Senate Ways and Means Committee:

"In order to clarify the direction given to the Commission, I recommend replacing the current language of Item 3 (b) with the following (underscored text is new) language: "The Climate Change Mitigation and Adaptation Commission shall research and submit a report on options for a state supplemental insurance program for properties within the State subject to climate change impacts to the Legislature prior to the Regular Session of 2021." Thank you for the opportunity to offer testimony on 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
**SENATE COMMITTEES ON WATER & LAND
AND
AGRICULTURE & ENVIRONMENT**

Monday, March 16, 2020

1:20 PM

State Capitol, Conference Room 224

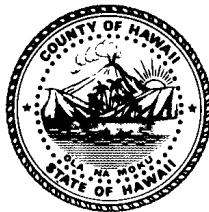
in consideration of
HB 1856 HD1
RELATING TO SEA LEVEL RISE.

Chairs Kahele and Gabbard, Vice Chairs Keith-Agaran and Ruderman, and Members of the Senate Committees on Water and Land and Agriculture and Environment.

The Office of Planning (OP) supports this measure, provided that its passage does not replace or adversely impact priorities indicated in our Executive Budget. The OP defers to the testimony of Hawaii Climate Change Mitigation and Adaptation Commission Coordinator for suggested amendments to this measure. The OP looks forward to continuing to support the Hawaii Climate Change Mitigation and Adaptation Commission.

Thank you for the opportunity to testify on this measure.

REBECCA VILLEGAS
Council Member
District 7, Central Kona



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HAWAI'I COUNTY COUNCIL

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Kailua-Kona, Hawai'i 96740*

March 10, 2020

TESTIMONY OF REBECCA VILLEGAS
COUNCIL MEMBER, HAWAI'I COUNTY COUNCIL
ON HB 1856 HD 1, RELATING TO SEA LEVEL RISE

Committee on Water and Land
Committee on Agriculture and Environment
Monday, March 16, 2020
1:20 p.m.
Conference Room 224

Aloha Chair Kahele, Chair Gabbard, and Members of the Committees:

I thank you for the opportunity to testify in support of HB 1856 HD 1, 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 direct and fund the Hawai'i climate change mitigation and adaptation commission to continue its progress towards addressing the impacts of sea level rise, to identify critical public infrastructure in impacted areas, and to provide policy direction to the legislature on how to move forward. Hawai'i is already experiencing the impacts of climate change, including sea level rise, extreme tides, coastal erosion, and stronger and frequent storms. Impacts of climate change are inescapable and require adaptation. We must find solutions to protect the State's economy, health, environment, and way of life for our residents.

For the reasons stated above I urge the Committee on Water and Land, the Committee on Agriculture and Environment 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-1856-HD-1

Submitted on: 3/9/2020 4:02:58 PM

Testimony for WTL on 3/16/2020 1:20:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Dyson Chee	Testifying for Hawaii Youth Climate Coalition	Support	No

Comments:

**Testimony of Hawaii Pacific University Natural Resource Management Undergraduates
Aidan Ahern, Cathleen Drake, Dakota Stetler, Deshna Joe, John Duarte, Madison Beardsley**

HOUSE COMMITTEE ON WATER, LAND, & HAWAIIAN AFFAIRS

Representative Ryan I. Yamane, Chair

Representative Chris Todd, Vice Chair

Monday, March 16th, 2020 1:20 pm, House Conference room 224

Support for Testimony for HB 1856, RELATING TO SEA LEVEL RISE.

Chair Yamane, Vice Chair Todd, and members of the WLH committee thank you for hearing House Bill 1856 relating to sea-level rise and climate change. We are Hawaii Pacific University Natural Resource Management undergraduates. We respectfully request your support of this bill to ensure the current and future kama'aina of Hawaii to protect coastlines from coastline intrusion and sea-level rise.

Rising sea levels are increasing coastal flooding and erosion which has become a large issue facing many coastal communities. As sea levels continue to rise, infrastructure throughout the state are likely to be damaged. Coastal flooding can be clearly seen in areas all along the Kamehameha Highway. As these areas along the coast continue to see retractions of land from sea level rise, people will be forced to relocate from their property. The Hawaii state government is responsible for preparing changes and to support this bill will allow that precedent to occur.

Over the last decade, major trends of reduced rainfall across all of the islands has been recorded. Water vapor continues to get trapped in the atmosphere and the availability of freshwater within Hawaiian islands continues to diminish. According to the February 2020 Groundwater report released from the Board of Water Supply, the Kaimuki, Punaluu, and Waialua groundwater systems are all within caution or alert levels. This means that they are not being replenished within a fast enough rate to replace water that was extracted in the months prior. The issue of water security is now and we attest that this issue is faced head-on starting with you and this bill.

We support House Bill 1856 in which water security will have an implemented management plan and cadence to protect current and future kama'aina. Due to the inevitability rising sea level, changes to local weather, and accessibility to freshwater this bill can create a preemptive plan to begin structuring projects and plans for how water will be used and how quality will be maintained. Planning for issues such as infiltration, drought, public trust, and other issues regarding this resource will be started, allowing for a much easier time when these issues become a reality. Instead of waiting for issues regarding water to reach critical levels, the House Bill 1856 seeks to set up a plan and structure to prevent or severely hinder these issues before it can affect Hawai'i and its communities.

In conclusion, we thank you for hearing our views on this issue. We hope that you will take into account the current trends for future changes to the local climate and take into consideration the effect water scarcity would have on you and your families and give the residents of Hawai'i that same concern. Mahalo.



HB 1856, HD1, RELATING TO SEA LEVEL RISE

MARCH 16, 2020 · SENATE WATER AND LAND COMMITTEE AND SENATE AGRICULTURE AND ENVIRONMENT COMMITTEE · CHAIRS SEN. KAIALI'I KAHELE AND SEN. MIKE GABBARD

POSITION: Support.

RATIONALE: IMUAlliance supports HB 1856, HD1, relating to sea level rise, which requires the Hawaii climate change mitigation and adaptation commission, in collaboration with the office of planning CZM program, to conduct certain activities to address the impacts of sea level rise and report to the legislature before the 2022 regular session.

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 plans for mitigating and adapting to the imminent and existential threat of 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-1856-HD-1

Submitted on: 3/9/2020 6:34:24 PM

Testimony for WTL on 3/16/2020 1:20:00 PM

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

Comments:

I support HB1856 HD1. 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 the 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.

Mahalo for the opportunity to comment.

Benton Kealii Pang, Ph.D.

HB-1856-HD-1

Submitted on: 3/9/2020 9:50:56 PM

Testimony for WTL on 3/16/2020 1:20:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Don Aweau	Individual	Support	No

Comments:

HB-1856-HD-1

Submitted on: 3/12/2020 11:09:34 AM

Testimony for WTL on 3/16/2020 1:20:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Climate Protector	Individual	Support	No

Comments: