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Statement of
LEO R. ASUNCION
Planning Program Administrator, Office of Planning
before the
SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT
AND
SENATE COMMITTEE ON WATER AND LAND

Monday, February 11, 2019

2:45 PM

State Capitol, Conference Room 224

in consideration of
SB 644
RELATING TO CLIMATE CHANGE

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

The Office of Planning (OP) offers the following comments on SB 644:

- The sea level rise exposure area, as identified in the Hawaii Sea Level Rise Vulnerability and Adaptation Report includes scenarios of 1.0, 2.0, and 3.2 feet of sea level rise. It is unclear how to incorporate the determinations for 6- and 9-foot of sea level rise at this time.
- OP's Coastal Zone Management Program (OP-CZM) has identified the complexities surrounding managed retreat from Hawaii's coastal areas. OP-CZM is finalizing a report entitled *Assessing the Feasibility and Implications of Managed Retreat Strategies for Vulnerable Coastal Areas in Hawaii*, which should be published and available on-line in the next 7-10 days. The report examines the myriad of issues surrounding managed retreat from the shore.
- OP agrees that, while it is important to know the extent of sea level rise, it is also necessary to identify the land use issues, funding issues, legal issues, social justice / equity issues, etc. impacted by retreat. The amount of sea level rise is just one component of broad policy analyses that must be conducted for managed retreat to be successfully implemented according to OP-CZM's initial assessment of the issue.

Thank you for the opportunity to comment on this measure.

DAVID Y. IGE
GOVERNOR OF HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

**Testimony of
SUZANNE D. CASE
Chairperson**

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

**Monday, February 11, 2019
2:45pm
State Capitol, Conference Room 224**

**In consideration of
SENATE BILL 644
RELATING TO CLIMATE CHANGE**

Senate Bill 644 proposes to require the Hawaii Climate Change Mitigation and Adaptation Commission to determine areas in each county to designate for either armoring or managed retreat. **The Department of Land and Natural Resources (Department) supports this measure provided that its passage does not replace or adversely impact priorities indicted in the Executive Supplemental Budget request.**

In 2017, the Governor signed Act 32 establishing the Hawaii Climate Change Mitigation and Adaptation Commission (Climate Commission). Act 32 also established a Climate Change Mitigation and Adaptation Coordinator (Climate Coordinator) position. The Climate Commission has two main areas of priority and focus: reducing emissions from ground transportation sector and adapting to impacts of sea level rise.

In December 2017, the Climate Commission adopted State Sea Level Rise Adaptation and Mitigation Report in accordance with Act 32, SLH, 2017. This first statewide assessment of Hawaii's vulnerability to sea level rise uses the latest science to characterize threats and risks to our coastal areas and proposes a series of recommendations for adaptation. The Climate Commission passed five of those recommendations that are specifically aimed at State and counties to tackle keystone issues surrounding sea level rise. These actions include 1) requiring real estate disclosure of sea level rise hazards, 2) redirecting all new development away from beach areas, 3) advising counties to incorporate consideration of areas vulnerable to sea level rise exposure into their general and community plans, 4) encouraging agencies and non-governmental utility providers to identify and prioritize assets within areas characterized as vulnerable to sea level rise and to report back to the Climate Commission annually regarding their progress towards

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

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

implementing adaptation measures, and 5) supporting legislation that funds State programs to meet goals and provide resources to assist in planning and implementation for sea level rise and related impacts. The 2019 legislative session will be a critical turning point that will potentially provide pathways in which sea level rise adaptation measures can be executed at the agency level.

We note that as sea level continues to rise, it will not likely be possible to simultaneously protect beaches and existing shoreline development. In response, we are recommending a “triage” approach in which we identify areas along Hawaii’s coastline where there are beach resources (e.g., North Shore, Oahu) that can be saved utilizing a multi-pronged approach of non-regulatory (financing) and regulatory (zoning) mechanisms such as “managed retreat.” We would further identify areas in which beaches and lateral shoreline access are lacking such that it may be acceptable to consider a combination of managed retreat, and engineering solutions, however, it is understood that such measures would only be effective as short-term solutions due to the progressive impacts that will be brought on by rising sea levels. Such decisions can be reinforced through consideration of site-specific coastal geology and near-shore physical processes. Identification of components and considerations of a statewide approach to shoreline armoring is recommended. Thus, a new study to specifically identify areas in the state where managed retreat would be appropriate and feasible, and where armoring could be sustained over the short term – e.g., Honolulu International Airport, could be beneficial. Thus, we support the concept of a new study. However, the specific parameters considered as part of such a study would need to be described in a detailed scope of work.

Finally, we note that sea level rise adaptation efforts are currently siloed in various agencies including the Department of Land and Natural Resources, the Office Planning, Department of Transportation, and County public agencies, and other agencies and departments. The State Climate Commission, which includes representation from these same agencies and departments, is endeavoring to improve coordination of sea level adaptation actions by implementing the recommendations of the SLR Report, which it authored. If the Legislature provides the Climate Commission with adequate resources, it can utilize its strong expertise and deep climate networks that it has formed with state, county, federal, and international entities involved in climate change adaptation, to assist local agencies and departments with the onerous task of properly assessing climate change vulnerability and prioritization of efforts to implement appropriate climate adaptation measures to improve long-term resiliency.

Thank you for the opportunity to comment on this measure.

STATE OF HAWAII
DEPARTMENT OF DEFENSE
HAWAII EMERGENCY MANAGEMENT AGENCY

**TESTIMONY ON
SENATE BILL 644, RELATING TO CLIMATE CHANGE**

Before the Senate Committee on
**AGRICULTURE AND ENVIRONMENT
AND
WATER AND LAND**

By

Thomas L. Travis
Administrator, Hawaii Emergency Management Agency (HI-EMA)

Chairs Gabbard and Kahele, Vice Chairs Ruderman and Keith-Agaran, and Members of the Committee

The Hawaii Emergency Management Agency (HI-EMA) ***supports the intent of*** Senate Bill 644.

Senate Bill 644 Requires the Hawaii Climate Change Mitigation and Adaptation Commission to determine areas in each county to designate for either armoring or managed retreat. Requires the commission to submit a report to the Legislature. Appropriates moneys.

Note: My comments represent HI-EMA concerns at the state emergency management level only. I would defer to the separate comment/testimonies of the county emergency management agencies, as they would be the jurisdictions impacted by this legislation at the local level.

Thank you for the opportunity to provide testimony on Senate Bill 644.

Thomas L. Travis: Thomas.l.travis@hawaii.gov; 808-733-4300



SB 644, RELATING TO CLIMATE CHANGE

FEBRUARY 11, 2019 · SENATE COMMITTEES ON
AGRICULTURE AND THE ENVIRONMENT AND
WATER AND LAND · CHAIRS SEN. MIKE GABBARD
AND KAIALI'I KAHELE

POSITION: Support.

RATIONALE: IMUAlliance supports SB 644, relating to climate change, which requires the Hawaii Climate Change Mitigation and Adaptation Commission to determine areas in each county to designate for either armoring or managed retreat and requires the commission to submit a report to the Legislature.

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.

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.



**TESTIMONY TO THE SENATE COMMITTEES ON AGRICULTURE AND ENVIRONMENT,
AND WATER AND LAND
State Capitol, Conference Room 224
415 South Beretania Street
2:45 PM**

February 11, 2019

RE: SENATE BILL NO. 644, RELATED TO CLIMATE CHANGE

Chairs Gabbard and Kahele, Vice Chairs Rudeman and Keith-Agaran, and members of the committees:

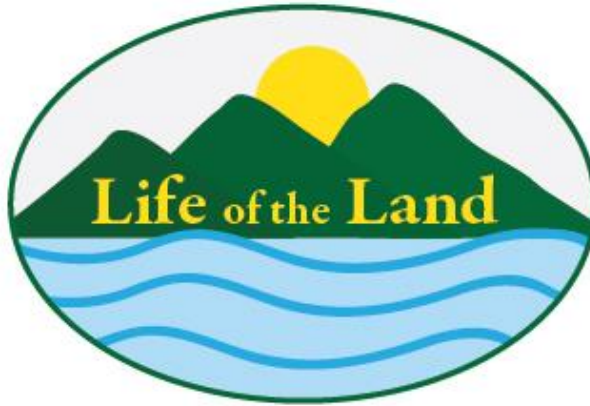
My name is Gladys Quinto-Marrone, CEO of the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, the Building Industry Association of Hawaii is a professional trade organization affiliated with the National Association of Home Builders, representing the building industry and its associates. BIA-Hawaii takes a leadership role in unifying and promoting the interests of the industry to enhance the quality of life for the people of Hawaii. Our members build the communities we all call home.

BIA-Hawaii has the following **comments** on S.B. 644, which proposes to require the Hawaii Climate Change Mitigation and Adaptation Commission to determine areas in each county to designate for either armoring or managed retreat, and submit a report to the Legislature.

We understand that the Commission, which is comprised of various state and county officials, has provided the legislature with a comprehensive sea-level rise report in which risk levels are clearly identified. We suggest that the Legislature consider having the Commission formally adopt the maps created by the Commission, which identifies the area that will be impacted by the predicted three (3), six (6), and, nine (9) foot sea-level rise. This would allow affected landowners to be informed of the possible designation, and raise any concerns they may have through the Administrative Rule-making process used to adopt the maps.

Once the maps have been formally adopted, the Commission could then identify those areas around the state that will be subject to high rates of coastal erosion due to sea level rise, and appropriately seek funding for condemnation of the private properties impacted and relocation of public infrastructure.

We appreciate the opportunity provide comments on S.B. 644.



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COMMITTEE ON AGRICULTURE AND ENVIRONMENT

Senator Mike Gabbard, Chair

Senator Russell E. Ruderman, Vice Chair

COMMITTEE ON WATER AND LAND

Senator Kaiiali'i Kahele, Chair

Senator Gilbert S.C. Keith-Agaran, Vice Chair

DATE: Monday, February 11, 2019

TIME: 2:45 P.M.

PLACE: Conference Room 224

SB 644 Relating to Climate Change

Support, Amendment

Aloha Chairs Gabbard and Kahele, Vice Chairs Ruderman and Keith-Agaran, and Members of the Committees

Life of the Land is Hawai`i's own energy, environmental and community action group advocating for the people and `aina for 49 years. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

Amendment: The legislature believes that one of the most important and urgent matter to be addressed is the identification and determination of shoreline armoring and retreat.

Rationale: Equally important is preparing for a Hurricane Maria or Lane, establishing shelters, upgrading warning systems, food security, and electric grid, water, and wastewater resiliency.

Mahalo

Henry Curtis

Executive Director

LATE

SB-644

Submitted on: 2/10/2019 6:50:40 PM

Testimony for AEN on 2/11/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	Testifying for O`ahu County Committee on Legislative Priorities of the Democratic Party of Hawai`i	Support	No

Comments:

SB-644

Submitted on: 2/7/2019 6:43:45 PM

Testimony for AEN on 2/11/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Erica Scott	Individual	Support	No

Comments:

SB-644

Submitted on: 2/10/2019 2:10:55 PM

Testimony for AEN on 2/11/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Andrea Quinn	Individual	Support	No

Comments:

Dear Honorable Committee Members:

Please support SB644.

Valuable coastline is eroding and coral reefs are dying due to climate change, which is already occurring. We need to be a leader in legislation to mitigate global warming.

Thank you for the opportunity to present my testimony.

Sincerely,

Andrea Quinn