

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 930
RELATING TO CLIMATE CHANGE**

Senate Bill 930 proposes to support the Hawaii climate adaptation initiative by providing affected agencies and departments of the state and county with the necessary resources to implement this Act. **The Department of Land and Natural Resources (Department) strongly 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 which expires at the end of the FY19, although the Commission does not. Senate Bill 263 proposes to extend the Climate Coordinator position and provide the Department with resources necessary to implement climate change mitigation and adaption actions to improve our State's resiliency. The Climate Commission has two main areas of priority and focus: reducing emissions from the ground transportation sector and adapting to impacts of sea level rise.

In the brief 18 months of its existence, the Climate Commission has had a tremendous impact on state and county policies and has established a new standard for state level action on climate change mitigation and adaptation. In its first 18 months, the Climate Commission and its Climate Coordinator have accomplished a great deal of work:

- **Adopted a cutting edge 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

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

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 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.

- **Identified priority areas to help reduce emissions from ground transportation.** These include a strong statement on carbon pricing, along with addressing system efficiencies through transportation and parking studies, electric vehicle (EV) infrastructure deployment through government carshare and other programs, and a PSA campaign to engage residents and visitors in the transition to clean transportation.
- **Finalized a mission statement to bind together the above priorities.** The Commission aims “[t]o promote ambitious, climate-neutral, culturally responsive strategies for climate change adaptation and mitigation in a manner that is clean, equitable and resilient.”
- **Developed a climate “brand” for Hawaii through a new website and social media presence** to inform local and global audiences of Hawaii’s climate response. The web portal launched in June helps to tie together all State efforts on Climate Change—adaptation, greenhouse gas sequestration, the greenhouse gas inventory, Hawaii Clean Energy Initiative, Sustainability initiatives, and the State Energy Office sites. The social media accounts attempt to provide insights into the Commission’s ongoing work.
- **Projected a national presence for climate response.** Hawaii works with the 20-Governor US Climate Alliance (USCA) that was formed as a response to the Federal Administration’s withdrawal from the Paris Agreement. Hawaii is involved in various working groups, including for resilience, transportation, natural and working lands, and so on. The Climate Coordinator co-chairs, along with staff from Minnesota and Washington, the transportation working group and brings lessons from other states to Hawaii.
- **Hosted a dynamic statewide First Annual Climate Conference** bringing subject matter experts together from the mainland U.S. and from Hawaii, to engage with

researchers, the interested public, industry and government in an effort to help resolve the most difficult issues facing the state and set the tone for the work of the Commission in 2019.

Senate Bill 930 would allow the Climate Coordinator to continue to support the Climate Commission going forward, specifically:

- Develop a technical assistance program for state and county agencies that provides technical expertise, funding, and consistent guidelines and industry standards such that local vulnerabilities can be identified and resolved through implementation of adaptation measures. Coordinate partnerships for a PSA campaign focused on transportation.
- Conduct in-depth research on existing policies and legislation relating to carbon reduction to identify potential for application in Hawaii, and to specifically improve ground transportation systems across the state.
- Conduct specialized research studies: baseline fleet inventories and fleet analysis for public fleets.
- Continue to host a dynamic annual conference that becomes the trademark of the Commission, highlights partnerships and progress towards Hawaii's goals, and sets the tone for the Commission's work for the respective year.
- Continue to work in partnership with the State Office of Planning Sustainability Coordinator, the City and County of Honolulu, Climate Change, Sustainability and Resiliency, and the other County Sustainability officers, as well as on a national level with the US Climate Alliance.

Finally, we note that climate mitigation and adaption efforts are currently based 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 all implementing efforts. 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 mitigation and 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 mitigation and 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 930, 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 930.

Senate Bill 930 Requires the Hawaii climate change mitigation and adaptation commission and coordinator to assist the State and counties with developing and implementing various sea level rise adaptation plans and climate change mitigation efforts. Appropriate funds to support the Hawaii climate change initiative.

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 930.

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

LATE

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Council District 4 -
Lower Puna



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ASHLEY L. KIERKIEWICZ

HAWAII COUNTY COUNCIL – DISTRICT 4

Chair: Committee on Planning, and Committee on Government Relations & Economic Development
25 Aupuni Street • Hilo, Hawai'i 96720

February 10, 2019

Senate Committee on Agriculture and Environment

Senator Mike Gabbard, Chair
Senator Russell Ruderman, Vice-Chair

Senate Committee on Water and Land

Senator Kaiali'i Kahele, Chair
Senator Gilbert Keith-Agaran, Vice-Chair

**RE: Support for SB930
relating to Climate Change Adaptation and Mitigation**

Aloha, Senators:

As Chair of the Committee on Planning and the Committee on Government and Economic Development for Hawai'i County Council, I appreciate the opportunity to submit testimony in support of SB930. As a 33-year-old, I believe climate change is the most significant issue facing my generation.

Thank you for recognizing the grave costs and consequences of climate change here in the islands. The plans identified in SB930 must be crafted swiftly. Please consider ways in which the State and County can work together to implement solutions. We haven't a moment to lose. The future of our precious island home is at stake.

Mahalo nui loa,

Ashley Lehualani Kierkiewicz
Hawai'i County Council, District 4



Email: communications@ulupono.com

SENATE COMMITTEES ON AGRICULTURE & ENVIRONMENT AND WATER & LAND
Monday, February 11, 2019 — 2:45 p.m. — Room 224

Ulupono Initiative Strongly Supports SB 930, Relating to Climate Change

Dear Chair Gabbard, Vice Chair Ruderman, Chair Kahele, Vice Chair Keith-Agaran, and Members of the Committees:

My name is Murray Clay and I am Managing Partner of the Ulupono Initiative, a Hawai'i-based impact investment firm that strives to improve the quality of life for the people of Hawai'i by working toward solutions that create more locally produced food; increase affordable, clean, renewable energy; and better manage waste and fresh water resources.

Ulupono strongly supports SB 930, which assists the State and Counties in studying energy usage of its facilities and vehicles, studying clean transportation initiatives, and initiates a public advertising campaign to encourage behavioral changes that support cleaner modes of transportation. These activities help reduce Hawai'i's dependence on imported fossil fuels by increasing the use of more efficient, cleaner forms of ground transportation.

The Hawai'i Climate Change Mitigation and Adaptation Commission has worked hard to identify these measures as part of a larger stakeholder based process to help the State meet its critical clean transportation goals. As a result, the State and Counties will need to enact numerous policies to support clean transportation if we want to reduce imported fossil fuels, since transportation accounts for more than half of all oil consumed in the State.

Furthermore, these transportation alternatives can offer additional benefits for all, including reducing the cost of living, improving health and decreasing green house gas emissions and congestion. This bill provides myriad of clean transportation studies and policies with funding to execute so the community can start to reap these benefits.

If this bill were passed, Ulupono would be happy to work with the Hawai'i Climate Change Mitigation and Adaption Commission on implementing these goals.

As Hawai'i's energy issues become increasingly complex and challenging, we appreciate these committees' efforts to look at policies that support clean ground transportation. Thank you for this opportunity to testify.

Respectfully,

Murray Clay
Managing Partner

Investing in a Sustainable Hawai'i



SB 930, 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 930, relating to climate change, which requires the Hawaii climate change mitigation and adaptation commission and coordinator to assist the State and counties with developing and implementing various sea level rise adaptation plans and climate change mitigation efforts, and appropriates funds to support the Hawaii climate change initiative.

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.



SENATE JOINT COMMITTEE ON AGRICULTURE & ENVIRONMENT AND WATER & LAND

February 11, 2019 2:45pm Room 224

In **SUPPORT** of **SB930**: Relating to Climate Change

Aloha Chairs Gabbard and Kahele, Vice Chairs Ruderman and Keith-Agaran, and members of the committees,

The HAWAII REEF AND OCEAN COALITION –HIROC– was formed in 2017 by coral reef scientists, educators, local Hawai'i environmental organizations, elected officials, and others to address a crisis facing Hawai'i's coral reefs and ocean, including those related to sea level rise.

HIROC **strongly supports SB930**, relating to Climate Change.

This bill provides a mandate and funding in support of the work of the Climate Mitigation and Adaptation Commission as it seeks to accelerate implementation of climate adaptation measures to deal with sea level rise.

The Climate Mitigation and Adaptation Commission includes representatives of relevant state and county governments and agencies, and the state legislature, and conducts workshops and other outreach efforts to involve the private sector, non-profit organizations, and ordinary citizens. This bill requires the commission to assist the State and counties with developing and implementing various sea level rise adaptation plans and climate change mitigation efforts, and provides funding to do so, including funding for a coordinator position. That position is needed to assure there is communication and coordination between the agencies, and to monitor and report on progress on climate adaptation measures.

In summary, SB930 is a very important bill. We strongly support the bill and associated appropriations. Mahalo.

Kimiko LaHaela Walter on behalf of the Hawai'i Reef and Ocean Coalition.



Environmental Caucus

The Democratic Party of Hawai'i

SENATE JOINT COMMITTEE ON AGRICULTURE AND THE ENVIRONMENT AND WATER AND LAND

February 11, 2019 2:45 p.m. Room 224

In **SUPPORT** of **SB930**: Relating to Climate Change

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

On behalf of the Environmental Caucus of the Democratic Party of Hawai'i (ECDPH), we **support passage of SB930**, relating to Climate Change.

Climate change and efforts to mitigate its effects is the single most pressing issue of our time. The impact of a 3.2 foot sea level rise, as outlined in the the findings of the Sea Level Rise Vulnerability and Adaptation Report in 2017 (hereafter referred to as "The Report"), is likely to be disastrous for Hawai'i's economy, sustainability, and way of life.

This bill provides a mandate and funding in support of the work of the Climate Mitigation and Adaptation Commission (the "Commission") as it seeks to accelerate implementation of climate adaptation measures to deal with sea level rise. The Commission includes representatives of relevant state and county governments and agencies, and the state legislature, and conducts workshops and other outreach efforts to involve the private sector, non-profit organizations, and ordinary citizens. This bill requires the commission to assist the State and counties with developing and implementing various sea level rise adaptation plans and climate change mitigation efforts, and provides funding to do so, including funding for a coordinator position. That position is needed to assure there is communication and coordination between the agencies, and to monitor and report on progress on climate adaptation measures.

Mahalo for this opportunity to provide testimony in **strong support of SB930**.

Lana Olson, Chair, Environmental Caucus of the Democratic Party of Hawai'i

SB-930

Submitted on: 2/10/2019 2:38:17 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:



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COMMITTEE ON WATER AND LANDS

Senator Kaiālī'i Kahele, Chair
Senator Gilbert S.C. Keith-Agaran, Vice Chair

COMMITTEE ON AGRICULTURE AND ENVIRONMENT

Senator Mike Gabbard, Chair
Senator Russell Ruderman, Vice Chair

Monday, February 11, 2019, 2:45 p.m., Conference Room 224

SB664 – Relating to Climate Change

SB828 – Relating to Coastal Erosion Adaptation Plan

SB930 -- Relating to Climate Change

SB944 – Relating to Climate Change

SB393 – Relating to Coastal Zone Management

SB1113 – Relating to Coastal Management

TESTIMONY

Nancy Davlantes, Legislative Committee Member, League of Women Voters of Hawaii

Chairs Kahele and Gabbard, Vice-Chairs Keith-Agaran and Ruderman, committee members:

The League of Women Voters of Hawaii echoes its testimony previously submitted to various House bills addressing the challenges taken up by the Senate in this hearing.

Hawaii's Climate Change Mitigation and Adaptation Commission, created by Act 32 in 2017, certainly has a lot on its plate, tasked in three of these bills to assist the state and counties with developing and implementing various sea level rise adaptation plans and climate change mitigation efforts; to prioritize nature-based solutions in its climate change mitigation and adaptation efforts and assess risk transfer market mechanisms that promote investments in nature to reduce the risks of climate change; and to determine areas in each county to designate for either armoring or managed retreat. Fortunately, these bills appropriate money, and it's going to take a lot of it.

If there's anything that stands out from a review of the objectives of each of these bills is that everything is inter-related. Climate change is all-encompassing: sea-level rise, coastal erosion, what to do about moving roads and property mauka of the ocean, preserving beach and access – these problems can't be confronted in isolation.

What is needed is an integrated approach to the significant challenges confronting our island state. The League is both gratified and impressed by the number of bills introduced this session by both the Senate and House, recognizing that delay in addressing these challenges is not an option.



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Now comes the hard part—sifting through the myriad bills, recognizing the common goals, and putting the pieces of the puzzle together to come up with the legislation and the money to put Hawaii on the course it needs to be on to face what's ahead of us.

It's a daunting task, to say the least, but the very number of bills introduced indicates that the time to act is now.

Thank you for the opportunity to submit testimony.



SIERRA CLUB OF HAWAII
MĀLAMA I KA HONUA. *Cherish the Earth.*

LATE

SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT

SENATE COMMITTEE ON WATER AND LAND

February 11, 2019 2:45 pm. Room 224

In SUPPORT of SB 930: Relating to Climate Change

Aloha Co-Chairs Gabbard and Kahele, Vice Co-Chairs Ruderman and Keith-Agaran, and members of the committees,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawai'i **strongly supports passage of SB 930**, Relating to Climate Change.

As this bill documents, more than ten years have elapsed since the state legislature undertook its initial efforts at a statewide climate action plan for mitigation and adaptation to climate change, with an initial emphasis on mitigation actions to reduce greenhouse gas emissions. Since that time greenhouse gas emissions, global air and sea temperatures, and sea levels have risen significantly. Sea levels are predicted to rise at increasing rates as melting of ice adds to increases due to increases in ocean temperatures.

The local impacts of sea level rise are already been felt during spring tide and storm surge events. We have made great strides over the past ten years, culminating in the 2018 release of the Hawaii Sea Level Vulnerability Report and the associated tools to view sea level rise exposure areas at the level of individual parcels of lands. But, we are only beginning to develop and implement urgently needed climate change adaptation plans. We must act this session to accelerate these efforts. SB 930 provides both a strong mandate and important resources for doing so.

Many of the actions required to implement climate change adaptation plans must be implemented by the county governments to address the specific circumstances of each island and community. Those entities will require and benefit from the technical, financial, and coordinating assistance from the state this bill would provide.

It is vital, however, that state agencies work closely with county agencies in the development and implementation of county level adaptation plans. This is especially true for the Department of Transportation, which will need to make key decisions on how to adapt the state's coastal highways to the inevitable increase in sea level rise in coming years and decades. The decisions will include actions to abandon or relocate inland certain sections of highways, which will affect the planning and zoning decisions of the county agencies.

The Climate Change Mitigation and Adaptation Commission includes representatives of relevant state and county governments and agencies, and the state legislature, and conducts workshops and other outreach efforts to involve the private sector, non-profit organizations, and ordinary citizens. However, it currently lacks an overall, time-phased, implementation plan assigning responsibilities and timetables, and identifying task dependencies (the need for a particular task to be completed by one agency before a second agency can start its task). It is also necessary to track and report on progress, or lack thereof, in order to manage a project of this magnitude, complexity, and importance. Lastly, there must be someone responsible for coordinating the overall project. Otherwise there is a tendency for agencies to exist in their own silos, operating under their individual budgets and statutory duties. A coordinator is needed to assure there is communication and coordination between the agencies. SB 930 provides the modest, but necessary, funding for such a position.

In summary, SB930 is a very important bill which we strongly support.

Mahalo,

A handwritten signature in cursive script that reads "Jodi Malinoski".

Jodi Malinoski, Policy Advocate

SB-930

Submitted on: 2/10/2019 2:15:45 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 SB930.

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

Kihei

SB-930

Submitted on: 2/10/2019 2:47:00 PM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Chuck Flaherty	Individual	Comments	No

Comments:

Aloha Chairs Gabbard and Kahele and Members of the Committee on Agriculture and Environment and Committee on Water and Land,

It appears Senate Bills 930 and 263 are intended to accomplish the same goal, that is, to for the Hawai'i Climate Change Mitigation and Adaption Commission to assist the state and county agencies in identifying public assets that may be impacted by climate change and determining mitigation and adaption measures.

I support this concept provided sufficient dedicated funding and personnel are detailed and required in any proposed legislation.

Mahalo for this opportunity to testfy,

Charles Flaherty

P O Box 922

Captain Cook HI 96704

LATE

SB-930

Submitted on: 2/10/2019 6:33:00 PM

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

Submitted By	Organization	Testifier Position	Present at Hearing
Dain Christensen	Individual	Support	No

Comments: