

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 House Committees on
ENERGY & ENVIRONMENTAL PROTECTION
and
WATER & LAND

Thursday, March 23, 2017
11:00 A.M
State Capitol, Conference Room 325

In consideration of
SENATE BILL 559 SENATE DRAFT 1
RELATING TO CLIMATE CHANGE

Senate Bill 559, Senate Draft 1 proposes to highlight Hawaii's legacy of environmental protection and climate change leadership and supports the goals of the December 2015 Paris Climate Agreement as a framework to undertake strategies and mechanisms to reduce and mitigate the greenhouse gas emissions of all Hawaii state departments and agencies. **The Department of Land and Natural Resources (Department) supports this measure and offers comments and amendments regarding implementation.**

The Department applauds the Legislature's clear statement that climate change is real and the overriding challenge of the 21st century. The Department agrees that the 2015 Paris Climate Agreement is a hugely important step forward for the world, and that whether or not opposing efforts to roll back or abandon those agreements succeed, it is local and regional leadership and action that is needed to ensure those global agreements are actually implemented.

The Department has been actively engaged in climate change adaptation work in support of the goals of the Paris Agreement.

The Sustainable Hawaii Initiative <http://governor.hawaii.gov/sustainable-hawaii-initiative/> has established goals to decrease or eliminate dependency on fossil fuels, protect our watersheds, improve biosecurity, increase food self-sufficiency, and effectively manage our marine areas.

In addition, the Department is in the process of establishing a new Carbon Credits Initiative <http://dlnr.hawaii.gov/blog/2017/01/31/nr17-015/> to offset carbon emissions through

SUZANNE D. CASE
CHAIRPERSON
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COMMISSION ON WATER RESOURCE MANAGEMENT

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DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

reforestation of degraded lands. The Department is also interested in potential conversion to electric or hybrid vehicles, and/or biofuel use, for emissions reductions.

The State Planning Act was amended in 2012 with the addition of the Climate Change Adaptation Priority Guidelines (Act 286). These guidelines were created to encourage collaboration needed to address climate change recognizing that impacts will occur to multiple sectors including agriculture, conservation lands, coastal and nearshore marine areas, natural and cultural resources, education, energy, higher education, health, historic preservation, water resources, and the economy.

Furthermore, the Department and the Office of Planning (OP) are presently engaged in assessing potential impacts and planning for climate change and sea level rise for the State as directed by the Act 83, Session Laws of Hawaii 2014. Act 83 established an Interagency Climate Adaptation Committee (within the Department, co-chaired by the Department and OP), which is presently focused on developing a Sea Level Rise Vulnerability and Adaptation Report for the State. The Report, related data and maps, and recommendations will help in the assessment of and planning for potential impacts resulting from projected sea level rise for development, infrastructure, and coastal environments.

Finally, Act 83 “Authoriz[ed] the office of planning to coordinate the development of a statewide climate adaptation plan and use the Sea Level Rise Vulnerability and Adaptation Report as a framework for addressing other climate threats and climate adaptation priorities...”

Senate Bill 559, Senate Draft 1 strengthens on-going state efforts to curb emissions that contribute to global warming, and promotes climate change adaptation efforts.

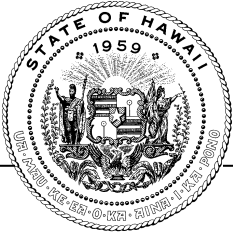
The Department notes that a core next step for Hawai‘i is to review the multifaceted goals and actions of the 2015 Paris Climate Agreement to prioritize best actions for Hawai‘i to implement, given Hawai‘i’s actions to date, as well as the existing capabilities and resources of our state offices and gaps in our efforts that need to be filled.

Thus, the Department recommends as follows:

- 1) Utilize but broaden the scope of the Existing Interagency Climate Adaptation Committee to take the next steps in terms of climate mitigation and adaption coordination and planning for Hawaii;
- 2) Rename the Interagency Climate Adaptation Committee to the “Interagency Climate Mitigation and Adaptation Commission” with members appointed by the Governor.
- 3) Establish a climate mitigation and adaptation coordinator position with technical and administrative support attached to the Department of Land and Natural Resources for administrative purposes to support the Interagency Climate Adaptation Commission;
- 4) Provide at least three years of funding; and
- 5) Direct the Commission to do the following:
 - a. Establish climate change mitigation and adaptation goals to help guide planning and implementation state-wide;

- b. Identify all climate change mitigation and adaption planning actions being undertaken at the federal, state and county level including an assessment of vulnerable people, places, and ecosystems, and how existing policies, plans, and programs can be enhanced to promote and implement climate mitigation and adaptation in line with the Paris Agreement and State-determined climate change mitigation an adaptation goals;
- c. Identify information necessary to track greenhouse gas emission contribution levels in the state as well as the progress made in implementing and achieving the State's state-determined goals of reducing and mitigating greenhouse gas emissions;
- d. Determine what additional scientific and technical information is needed to monitor, understand, and forecast climate change and related impacts at the regional, state, and local level;
- e. Facilitate coordination of climate change mitigation and adaption measures, efforts, and programs among state, federal, county, international, and non-governmental organizations and industries;
- f. Assess the capacity and availability of existing and identify new financial mechanisms and human resources necessary to conduct all climate change mitigation and adaptation actions at the state and local level;
- g. Provide oversight on the development of state, county, and community climate change mitigation and adaptation plans that shall reflect the highest possible ambitions to reduce greenhouse gas emissions and increase resiliency to climate change by identifying specific actions and resources necessary to be taken in line with the Paris Agreement and state-determine goals;
- h. Advise the governor and legislature on budgetary and other issues regarding climate change mitigation and adaptation; and
- i. Maintain a website that includes the mission statement of the Interagency Climate Mitigation and Adaptation Commission and which provides access to all state climate mitigation and adaptation actions, plans, policies and results undertaken and completed by or related to the Commission.

Thank you for the opportunity to comment on this measure.



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DAVID Y. IGE
GOVERNOR

LEO R. ASUNCION
DIRECTOR
OFFICE OF PLANNING

AMENDED

Statement of
LEO R. ASUNCION
Director, Office of Planning
before the
**HOUSE COMMITTEES ON ENERGY & ENVIRONMENTAL PROTECTION, AND
WATER & LAND**

Thursday, March 23, 2017
11:00 AM
State Capitol, Conference Room 325

in consideration of
SB 559, SD1
RELATING TO CLIMATE CHANGE.

Chairs Lee and Yamane, Vice Chairs Lowen and Kong, and Members of the House Committees on Energy & Environmental Protection, and Water & Land.

The Office of Planning (OP) supports the intent of SB 559, SD1 provided that its passage does not replace or adversely impact priorities indicated in our Executive Budget, and provides the following comments.

SB 559, SD1 enacts relevant provisions of the Paris Agreement as Hawaii State Law and designates the Department of Accounting and General Services (DAGS) as the lead agency to undertake strategies and mechanisms to reduce and mitigate the greenhouse gas emissions of all state departments and agencies and makes an appropriation.

OP finds that the intent of SB 559, SD1 supports potential implementation activities consistent with addressing HRS § 226-109, Climate Change Adaptation Priority Guidelines, specifically to: “explore adaptation strategies that moderate harm or exploit beneficial opportunities in response to actual or expected climate change impacts to the natural and built environments” (HRS § 226-109(6)).

The passage of the Hawaii Climate Adaptation Initiative Act in 2014 (Act 83, Session Laws of Hawaii 2014) established an Interagency Climate Adaptation Committee (ICAC), codified in Hawaii Revised Statutes (HRS) Chapter 225P. Among its initial responsibilities, the ICAC is tasked with developing a statewide Sea Level Rise Vulnerability Assessment and Adaptation Report (SLR Report) affecting the state and counties through 2050 by December 2017. Act 83, SLH 2014 also authorized OP to coordinate the development of a statewide climate adaptation plan and use the SLR Report as a framework for addressing other climate threats and climate change adaptation priorities in HRS § 226-109.

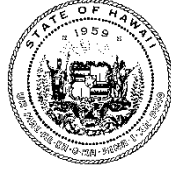
OP has concerns that there may be overlap with the statewide climate adaptation plan tasked to OP in Act 83, SLH 2014 and the proposed language in this measure, specifically on page 12, lines 1-19, which states that DAGS “shall engage in adaptation planning processes and the implementation of actions, including the development or enhancement of relevant plans, policies, and goals...,” and seeks clarification for whether this applies specifically to state department and agencies greenhouse gas emissions or more broadly to include all anticipated impacts of climate change.

OP acknowledges that greenhouse gas emissions mitigation and adaptation planning would be a critical section for a statewide climate adaptation plan, but because of the broad scope of this measure, OP believes that this measure warrants further discussion and clarification to ensure consistency, clarification of roles and responsibilities, and prudent use of state funds. For example, the Department of Health, Clean Air Branch is currently working towards contracting a project to support achieving and implementing the mandates of Act 234, SLH 2007 in part to prepare greenhouse gas emissions inventories to help inform regulatory decision making. These and other relevant efforts (if any) should be taken into consideration to ensure a fully collaborative statewide process.

However, should this measure move forward, for purposes of consistency and to reduce redundancy across existing and future state climate change initiatives OP recommends that the mitigation and adaptation tasks proposed in this measure are developed according to the framework of the SLR Report and in collaboration with the existing committee structure of the ICAC, with the addition of DAGS as a member of the committee.

Thank you for the opportunity to testify on this measure.

DAVID Y. IGE
GOVERNOR



RODERICK K. BECKER
Comptroller

AUDREY HIDANO
Deputy Comptroller

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

P.O. BOX 119, HONOLULU, HAWAII 96810-0119

TESTIMONY OF
RODERICK K. BECKER, COMPTROLLER
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
TO THE HOUSE COMMITTEES ON
ENERGY & ENVIRONMENTAL PROTECTION
AND
WATER & LAND
ON
THURSDAY, MARCH 23, 2017
11:00 A.M.
CONFERENCE ROOM 325

S.B. 559, S.D. 1

RELATING TO CLIMATE CHANGE.

Chairs Lee and Yamane, Vice Chairs Lowen and Kong, and members of the Committees, thank you for the opportunity to submit testimony on S.B. 559, S.D. 1.

The Department of Accounting and General Services (DAGS) supports the intent of the bill, but believes the program would be better placed within the Department of Land and Natural Resources (DLNR) or the Office of Planning (OP), for the following reasons:

1. Subject Matter Expertise and Resources: DAGS does not currently possess the requisite subject matter expertise to develop and implement strategies and mechanisms to reduce and mitigate greenhouse gas emissions. DAGS recognizes the importance of the bill's objectives, but it is not adequately resourced to meet those objectives.

DAGS currently provides many State departments and agencies with public facilities, operational support and fiscal guidance, and oversight of administrative services; none of which reflects the requisite subject matter expertise to formulate and implement critical and highly technical environmental programs that address climate change.

2. Current Programs: DAGS agrees with the comments of the Senate subject matter committees in Standing Committee Report No. 423, noting that the Hawaii Climate Adaptation Initiative Act, Act 83, Session Laws of Hawaii (SLH), established the climate change adaptation priority guidelines, and that the Office of Planning (OP) may be better suited than DAGS to serve as the implementing agency.

Act 83 established the interagency climate adaptation committee whose purpose is to address the effects of climate change to protect the State's economy, environment, health, and way of life. Under Act 83, OP is authorized to coordinate the development of a statewide climate adaptation plan and to use the sea level rise vulnerability and adaptation report as a framework for addressing other climate threats and climate change adaptation priorities identified in Act 286, SLH 2012. Act 83 also provided funding to OP (\$108,874) and DLNR (\$458,874), and established one full-time equivalent position in each agency to carry out the purposes of Act 83. OP is required to publish its findings, recommendations, and progress reports on actions taken, no later than December 31, 2017.¹

Thank you for the opportunity to submit written comments on this matter.

¹ Section 225M-2(b)(9)(C), Hawaii Revised Statutes



**Conservation Council
for Hawai'i**

Hawai'i's voice for wildlife

Kō Hawai'i leo no nā holoholona lōhiu



Testimony Submitted to the House Committee on Energy and Environmental Protection
and House Committee on Water and Land
By the Conservation Council for Hawai'i
Hearing: Thursday, March 23, 2017 11 am
Room 325

Support for SB 559 SD 1 Relating to Climate Change

Chair Lee, Chair Yamane, Vice Chair Lowen, Vice Chair Kong, and Members of the Committees,
Aloha. The Conservation Council for Hawai'i supports SB 559 SD 1, which enacts relevant
provisions of the Paris Agreement as Hawaii state law, requires annual reports, and makes an
appropriation.

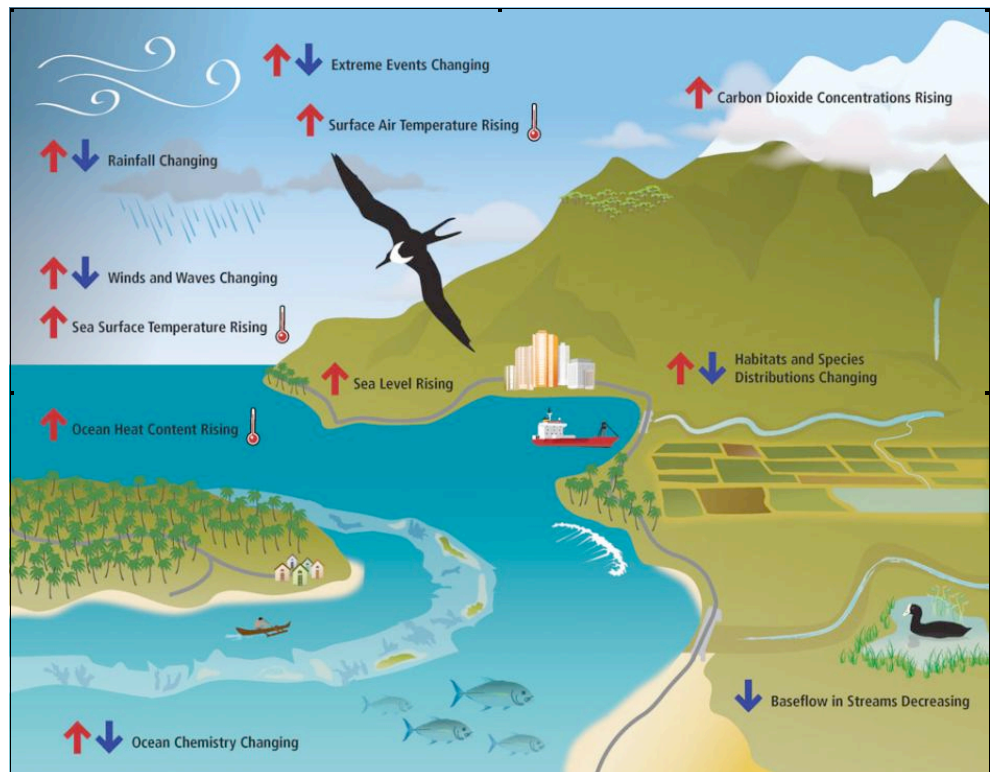
Climate change and invasive species are the most dangerous threats to our environment, human
health and safety, quality of life, and economy.

Please pass SB 559 SD 1. Mahalo nui loa for the opportunity to testify.

Sincerely,

Marjorie Ziegler

Marjorie Ziegler



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**HOUSE COMMITTEE ENERGY & ENVIRONMENTAL PROTECTION
HOUSE COMMITTEE ON WATER & LAND**

March 23, 2017, 11 AM

Room 325

(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF SB 559

Aloha Chair Lee, Chair Yamane, Vice Chair Lowen, Vice Chair Kong, and Committee Members:

Blue Planet Foundation **supports SB 559.**

News reports from recent days indicate that President Trump is attempting to dismantle progress on clean energy and climate change. He intends to weaken federal standards for vehicle fuel efficiency, end a moratorium on new coal mines, stop the Clean Power Plan, and eliminate a review of climate impacts in environmental impact statements. Without state action, these steps will hurt local consumers and our environment, simply to line the pocket of the fossil fuel industry. Other news reports indicate that a fossil fuel lobby, including the infamous Koch brothers, are launching an anti-clean transportation initiative targeted at “changing the energy narrative.”

At the same time, on March 17, 2017, West Hawaii Today reported on a presentation by Professor Ruth Gates, Director of the Hawai'i Institute for Marine Biology. Professor Gates' presentation explained that **“We have lost 50 percent of the world's coral reefs in the last three decades,”** and **“the remaining coral will be gone or heavily damaged by 2050 if things don't turn around.”** Imagine Hawai'i's people, islands, and economy without coral reefs. This is but one of the impacts of climate change.

The historic Paris Agreement is the world's near-unanimous decision that we simply cannot let climate change ruin our children's planet, and that we must turn things around. SB 559 will embody the Paris Agreement's principles in our state law, and will ensure that we do all we can to reduce our contribution to greenhouse gas emissions. The importance of this cannot be overstated.

Thank you for this opportunity to testify.

info@blueplanetfoundation.org

55 Merchant Street 17th Floor • Honolulu, Hawai'i 96813 • 808-954-6142 • blueplanetfoundation.org



March 23, 2017

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Chris Lee, Chair; Rep. Nicole Lowen, Vice Chair; and Committee Members

COMMITTEE ON WATER & LAND

Rep. Ryan Yamane, Chair; Rep. Sam Satoru Kong, Vice Chair; and Committee Members
Public Hearing, March 23, 2017 at 11:00 a.m., Conference Room 325

**TESTIMONY of WILLIAM F. ANONSEN
MANAGING PARTNER/PRINCIPAL of THE MARITIME GROUP, LLC
IN SUPPORT of S.B. 559 SD1**

My name is William Anonsen and I am the Managing Partner/Principal of THE MARITIME GROUP, LLC. We strongly support SB 559 SD1 which recognizes the critical importance of climate change which poses immediate and long-term threats to the State's economy, sustainability, security, and way of life. This measure would help to enact applicable and relevant provisions of the Paris Agreement as Hawaii state law.

There's a really strong economic self-interest for the state of Hawaii and the United States to try to lead this effort and build a global coalition around climate action. Our Hawaiian Islands archipelago anchored in the middle of the Pacific Basin is interconnected to global markets, we're connected to other ecosystems, we're connected via cultural diversity, migration, via national security issues, so things that happen even outside our own island shores still very much can affect Hawaii, our nation, and the pocketbooks of average Americans.

The historic climate agreement reached at the Paris summit commits for the first time virtually every nation to reducing the greenhouse gas emissions that cause climate change. The stated goal among global climate negotiators has long been to reduce emissions enough so that global temperatures rise no more than 3.6 degrees Fahrenheit, by 2100. That is the level at which scientists say the most catastrophic effects of climate change can be avoided.

The agreement states that countries signing on "recognize the importance" of minimizing and addressing damage caused by climate change and the role of "sustainable development" in reducing the risk of loss and damage. The agreement comes 20+ years after world leaders first began meeting to see whether such an agreement could be achieved. It also comes as the sometimes harsh effects of climate change are becoming apparent: Fourteen of the 15 warmest years in recorded history have come in the last two decades. The warming is forecast to continue, and the agreement reached, promises that efforts to address it, will continue.

Mahalo for the opportunity to comment in support of this critically important issue

Sincerely,

William F. Anonsen

William F. Anonsen
Managing Partner/Principal



Hawai'i Green Growth is a public-private partnership that catalyzes action across government, private sector and civil society to achieve Hawai'i's Aloha+ Challenge 2030 sustainability goals and serve as a model for integrated green growth

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Homelands

Testimony of Hawai'i Green Growth In Support of SB559 SD1 Relating to Climate Change & Environmental Protection Water & Land

Tuesday, February 14, 2017 at 10:00 am in Room HG

Aloha Chairs, Vice Chairs, and Members of the Committees:

Hawai'i Green Growth supports SB559 SD1 to enact appropriate provisions of the Paris Agreement as Hawai'i state law, including an appropriation to support capacity in administering strategic and mechanisms to reduce and mitigate the greenhouse gas emissions of all state departments and agencies.

Hawai'i's *Aloha+ Challenge* has been recognized nationally and internationally as model that can be scaled to support the implementation of the United Nations 2030 Sustainable Development Goals (SDGs) and the Paris Climate Agreement. The *Aloha+ Challenge* is a joint leadership commitment launched by the State Legislature (SCR69), Governor, four County Mayors, Office of Hawaiian Affairs and Hawai'i Green Growth public-private partners. This statewide framework outlines six ambitious 2030 sustainability goals in the areas of clean energy, local food, natural resource management, solid waste, smart sustainable communities, and green education and workforce. Hawai'i Green Growth partners identified climate resiliency as an important priority to support implementation on Hawai'i's *Aloha+ Challenge* 2030 sustainability goals.

Given evolving federal climate and energy policy, local leadership and strategic partnerships to address the urgent impacts of climate change will be critical. In addition, this builds on the recent Hawai'i hosted 2016 IUCN World Conservation Congress with over 10,000 participants from 190 countries and the current Worldwide Voyage of Hōkūle'a. **SB559 SD1** is an opportunity for Hawai'i's continued leadership on sustainable development and resiliency, and begins the important dialogue on implementation.

As a public-private partnership, Hawai'i Green Growth strongly supports **SB559 SD1** and appreciates the opportunity to provide testimony.

Testimony of The Nature Conservancy of Hawai'i
Supporting S.B. 559 SD1 Relating to Climate Change
House Committee on Energy and Environmental Protection
House Committee on Water and Land
Thursday, March 23, 2017, 11:00AM, Room 325

The Nature Conservancy of Hawai'i is a private non-profit conservation organization dedicated to the preservation of the lands and waters upon which life depends. The Conservancy has helped to protect nearly 200,000 acres of natural lands in Hawai'i. We manage 40,000 acres in 14 preserves and work in 19 coastal communities to help protect the near-shore reefs and waters of the main Hawaiian Islands. We forge partnerships with government, private parties and communities to protect Hawai'i's important watershed forests and coral reefs.

The Nature Conservancy supports S.B. 559 SD1 to ensure statewide commitment to combat climate change by enacting into Hawai'i law the principles of the Paris Agreement adopted in 2015 at the 21st Conference of the Parties of the United Nations Framework Convention on Climate Change.

Climate change caused by burning fossil fuels is an imminent and unprecedented threat to every person in Hawai'i. It is our responsibility to do what we can and what is necessary reduce our own carbon emissions, however small on a global scale, to contribute to the worldwide effort needed to mitigate the growing effects of climate change.

Even if we drastically reduce CO2 emissions now, however, we will still feel certain effects of climate change. In Hawai'i, science indicates that this will likely include:

- More frequent and more severe storms that can increase runoff and siltation;
- Overall, less rainfall and therefore less fresh water;
- Higher temperatures that affect watershed and agricultural health, while being beneficial to invasive species;
- Sea level rise and high waves that will harm coastal areas and groundwater systems;
- Ocean acidification that will inhibit the growth of protective coral reefs.

In response, we must plan and implement mitigative and adaptive measures to ensure the resilience of our natural and human systems.

Protecting and enhancing the health and function of our forested watersheds is one critically important initiative. Healthy Hawaiian forests that are not overrun by invasive species act like a sponge, collecting rain and moisture from passing clouds, slowly delivering fresh water into streams and aquifers, absorbing greenhouse gases, and reducing runoff and siltation into near shore waters during storm events. Healthy coral reefs that are free of non-native invasive algae and runoff and have healthy fish and native limu populations are better able to withstand and recover from the effects of temperature changes and acidification, while continuing to provide food and storm protection for coastal areas. Investing in local energy and agriculture security are also essential components of building self-reliance and resilience here in the middle of the Pacific Ocean. It's important to coordinate efforts such as these and others in a comprehensive climate change response and adaptation effort as contemplated in this bill.

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

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WRITTEN COMMENTS OF RICHARD TILLOTSON
TO THE
HOUSE COMMITTEES ON ENERGY AND ENVIRONMENTAL PROTECTION
AND
WATER AND LAND
ON
THURSDAY, MARCH 23, 2017, 11:00 A.M.
CONFERENCE ROOM 325

S.B. 559-SD1

RELATING TO CLIMATE CHANGE.

Chairs Chris Lee and Ryan I. Yamane, Vice Chairs Nicole E. Lowen and Sam Satoru Kong, and members of the Committees, thank you for the opportunity to submit written comments on S.B. 559-SD1.

My name is Richard Tillotson. I am a retired advertising writer and creative director, but I continue an active career as an independent writer of novels, plays, and occasionally, opinion pieces that appear in our local paper.

I write today in support of S.B. 559-SD1, and I would like to direct the committees' attention to three documents in the public domain, which I believe, provide compelling reasons for your support as well. For your convenience, I am providing URL links to these documents, but I will also append digital files which can be printed.

The first document is an opinion piece, which I authored, "Hawaii should agree to the Paris Climate Accord." It appeared in the Honolulu Star-Advertiser on November 27, 2016, and may have been the first public comment on this issue:
<http://www.staradvertiser.com/2016/11/27/editorial/island-voices/hawaii-should-agree-to-the-paris-climate-accord/>

The second document is the Senate Concurrent Resolution, SCR70, introduced by Senator Mike Gabbard and which provides a number of reasons to support SB559-SD-1.
http://www.capitol.hawaii.gov/session2017/bills/SCR70_.PDF

The third document is a 2014 study funded by the State of Hawaii and produced by the University of Hawai'i Sea Grant College Program, "CLIMATE CHANGE IMPACTS IN HAWAI'I: A summary of climate change and its impacts to Hawai'i's ecosystems and communities" This deeply researched, 36-page study by Hawaii's own scientists provides forceful and undeniable evidence of the need for your vote in support of S.B.559-SD-1. The link here will take you to the full study. The Executive Summary is appended below.
<http://seagrantsoest.hawaii.edu/sites/default/files/publications/smfinal-hawaiiclimatechange.pdf>

Thank you for this opportunity to provide testimony, and thank you for your service.

Best regards,
Richard Tillotson

Hawaii should agree to the Paris Climate Accord

By Richard Tillotson

(HONOLULU STAR-ADVERTISER, NOV. 27, 2016)

“We have to *do* something!”

I’ve heard that a lot since Donald Trump was elected President. Often it’s voiced in a tone of despair that implies a sense of helplessness. What is there to be done when so many hard-won goals are endangered by this President-elect who scoffs at them as hoaxes, derides them as “political correctness,” and appoints their enemies to positions of power?

Hawaii has an additional problem many Americans must envy. We live in a state that has already embraced a number of items on the progressive agenda. We have set national examples in everything from racial diversity and tolerance to a woman’s right to choose to employer-mandated health care.

But what can Hawaii do *now*? Well, one thing would be a legislative resolution declaring that our state will honor the Paris Climate Accord. President Obama and 193 other nations including the world’s other largest polluters, China, India, and the European Union, have signed this accord. It has been ratified by 111 nations and officially went into force this November.

President-elect Trump has called climate change a hoax and said he will “rip up” this agreement. He doesn’t actually have to do that. He can simply ignore it. He has already begun that process by the insulting selection of Myron Ebell to lead his Environmental Protection Agency transition team. Mr. Ebell is a noted denier of climate change. Heading up Trump’s transition team for the Department of Energy is Mike McKenna, a lobbyist whose clients in 2016 include the Koch Companies and Dow Chemical Company.

Climate change is an existential issue for our island state. Experts have predicted that if left unchecked, it will result in a one- to six-foot rise in sea levels by the end of this century. A rise at the upper end of this scale would likely wipe out much of the tourism infrastructure in the Waikiki and Neighbor Island resorts and destroy billions of dollars

worth of property values (including those in the Waikiki Trump Tower and the new condo towers lining Ala Moana Boulevard). Increases in the size and frequency of hurricanes are also predicted. Those who remember what Iniki did to Kauai can imagine what a similar hurricane would do to Oahu.

But Hawaii doesn't require a federal agency in order to be environmentally responsible. We can abide by the Paris agreement on our own. In fact, our state has already committed to generating electricity from 100% renewable energy by 2045. This should exceed Hawaii's portion of the goal set in Paris for reducing global carbon emissions. A resolution to abide by the Paris Accord is not a stretch for us.

And we can hope the example will be followed by other states. California, another progressive state and by itself the world's sixth largest economy, would be a likely candidate. If all the blue states on the electoral map signed on, America would be halfway home to honoring the Paris agreement whatever Mr. Trump might do in Washington.

A majority of Americans – nearly two million more of them – voted against this President-elect. If we only count the millennial voters, the ones ages 18 to 35, the electoral map is overwhelmingly blue. Clearly, the future does not belong to climate-change deniers and reality-show hosts who take office with the backing of hate groups. Trump's tide will turn. For now, if we are looking to *do* something, one thing we can focus on is preserving our world so there will be a future to inhabit. Nuclear war and climate change are the two most imminent threats to that future. Lets begin there.

Richard Tillotson is a Hawaii-based writer. His most recent novel is *What You Will On Capitol Hill*.

1 2 3 4 5 6 7 8 9

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

S.C.R. NO. 70 MAR 07 2017

SENATE CONCURRENT RESOLUTION

URGING THE STATE TO ABIDE **BY** THE STANDARDS ADOPTED IN
THE PARIS AGREEMENT ON CLIMATE CHANGE.

WHEREAS, more than ninety percent of the world's
scientists agree that global warming is occurring as a
result of human activity, particularly the burning of
fossil fuels; and

WHEREAS, scientists predict that if left unchecked,
global warming will cause a sea level rise of one to
six feet or greater by the end of this century; and

WHEREAS, a sea level rise of one to six feet will cause
billions of dollars' worth of property damage in the
Hawaiian

Islands and have profoundly adverse effects on the
tourism industry and Hawaii's way of life; and

WHEREAS, scientists also predict that if left
unchecked, global warming will cause increases in the
size and frequency of hurricanes, thereby endangering
the lives and property of the people of Hawaii; and

WHEREAS, the International Paris Agreement (Paris
Agreement) entered into force on November **4, 2016**, and has
the central aim of strengthening the global response to
the threat of climate change by holding the increase in
the global average temperature this century to well
below 2 degrees Celsius above pre-industrial levels and
at the same time pursuing efforts to even further limit
the temperature increase to **1.5** degrees

Celsius above pre-industrial levels; and

WHEREAS, the Paris Agreement aims to strengthen the
ability of countries to address the impacts of climate
change and to reach these ambitious goals through
appropriate financial flows, a new technology
framework, and an enhanced capacity building framework,
thus supporting action by developing countries and

THE SENATE

TWENTY-NINTH LEGISLATURE, 2017 STATE OF HAWAII

22. **22** and Hawaii's contribution to global warming, Act 97(2015) will
23. **23** have the practical benefit **of** making Hawaii's electricity
24. **24** considerably cheaper, saving consumers and businesses an
25. **25** estimated \$4,000,000,000 a year, which is currently sent out **of**
26. **26** the State to pay for fossil fuels; and
- 27
28. **28** WHEREAS, Hawaii wishes to be an example to other states of
29. **29** how they, as individual states, can make contributions to reduce
30. **30** global warming; now, therefore,
- 31
32. **32** BE **IT** RESOLVED by the Senate of the Twenty-ninth
33. **33** Legislature of the State of Hawaii, Regular Session of 2017, the
34. **34** House of Representatives concurring, that this body urges the
35. **35** State to abide by the standards set forth in the Paris Agreement
36. **36** and to reduce Hawaii's carbon emissions by the same or greater
37. **37** percentage as sought by the United States under the Paris
38. **38** Agreement; and
- 39
40. **40** BE **IT** FURTHER RESOLVED that this body urges the State to
41. **41** abide by all other conditions of the Paris Agreement, insofar as

2
Page 3

S.C.R. NO. 70

1. **1** it is able as a non-party stakeholder, including the requirement
2. **2** to report regularly on emissions and implementation efforts; and
- 3
4. **4** BE IT FURTHER RESOLVED that certified copies of this

5. **5** Concurrent Resolution be transmitted to the Secretariat of the
6. **6** United Nations; President of the United States; White House
7. **7** Secretary, who is requested to distribute a copy to each
8. **8** national news organization represented in the White House Press
9. **9** Corps; Secretary of the United States Senate and Clerk of the
10. **10** United States House of Representatives, who are requested to
11. **11** distribute a copy to each member of the United States Congress;
12. **12** Governor of each state; and the heads of each state legislature.

13 14 15

OFFERED BY:

2017-0493 SCR SMA.doc



EXECUTIVE SUMMARY

It is now widely accepted that human activities are affecting global climate systems in a significant way. While there are disagreements about the exact nature, magnitude, and timing of these changes, the science is clear that global climate change is being observed. This report is intended to provide a basic summary of the observed and projected changes to Hawai'i's ecosystems and their resulting impacts for Hawai'i's residents.

The University of Hawai'i Sea Grant College Program (UH Sea Grant) prepared this climate change impacts report to provide Hawai'i communities with a foundational understanding of the effects of global climate change on Hawai'i's resources and ecosystems. The report presents a summary of the current state of scientific knowledge regarding climate change and how it is expected to affect Hawai'i, including marine, coastal, terrestrial, and freshwater ecosystems, built systems, and human health so that Hawai'i can be better prepared for the changes to come. The first part includes an overview of global climate science, followed by a summary of observed and projected impacts by specific ecosystem and sector. Where applicable, context is provided for how the changes in these ecosystems have bearing for Hawai'i's communities, economic sectors, and the built environment.

This structure

is intended to serve a broad audience, including communities and government agencies that are involved or interested in issues related to climate change impacts in Hawai'i, to improve the basic understanding of how climate change is expected to affect Hawai'i.

UH Sea Grant, in partnership with state, local, and non-governmental entities, strives to address the climate change adaptation needs of Hawai'i through additional research and technical support for state climate change adaptation planning. UH Sea Grant strives to support the adaptive capacity and resilience of Hawai'i's communities through university extension, education, and partnerships. The first step in building adaptive capacity is sharing knowledge about existing vulnerabilities to climate change impacts.

Global Climate Change and Hawai'i

Climate change is now observed globally. The scientific consensus presented in the global body of climate research, including the fifth report released by the United Nations' Intergovernmental Panel on Climate Change (IPCC) in 2013, is that warming of Earth's climate system is unequivocal (IPCC, 2013). The fifth IPCC assessment report concludes that it is "extremely likely"¹ that most of the temperature increase since the mid-20th century is caused by increased concentrations of greenhouse gases from human activities. This finding is supported by detection of land and sea temperature increases, changes in global water cycle, reductions in snow and ice, sea-level rise, and changes in climate extremes.

¹ Defined as 95–100% probability by the IPCC, 2013 Summary for Policy Makers. "It is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century."

<http://www.climate2013.org/spm>

Summary of Local Impacts of Climate Change to Hawai'i

The rate of warming air temperature in Hawai'i has quadrupled in the last 40 years to over 0.3°F (0.17°C) per decade. This warming could cause thermal stress for plants and animals, and heat-related illnesses in humans as well as expanded ranges for pathogens and invasive species.

A decrease in the prevailing northeasterly trade winds, which drive orographic precipitation on windward coasts, has been recorded in Hawai'i over the last 40 years.

Hawai'i has seen an overall decline in rainfall in the last 30 years, with widely varying precipitation patterns on each island. It is projected that Hawai'i will see more drought and heavy rains causing more flash flooding, harm to infrastructure, runoff, and sedimentation.

Declining precipitation trends have caused a decrease in stream base flow over the last 70 years, and could reduce aquifer recharge and freshwater supplies and influence aquatic and riparian ecosystems and agriculture.

Sea surface temperatures have warmed between 0.13°F and 0.41°F (0.07°C and 0.23°C) per decade in the Pacific for the last 40 years. This trend is projected to accelerate, warming by 2.3°F to 4.9°F (1.3°C to 2.7°C) before the end of the century. This warming can influence ocean circulation and nutrient distribution.

2

Global ocean acidity has increased by 30% due to marine uptake of CO₂, correlating to a pH change of 0.1. Acidification is expected to continue, with additional pH changes between 0.1 and 0.4 by the end of the century. Ocean acidification could trigger a wide range of impacts on marine biota, including inhibiting shell and skeleton growth in corals, shellfish, and plankton.

Sea level has risen over the last century on each island at rates varying from 0.5-1.3 inches (1.5-3.3 centimeters) per decade, which has contributed to shoreline recession. Accelerating rates of sea-level rise have been detected in global sea level data. Rates of rise are projected to continue to accelerate, resulting in a 1-3 foot (approximately 0.3-1 meter) rise, or more, by the end of the century. Sea-level rise will exacerbate coastal inundation, erosion and hazards, leading to the degradation of coastal ecosystems, beach loss, and increasing damage to infrastructure in low-lying areas.

Threats to human health posed by Hawai'i's warming climate may include increased heat-related illness and wider ranges of vector-borne diseases such as dengue fever.

From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 20, 2017 9:53 PM
To: EEPtestimony
Cc: drgamby@gmail.com
Subject: Submitted testimony for SB559 on Mar 23, 2017 11:00AM

SB559

Submitted on: 3/20/2017

Testimony for EEP/WAL on Mar 23, 2017 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Tanya Gamby	Individual	Support	No

Comments: I strongly support SB559. Our world is truly in peril and the short-sighted interests of the fossil fuel companies are hog-tying our country. Hawaii is a leader in the fight against climate change and in adopting renewable energy sources. Please enact relevant portions of the Paris Agreement into state law to mitigate against Trump's dangerous/anti-science/anti-national security/anti-fiscal responsibility agenda that prioritizes short sighted riches against long-term stability and viability.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, March 21, 2017 9:12 AM
To: EEPtestimony
Cc: kteger@hawaii.rr.com
Subject: Submitted testimony for SB559 on Mar 23, 2017 11:00AM

SB559

Submitted on: 3/21/2017

Testimony for EEP/WAL on Mar 23, 2017 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Katharine T. Cannon-Eger	Individual	Support	No

Comments: One of the more critical issues of our time. Thank you for considering passage of these provisions of the Paris Agreement.

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From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 20, 2017 4:52 PM
To: EEPtestimony
Cc: cathyg@animalrightshawaii.org
Subject: *Submitted testimony for SB559 on Mar 23, 2017 11:00AM*

SB559

Submitted on: 3/20/2017

Testimony for EEP/WAL on Mar 23, 2017 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Cathy Goeggel	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, March 21, 2017 9:52 PM
To: EEPtestimony
Cc: freundtheresa@gmail.com
Subject: Submitted testimony for SB559 on Mar 23, 2017 11:00AM

SB559

Submitted on: 3/21/2017

Testimony for EEP/WAL on Mar 23, 2017 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Theresa Freund	Individual	Support	No

Comments: Aloha, My name is Theresa Freund and I am from Nuuanu. I am in strong support of SB559. There is no question that climate change is real and that we will suffer serious consequences if we do not act soon. We can no longer wait and see, it is time now to reduce and mitigate greenhouse gas emissions. If we do not act now, we will face serious threats to Hawaii's economy, sustainability, security, and way of life. Please pass SB559 which will help us become more sustainable and bring us a little closer to reducing our footprint on earth. Mahalo Nui Loa.

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, March 21, 2017 7:15 PM
To: EEPtestimony
Cc: john.from.stl@alumni.stanford.edu
Subject: Submitted testimony for SB559 on Mar 23, 2017 11:00AM

SB559

Submitted on: 3/21/2017

Testimony for EEP/WAL on Mar 23, 2017 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
John Maurer	Individual	Support	No

Comments: I support Senate Bill 559. Climate change is a defining challenge of our generation. It is critically important that the state do all it can to solve this challenge urgently and fairly. Please pass this important bills

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, March 21, 2017 3:41 PM
To: EEPtestimony
Cc: mendezj@hawaii.edu
Subject: *Submitted testimony for SB559 on Mar 23, 2017 11:00AM*

SB559

Submitted on: 3/21/2017

Testimony for EEP/WAL on Mar 23, 2017 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Javier Mendez-Alvarez	Individual	Support	No

Comments:

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From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, March 21, 2017 3:01 PM
To: EEPtestimony
Cc: rkayelny@gmail.com
Subject: Submitted testimony for SB559 on Mar 23, 2017 11:00AM

SB559

Submitted on: 3/21/2017

Testimony for EEP/WAL on Mar 23, 2017 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Robin Kaye	Individual	Support	No

Comments: Given the current effort at the national level to undermine our commitments to learning more about human impacts on changing climates, this bill becomes even more important -- especially to Hawaii's environment. Please pass this bill.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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**HOUSE JOINT COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION,
AND WATER AND LAND**

Thursday, March 23, 2017, 11AM Room 325

SUPPORT SB 559 Relating to Climate Change

Aloha Chairmen Lee and Yamane, and members of the Joint Committee,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawai'i strongly **supports** SB 559. This measure seeks to enact relevant provisions of the Paris Climate Agreement into Hawai'i state law, as well as make an appropriation in order to achieve these goals.

The Paris Climate Agreement is a groundbreaking, ambitious, and historic agreement between 192 countries that seeks to mitigate the effects of anthropogenic global climate change. By setting a series of progressively significant emissions mitigation benchmarks, it is one of the single most important agreements ever ratified by any collection of states. In both scale and scope, it seeks to address and combat many of the effects of global climate change, by allocating an emissions specific target to each participating country.

Unless action is taken to address global climate change, Hawai'i and its people will suffer catastrophic effects. A recent report conducted by the UH Manoa Sea Grant College Program found conclusively that global climate change will negatively impact sea temperature, rainfall, sea level rise, and coastal infrastructure and communities.¹ Hawai'i, more than any other state in the United States, is at risk and in need of the most protection.

SB 559 seeks to ratify parts of the Paris Climate Agreement into state law to safeguard and protect our state and its people. This bill isn't only recommended, it is absolutely necessary. Given the tenuous relationship the federal government now seems to have with enforcing their end of the agreement², enacting this bill into law allows Hawai'i to control its own destiny and dictate its own terms.

Through this measure, Hawai'i demonstrates to the nation that addressing global climate change and mitigating its effects on the state, the environment, and its people is paramount. Protecting

¹ <http://seagrantsoest.hawaii.edu/sites/default/files/publications/smfinal-hawaiiclimatechange.pdf>

²

<http://www.foxnews.com/politics/2017/01/31/former-trump-aide-says-us-will-pull-out-paris-climate-deal-wihin-days.html>

the environment supersedes national agendas and international politics. As the famous astronomer Carl Sagan once said about protecting our planet, “it underscores our responsibility to deal more kindly with one another, and to preserve and cherish the pale blue dot, the only home we've ever known.”

We urge the committee to pass SB 559.

Thank you very much for this opportunity to provide testimony on this important issue.

Mahalo,
Marti Townsend
Director

LATE

SB559 SD1

Testimony by John Bond, FTA HART Rail PA Consulting Party

RELATING TO CLIMATE CHANGE

Climate Change; Paris Agreement; Policy Priorities; Appropriation (\$)

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Chris Lee, Chair

Rep. Nicole E. Lowen, Vice Chair

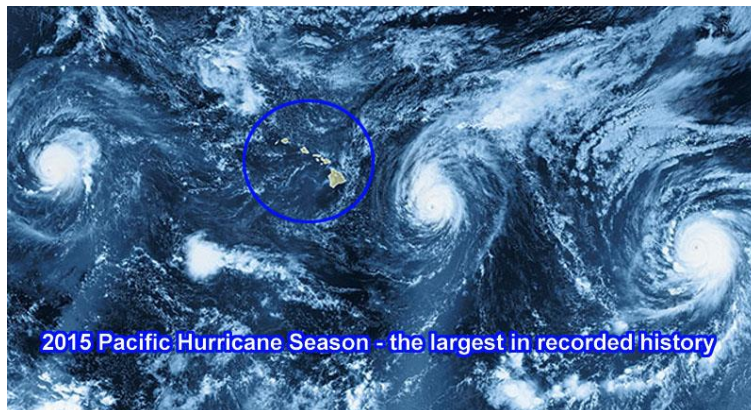
COMMITTEE ON WATER & LAND

Rep. Ryan I. Yamane, Chair

Rep. Sam Satoru Kong, Vice Chair

Aloha Chairs and Committee members

The legislature finds that not only is climate change real, but it is the overriding challenge of the 21st century and one of the priority issues of the senate. Climate change poses immediate and long-term threats to the State's economy, sustainability, security, and way of life.

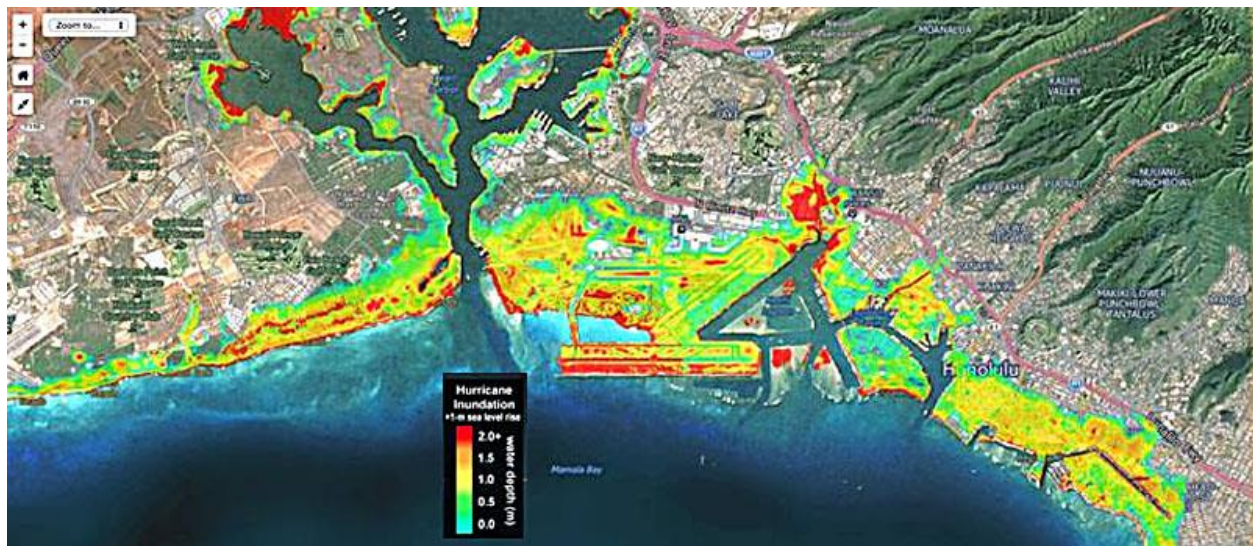


Since this bill recognizes that climate change poses immediate and long-term threats it is very important to also recognize that the City, with the State's planning support, is developing Transit oriented Development in projected Sea Level Rise, Tsunami Zones and Hurricane Storm Surge Flood Areas according to City, State and Federal FEMA maps.

Don't expect that agreeing with provisions of the December 2015 Paris Climate Change Agreement automatically saves Hawaii and stops sea level rise, tsunamis and hurricane storm surge from happening. Climate Change is a major global phenomena and it will likely get much worse before it appears to be improving.

Know that according to FEMA and NOAA scientists that while sea level is rising with climate change, higher sea levels also mean that larger more deadly and destructive storm surges push farther inland than they once did. Disruptive and expensive flooding is estimated to be from 300 percent to 900 percent more frequent within U.S. coastal communities than it was just 50 years ago.

This while the State legislature is voting to support the recognition that climate change poses immediate and long-term threats to Hawaii, it is also voting to spend BILLIONS to build HART rail and TOD's in these very same low sea level zones that will suffer billions of dollars in future infrastructure damages!



Don't expect the Federal government to keep endlessly sending truckloads of money to Hawaii and other states that have been repeatedly warned that building

in low sea level areas has consequences and very big recovery costs that will likely have to be funded out of the State's budget.

The two major causes of global sea level rise are thermal expansion caused by warming of the ocean (since water expands as it warms) and increased melting of land-based ice, such as glaciers and ice sheets. The oceans are absorbing more than 90 percent of the increased atmospheric heat associated with emissions from human activity.

Sea Level Rise and Climate Change is not related to expert FEMA and NOAA forecasts that well overdue major tsunamis are due to hit Hawaii at any time.

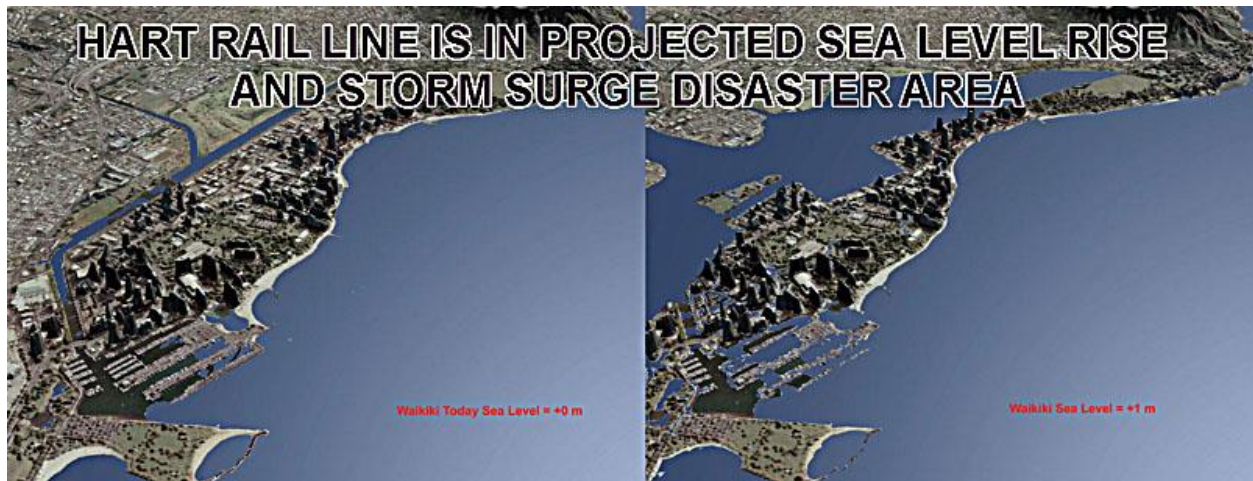


The rail project and TOD's in these identified zones makes no sense and billions will be required to rebuild destroyed rail stations, utilities, streets, facilities, etc.



According to the City's Tsunami Evacuation maps and criteria this station structure would not be high enough to survive a major extreme tsunami and could kill hundreds of rail commuters.

A new Supplemental Environmental Impact Statement (SEIS) is required based upon all of the best FEMA and NOAA science and engineering evidence.



Here's why:

*The Final EIS did **NOT** evaluate the Project as being in an identified Tsunami Evacuation Zone, which Federal advisories now also identify as flood zones. Flooding by any means is a flood.*

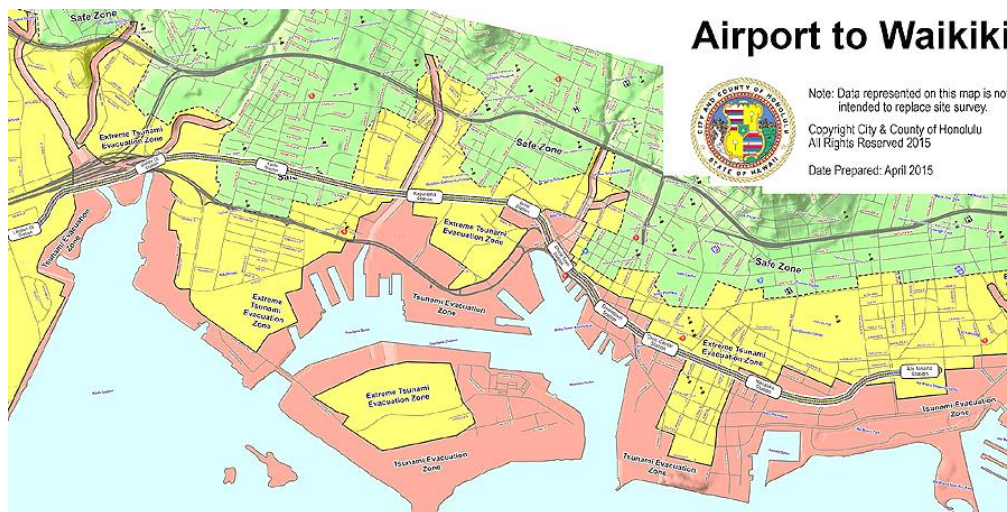
Appendix J, FEIS, June 2010, includes a summary of the Project's relationship to land use plans, policies, and controls as documented in the Final EIS and technical reports completed for the Project.

It is also extremely concerning that the June 2010 Project FEIS specifically states in Appendix J, Section 1.3, Coastal Zone Management Program, Chapter 205A, Hawaii Revised Statutes, Page 6 and again Appendix J, Section 2.6, Special Management Area, Page 80, that **"The Project is not located in a tsunami evacuation zone"**



Further, under Coastal Hazards, Table 2, Page 9, Objective, “reduce hazard to life and property from tsunami, storm wave, stream flooding, etc,” Policies: B, “Control development in areas subject to storm wave, tsunami, flood, etc ,” **This box is checked “Not Applicable.”**

Based upon the fact that 2010 City Department of Emergency Management Tsunami Evacuation Zone maps **were published and available** at the time the 2010 Final EIS was published leads to a troubling conclusion that the FEIS intentionally omitted this in two separate areas of Appendix J in order to obtain a favorable FTA ROD to commence immediate construction. *Map showing the route in Tsunami Evacuation Zones:*



There is very great potential for harm to human lives and loss of billions in property and critical transit infrastructure from the badly chosen SLR Route

Relevant CFR's:

In §771.130 Supplemental environmental impact statements, part 2 states: (2) The Administration decides to approve an alternative fully evaluated in an approved final EIS but not identified as the preferred alternative. In such a case, a revised ROD shall be prepared and circulated in accordance with §771.127(b).

In §771.130 (e) A supplemental draft EIS may be necessary for major new fixed guideway capital projects proposed for FTA funding if there is a substantial change in the level of detail on project impacts during project planning and development. The supplement will address site-specific impacts and refined cost estimates that have been developed since the original draft EIS.

*In addition is it further greatly troubling that the City and FTA are actually assisting and encouraging Transit Oriented Development (TOD) **within both 2010 Tsunami Evacuation Zones as well as the updated and expanded 2015 Extreme Tsunami Evacuation Zones.** These plans virtually ensure widespread loss of billions in critical infrastructure and potential deaths of hundreds of rail passengers and TOD business operators and employees who could be trapped in a locally generated earthquake tsunami event.*

*City Department of Emergency Management data supplied for these evacuation zones state "Vertical Tsunami Evacuation - Evacuate to the **FOURTH** floor or above in a reinforced concrete or structural steel building of **TEN** stories or more. All others, evacuate inland to higher ground."*

Not only is **Honolulu** widely regarded by experts to be long overdue for a major **tsunami and hurricane**, all current best science predictions show greatly increased probabilities of more powerful future storms, likely accelerated sea level rise and the **major threats of the San Andreas and Cascadia faults producing huge Pacific tsunamis.** The City DEM 2015 Extreme Tsunami Evacuation Zones were a result of predictions for a **Great Aleutian Tsunami** which adds a further major tsunami threat.

The Rail and TOD's in SLR – low sea level zones are directly encouraging commercial development in identified tsunami zones that are widely predicted by scientists to become future disaster areas. The City and FTA encouragement to construct in best science identified disaster zones will also likely result in major litigation against the City, FTA and State after a major disaster.

Sincerely,



John Bond HART Rail Programmatic Agreement Consultant

REFERENCES:

June 2010 Honolulu High-Capacity Transit Corridor Project Environmental Impact Statement

<http://hartdocs.honolulu.gov/docushare/dsweb/Get/Document-16801/20110701-final-eis-appendix-j.pdf>

Appendix J, Section 1.3 Page 6, the FEIS falsely states:

Coastal Hazards—The Project is not located in a tsunami evacuation zone and is being designed to applicable standards and specifications regarding storm weather, seismic events, and associated risks.

Yet further, in Appendix J, Section 1.3 Page 8, the project appears to violate the policies Coastal Zone Management Act, Chapter 205A, Hawai'i Revised Statutes

Table 2. Coastal Zone Management Act, Chapter 205A, Hawai'i Revised Statutes (D) **Encourage those developments that are not coastal dependent to locate in inland areas.**

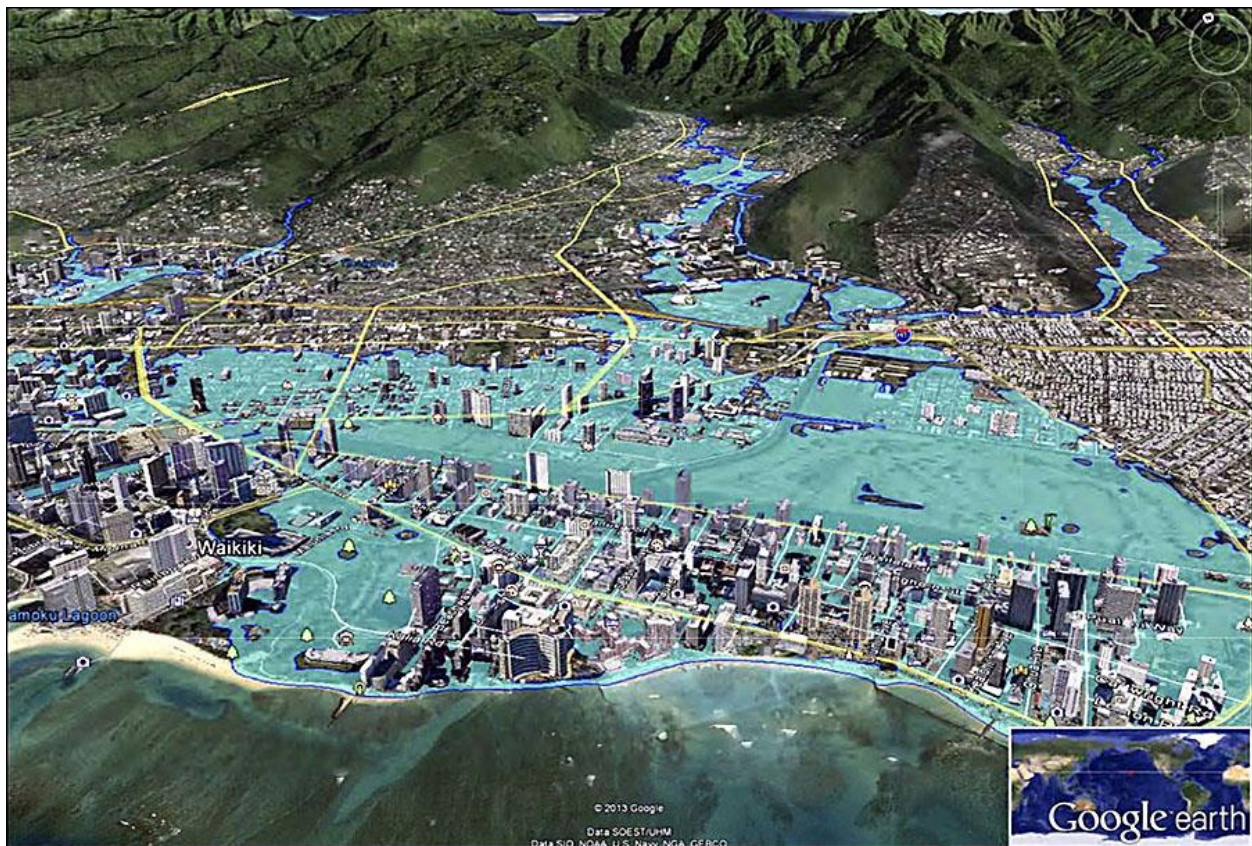
Coastal Hazards Objective - Policies - Page 9: (A) **Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.** (B) **Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards;**



There also appears to be a conflict with the City and County of Honolulu General Plan in Appendix J, Table 7. City and County of Honolulu General Plan, Page 45, Objectives and Policies - Natural Environment: Policy 5: **Require sufficient setbacks of improvements in unstable shoreline areas to avoid the future need for protective structures.** Wouldn't this apply to shoreline areas clearly subject to hurricane storm surge, sea level rise and tsunami?

In the June 2010 Honolulu High-Capacity Transit Corridor Project Environmental Impact Statement (FEIS), Appendix J, Page 80, 2.6, Special Management Area (b) part 3: That the development has been adequately planned to minimize the risk from coastal hazards such as **tsunamis, hurricanes, wind, storm waves, flooding, erosion, and sea level rise**; and the Project has been adequately planned and designed to the extent practical to minimize the risk from coastal hazards **and is not located in a tsunami evacuation zone.**

4-143,– Environmental Analysis, Consequences, and Mitigation states: *Flood Zones - Protection of floodplains and floodways is required by Presidential Executive Order 11988 (USEO 1977); USDOT Order 5650.2 (USDOT 1979); the Federal Aid Highway Program Manual (FHWA 1992b); and 23 CFR 650 (CFR 1999). These regulations place special importance on floodplains and floodways and require Federal agencies to avoid conducting, allowing, or supporting actions on a floodplain or within a floodway. If a project is located within a floodplain or floodway, results from sufficient analysis must be included in the project's Final EIS, as specified in USDOT Order 5650.2.*



City and County of Honolulu Department of Emergency Management website:

<http://www.honolulu.gov/demevacuate/tsunamimaps.html>

For additional reference information and routing maps please check out the University of Hawaii Sea Grant Tsunami Project Website:

<http://seagrantsioest.hawaii.edu/tsunami-research-and-preparedness>

"The XTEZ does not replace the current tsunami evacuation zone; it adds a second zone for a potential XT event."

At least seven HART rail stations are in sea level 2010 Tsunami Evacuation Zones

<http://frenzel.us/images/tmaprail.jpg>

"The XTEZ will serve as a second evacuation zone for only a GAT scenario, all other tsunami events will continue to use the existing updated **2010** tsunami evacuation maps."

<http://seagrant.soest.hawaii.edu/tsunami-research-and-preparedness>

New 2015 Extreme Tsunami Evacuation Zone

[https://www.honolulu.gov/rep/site/dem/ETEZ-](https://www.honolulu.gov/rep/site/dem/ETEZ-FAQs_FINAL_VERSION_2015_07_22.pdf)

[FAQs FINAL VERSION 2015 07 22.pdf](https://www.honolulu.gov/rep/site/dem/ETEZ-FAQs_FINAL_VERSION_2015_07_22.pdf)

http://seagrant.soest.hawaii.edu/sites/default/files/shared/web-2012_butler_srl.pdf

Geophysicists at the University of Hawai'i have identified a possible source region in the Eastern Aleutian (EA) island arc, directly north of Hawai'i, that *has the potential for a very large magnitude 9+ earthquake that could produce a Great Aleutian Tsunami (GAT)*.

Scientists Predict The Next Big One: San Andreas Fault "Locked, Loaded, Ready To Roll" <http://khon2.com/2016/05/05/san-andreas-fault-could-be-more-destructive-than-previously-reported/>

Scientists have predicted the Cascadia Fault Ready To Go creating massive tsunami waves

<http://www.dailymail.co.uk/sciencetech/article-3480680/Terrifying-simulation-shows-Pacific-Northwest-decimated-megaquake-Cascadia-fault.html>

From: mailinglist@capitol.hawaii.gov
Sent: Wednesday, March 22, 2017 10:59 PM
To: EEPtestimony
Cc: bautista.aprilk@icloud.com
Subject: *Submitted testimony for SB559 on Mar 23, 2017 11:00AM*

SB559

Submitted on: 3/22/2017

Testimony for EEP/WAL on Mar 23, 2017 11:00AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
April Bautista	Individual	Support	No

Comments:

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LATE

TESTIMONY to House Committee on Energy and Environmental Protection
and House Committee on Water and Land

Regarding: S.B. 559 SD 21 Relating to Climate Change

Thursday, March 23, 2017

11:00 AM -- Conference Room 325

Submitted in **OPPOSITION** by: Mary Smart, Mililani, HI 96789

Chairs Lee and Yamane , Vice Chairs Lowen and Kong, and Committee Members:

1. I Strongly OPPOSE SB 559 SD1.

2. Climate Change legislation is a tax the poor to support the rich scheme. Those of us who can't afford beachfront property will see our taxes spent to protect elites who live in luxury on our pristine beaches -- all in a belief that man can keep the seas from rising. The rich should pay to protect their own property and not rely on those who have to live in the central part of the islands to bail them out. It is arrogant to imagine that man can stop climate change. The climate has always changed with little influence from humanity. Carbon dioxide is not a hazardous gas. It occurs naturally and benefits plant life.

3. Spending Hawaii tax money on climate change measures is wasteful. We have real problems that occur today. Anyone familiar with computer models knows that you can get any outcome you want if you manipulate the data. It is well known that the climate data was falsified by omission of key data. Climate change's negative impact is not expected for decades. It is a low priority issue that does not need the legislature's attention. The United States has made progress in improving air and water quality. Hawaii has some of the best water and air in the country -- except for the VOG . Man can't do much about the volcanic activity -- which is not man-made.

3. Economics teaches about the cost of money. Addressing climate change issues now, before it becomes a problem is costly. If we wait until the problem is more imminent, the cost of the remedies will likely go down. Being an "early adaptor" is costly and usually recommended for the "super rich." Many of us in Hawaii don't fit into that category.

4. As we look at the global problem we see that China and other industrialized nations outside the USA need to take measures to clean their water and air to reach the level of the USA. The USA has done enough for now and doesn't need this bill and its costly demands. There is nothing "sustainable" about Sustainable Development.

5. Please vote no on SB 559 SD1. This bill and its costs is clearly what can be called "government waste." The legislature is already raising taxes and creating new fees just to get by with current costs. It is time for this bill to die in committee.

Katherine T. Kupukaa
Mililani, Hawaii

LATE

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Chris Lee, Chair
Rep. Nicole E. Lowen, Vice Chair

LATE

COMMITTEE ON WATER & LAND

Rep. Ryan I. Yamane, Chair
Rep. Sam Satoru Kong, Vice Chair

DATE: Thursday, March 23, 2017
TIME: 11:00 am.
PLACE: Conference Room 325
State Capitol
415 South Beretania Street

RE. OPPOSE SB 559, SD1 RELATING TO CLIMATE CHANGE

I oppose this bill because it states that climate change poses immediate and long-term threats to the State's economy, sustainability, security, and way of life. I differ from this belief and this should not be one of the legislature's priority. We have more urgent issues to deal with such as unfunded public liability, high cost of living, more affordable housing, and the economy to name a few.

May I remind you that we have a new president now so let's look forward and forget what former President Obama's appointment of former Abercrombie to serve on Climate Preparedness and Resilience. This belief of global warming is debatable and is not necessarily shared by all scientists.

There should be no funds appropriated out of the general revenues of the State of Hawaii. Please do not pass this bill. It is a waste of tax payer's money.

Thank you for allowing me to voice my concern.