

STATE OF HAWAII DEPARTMENT OF HEALTH

P. O. Box 3378 Honolulu, HI 96801-3378 doh.testimony@doh.hawaii.gov

Testimony COMMENTING on H.B. 591, HD1 RELATING TO CLIMATE CHANGE

REPRESENTATIVE DELLA AU BELATTI, CHAIR HOUSE COMMITTEE ON HEALTH

Hearing Date: March 4, 2015 Room Number: 329 8:30 a.m.

- 1 **Fiscal Implications:** Unknown, but the addition of public health vulnerability and adaptation
- 2 reports to the Interagency Climate Adaptation Committee's responsibilities would require
- 3 additional committee time and resources.
- 4 **Department Testimony:** The Department offers the following **comments** on H.B. 591, HD1,
- 5 which would require the Interagency Climate Adaptation Committee to prepare public health
- 6 vulnerability reports. These reports are intended to assist the State's health professionals with
- 7 preparing for and responding to various potential health impacts of climate change, and are an
- 8 important piece of the State's overall response to the challenges of climate change.
- 9 However, given the committee's current commitment to conducting sea level rise vulnerability
- and adaptation reports, as established in Act 83, Session Laws of Hawaii 2014, the Department
- defers to the Department of Natural Resources and the Office of Planning regarding the
- committee's capacity to take on additional responsibilities at this time. The Department also has
- concerns about the feasibility of the December 31, 2017 deadline for the proposed public health
- vulnerability and adaptation reports, given the committee's pre-existing obligation to complete
- sea level rise reports by that date. The data gathered in the course of conducting the sea level
- rise reports may provide information that can be applied to a public health vulnerability study in
- 17 the future.
- 18 Thank you for the opportunity to provide comments on this measure.

DAVID Y. IGE GOVERNOR OF HAWAI'I





STATE OF HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621 HONOLULU, HAWAI'I 96809

Testimony of **CARTY S. CHANG Interim Chairperson**

Before the House Committee on HEALTH

Wednesday, March 4, 2015 8:30 am **State Capitol, Conference Room 329**

In consideration of **HOUSE BILL 591 HOUSE DRAFT 1** RELATING TO CLIMATE CHANGE

House Bill 591, House Draft 1 proposes to require the Chairperson of the Board of Land and Natural Resources and the Director of the Office of Planning to jointly chair an Interagency Climate Adaptation Committee that shall be placed within the Department of Land and Natural Resources (Department) for administrative purposes only.

The Interagency Climate Adaptation Committee shall assist with coordinating the implementation of climate change policies and development of climate change reports to be completed no later than December 31, 2017. The reports shall include:

- Sea level rise vulnerability and adaptation reports; and (A)
- (B) Public health vulnerability and adaption reports.

The Department opposes the measure.

House Bill 591 amends the Hawai'i Climate Adaptation Initiative Act, Session Laws of Hawai'i, 2014 (Act 83). As a matter of background, the purpose of Act 83 is to address the effects of climate change to protect the State's economy, health, environment, and way of life. Act 83 calls for the establishment of an interagency climate adaptation committee within the Department and further states that "Among the various potential impacts of climate change, the committee shall, as a first step, focus on and develop sea level rise vulnerability and adaptation reports."

The Department embraced Act 83 with the understanding that it would endeavor to develop an actionable report on the impacts of sea level rise in Hawai'i. Sea level rise is measurable and predictable, therefore, it is possible to assess and forecast the impacts of sea level rise on

CARTY S. CHANG

INTERIM CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DANIEL S. QUINN INTERIM FIRST DEPUTY

W. ROY HARDY ACTING DEPUTY DIRECTOR

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

shoreline change, flooding, and ground water intrusion because the science underpinning sea level rise is well understood. While it is important to consider all aspects of climate change on our people, it is vital that Hawai'i immediately addresses impacts related to forecasted acceleration in sea level rise in order to allow adequate time for the implementation of adaptation measures.

The Department has invested a substantial amount of time and energy into Act 83 for the purpose of meeting the expectations and deadlines set by the Legislature in delivering the required sea level rise report by December 31, 2017. Imposing additional responsibilities on the Department, at this time, for matters related to public health will undermine our ability to fulfill the original purpose of Act 83.

The Interagency Climate Adaptation Committee will, over time, establish the agenda for addressing other relevant climate change effects including the effects on the economy, environment, health, and way of life, pursuant to Act 83, absent the amendments proposed in HB591HD1.

Thank you for the opportunity to testify on this measure.

OFFICE OF PLANNING STATE OF HAWAII

LEO R. ASUNCION ACTING DIRECTOR OFFICE OF PLANNING

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846 Fax: (808) 587-2824 Web: http://planning.hawaii.gov/

Statement of LEO R. ASUNCION

Acting Director, Office of Planning before the

HOUSE COMMITTEE ON HEALTH

Wednesday, March 4, 2015 8:30 AM State Capitol, Conference Room 329

in consideration of HB 591, HD 1 RELATING TO CLIMATE CHANGE.

Chair Belatti, Vice Chair Creagan, and Members of the House Committee on Health.

HB 591, HD 1, requires the interagency climate adaptation committee to assist with coordinating the implementation of climate change policies developed by county, state, and federal agencies; and requires the committee to prepare public health vulnerability reports to assist the State's health professionals effectively and efficiently prepare for and respond to various potential health impacts of climate change. **The Office of Planning (OP) strongly opposes this bill and offers the following comments.**

- 1. HB 591, HD 1, is inconsistent with the original legislative intent of Act 83, Session Laws of Hawaii 2014, which reads as follows (emphasis added):
 - "The purpose of [Act 83, Session Laws of Hawaii 2014] is to address the effects of climate change through 2050 to protect the State's economy, health, environment, and way of life. Recognizing Hawaii's unique geography as the only island state and its susceptibility to sea level rise, the initial focus of [Act 83, Session Laws of Hawaii 2014] is to address the impact of sea level rise on Hawaii and to support ongoing climate change efforts of the State by:
 - (1) Establishing an interagency climate adaptation committee, attached administratively to the department of land and natural resources, to develop a sea level rise vulnerability and adaptation report for Hawaii through the year 2050;
 - (2) Authorizing the office of planning 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, Session Laws of Hawaii 2012; and
 - (3) Allocating funds and creating positions to carry out these purposes."

As co-chair, the OP contends that the interagency climate adaptation committee will gradually prioritize and address other climate threats, including impacts to public health, pursuant to the above.

- 2. HB 591, HD1, is too costly and would create significant problems to implement.
 - a. In particular, HB 591, HD1, does not include an appropriation to carry out the additional responsibilities assigned to the interagency climate adaptation committee, or reimburse the committee members for any additional expenses necessary for the performance of their duties. Consequently, HB 591, HD1, would presumably detract from the sums originally appropriated to provide the Department of Land and Natural Resources and Office of Planning to carry out the purposes of Act 83, Session Laws of Hawaii 2014. The committee is advised, however, that the Governor's FY 15 Budget Execution Policies and Instructions have placed a restriction on specific appropriations and grants funded by general funds – including the sums appropriated under Act 83, Session Laws of Hawaii 2014 – and directs departments to refrain from requesting release of these types of appropriations until the start of the second half of the Fiscal Year 15. While the start of the second half of FY 15 has passed, the restriction remains, with agencies having to justify the use and encumberance of such funds by June 30, 2015. All sums appropriated under Act 83, Session Laws of Hawaii 2014, are scheduled to lapse on June 30, 2015.
 - b. In addition, HB 591, HD1, requires the interagency climate adaptation committee to develop climate change reports and recommendations, including both sea level rise and public health vulnerability and adaptation reports, to be made publically available no later than December 31, 2017. Imposing the same deadline for both reports is overly ambitious and unrealistic given the breadth of scope specified for each report and lack of additional resources.

Thank you for the opportunity to provide testimony on this measure.



STATE OF HAWAII OFFICE OF ENVIRONMENTAL QUALITY CONTROL

235 S BERETANIA ST., SUITE 702 HONOLULU, HAWAI'I 96813 Tel. (808) 586-4185 Fax. (808) 586-4186 oegchawaii@doh.hawaii.gov

Testimony COMMENTING on HB 591, HD1 RELATING TO CLIMATE CHANGE

REPRESENTATIVE DELLA AU BELATTI, CHAIR HOUSE COMMITTEE HEALTH

Hearing Date: March 04, 2015 – 8:30 a.m. Room Number: 329

- 1 **Office Testimony:** The Office of Environmental Quality Control does not support the language
- 2 in this bill and defers to the positions of the Department of Health, Department of Land and
- 3 Natural Resources, and the Office of Planning, with respect to this draft of HB591, HD1.
- 4 Act 83, Session Laws of 2014, created the Interagency Climate Adaptation Committee to
- 5 address the effects of climate change, protect the State's economy, environment, health, and way
- of life. OEOC should be, but is not, a sitting member of this committee. Nonetheless, OEOC
- 7 supports the objectives of the Interagency Climate Adaptation Committee and hopes to be
- 8 included in the committee's discussion to fulfill the OEQC's fiduciary mandate, as required by
- 9 HRS Chapter 341, and in adapting its policies with HRS Chapter 343, known as the Hawai'i
- 10 Environmental Policy Act (HEPA).
- 11 OEQC recommends amending HB591, HD1, to include the Office of Environmental
- 12 Quality Control as a member of the Interagency Climate Adapation Committee should the bill
- 13 move forward.
- Thank you for the opportunity to submit testimony.



March 4, 2015 TESTIMONY: oral & written

To: Chairperson Au Bellati, Vice-Chair Creagan and Members of the House Health Committee

From: The Hawaii Public Health Association (HPHA) Subject: HB591,HD1: Relating to Climate Change

Aloha Chair Belatti, Representative Creagan and Members of the House Health Committee:

My name is Nancy Partika, and I am President of the Hawaii Public Health Association (HPHA). HPHA is pleased to be testifying today in strong support on a public health issue that is unparalleled in nature: that of climate change and its impacts on health. The Hawaii Public Health Association (HPHA) represents a membership of over 600 practitioners, professionals, and students in the field of public health from various disciplines statewide. HPHA's mission is to promote public health in Hawai'i through leadership, collaboration, education and advocacy, and our vision is health equity in Hawai'i and the Pacific and a strong public health workforce able to effectively respond to health challenges. HPHA is very concerned about the current and projected impacts of climate change on Hawaii's people and their health.

While HPHA strongly supports the intent of the HB591, we do have concerns about the HD1 amendments that are significantly different from its original version, essentially proposing to tack on the health issue to Act 83's original mission.

One concern we have is that the specified committee composition in Section 2.(c) lacks adequate numbers of health/public-health qualified entities on the committee (only 1 of 14) that have the capacity/background in health needed to adequately address climate change and health factors. We originally proposed a climate change and health working group that would work parallel to the Interagency Climate Change Adaptation Committee (ICCAC), to provide timely findings and recommendations to the ICCAC for potential inclusion into its final report. There are a number of qualified individuals and organizations that could be invited to participate in a climate change and health workgroup process.

There is also the issue of whether it is advisable to divert DLNR's intended original first year Act 83 focus only on sea level rise by adding the health focus, as evidenced in Section 2.(f)(B)(i-vi). HPHA believes that we need to be addressing climate change and health now rather than later, but this proposed combined approach, to address sea level rise as well as climate change and health, seems overambitious and infeasible to us. We think that separate but linked processes, perhaps with the Department of Health leading or co-leading the health-specific working group process, would be the best solution at this time.

This bill is viewed by HPHA and our partners as a vehicle for public policy-level discussion and dialogue about the impacts of climate change and health. HPHA is supportive of efforts to best address climate change and health in an inclusive manner, since it does/will impact us all, regardless of who we are, where we live and what we believe. HPHA does not advocate for more funding at this time to support amending Act 83, or to burden the administrative DLNR leads of Act 83 with more work in areas that they may not feel are their kuleana.

In closing, we welcome the discussion today on climate change and health so that we can begin to chart our future actions to address the public health implications. We are committed to working with DLNR, the Department of Health and all other agencies and organizations concerned with health on this issue. We respectfully request that HB591,HD1 be amended to address these 2 areas of concern in order to address climate change in a timely and effective manner. Mahalo for this opportunity to testify today.

Background Information on Climate Change and Health:

"Climate change, together with other natural and human-made health stressors, influences human health and disease in numerous ways. Some existing health threats will intensify and new health threats will emerge. Not everyone is equally at risk. Important considerations include age, economic resources, and location. In the U.S., public health can be affected by disruptions of physical, biological, and ecological systems, including disturbances originating here and elsewhere. The health effects of these disruptions include increased respiratory and cardiovascular disease, injuries and premature deaths related to extreme weather events, changes in the prevalence and geographical distribution of food- and water-borne illnesses and other infectious diseases, and threats to mental health."

(Source: Climate Effects on Health: http://www.cdc.gov/climateandhealth/effects/default.htm)

Hawaii is not alone in advocating for the need for dialog and action on the issue of climate change and health. The American Public Health Association (APHA) has identified Climate Change and Health as a key public health issue, and in the attached recent Journal of Emergency Management article (*How a Warming Climate Impacts Public Health, 2/3/15*), there are strong statements from APHA and other national leadership about the need to address climate change and its health implications now, rather than later.

Multnomah County in Oregon has developed a strategic plan to address climate change and health in 2013. The Great Lakes Public Health Coalition (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin) are currently working to do parallel policy and advocacy work on climate change on a state-level. Federally, CDC's Climate-Ready States and Cities CDC's Building Resilience Against Climate Effects (BRACE) Framework Initiative is working to assist 16 states and cities partner with local and national climate scientists to understand the potential climate changes in their areas. CDC will assist states and cities in developing and using models to predict health impacts, to monitor health effects, and to identify the area's most vulnerable to these effects (http://www.cdc.gov/climateandhealth/). Very recently, the U.S. Office of the Assistant Secretary for Insular Areas established a new climate change coordinator position in the Department of the Interior to help leaders of the U.S. insular areas in the Pacific and the Caribbean plan and prepare for the impacts of climate change in their respective jurisdictions.

One striking example of climate change that we can all relate to in Hawaii is the increase in vog statewide, due in part to tradewinds being reduced by 28% over the past 38 years (source: Professor Chip Fletcher, UHM School of Ocean and Earth Science and Technology). This reduction in tradewinds is expected to increase in the years ahead. At an HPHA-sponsored Climate Change and Health briefing for stakeholders held at the State Capitol on Oct., 23, 2014, several presenters talked about Hawaii's efforts thus far in addressing climate change, including the passage of Act 83 in 2014. HPHA is very supportive of state, national and community efforts to further the dialogue on what impacts and effects climate change may have on health-specific areas of concern, including:

Asthma

Respiratory Allergies (increased human exposure to pollen (due to altered growing seasons), molds (from extreme or more frequent precipitation), air pollution and aerosolized marine toxins (due to increased temperature, coastal runoff, and humidity) and dust (from droughts), Airway Diseases

Foodborne Diseases (food contamination of seafood from chemical contaminants, biotoxins, & pathogenic microbes & of crops by pesticides)

Nutrition (staple food shortages, malnutrition)

Heat-Related Morbidity & Mortality (heat exhaustion, heat cramps, heat stroke, & death)

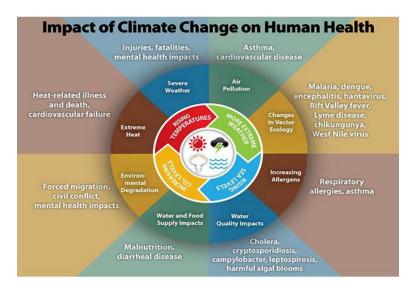
Cancer (cancer risk, such as increased duration & intensity of ultraviolet (UV) radiation)

Cardiovascular Disease (climate change may exacerbate existing cardiovascular disease by increasing heat stress, increasing the body burden of airborne particulates, & changing the distribution of zoonotic vectors that cause infectious diseases linked with cardiovascular disease), Stroke

Vector-borne Diseases (malaria, hantavirus pulmonary syndrome, rabies, & Lyme disease may increase as a result of climate change due to expansions in vector ranges, shortening of pathogen incubation periods, & disruption & relocation of large human populations) **Zoonotic Diseases**

Waterborne Diseases (Increases in water temperature, precipitation frequency & severity, evaporation-transpiration rates, & changes in coastal ecosystem health could increase the incidence of water contamination with harmful pathogens & chemicals, resulting in increased human exposure to waterborne & ocean-related pathogens & biotoxins.)

Also to be considered are **mental health and displacement impacts** on vulnerable populations most likely to be directly affected by climate change impacts on our environment.



How a Warming Climate Impacts Public Health

Public Health: http://www.emergencymgmt.com/health/How-Warming-Climate-Impact-Public-Health.html

Greater climate variability means regions of the country can expect to see new types of human health hazards. Here's what you should know.

David Raths | February 3, 2015

It may seem counterintuitive to make a connection between a warming planet and the huge snowfall totals that hit Buffalo, N.Y., in November, but these dramatic storms are happening at least in part because the world is warmer, scientists say.

"There is an influx of Arctic air into Buffalo because the Arctic is warm," said John Balbus, senior adviser for public health at the <u>National Institute of Environmental Health Sciences</u>. The water temperatures in the Bering Sea are running way above what are usual, the air temperatures are higher and it displaces the usual patterns, he added.

As researchers study climate change, one area getting more attention recently is the impact of climate variability on public health. Greater climate variability means regions of the country can expect to see new types of human health hazards, which will lead to more public health emergencies.

"Places that haven't had to deal with certain kinds of phenomena, like searing heat in Minnesota or in coastal Washington, need to start developing plans to prepare for that, because they will have to deal with it," Balbus said.

The Centers for Disease Control and Prevention (CDC) has identified several ways public health will be affected as temperatures rise, and many of them could have a direct impact on emergency management and response:

- increasing deaths and illnesses from heat stress;
- increasing risk of injuries and illnesses due to extreme weather events, such as storms and floods;
- more respiratory and cardiovascular illness and deaths caused by smoke from heat- and drought-related wildfires, as well as changes in air pollution, particularly ozone smog;
- changes in the rates and ranges of infectious diseases carried by insects or in food and water;
- threats to the safety and availability of food and water supplies; and
- greater levels of mental and emotional stress in response to climate change and extreme weather-related emergencies.

George Luber, an epidemiologist and the associate director for global climate change in the <u>Division of Environmental Hazards and Health Effects</u> at the CDC's National Center for Environmental Health, said researchers are seeking to understand the key pathways through which health will be compromised. There are direct impacts, such as storms, extreme weather, heat waves and air quality

problems, but there are also indirect effects climate change will have, including the abundance and distribution of vector-borne diseases.

Climate change will affect the cumulative exposure people have to some impacts, Luber explained. "If you get heat stroke once, your sensitivity to heat is much higher the next time around," he said. "Multiple heat waves have a cumulative effect. Multiple cumulative exposures to bad air mixed with high temperatures mixed with ozone have a death-by-a-thousand-cuts impact. But in addition to that, you have the potential for more complex emergencies."

The magnitude of climate change-related events is projected to get much bigger, and storms will stress the capability of response systems to manage them. "The potential for multiple disasters within a disaster really exacerbates public health issues," Luber said. "A loss of electricity affects those on durable medical equipment. We do see a spike in mortality during power outages. Those systems — communications for EMS, transportation for egress from storms, power — when those go down, public health is affected. And those types of incidents are expected to increase in frequency and magnitude from storms. That is of critical importance."

Luber reiterates Balbus' comment about regions needing to prepare for surprises and anomalous weather events. Profound changes in ecology lead to the potential for the emergence of pathogens in areas where they have never been seen before. "We are seeing a food-borne illness, paralytic shellfish poisoning, in Alaska that extended the northernmost range 1,000 kilometers," he said. And he pointed to the 2003 heat wave in Europe, which killed approximately 70,000 people, and for which public health officials there were unprepared. "In subsequent heat waves, they learned their lesson," Luber said. "It drove home to them that they need to prepare for an event they have never experienced before."

Regional public health officials are making the connection between climate change and chronic health conditions. The increase in ground-level ozone causes airway inflammation that can damage lung tissue, said Anne Kelsey Lamb, director of the Oakland, Calif.-based Regional Asthma Management and Prevention (RAMP), a project of the Public Health Institute. "We also see climate change is leading to an increase in particulate matter, which are tiny particles, which, if inhaled, can damage the lungs and cause chronic breathing problems," she said.

Another way climate change is impacting asthma is through increasing the length of ragweed pollen season, which is a significant asthma trigger. "We see that this is already happening and is only going to get worse," Lamb said.

RAMP has been working with other Public Health Institute projects toward the goal of increasing public health engagement in climate action. "We are recognizing that climate change is one of the most significant public health issues of our time, and we want to see the public health community increasing the level of engagement with this issue," Lamb said. "Asthma is just one example, and it is the one my organization is most focused on, but there are so many other ways that climate change is already impacting public health. We want to see the public health community become more engaged."

There are ways that the whole array of public health strategies — policy advocacy, surveillance and monitoring, health education and case management — can integrate climate change, Lamb said. "Even recognizing the financial constraints of many people working in public health, we would recommend there are ways they can integrate climate change into what they are already doing as part of their everyday job."

The release of the third annual National Climate Assessment in 2014 was a milestone for public health, said Georges Benjamin, executive director of the American Public Health Association.

"The significance of the National Climate Assessment is the recognition that climate change is here now," he said. "We have been hearing that it is coming. Well, people now realize that it is already here and affecting every region of the nation."

Public health agencies need to think about how they are going to respond, Benjamin said. "They have to know where their vulnerable citizens are so that when there is a severe event, they can respond to their needs," he said. "When the power goes off, they can prioritize people who will need help right away because they are at home with electronics-dependent equipment."

More work needs to be done around systems preparedness and doing out-of-the-box thinking about cascading failures, Benjamin said. "We know that in Hurricane Sandy, EMS units had to move out of firehouses because of flooding. What do you evacuate to and maintain response capacity? What is the backup plan if 911 goes down?"

Many states and some cities are starting to do vulnerability assessments as part of the Climate-Ready States and Cities Initiative, which Luber's office at the CDC oversees. With federal grant funding, 16 states and two cities (San Francisco and New York) are going through a five-step process to anticipate health effects by applying climate science to predict health impacts and prepare flexible

programs.

The program, called BRACE (<u>Building Resilience Against Climate Effects</u>), takes a hazards assessment approach. "It is guided by principles of adaptive management, which is an iterative, learning-based process," Luber said.

The first step is projecting current climate hazards into the future. States identify their principal hazards, such as heat waves and floods, and use climate models to project how those will change in the future. North Carolina, for instance, would look at flood plains, coastal zones and urban heat islands, and which populations are most vulnerable, as well as risk factors for exposures.

The assessment would also look at rates of respiratory problems, water-borne disease incidents, septic systems and other aggregations of risk to project disease burden. Officials look at the current health profile of the state and project how that could change in the future. "The next question is: Which ones can we do something about now?" Luber said. "They identify which interventions would have the most impact and work to put those in place. They are also building capacity to track health outcomes over time."

For example, the BRACE program at the Florida Department of Health collaborated with the University of South Carolina Hazards and Vulnerability Research Institute to assess hurricane winds, storm surge, sea-level rise, drought and wildfires. To quantify social and medical vulnerability to these hazards, they used a Social Vulnerability Index and Medical Vulnerability Index linked to hazard maps to display the intersection of vulnerabilities and hazards throughout the state.

Some states are trying new technologies and approaches. For instance, Vermont is using crowdsourcing and a Web-based tracking tool to identify the presence of ticks.

A 2014 report in the Journal of the American Medical Association notes that in response to heat waves, "cities with investments in early warning and response programs have seen some success. For example, after Milwaukee implemented an extreme heat conditions plan following 91 fatalities during the 1995 heat wave, a subsequent heat wave in 1999 resulted in only 10 deaths, or 49 percent less than expected."

Benjamin said it is important for public health agencies to form tighter partnerships with other emergency response organizations. "The time to plan is now," he stressed. "In the middle of a disaster is not the time to exchange business cards." Agencies need to plan and drill together and understand each other's capabilities, he added. They should provide redundancies in systems and make sure they have adequate communications capacity. "We have lots of multijurisdictional responses to things, and frequently the responders can't talk to each other."

"The time to plan is now. In the middle of a disaster is not the time to exchange business cards."

Even primary care providers should begin talking to patients about emergency preparedness, Benjamin said. Doctors can help people think through how they should prepare for emergencies, especially if they have a medical condition that requires some urgency. "In the hospital settings, we have seen several cases where patients had to be evacuated. We need to be more imaginative about what can go wrong." While there were some improvements after hurricanes Katrina and Rita, he said, there were evacuations again during Sandy.

Balbus is leading an initiative called Sustainable and Climate-Resilient Healthcare Facilities, a public-private partnership developed to ensure that facilities such as hospitals, nursing homes and dialysis centers are getting information to help them prepare for their role in extreme weather situations. "Having to move patients in a storm is a huge issue," he said. "We've seen very straightforward, low-tech things cause problems, like getting an emergency generator out of a basement during a flood." The goal is to look at innovative architectural designs for new structures as well as doing vulnerability assessments on existing ones.

Benjamin called it a tragedy that climate change has become unnecessarily political. "Climate change, hurricanes and tornadoes don't know political parties or pick victims. People need to follow the science. Shame on us if we can't put aside the politics on this," he said. "The scientific community is clear about it. There was a time, not that long ago, when this was a bipartisan issue. We are hoping it will get back to that."

David Raths | Contributing Writer for *Emergency Management* magazine.



To: The Honorable Della Au Belatti, Chair, Committee on Health

The Honorable Richard P. Creagan, Vice Chair, Committee on Health

Members, House Committee on Health

From: Jessica Yamauchi, Executive Director

Date: March 2, 2015

Hrg: House Committee on Health; Wednesday. March 4, 2015 at 8:30 a.m. in Rm 329

Re: Support the intent for HB 591, HD1 Relating to Climate Change

Thank you for the opportunity to offer testimony in **support of the intent** of House Bill 591 HD1, which will create an interagency climate adaptation committee to examine various potential health impacts of climate change and assist Hawaii's health professionals in effectively preparing for and responding to the various potential health impacts, but defers to the Board of Land and Natural Resources on the feasibility of this bill.

The Hawaii Public Health Institute (HIPHI) supports and promotes policy efforts to create a health Hawaii. HIPHI weaves silos into working relationships as an effective network, ensuring that we come together across sectors to advance collaboration and innovation in public health and work towards making Hawaii the healthiest place on earth.

Hawaii is particularly vulnerable to the impacts of climate change, including contamination or decrease in the water, food, and energy supply. Various potential health impacts of climate change include respiratory allergies, airway diseases, food-borne diseases, biotoxin exposure, heat-related illnesses, cancer, cardiovascular diseases, vector-borne diseases, and waterborne diseases. The committee will develop, integrate, and maintain state and regional disease surveillance and monitoring systems to respond to various potential health impacts of climate changes as mentioned above. This bill outlines several requirements of the committee relating to climate change preparedness. Members of the committee will also create evidence-based tools to predict and monitor the public health impacts of climate change in the State, and identify and prioritize communities and populations that may be vulnerable.

If passed, HIPHI would like to see the addition of more health/public health professionals to the committee. HIPHI supports the intent of House Bill 591.

Thank you for the opportunity to testify.

Respectfully,

Jessica Yamauchi, MA Executive Director

From: mailinglist@capitol.hawaii.gov
Sent: Friday, February 27, 2015 11:42 AM

To: HLTtestimony

Cc: mendezj@hawaii.edu

Subject: *Submitted testimony for HB591 on Mar 4, 2015 08:30AM*

HB591

Submitted on: 2/27/2015

Testimony for HLT on Mar 4, 2015 08:30AM in Conference Room 329

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

Comments:

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.

March 3, 2015 WRITTEN TESTIMONY

To: Chairperson Au Bellati and Vice-Chair Creagan

From: Holly Kessler

Subject: HB591,HD1: Relating to Climate Change

Aloha Chair Belatti, Representative Creagan and Members of the House Health Committee:

I strongly support HB591: Relating to Climate Change. A changing climate impacts the health of Hawaii's people and our wellbeing. Climate change is a critical public health problem. Climate change makes many existing diseases and conditions worse. As the planet warms, oceans expand and the sea level rises, floods and droughts become more frequent and intense, and heat waves and hurricanes become more severe. The most vulnerable people—children, the elderly, the poor, and those with underlying health conditions—are at increased risk for health effects from climate change.

It is important that Hawaii take steps now to address climate change and the effects on our citizens. Please pass HB591 as originally proposed. The proposed HD1 amendments differ from the original intent of the bill, adding the health issue to Act 83's original mission.

Respectfully submitted:

House Kessler

Holly Kessler

TESTIMONY to House Committee on Health

H.B. 591 HD1 Relating to Climate Change

Wednesday, March 4, 2015

8:30 AM -- State Capitol House Conference Room 329

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

Chair Belatti; Vice-Chair Creagan and Committee Members:

- 1. I most strongly **OPPOSE** this bill. Since this bill modifies <u>Act 83</u> from the 2014 session, I most strongly recommend that Act 83 be repealed.
- 2. Man-caused climate change was developed when people claiming "man made global warming" were caught manipulating the data. There are reported to be over 31,000 scientists who say there is no convincing evidence that man can or will cause any significant problems in the global climate. Opposition to the theory of man-made climate change is frequently suppressed and the reputation of acclaimed scientists are smeared when they refuse to join in a false climate change narrative. Currently Dr. Wei-Hock Soon, a solar and stellar physicist at the Harvard-Smithsonian Center for Astrophysics for a quarter of a century is under attack for daring to challenge this unproven theory. The last thing the legislature should do is waste any more time on this topic -- and NEVER spend any of Hawaii's taxpayers funds on addressing this false notion. We don't need any committees to do planning for this myth. It would be a waste of their time and our taxes. Solar activity is a source of climate change and currently man cannot control that heat source. Even if volcanoes aren't a worldwide problem, Hawaii has an active volcano spewing gases that are harmful to people and perhaps the environment. What are you going to do to stop them from exploding and flowing? Before the industrial period and the jet/auto age, the climate was warmer. Man was not responsible. We know climate changes -- it always does. We can neither predict it nor control it. The problems usually discussed will not occur for centuries (if they occur at all). If you were really worried about global warming (and the sea rising), you wouldn't allow all the development near the coastline in Kakaako and Ewa. The Rail system and transit oriented development around it would be vulnerable. Stop these projects if you think there is a problem.
- 3. While horror stories of man-made global warming are supposed to make us change our means of transportation, what we eat, the size of our homes, and our energy use, parts of the country are experiencing record cold weather. As a person who moved to Hawaii from a cold climate area, I assure you, many people would appreciate some global warming. The Great Lakes of Northeastern USA were created when the glaciers melted. That was a good thing.

- 4. There have been studies to identify a means to implement "world peace." To do this it is suggested that there needs to be global governance. Efforts to identify an issue that expands beyond nation boarders so that "global" restrictions can be placed on world populations. Whether the 1967 Report from Iron Mountain is a hoax or a leaked classified document, there is a world-wide effort to implement regulations and controls based on disarmament, population control, and globalization. This document addresses these issues with suggested implementation methods. (Begin on page 19 of 79 pages.) A quote from page 41: "The existence of an accepted external menace, then, is essential to social cohesiveness as well as to the acceptance of political authority. The menace must be believable, must be of a magnitude consistent with the complexity of the society threatened, and must appear, at least, to affect the entire society." The page 46 explanation of the substitution for war is a perfect description for the focus on "climate change" -- "Economic surrogates for war must meet two principle criteria. They must be "wasteful" in the common sense of the word, and they must operate outside the normal supply-demand system." Addressing "climate change" is the perfect ruse -wasteful, not needed, and especially, no action to prevent it is desired. Page 47 of the Report from Iron Mountain goes on to describe another way to waste taxpayer funds --"the establishment of a system of mass public transportation ..." such as the unsustainable Hawaii Rail system which is wasting billions of our dollars and making life miserable for most Hawaii residents. The section on Physical environment clearly discusses how natural resources have to be "protected" (or in other words controlled and put off limits which is happening all the time in the USA). The section on Poverty discusses the socialist notion of "guaranteed annual income or whatever system of distribution will best assure its achievement." All these concepts in the "hoax" document are playing themselves out in today's laws and regulations. Climate change is just one of the tools to force Americans to do things they prefer not to do and to pay for items that are not desired and are "wasteful."
- 5. In discussion for finding alternate enemies to war, page 51 of the Report from Iron Mountain suggests alternate enemies are needed: "... It may be, for instance, that gross pollution of the environment can eventually replace the possibility of mass destruction by nuclear weapons as the principal apparent threat to the survival of the species." Man made climate change is just another "crisis" to force people to waste money on things they would never consider if it weren't elevated to a "panic"/global emergency status. Page 61 identifies under the Political heading d, that Fictitious alternative enemies (manmade climate change?) may be a motivating factor.
- 6. Do not pass this bill out of committee. Hawaii has real problems that affect us NOW that need to be addressed. Wasting any resources on climate change policies is a disservice to the people of Hawaii. We need groups addressing our sewer and water pipe maintenance and waste management system upgrades but there seems to be no interest on topics even though they have critical health implications that could affect us in the near term.

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, March 03, 2015 7:36 AM

To: HLTtestimony

Cc: dustinandrewsoahu@gmail.com

Subject: *Submitted testimony for HB591 on Mar 4, 2015 08:30AM*

HB591

Submitted on: 3/3/2015

Testimony for HLT on Mar 4, 2015 08:30AM in Conference Room 329

Submitted By	Organization	Testifier Position	Present at Hearing
Dustin Andrews	Individual	Oppose	No

Comments:

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.

From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 02, 2015 7:41 PM

To: HLTtestimony

Cc: davidsher@juno.com

Subject: Submitted testimony for HB591 on Mar 4, 2015 08:30AM

HB591

Submitted on: 3/2/2015

Testimony for HLT on Mar 4, 2015 08:30AM in Conference Room 329

Submitted By	Organization	Testifier Position	Present at Hearing
Sherry Pollack	Individual	Comments Only	No

Comments: I strongly support the original intent of HB591, and agree with the comments and recommendations made by the Hawaii Public Health Association (HPHA) in regards to the HD1 amendments that are significantly different from the bill's original version. It was originally proposed to have a climate change and health working group that would work parallel to the Interagency Climate Change Adaptation Committee (ICCAC), to provide findings and recommendations to the ICCAC for potential inclusion into its final report. This committee, comprised of individuals with specialized backgrounds and expertise, can better and more adequately address climate change and health factors, and make appropriate recommendations. The ICCAC should focus on coordinating the implementation of climate change policies developed by county, state, and federal agencies. I strongly urge that it be required that this include policies that will promote climate stabilization, (not just climate adaption), such as measures that would move us towards 100% renewable energy, and no LNG, even as a 'bridge" fuel. As is pointed out in this bill, human activities are altering the climate. Hawaii will be hit harder than any other state as a result of extreme weather events and other serious effects from climate change. We are already feeling it's effects. We need to be strategic and focused, and and stop contributing to the destabization of the climate. I am grateful to the authors of this bill and their leadership on the crucial public health issue of climate change and its impacts on health. Please support and pass this bill with it's original intent. Sincerely, Sherry Pollack, MS, RD Ahuimanu

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.

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, March 03, 2015 11:58 AM

To: HLTtestimony Cc: Ibc@hawaiiantel.net

Subject: Submitted testimony for HB591 on Mar 4, 2015 08:30AM

HB591

Submitted on: 3/3/2015

Testimony for HLT on Mar 4, 2015 08:30AM in Conference Room 329

Submitted By	Organization	Testifier Position	Present at Hearing
lois crozer	Individual	Comments Only	No

Comments: Chair Belatti, Vice Chair Creagan I support the intent of this bill to examine potential impacts of Climate Change. It seems that there hasn't been a budget put forth for this and the DLNR would like to initially focus on the sea level rise vulnerability and adaption report due 12/17. The interagency climate adaptation committee will establish the agenda for addressing other relevant climate change effects including the effects on the economy, environment, health, and way of life, pursuant to Act 83. Please make climate change adaptation a priority. Lois Crozer Kailua

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.

Katherine T. Kupukaa Mililani Town, HI 96789

COMMITTEE ON HEALTH Rep. Della Au Belatti, Chair Rep. Richard P. Creagan, Vice Chair

DATE: MARCH 4, 2015

TIME: 8:30 am

PLACE: Conference Rm. 329

State Capitol

415 South Beretania Street

Re: OPPOSE HB 591 RELATING TO CLIMATE CHANGE

The purpose of this Act is to create a climate change and health working group to examine various potential health impacts of climate change and assist Hawai'i's health professionals in effectively and efficiently preparing for and responding to the various potential health impacts. This is totally unnecessary and I am not concerned about climate change that it is constantly changing. I am concerned that you believe this should be our concern. Your agenda to make this a priority starts from the Obama administration and this is so wrong. There was a time that global warming was the phrase used and what is actually occurring was cooling period. As you probably are aware that spring is less than 3 weeks away and yet there was snow on Mauna Kea yesterday.

This week I saw on a program and the ice in Antarctica where most of the earth's ice is, is actually increasing. I do not know where you get your information from when you submit bills or even check the correctness of the information whether it is truth or fictional, but I would like to be assured so that I do not waste my time on matters like this.

God's covenant with creation. Genesis 8:21 And the Lord smelled a soothing aroma. Then the Lord said in His heart, "I will never again curse the ground for man's sake, although the imagination of man's heart is evil from his youth; nor will again destroy every living thing as I have done. Gen 8:22 "While the earth remains seedtime and harvest, cold and heat, winter and summer, and day and night shall not cease." I will continue to trust in the Lord not man.

I urge you to use your God given wisdom as elected officials to make the right decision and not pass this bill. Thank you for allowing me the opportunity to voice my concern.