



STATE OF HAWAII  
HAWAII CLIMATE CHANGE MITIGATION & ADAPTATION  
COMMISSION  
POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

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Director, OPSD

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Director, Kaua'i DP  
The Adjutant General  
Manager, CZM

**Testimony of  
Leah Laramee  
Coordinator, Hawai'i Climate Change Mitigation and Adaptation Commission**

**Before the Senate Committees on  
AGRICULTURE AND ENVIRONMENT**

**Wednesday, April 12, 2023  
1:00 PM  
State Capitol, Via Videoconference, Conference Room 224**

**In support of  
House Concurrent Resolution 192**

**URGING THE HAWAII CLIMATE CHANGE MITIGATION AND ADAPTATION COMMISSION TO DEVELOP A PROACTIVE AND COMPREHENSIVE COMMUNICATION STRATEGY TO EDUCATE HAWAII'S RESIDENTS ABOUT THE HEALTH IMPACTS OF THE CLIMATE CRISIS.**

House Concurrent Resolution 192 urges the Hawai'i Climate Change Mitigation and Adaptation Commission to develop a proactive and comprehensive communication strategy to educate Hawai'i's residents about the health impacts of the climate crisis. **The Hawai'i Climate Change Mitigation and Adaptation Commission (Commission) supports this measure.**

The Hawai'i Climate Change Mitigation and Adaptation Commission consists of a multi-jurisdictional effort between 20 different departments, committees, and counties. Public health is already being impacted by climate change through increased heat, vector-borne diseases, crop failure and food insecurity, water insecurity, waterborne diseases, extreme weather events, air pollution, and adverse mental health impacts. The Commission is sensitive to these impacts and supports all efforts to address them. The Commission looks forward to the establishment of the Climate and Health position at the Department of Health and will continue to work with staff on addressing health related climate issues.

Mahalo for the opportunity to testify in support of this measure.



WRITTEN  
TESTIMONY

STATE OF HAWAII  
DEPARTMENT OF HEALTH  
KA 'OIHANA OLAKINO  
P. O. BOX 3378  
HONOLULU, HI 96801-3378

**Testimony in SUPPORT of HCR0192**

URGING THE HAWAII CLIMATE CHANGE MITIGATION AND ADAPTATION COMMISSION TO DEVELOP A PROACTIVE AND COMPREHENSIVE COMMUNICATION STRATEGY TO EDUCATE HAWAII'S RESIDENTS ABOUT THE HEALTH IMPACTS OF THE CLIMATE CRISIS.

SENATOR MIKE GABBARD, CHAIR

SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT

Hearing Date: 4/12/2023

Room Number: 224

1 **Fiscal Implications:** None

2 **Department Testimony:** The Department of Health supports this measure to raise awareness  
3 about the ways climate change will negatively impact human health. Hawaii has been a national  
4 leader in taking steps to increase resilience and mitigate the negative impacts of climate change.  
5 However, much of these efforts have been directed at planning and infrastructure and have not  
6 focused on preventing the illness and injuries that climate change will cause.

7 The health impacts from climate change are wide ranging and will affect every resident, visitor,  
8 and community. Certain communities will be disproportionately affected, enhancing already  
9 present health disparities and environmental injustice.

10 A focused communication effort to educate the residents of Hawaii about these potential health  
11 impacts will help people further understand the need for action to slow climate change and  
12 inspire efforts to mitigate the morbidity and mortality that is coming. An educated populace will  
13 be more prepared to respond to the upcoming challenges from climate change as well as  
14 advocate for changes to help keep them, their families, and their communities safe.

15 **Offered Amendments:** None

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19 Thank you for the opportunity to testify on this measure.



To: The Honorable Chair Mike Gabbard, the Honorable Vice-chair Tim Richards, III, and members of the Committee on Agriculture and Environment

From: Climate Protectors Hawai'i (by Ted Bohlen)

Re: Hearing **HCR192 URGING THE HAWAI'I CLIMATE CHANGE MITIGATION AND ADAPTATION COMMISSION TO DEVELOP A PROACTIVE AND COMPREHENSIVE COMMUNICATION STRATEGY TO EDUCATE HAWAII'S RESIDENTS ABOUT THE HEALTH IMPACTS OF THE CLIMATE CRISIS.**

Hearing: Wednesday, April 12, 2023, 1:00 p.m. CR224

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Aloha Chair Gabbard, Vice-chair Richards, and members of the Committee on Agriculture and Environment:

The Climate Protectors Hawai'i seek to educate and engage the local community in climate change action, to help Hawai'i show the world the way back to a safe and stable climate.

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The Climate Protectors Hawai'i **STRONGLY SUPPORTS HCR192!**

Climate change is here. The Hawaii Legislature has declared that there is a climate emergency and requested statewide collaboration toward an immediate transition and emergency mobilization effort to restore a safe climate. As noted by the Hawai'i Climate Change Mitigation and Adaptation Commission, **public**

**health is already being impacted by climate change through increased heat, vector-borne diseases, crop failure and food insecurity, water insecurity, waterborne diseases, extreme weather events, air pollution, and adverse mental health impacts.** Adverse health impacts will increase in future years.

Climate action is not viewed as urgent because the public has not been informed of the full spectrum of public health risks posed by the climate crisis. **We need to prepare the public about the health effects that are coming with climate change.**

The Hawai'i Climate Change Mitigation and Adaptation Commission should develop a **proactive and comprehensive communication strategy to educate Hawaii's residents about the health impacts of the climate crisis** and work with other state agencies, local governments, and community organizations to develop a **public health engagement strategy.**

Please pass this Concurrent Resolution!

Mahalo!

Climate Protectors Hawai'i (by Ted Bohlen)

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**SENATE COMMITTEE ON AGRICULTURE AND THE ENVIRONMENT**

April 12, 2023, 1:00 PM

Room 224

**TESTIMONY IN SUPPORT OF HCR 192**

Aloha Chair Gabbard, Vice Chair Richards, and members of the committee:

Blue Planet Foundation **supports HCR 192**, which urges the Hawai'i Climate Change Mitigation and Adaptation Commission to develop a communications strategy to raise public awareness about the health impacts of climate change.

Islands, like Hawai'i, are ground zero for the destructive impacts of climate change—we are acutely vulnerable to impacts like sea level rise and food insecurity (because of our reliance on imported goods). Our tropical climate also means we will continue to experience extreme heat, extreme weather events and flooding, and increases in vector-borne illness, among other impacts.

Much of the local conversation about climate change has centered on framing these impacts as environmental and infrastructure issues. What isn't discussed as part of the public narrative is the human side of climate change—i.e. the human health co-benefits of mitigation (reduced air pollution, the health benefits of a plant-based diet and increased physical activity, etc.) as well as how public health will be impacted by hotter temperatures, mental health stresses, and an increased prevalence of disease (food-, water-, and vector-borne illnesses). Moreover, our low- and moderate-income residents, seniors, and indigenous residents will disproportionately experience these impacts.

That's why the public health engagement strategy in HCR 192 is so important. **Please pass HCR 192.**

Thank you for the opportunity to provide testimony.

[info@blueplanetfoundation.org](mailto:info@blueplanetfoundation.org)

126 Queen Street, Suite 204 • Honolulu, Hawai'i 96813 • 808-954-6161 • [blueplanetfoundation.org](http://blueplanetfoundation.org)

**HCR-192**

Submitted on: 4/6/2023 5:13:40 PM

Testimony for AEN on 4/12/2023 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Cards Pintor	Individual	Support	Written Testimony Only

Comments:

Aloha,

I support this resolution.

Mahalo nui,

Cards Pintor

**HCR-192**

Submitted on: 4/6/2023 6:57:45 PM

Testimony for AEN on 4/12/2023 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Andrew Crossland	Individual	Oppose	Written Testimony Only

Comments:

I **strongly oppose** this Resolution that would use taxpayer dollars to disemmanate propaganda about climate change.

**HCR-192**

Submitted on: 4/6/2023 7:45:45 PM

Testimony for AEN on 4/12/2023 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Beth Anderson	Individual	Support	Written Testimony Only

Comments:

HCR 192 is critically needed because it demands that we educate the public about the health impacts of the climate crisis. As we deal with the increasing effects of global warming in our state, the health impacts mentioned in this bill are likely to occur. At some point, in addition to educating the public about health effects of the climate crisis, it will become necessary to increase the numbers of State public health care workers in order to address all of the climate related health problems that will arise. We saw how during the initial stages of the pandemic the department of public health was overwhelmed, there were never enough testing sites, and other unanticipated problems arose.

It is wise to be prepared for what lies ahead and to begin to educate and provide services to Hawaii's residents related to the impact of global warming on the health of our environment and our health. For these reasons, I support HRC 192 and urge others to support it, too.

Mahalo.



**HCR-192**

Submitted on: 4/6/2023 8:19:50 PM

Testimony for AEN on 4/12/2023 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Dana Keawe	Individual	Support	Written Testimony Only

Comments:

Support

**HCR-192**

Submitted on: 4/6/2023 8:49:01 PM

Testimony for AEN on 4/12/2023 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Gerard Silva	Individual	Oppose	Written Testimony Only

Comments:

THERE IS NO SUCH THING AS CLIMET CHANG. The HOLE world KNOWS this but You Idiots over there are still trying to Push this BULL SHIT. We know this is all bin Made up By the Elites Just to Make Money off the People. Stop Beliveing in this Crap they Have proof this is Crap ths Scientice are saying there is no Climet Change. Only the Idiots in Hawaii belive in this Crap pushed by COMMUNIST!!!!!!!!!!!!!!!!!!!!!!!!!!!!

**HCR-192**

Submitted on: 4/6/2023 9:52:46 PM

Testimony for AEN on 4/12/2023 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
B.A. McClintock	Individual	Support	Written Testimony Only

Comments:

Please support this common sense bill. Mahalo.

**HCR-192**

Submitted on: 4/9/2023 7:59:52 PM

Testimony for AEN on 4/12/2023 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Elizabeth Kiefer, MD, MPH	Individual	Support	Remotely Via Zoom

Comments:

My name is Dr. Elizabeth Kiefer. I am a physician and an assistant clinical professor at the John A Burns School of Medicine.

I am here to support HCR 192, to educate Hawaii’s residents about the health impacts of the climate crisis. In addition to my internal medicine training, I have a master's degree in epidemiology and public health, and in 2020 I completed a certificate program at Yale University specifically for health professionals to educate and address the adverse health impacts of climate change.

Since I completed my training, I have been educating physicians about these health impacts through lectures and presentations. Climate change causes rising temperatures, rising CO2, increasing sea level, and more extreme weather. These events in turn cause extreme heat, food insecurity, air pollution, changes in vector ecology, allergens, changes in water quality, and environmental degradation -- all of which affect human health. We examine the physiology of how heat, flooding, or food insecurity can affect our patients’ respiratory health, cardiovascular health, or even susceptibility to infection or obesity. We learn that not everyone is equally at risk and some important considerations include age, economic resources, underlying chronic diseases and even neighborhood.

It is important for the public to be educated about these risks as well, to make these sorts of connections in order to stay out of the hospital in the first place. As physicians concerned about the climate, we want a Mom to recognize, for example, that a really humid, hot day with low wind might be a trigger for her child's asthma. We want Mom to take precautions so that her child does not end up in the ER in the first place with a full blown attack, in respiratory crisis. Another health example and warning that could come from our government would be reminders to stay out of flood waters after a storm, because as temperatures rise, bacteria thrive in our streams and canals, and if residents already have a chronic disease like diabetes, they are more susceptible to infection. There are numerous ways the public can be educated on these health effects, and it is imperative to do so.

Education and communication about climate related health issues can improve the health of people in Hawaii. And this resolution supports these goals. Thank you.

For much more detailed information, please see the briefing I completed with my colleague, Dr. Diana Felton, on climate and health issues in Hawaii for the House Committee on Energy and Environmental Protection:

<https://www.youtube.com/watch?v=IDRUGF9t4rI>

**HCR-192**

Submitted on: 4/10/2023 1:34:11 PM

Testimony for AEN on 4/12/2023 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Jacob Lee, MD	Individual	Support	Written Testimony Only

Comments:

Aloha, as a Hawaii-trained physician now residing and serving in Honolulu, I've seen firsthand how climate's many impacts (disasters, heat, land use change, toxic exposure) have negatively impacted our aina and communities. My research has been in climate change and youth mental health, and one of the clear takeaways is that positive message can activate youth to bring about positive change in their community. One of the larger risk factors for ecoanxiety is negative information, misinformation, or disinformation about our changing climate. Youth are inundated with alarming climate-related content on social media and on the news. Many don't know what's already being done to help turn things around. A push for climate-related education for our state will likely save lives and activate a new generation towards working for a future worth living in.

**HCR-192**

Submitted on: 4/11/2023 11:16:51 PM

Testimony for AEN on 4/12/2023 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Katie Pothier	Individual	Support	Written Testimony Only

Comments:

**To the Senate Committee on**

**AGRICULTURE AND ENVIRONMENT**

**Testimony of**

**KATIE POTHIER**

**Student at Hawai'i Pacific University**

**In SUPPORT of HCR192**

**April, 12, 2023**

Aloha Chair Gabbard, Vice Chair Richards, and Members of the Committee,

**I support HCR192** that urges the Hawai'i Climate Change Mitigation and Adaptation Commission to develop a communications strategy to raise public awareness about the health impacts of climate change.

Based on the geographical location of the Hawaiian Islands, we are particularly vulnerable to destructive climate change impacts, especially issues involving sea level rise, water insecurity, and food insecurity. Rising sea levels will increase coastal flooding and erosion, impacting

coastal ecosystems, local agriculture, and the people of Hawai'i. Heightened sea levels also run the risk of saltwater intrusion to surface water and groundwater systems. These problems endanger human communities by negatively impacting basic societal needs, such as food and freshwater availability.

Major climate change impacts, such as reduced streamflow, sea level rise, and saltwater intrusion, will significantly threaten the ongoing cultivation of taro and other traditional crops on the Hawaiian Islands. These kinds of climate impacts lead to an even greater dependence on imported food from the mainland states (that is usually of little nutritional value). There are also risks of impacts on traditional and customary Hawaiian practices (including fishpond maintenance and nearshore fisheries). These impacts can lead to feelings of detachment from traditional lands, affecting the spiritual and mental health of the Hawaiian people.

The topic of climate change has become increasingly popular over the last few decades, and I believe that it will be extremely important to improve public awareness on the health impacts climate change may cause, especially here in Hawai'i. There are prominent social justice issues already apparent in Hawai'i, and the impacts of climate change will considerably and disproportionately affect these marginalized groups of people (such as lower income residents, Native Hawaiians, senior citizens, and indigenous residents). The key to a successful climate change plan is effective public engagement, and by passing HCR192, the public can become more educated about climate change and be more prepared to address the varying challenges it brings with it.

Thank you for the opportunity to testify on this measure.





## HCR192

RELATING TO URGING THE HAWAI‘I CLIMATE CHANGE MITIGATION AND ADAPTATION COMMISSION TO DEVELOP A PROACTIVE AND COMPREHENSIVE COMMUNICATION STRATEGY TO EDUCATE HAWAII'S RESIDENTS ABOUT THE HEALTH IMPACTS OF THE CLIMATE CRISIS  
Senate Committee on Agriculture and Environment

April 12, 2023

1:00 PM

Room CR 224

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The Office of Hawaiian Affairs (OHA) **SUPPORTS** HCR192, which would allow the Hawai‘i Climate Change Mitigation and Adaptation Commission to use federal Inflation Reduction Act funding and work with other state agencies, local governments, and community organizations to develop a public health engagement strategy.

OHA understands that it is not enough to rely solely on “nature-based solutions” to become adaptive and resilient to the most unprecedented impacts of climate change. The Intergovernmental Panel on Climate Change, the United Nations body for assessing the science related to climate change stated:

“Indigenous, local and traditional knowledge systems and practices, including indigenous peoples’ holistic view of community and environment, are a major resource for adapting to climate change [...] Integrating such forms of knowledge with existing practices increases the effectiveness of adaptation.”<sup>1</sup>

“Indigenous knowledge can be a unique source for techniques for adaptation and may be favoured [sic] over externally generated knowledge.”<sup>2</sup>

“Indigenous knowledge is an important source of guidance for biodiversity conservation, impact assessment, governance, disaster preparedness and resilience.”<sup>3</sup>

Here in Hawai‘i, it is the traditional knowledge systems and practices of Native Hawaiians that are indispensable for climate change mitigation, adaptation, and resilience. OHA takes care to note that it is of critical importance to the responsible advancement and perpetuation of Native Hawaiian culture and identity to support Native Hawaiian participation and even leadership in the development, implementation, and use of these strategies for the better future of Hawai‘i and the people who call these Islands, home.

OHA appreciates the opportunity to provide testimony on this measure and respectfully urges the Legislature to **PASS HCR192**. Mahalo nui loa.

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<sup>1</sup> IPCC, AR5 Synthesis Report: Climate Change 2014, P.19.

<sup>2</sup> IPCC, AR6 Synthesis Report: Climate Change 2022, P.469.

<sup>3</sup> Id. at 526.