

SB 266



**SENATE COMMITTEE ON WAYS AND MEANS**

March 3, 2009, 9:30 A.M.

Room 211

**(Testimony is 3 pages long)**

**TESTIMONY IN STRONG SUPPORT OF SB 266 SD1**

Chair Kim and members of the committee:

The Blue Planet Foundation supports the intent of SB 266 SD1, establishing a global warming task force to assess the impacts of climate change on Hawai'i.

Blue Planet believes it would be wise preventative measure for the State to establish a task force that is focused solely on examining the potential impacts of global climate change and Hawai'i's adaptation needs. Clear deliverables from the task force—in terms of proposed legislation, rule changes, resource needs, etc—are needed for the work of the task force to be effective. Establishment of a climate change adaptation task force would be a welcome complement to the existing Greenhouse Gas Emissions Reduction Task Force (GHGERTF) that was established in 2007 through Act 234. The GHGERTF is focused on mitigating Hawai'i's contribution to global climate change—that is, actually reducing Hawai'i's greenhouse gas emissions. The task force contemplated in SB 266 SD1 would be focused on reducing the inevitable negative impacts that Hawai'i will likely experience given ongoing and accelerating climate change.

Global climate change is perhaps the greatest threat to Hawai'i's prosperity. The ongoing increase in global greenhouse gas emissions—primarily from fossil fuel combustion—has systematically increased the concentration of greenhouse gases in the atmosphere. This increase in greenhouse gases is causing a warming of the Earth, leading to dramatic changes in climate, sea level, and weather.

Global climate change threatens Hawai'i with stronger hurricanes, prolonged drought, shifting weather patterns, warmer temperatures, shifting micro-climates, increased spread of invasive

**Jeff Mikulina, executive director • [jeff@blueplanetfoundation.org](mailto:jeff@blueplanetfoundation.org)**

55 Merchant Street 17<sup>th</sup> Floor • Honolulu, Hawai'i 96813 • 808-954-6142 • [blueplanetfoundation.org](http://blueplanetfoundation.org)

species, and saltwater intrusion into Hawaii's aquifers. University of Hawaii experts have demonstrated that a one meter rise in sea level—a change that is possible within the next 50 years—would inundate much of Hawaii's coastline, including its beaches, the world renown Waikiki resort area, the Honolulu International Airport's reef runway, the majority of Hawaii's wastewater treatment facilities, many historic sites, and many populated areas, including lands up to a mile away from the existing shoreline in parts of Honolulu. The image on page 2 of this testimony demonstrates the extent of flooding through the Waikiki-Moiliili-McCully areas that would likely be caused by a one-meter rise in sea level.

Independent of the warming, the increase in carbon dioxide concentration in the atmosphere fosters greater carbon dioxide uptake by the world's oceans, leading to ocean acidification and the resultant decrease in reef health and decrease in survival of ocean life that rely on calcium carbonate shells. The Task Force contemplated in SB 266 SD1 should examine this phenomenon and its effects as well. Blue Planet believes that that SB 266 SD1 should be amended to address global climate change and its effects as opposed to global warming alone. The composition of the Task Force could also be reexamined to include additional expertise from the biological sciences, cultural experts, and community groups.

Finally, we would strongly support using a portion of the barrel fee increase (as contemplated in HB 1271) to fund the Global Warming task force.

Thank you for the opportunity to testify.



Testimony of The Nature Conservancy of Hawai'i  
Supporting S.B. 266 SD 1 Relating to Global Warming  
Senate Committee on Ways & Means  
Tuesday, March 3, 2009, 9:30AM, Room 211

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*The Nature Conservancy of Hawai'i is a private non-profit conservation organization dedicated to the preservation of Hawaii's native plants, animals, and ecosystems. The Conservancy has helped to protect nearly 200,000 acres of natural lands for native species in Hawai'i. Today, we actively manage more than 32,000 acres in 11 nature preserves on O'ahu, Maui, Hawai'i, Moloka'i, Lāna'i, and Kaua'i. We also work closely with government agencies, private parties and communities on cooperative land and marine management projects.*

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The Nature Conservancy of Hawaii supports S.B. 266 SD 1.

While the Legislature passed landmark legislation in 2007 to put Hawai'i on the path to reducing greenhouse gas emissions, that legislation does not provide authority or resources toward assessing, mitigating and adapting to the inevitable effects of climate change. Regardless of the level of reduced emissions, Hawai'i and the world will feel the effects of human-induced climate change for generations to come.

Climate change is an imminent and unprecedented threat to both natural systems (*e.g.*, forests, coastlines, coral reefs, wetlands) and to every person in Hawai'i that—whether they know it or not—depends on services from the natural environment for their livelihoods, health and welfare. Scientists have examined the evidence and rapid climate change is real; it is clearly caused by human activity; it is already a problem for habitat for plants and animals; and, if sources of CO<sub>2</sub> are not dramatically reduced, climate change could well have catastrophic results for people and their relationship with the natural environment.

The health of Hawaii's unique but threatened natural resources directly affects our economy and quality of life. Beyond breathtaking beauty, these resources provide essential natural services that make life possible in the middle of the vast Pacific Ocean. Even if we drastically reduce CO<sub>2</sub> emissions now, we will still feel the effects of climate change. In Hawai'i, science is indicating that this may include:

- More frequent and more severe storms;
- Overall, less rainfall and therefore less fresh water;
- Higher temperatures that may affect the health of forested watersheds;
- Climatic conditions even more conducive to invasive plants, insects and diseases;
- Sea level rise and high wave events that will harm coastal areas and cause seawater infiltration into groundwater systems; and
- Ocean acidification that will inhibit the growth of coral reefs.

**As this bill points out, we must plan and implement mitigative and adaptive measures to ensure the resilience of our natural and human systems.**

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# WINDWARD AHUPUA`A ALLIANCE

From the Peaks of Na Ko'olau to the Outer Reefs

*Community-Based Planning  
Sustainable Economic Development  
Restoration, Preservation, Protection & Public Access  
Educational & Cultural Programs*

Senator Donna Mercado Kim  
Chair, Senate Ways and Means Committee  
Room 210 - Hawai'i State Capitol

Aloha Chair Kim:

The *Windward Ahupua`a Alliance* wishes to express its concerns about SB 266 SD1 - RELATING TO GLOBAL WARMING for the following reasons:

1. The *Standing Committee Report No. 261* accompanying SD1 is misleading in that it speaks of "both warming and cooling trends." The inclusion of the word "cooling" suggests that "warming" is debatable.

First, no one who submitted oral or written testimony disputed the reality of global warming but had other legitimate concerns. Furthermore, scientists from around the world solidly support the research which proves that global warming does exist and that it will profoundly impact us in ways not imagined when the issues were first raised some 30 years ago.

See below for an article published on February 24, 2009, in Agence France-Press concerning the current scientific research.

2 Although several of us were asked to draft amendments to the bill at the conclusion of the hearing by the two *Chairs*, SD1 had only two very modest language changes: The first is in Section 1.1 - *climate warming trends to global warming and climate change trends*; and the second is in Section 1.3 - *climate warming to climate change*. Although I approve of these changes, they do not address what I consider to be the major issues.

While I can't speak for the others who submitted comments, I know that my concerns have to do with the size and the makeup of the Global Warming Task Force. See below my signature for my amendments.

Another major concern is the cost of the Task Force and where the funds will come from. The current draft still leaves the \$\$\$ amount blank.

The Global Warming Task Force is not going to be done *on the cheap*. Based upon the task forces set up to deal with the Sustainability 2050 plan and the current Greenhouse Gas Emissions Reduction Task Force AND without making any of the proposed changes I suggested, we are talking about a minimum of \$500,000 and perhaps as much as \$800,000.

These concerns are not new - after hearing that *Senator* Nishihara was going to submit a bill similar to the one which died last year, on several occasions starting in early December, 2008, I attempted to meet with him to address my concerns along with information about possible private and federal funding resources to help underwrite the costs.

Although several meetings were scheduled, they were canceled because of the *Senator's* other commitments.

Here's my suggestion with respect to the SB 266 SD1: Defer further action on it because of the financial uncertainties facing the state. In the meantime, establish an Interim Working Group comprised of representatives from the *NGOs* working on these issues, key members of the *Legislature*, staffers at impacted state agencies, and faculty & researchers from the *University of Hawai'i*, *Hawai'i Pacific University*, and the *East-West Center* to draft a bill to be submitted to the *2010 Legislature*.

In the meantime, the state's financial situation will become clearer over time plus the proposed legislation coming from the *Obama Administration* and *Congress* might very well contain specific funding for the Task Force.

This will also give the Interim Working Group the time to search out funding resources from private foundations with an interest in the broad issues underlying global warming. I know I identified four of them - and I am sure that there will be more available over the next several months.

*Mahalo* for the opportunity to submit these comments.

  
Shannon Wood, *President*  
*Windward Ahupua'a Alliance*

## PROPOSED CHANGES FOR SB 266 - RELATING TO GLOBAL WARMING

1. Reduce the total number of seats from 29 to 20;
2. Reduce the number of appointments by the *Governor* from 11 to 7; eliminate all military representatives;
3. Expand the focus to include all commercial areas across the state which might be directly impacted by rising sea levels;
4. With respect to funding, make it clear that the state financial support would be matching funds and that the Governor's Office, in conjunction with the *Legislature* and other interested parties, would identify and apply for federal & private grants to help underwrite the Task Force's costs.

5. **PROPOSED MEMBERS**

*Chair, State Department of Agriculture*

*Chair, State Department. of Transportation*

*Chair, State Department of Land & Natural Resources*

*Deputy Director, State Department of Health*

*State Energy Office Administrator (DBEDT)*

*State Planning Office Administrator (DBEDT)*

*Hawai'i Tourism Authority (DBEDT)*

*City & County of Honolulu Chief Planning Officer*

*Maui County Chief Planning Officer*

*Kaua'i County Chief Planning Officer*

*Hawai'i County Chief Planning Officer*

One representative from an environmental NGO appointed by the *House Speaker*

One representative from the commercial sector appointed by the *House Speaker*

One representative from ocean recreational users appointed by the *House Speaker*

One representative from an environmental NGO appointed by the *Senate President*

One representative from the commercial sector appointed by the *Senate President*

One representative from ocean commercial users appointed by the *Senate President*

One member from the *University of Hawai'i SOEST* faculty & research staff

One member from the *University of Hawai'i Dept. of Urban & Regional Planning*

One energy or environmental researcher from the *East-West Center*

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WASHINGTON -- The risk posed to mankind and the environment by even small changes in average global temperatures is much higher than believed even a few years ago, a study said Monday.

Published by the Proceedings of the National Academy of Sciences, the study updated a 2001 assessment by the Inter-governmental Panel on Climate Change that looked at temperature changes and the risks they pose.

"Today, we have to assume that the risks of negative impacts of climate change on humans and nature are larger than just a few years ago," said Hans-Martin Fussel, one of the authors of the report.

The new study found that even small changes of global mean temperatures could produce the kinds of conditions singled out as "reasons for concern" in the 2001 assessment.

Those included risks to threatened systems such as coral reefs or endangered species; and extreme weather events like cyclones, heat waves or droughts.

Other "reasons for concern" involved the way the impact of climate change is distributed, the aggregate damage caused and the risk of "large scale discontinuities" such as the deglaciation of the Greenland ice sheets.

"Compared with results reported in the (2001 assessment), smaller increases in GMT (global mean temperatures) are now estimated to lead to significant or substantial consequences in the framework of the five 'reasons for concern,'" the study said.

The report said its conclusions were based in part on observations of impacts already occurring because of global warming and better understanding of the risks associated with rising mean temperatures.

They also were based on "growing evidence that even modest increases in GMT (global mean temperature) above levels circa 1990 could commit the climate system to the risk of very large impacts on multiple century time scales," the study said.

Three of the authors of the latest report contributed to the 2001 assessment's chapter on "reasons for concern."

"If the associated risks are larger, the necessity is also larger to reduce the greenhouse gases emissions and to support affected regions to cope with the unavoidable consequences of climate change," Fussel said in a statement.

It was the third report published in recent weeks carrying grim news about climate change.

On February 15, a report by Chris Field, of the Carnegie Institution and a former member of the Inter-governmental Panel on Climate Change, warned that greenhouse gases have accumulated more rapidly in the atmosphere between 2000 and 2007 than anticipated.

Three weeks before that, a study by Susan Solomon, the senior scientist at the National Oceanic and Atmospheric Administration, said changes in surface temperature, rainfall and sea level are "largely irreversible for more than 1,000 years after CO2 emissions are completely stopped."