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STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

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Testimony of SUZANNE D. CASE Chairperson

Before the Senate Committee on WAYS AND MEANS

Thursday, February 23, 2017 1:30 PM State Capitol, Conference Room 211

In consideration of SENATE BILL 1088 RELATING TO CARBON FORESTRY CERTIFICATION

Senate Bill 1088 proposes to appropriate funds for the certification of a carbon reforestation project at Haleakala, Maui, operated by the Department of Land and Natural Resources (Department), under an established forest carbon standard certification system. **The Department supports this measure and provides the following comments.**

The Department is responsible for managing, protecting, and if necessary restoring nearly 1.3 million acres of state lands, beaches, and coastal waters. The ecosystems inhabiting these areas provide a variety of functions indispensable for the wellbeing of Hawaii's communities and economy such as water replenishment and purification, carbon storage, soil protection, genetic resources inherent in its unique flora and fauna, and stunning aesthetics. Particularly in an economy highly dependent on tourism, these functions can hardly be overstated and are further acknowledged in the State of Hawaii's Aloha+ Challenge and Sustainable Hawaii Initiative. However, to date the monetary valuation of those functions remains limited, and programs providing the opportunity for private entities to take on environmental responsibility through voluntary payments are almost non-existent in Hawaii. Such payments could considerably increase the Department's capacity to restore and maintain the critical ecosystem functions provided by the land and water areas under its jurisdiction.

The Department's ongoing reforestation project on a total of 515 acres of degraded pasture land at Kahikinui Forest Reserve (FR) and Nakula Natural Area Reserve (NAR) on the southern slopes of Haleakala, Maui will restore a variety of ecosystem functions including the additional storage of carbon in the restored above and below-ground biomass. If the reforestation would be extended to the entire area of the FR and NAR (approximately 3,700 acres total) an estimated

94,000 metric tons of carbon could be stored. The certification of these reforestation activities would enable the Department to sell carbon credits (one credit equaling one metric ton of carbon stored) which could offset the substantial cost of reforestation. Carbon storage is an ecosystem function for which both compliance (e.g., California Cap & Trade program) and voluntary markets already exist. In 2016, the average price per metric ton of carbon was \$9.70 and \$4.90 on the California compliance market and on the international voluntary market respectively. However, the price per ton varies considerably based on project quality, on additional ecological and social benefits of the project, and on carbon credit marketing. Based on the market position of the reforestation project at Kahikinui FR and Nakula NAR, the initial investment suggested in this bill is projected to produce a return that could not only recoup the investment but contribute funding to the restoration efforts of the project.¹ Further, once the Department achieves accreditation of an established forest carbon standard, areas of new forest carbon projects operated by the Department with similar environmental and social characteristics can be certified at minor additional costs resulting in a return of the initial investment beyond the pilot forest carbon project of this bill.

Recent scientific estimates by the United States Geological Survey suggest that an additional four million metric tons of carbon could be stored by reforesting current grass and shrublands under the jurisdiction of the Department's Division of Forestry and Wildlife. Therefore, the Department believes that the initial investment suggested in this bill could result in tremendous financial and ecological payoffs in the future.

Thank you for the opportunity to comment on this measure.

¹ A current overview of the forest carbon market can be found in the report "State of Forest Carbon Finance 2016" available online: <u>http://www.forest-trends.org/documents/files/doc_5388.pdf</u>



The Nature Conservancy Hawai'i Program 923 Nu'uanu Avenue Honolulu, HI 96817

Testimony of The Nature Conservancy of Hawai'i Supporting S.B. 1088 Relating to Carbon Forestry Certification Senate Committee on Ways and Means Thursday, February 23, 2017, 1:30PM, Room 211

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. 1088 to provide funding to the Department of Land and Natural Resources (DLNR) to establish a certified forest carbon sequestration project on Maui.

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. Healthy and diverse Hawaiian forests act like a sponge, collecting rain and moisture from passing clouds, slowly delivering fresh water into streams and aquifers, and reducing runoff and siltation into near shore waters during storm events. Forests also play an essential role in regulating atmospheric levels of greenhouse gases, and we believe that reforestation with native species can meaningfully contribute to our collective strategies and goals for watershed management and reducing carbon emissions.

At The Nature Conservancy, we have spent the last few years evaluating the potential for a carbon project on Hawai'i island, including reforestation and appropriate certification for carbon sequestration and other ecosystem service benefits like native species protection and water capture. As part of our research, we considered various offset project registries, including Climate Action Reserve, American Carbon Registry, and the Gold Standard. TNC has chosen to work with Climate Action Reserve ("CAR") for any future forest carbon sequestration project because its rigorous protocols have a 100-year permanence requirement, it requires the project to use native forest species, and the forest protocols included in the California compliance cap-and-trade offset market are based on CAR standards.

We think the opportunity for The Nature Conservancy and DLNR to share lessons learned from each of our projects will strengthen the overall results of our collective work and mutual conservation goals, as well as create the best chance for developing a viable model for both public and private landowners.

Thank you for the opportunity to testify in support of this bill. We are excited by the possibilities.

Mark Agne Paul Alston Christopher Benjamin Dr. C. Tana Burkert Anne Carter Richard Cooke III Brian Doyle Thomas Gottlieb James Haynes III Sean Hehir Eiichiro Kuwana Duncan MacNaughton Kathy Matsui James Polk Jean Rolles Scott Rolles Crystal Rose Dustin Sellers Nathan Smith Peter Tomozawa



SENATE COMMITTEE ON WAYS AND MEANS

Thursday, February 23, 2017 1:30 PM Room 211

In SUPPORT SB1088 Relating to Carbon Sequestration Certification

Aloha Chairwoman Tokuda and members of the WAM Committee,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawai'i strongly supports SB1088, which establishes a carbon sequestration certification program in the Department of Land and Natural Resources.

Since 1968, the Sierra Club of Hawai'i has been working to protect the unique natural and cultural resources of our islands. We are deeply concerned about the effects of climate change on the Hawaiian Islands and support an "all of the above" approach to reducing harmful emissions and increasing sequestration of emissions.

We know that carbon sequestration is an important element of a successful climate change management program. The New York State's Department of Environmental Conservation has implemented an effective carbon storage program that encourages tree-planting on public lands, tax incentives for tree planting on private land, and protections against deforestation. Their program found that "[w]isely managed forests can sequester carbon and also provide a sustainable source of fuel and lumber, help clean our air and water, preserve wildlife habitat, provide recreation opportunities and preserve the beauty of trees in their natural home for generations to come."¹

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

Mahalo,

Marti Townsend Director

¹ New York State Carbon Storage Program, http://www.dec.ny.gov/lands/47481.html