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**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

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

**Before the House Committee on
ENERGY & ENVIRONMENTAL PROTECTION**

**Tuesday, February 10, 2015
8:30 AM
State Capitol, Conference Room 325**

**In consideration of
HOUSE BILL 1040
RELATING TO INVASIVE SPECIES**

House Bill 1040 proposes to direct the interagency Hawaii Invasive Species Council (HISC) to contract the University of Hawaii Economic Research Organization (UHERO) to establish an economic model describing the impact and cost to mitigate invasive species in the State. This measure would also direct the Legislative Reference Bureau (LRB) to update its 2002 study, "Filling the Gaps in the Fight Against Invasive Species." **The Department of Land and Natural Resources (Department) offers the following comments.**

The Department is the administrative host of the interagency HISC, and has previously partnered with UHERO on a number of economic studies. In Fiscal Year 2015, the HISC awarded \$50,000 to UHERO to conduct a study on the economic impacts and mitigation costs for a short (5-10 species) list of "top pests" that will be developed as part of the contract. The reason for developing this short list is that the total number of invasive species in Hawaii is not known, and each has a different set of economic impacts depending on its location, density, and natural history characteristics. A single, comprehensive model for all invasive species, as suggested by this measure, would be both difficult to produce and would likely not describe any one species effectively. The Department suggests that rather than producing a single overarching economic model that future funding be directed towards periodically updating UHERO's analysis of impacts and costs for a limited number of priority species.

With regard to SECTION 3 of this measure, directing LRB to update its 2002 study, the Department recognizes that the 2002 study, "Filling the Gaps in the Fight Against Invasive Species," was instrumental in shaping the State's strategy for invasive species prevention, control, research, and outreach. The Department acknowledges that the study should be updated and notes that in 2014 the interagency HISC adopted Resolution 14-2: "Requesting a Legislative

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Reference Bureau Study to Update the 2002 Report Titled ‘Filling the Gaps in the Fight Against Invasive Species’.”



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
House Committee on Energy & Environmental Protection
February 10, 2015 at 8:30 am

By

Robert Bley-Vroman, Chancellor

And

Dr. Kimberly Burnett, Associate Specialist
University of Hawai'i Economic Research Organization
University of Hawai'i at Mānoa

HB 1040 – RELATING TO INVASIVE SPECIES

Chair Lee, Vice Chair Lowen, and Members of the Committee:

Thank you for the opportunity to submit testimony regarding HB 1040, which seeks to appropriate moneys to the Hawai'i Invasive Species Committee (HISC) to contract the University of Hawai'i Economic Research Organization (UHERO) to develop an economic model/formula to establish the impact and cost of mitigating invasive species in the State. As a co-director of UHERO's Project Environment Research Group, I offer the following comments on this bill.

The Bill requires that UHERO contract with HISC to study the impact and cost of mitigating invasive species in Hawai'i. It would be inappropriate for UHERO to attempt to develop a general model or formula to estimate the impact and cost of mitigating invasive species in the State when such a general formula or model is not feasible. Individual models reflecting biological and economic realities should be developed for groups of species or individual species as appropriate. A single model or formula could not reflect the complexities in which non-native organisms interact with Hawaii's ecosystems, economy, people and environments. Such a formula would be incapable of capturing crucial population dynamics and other essential interactions happening between and among the invader and the invaded, a necessary part of calculating the total economic costs and damages to a system such as Hawai'i.

Furthermore, UHERO is currently (FY15) contracted by HISC to estimate the costs of invasive species in Hawai'i, for a group of the most significant threats. Because a comprehensive study of every invasive species statewide would be a difficult and prohibitively costly effort, a list of top pests (for which costs can be assessed in dollar terms) will be developed in collaboration with invasive species managers, the CGAPS steering committee, HDOA, DLNR, TNC and watershed partnerships on each island. Once the list is finalized, UHERO will interview individuals in affected sectors and review relevant existing reports to collect information on damage costs (e.g. value of crop losses) and mitigation costs (e.g. costs of treating affected products with herbicide/pesticide) generated by those top pests. Given the importance of invasive

species that do not necessarily generate easily quantifiable monetary costs, UHERO will also discuss non-monetized damages of such species in terms of lost ecosystem services (e.g. groundwater recharge).

We suggest amending HB 1040 to appropriate moneys to HISC to contract UHERO to periodically update the FY15 study we expect to complete by December 31, 2015. As an alternative, we suggest that continued funding be provided to HISC to contract UHERO to conduct future economic analyses of the impact and costs of individual or related species.



Testimony of the O'ahu Invasive Species Committee
Supporting H.B. 799 Relating to the Uniform Aeronautics Act
House Committee on Energy and Environmental Protection
Tuesday, February 10, 2015, 8:30AM, Room 325

The O'ahu Invasive Species Committee (OISC) supports H.B. 1040 that provides unspecified funding to the Hawai'i Invasive Species Council to contract with the University of Hawai'i Economic Research Organization to establish an economic model formula that establishes the impact of and the cost to mitigate invasive species in the State. The bill would also fund the Legislative Research Bureau to update its 2002 study "Filling the Gaps in the Fight Against Invasive Species".

OISC could use this research to explain to the public how damaging invasive species are. The findings could also be useful in raising money to leverage state funds and help OISC gauge whether the money spent on certain projects is appropriate. In order to ensure that funding remains intact for invasive species prevention, rapid response and management programs supported by the Hawai'i Invasive Species Council, we encourage the Legislature to *add* this funding to the \$6 million proposed in H.B. 437 and not designate it as a portion of that funding.

The O'ahu Invasive Species Committee works island-wide to remove incipient invasive species from O'ahu before they become so abundant that they begin to damage ecosystems. OISC employs 17 people that conduct early detection, systematically survey and remove incipient invasive plants, educate the public about how special Hawai'i's biota is and how to protect it and assist the Department of Agriculture to survey and control for vertebrates and invertebrates.

OISC has benefitted from HISC funds for many years and we thank the Legislature for their continued support in the fight against invasive species. Thank you for your support.

Sincerely,
The O'ahu Invasive Species Committee



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Testimony of The Nature Conservancy of Hawai'i
Supporting H.B. 1040 Relating to Invasive Species
House Committee on Energy and Environmental Protection
Tuesday, February 10, 2015, 8:30AM, Room 325

The Nature Conservancy of Hawai'i is a private non-profit conservation organization dedicated to the preservation of the lands and waters upon which life in these islands depends. The Conservancy has helped to protect nearly 200,000 acres of natural lands in Hawai'i. Today, we actively manage more than 35,000 acres in 11 nature preserves on 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.

The Nature Conservancy supports H.B. 1040. It has been a dozen years since the Legislative Reference Bureau issued its analysis on invasive species that resulted in the Legislature's establishment of the Hawai'i Invasive Species Council. It makes sense to revisit and update the economic impacts of invasive species, the sufficiency of funds provided, and the efficacy of efforts since that time to best understand the threat and make informed decisions about future allocations of State resources.

Invasive weeds, insects, diseases, snakes, and other pests are one of the greatest threats to Hawaii's economy, agriculture, natural environment, and the health and lifestyle of its people. With favorable conditions and limited competition, non-native species arrive in the Hawaiian Islands to find an easy environment in which to thrive.

The Hawai'i Invasive Species Council (HISC) provides a comprehensive, statewide approach to invasive species policy and funding including prevention, early detection, control, research and education programs. This effort necessarily results in important coordination, collaboration, and prioritization amongst government agencies and partners based on a variety of issues including human health, safety and well-being, economic and agricultural harm, and the threat to the health and function of the natural environment.

We appreciate and support this measure requesting the LRB, with help from the UH Economic Research Organization, to update its 2002 assessment of the scope, status and costs of the problem.

Thank you for this opportunity to offer our support for this bill.

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LEGISLATIVE REFERENCE BUREAU
State of Hawaii
State Capitol, Room 446
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Written Comments

HB1040
RELATING TO INVASIVE SPECIES



Comments by the Legislative Reference Bureau
Charlotte A. Carter-Yamauchi, Acting Director

Presented to the House Committee on Energy and Environmental Protection

Tuesday, February 10, 2015, 8:30 a.m.
Conference Room 325

Chair Lee and Members of the Committee:

Good morning Chair Lee and members of the Committee, my name is Charlotte Carter-Yamauchi and I am the Acting Director of the Legislative Reference Bureau. Thank you for providing the opportunity to submit written comments on H.B. No. 1040, Relating to Invasive Species.

The purpose of this measure is to:

- (1) Require the Hawaii Invasive Species Council to execute a contract with the University of Hawaii Economic Research Organization to establish an economic model formula that establishes the impact of and the cost to mitigate invasive species in the State.
- (2) Appropriate moneys to the Hawaii Invasive Species Council for the contract; and
- (3) Require the Legislative Reference Bureau to update its 2002 study "Filling the Gaps in the Fight Against Invasive Species," by reporting on:
 - (A) Mitigation and eradication efforts for the invasive species identified in its report;
 - (B) Funding provided by the Legislature since fiscal year 2002-2003 to assist in mitigation and eradication efforts;
 - (C) The sufficiency of the funding; and
 - (D) The efficacy of the mitigation and eradication efforts.

While the Legislative Reference Bureau takes no position on this measure, we submit the following comments regarding the portion of the measure that directs the Bureau to update its 2002 study for your consideration.

When the Bureau conducted its 2002 study, one of its recommendations was to establish a state invasive species administrator/coordinator position to spearhead the State's invasive species mitigation and eradication efforts. In response to this recommendation, the Legislature established the Hawaii Invasive Species Council in 2003, pursuant to Act 85, Session Laws of Hawaii 2003, as an alternate means of coordinating interagency efforts to mitigate and eradicate invasive species.

According to section 194-2(a)(4), Hawaii Revised Statutes, some of the duties of the Council are to:

- (1) Maintain a broad overview of the invasive species problem in the State;
- (2) Advise, consult, and coordinate invasive species-related efforts with and between the Departments of Agriculture, Land and Natural Resources, Health, and Transportation, as well as state, federal, international, and privately organized programs and policies;
- (3) Identify and prioritize each lead agency's organizational and resource shortfalls with respect to invasive species;
- (4) After consulting with appropriate state agencies, create and implement a plan that includes the prevention, early detection, rapid response, control, enforcement, and education of the public with respect to invasive species, as well as fashion a mission statement articulating the State's position against invasive species;
- (5) Coordinate and promote the State's position with respect to federal issues;
- (6) Identify and record all invasive species present in the State;
- (7) Designate the Department of Agriculture, Health, or Land and Natural Resources as the lead agency for each function of invasive species control, including prevention, rapid response, eradication, enforcement, and education;
- (8) Identify all state, federal, and other moneys expended for the purposes of the invasive species problem in the State;
- (9) Identify all federal and private funds available to the State to fight invasive species and advise and assist state departments to acquire these funds;

- (10) Advise the Governor and Legislature on budgetary and other issues regarding invasive species;
- (11) Provide annual reports on budgetary and other related issues to the Legislature twenty days prior to each regular session;
- (12) Include and coordinate with the counties in the fight against invasive species to increase resources and funding and to address county-sponsored activities that involve invasive species;
- (13) Review state agency mandates and commercial interests that sometimes call for the maintenance of potentially destructive alien species as resources for sport hunting, aesthetic resources, or other values;
- (14) Review the structure of fines and penalties to ensure maximum deterrence for invasive species-related crimes;
- (15) Suggest appropriate legislation to improve the State's administration of invasive species programs and policies;
- (16) Incorporate and expand upon the Department of Agriculture's weed risk assessment protocol to the extent appropriate for the Council's invasive species control and eradication efforts; and
- (17) Perform any other function necessary.

In closely reviewing these statutory duties of the Council and the scope of the Bureau's 2002 study, it would seem that the issues identified to be updated now fall under the ongoing responsibilities of the Hawaii Invasive Species Council and, consequently, it would seem that the requested update by the Bureau would be redundant of the efforts of the Council. Further, we note that the only aspects of the 2002 study that do not seem to clearly fall under the current jurisdiction of the Hawaii Invasive Species Council, and thus could possibly benefit from an updated review, are the economic and other costs to Hawaii component (the portion of the measure that directs the Council to contract the services of UHERO for an economic model), and the health and safety issues component (not currently covered under the scope of the measure's language). Nevertheless, if the Committee would like the Bureau to undertake the requested update, we are certainly able to do so. However, we would request the measure be amended to require that the Council cooperate with, and provide any requested information to, the Bureau.

Thank you again for this opportunity to provide written comments.



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February 10, 2015

HEARING BEFORE THE
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

TESTIMONY ON HB 1040
RELATING TO INVASIVE SPECIES

Room 325
8:30 AM

Aloha Chair Lee, Vice Chair Lowen, and Members of the Committee:

I am Christopher Manfredi, President of the Hawaii Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,932 farm family members statewide, and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic and educational interest of our diverse agricultural community.

HFB supports HB 1040, which appropriates moneys to HISC to contract UHERO to establish an economic model formula to establish impact and cost of mitigating invasive species in the State and requires LRB to update its 2002 study on invasive species.

Invasive species have become one of the most devastating problems impacting Hawaii. Many invasive species are damaging Hawaii's environment and economy. Agriculture has a vested interest in this matter. Agriculture suffers when invasive species are introduced. Every year, numerous new pests are introduced into the State, such as the coqui frog, coffee berry borer, macadamia felted coccid, little fire ant, coconut rhinoceros beetle, small hive beetle and varoa mite, to name a few. Control measures take time to develop, leaving farmers and ranchers at risk. This is not consistent with the State's goal of increasing self sufficiency and sustainability.

Proper funding for HISC is critical for the protection of Hawaii's environment and economy and the health and lifestyle of its people through the support of invasive species prevention, control, research, outreach, and planning.

Thank you for the opportunity to comment on this measure.