UNIVERSITY OF HAWAI'I SYSTEM
'ŌNAEHANA KULANUI O HAWAI'I

Legislative Testimony
Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

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Testimony Presented Before the
House Committee on Higher Education & Technology
Wednesday, March 20, 2024 at 2:00 p.m.
By
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And
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SB 2284 SD2 HD1 – RELATING TO A WILDFIRE FORECAST SYSTEM FOR HAWAII

Chair Perruso, Vice Chair Kapela, and Members of the Higher Education & Technology Committee:

Thank you for the opportunity to provide testimony in support of Senate Bill 2284 SD2 HD1, provided its adoption does not impact priorities as indicated in our Board of Regents Approved Budget. This measure establishes and appropriates funds for the University of Hawai'i to develop a wildfire forecast system for the State of Hawai'i. The system will assist in forecasting potential wildfire incidents across the State of Hawai'i in order to enhance public safety, preparedness, and risk mitigation.

This early detection system will allow authorities to issue timely warnings to enhance the preparedness of first responders and enable the broader community to take proactive measures, such as evacuation planning and home risk mitigation. By providing timely information, these forecasts can help reduce the total area burned and mitigate the overall impacts of wildfire through rapid response and suppression efforts. By better anticipating potential wildfire locations and intensities, the forecast system assists emergency responders to allocate resources more efficiently. This includes positioning of firefighting teams, equipment, and helicopters in strategic locations based on the forecasted fire behavior. The rapid response leads to better control of the fire, reducing its spread and resultant damage. Finally, in collaboration with the National Weather Service, Department of Land and Natural Resources-Division of Forestry and Wildlife, Hawai'i-Emergency Management Agency, and county fire departments, wildfire risk forecasts from this project will be integrated into the Red Flag Warning to improve the overall preparedness and response capabilities of these agencies.

The UH Mānoa (UHM) College of Engineering's research capabilities in artificial intelligence and the Hawai'i Climate Data Portal development by the UHM Water Resources Research Center, combined with the extensive outreach activities and technical solutions from the UHM College of Tropical Agriculture and Human Resources, will provide the full range of skillsets and research, as well as the climate data necessary to develop this important tool for Hawai'i's decision-makers.

Thank you for the opportunity to testify on this measure.

TESTIMONY FROM THE DEMOCRATIC PARTY OF HAWAIʻI

HOUSE COMMITTEE ON HIGHER EDUCATION & TECHNOLOGY

MARCH 20, 2024

SB2284 SD2 HD1 – RELATING TO A WILDFIRE FORECAST SYSTEM FOR HAWAIʻI.

POSITION: SUPPORT

The Democratic Party of Hawaiʻi **supports** SB2284 SD2 HD1, relating to a wildfire forecast system for Hawaiʻi. Pursuant to the "Public Safety and Disaster and Emergency Preparedness" section of the Democratic Party of Hawaiʻi platform, the party supports "policy that protects the people of Hawaiʻi and their property against natural and man-made disasters," and "believes that climate change is real, affirms human activity as its primary cause and main driver, and supports emergency preparedness and planning efforts to mitigate its impacts."

Last year, we witnessed the impact of the climate emergency on our shores. On August 8, 2023, wildfires swept across Maui and killed at least 100 people, making it one of the nation's deadliest natural disasters. The spread of the fires has been attributed to climate change conditions, such as unusually dry landscapes and the confluence of a strong high-pressure system to the north and Hurricane Dora to the south.

The wildfires destroyed over 2,200 structures, including numerous residential buildings, historic landmarks, and school facilities. In September

2023, a report from the United States Department of Commerce estimated the total economic damage of the wildfires to be roughly $5.5 billion. According to a report issued by the University of Hawaiʻi Economic Research Organization on September 22, 2023, the unemployment rate on Maui was expected to soar above 11 percent by the end of 2023 and remain above 4 percent through 2026. A total of 10,448 new claims for unemployment in Maui County were filed in the four weeks following the wildfires, about 9,900 more than the preceding four weeks. Displaced families and workers who lost their jobs are still attempting to recover from the disaster, with a full recovery expected to take many years to achieve.

Accordingly, we must do all we can to prevent tragedies like this from occurring again on our shores, including by investing in this two year program that will generate a wildfire forecast system using artificial intelligence approaches. The system will forecast the risk of wildfires statewide to enhance public safety, preparedness, and risk mitigation, including improving the preparedness of firefighters and enabling residents to take proactive fire mitigation measures for their homes and plan for evacuations.

The Hawaiʻi Emergency Management Agency released an updated State Hazard Mitigation Plan last November, in which the state's wildfire risk level soared 74 percent to 6.6 from its previous level of 3.8 in the 2018 draft of the report.

The updated hazard mitigation plan contains statistics on how many people by county are at risk from wildfire hazards. For Honolulu, 427,293 people could potentially be affected by wildfires, which was listed as the highest risk with a risk factor of 5.7. Maui County also has wildfires as its highest emergency risk with a score of 5.8 and 81,424 people at risk. On Kauaʻi, wildfires carry a 5.6 risk level and threaten 27,604 people. Hawaiʻi Island has a wildfire risk score of 4.6 and 32,080 people at risk.

Wildfires are now designated as the top hazard in the state according to the updated HIEMA report. It is incumbent upon policymakers to respond with urgency to keep our communities safe.

Mahalo nui loa,

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HEARING BEFORE THE HOUSE COMMITTEE ON COMMITTEE ON HIGHER EDUCATION & TECHNOLOGY
HAWAII STATE CAPITOL, HOUSE CONFERENCE ROOM 309
Wednesday, March 20, 2024 AT 2:00 P.M.

To The Honorable Amy A. Perruso, Chair
The Honorable Jeanne Kapela, Vice Chair
Members of the Committee on Higher Education & Technology

COMMENTS on SB2284 SD2 HD1 RELATING TO A WILDFIRE FORECAST SYSTEM FOR HAWAII

The Maui Chamber of Commerce would like to **COMMENT on SB2284 SD2 HD1** which establishes a 2-year program at the University of Hawaii to develop a wildfire forecast system for the State using artificial intelligence, appropriates moneys, and declares that the appropriation exceeds the state general fund expenditure ceiling for 2024-2025.

The Chamber supports the idea of using leading technologies to help us forecast environmental shifts and predicting and providing advance warning on disasters. Modeling already exists for disasters like hurricanes and we feel wildfire modeling is appropriate and would like to see where this fits in a comprehensive wildfire preparedness plan.

We would like to suggest that this effort and the effort in SB2502 (relating to the generation of wildfire susceptibility maps for Hawaii) should be combined.

Mahalo for the opportunity to offer **COMMENTS on SB2284 SD2 HD1**.

Sincerely,

Pamela Tumpap

Pamela Tumpap
President

To advance and promote a healthy economic environment for business, advocating for a responsive government and quality education, while preserving Maui's unique community characteristics.

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