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RESOLUTION 23-1

RECOGNIZING THE ROLE OF INVASIVE PLANTS AS IT RELATES TO WILDFIRE IN HAWAI'I & SUPPORTING RECOMMENDATIONS FOR THE PREVENTION & POST-RECOVERY EFFORTS TO MITIGATE FUTURE IMPACTS

WHEREAS the devastating fires in Lahaina and Kula, Maui in August 2023, as well as reoccurring wildfires on Hawai'i Island and throughout the State, are clear examples of the negative impacts of invasive species and a changing climate; and

WHEREAS Hawaii's native ecosystems did not evolve with fire as a regular part of the ecosystem and most native species are not fire-adapted; and

WHEREAS Hawaiian landscapes began a massive change 245 years ago with the introduction of livestock (including cattle, goats, and sheep) and western principles of land management, and also drought-resistant grasses and shrubs for their fodder, and invasive plants that contribute to the degradation of watersheds and loss of native species; and

WHEREAS the transformation of upland native forests to dominated stands of invasive plants like strawberry guava, *psidium cattlianum*, can cause more water to transpire into the atmosphere resulting in less water feeding into streams, aquifers, and cooling forests; and

WHEREAS over the last one hundred years, the average annual rainfall decreased across 90% of the Hawaiian islands with the greatest declines in already dry leeward areas; and

WHEREAS the frequency and severity of drought has increased in the Hawaiian Islands, contributing to increased wildfire risk and the average area burned in Hawai'i increasing by 400% over the last century; and

RECOGNIZING that the natural environment is the first line of defense against climate change and that managing invasive species must be included as a critical component of protecting island resiliency; and

RECOGNIZING that unmanaged lands pose a greater wildfire risk than managed land and that any vegetation, invasive or not, can burn under extreme drought and high wind conditions; and

RECOGNIZING that invasive grasses can dry rapidly resulting in a large build-up of continuous fuels across large areas that allow for easier ignitions and for fire to spread long distances before they are stopped; and

RECOGNIZING that when Hawaiian forests burn, fast-growing grasses and woody invaders are the first to establish by outcompeting native regeneration, thus altering hydrological and nutrient cycling, and making landscapes more prone to future fire; and

RECOGNIZING that some invasive grasses still play a critical role in managed systems like ranching and

agriculture that are economically important industries, as well as in ecological restoration where some species suppress other harmful plants or are adapted to grow in more extreme climatic conditions without the need for irrigation; and

RECOGNIZING that high intensity wildfires can leave bare ground that is at increased risk of large-scale erosion that can threaten the near-shore environment and also deplete soil of vital nutrients that are needed for soil stabilization and revegetation; and

RECOGNIZING that current and projected climate change impacts, including increased land temperatures, a decline in rainfall, increased frequency and severity of drought, and increased storm severity will all serve to increase the risk of wildfire in Hawai'i in the future; and

WHEREAS, Chapter 194, Hawai'i Revised Statutes, authorizes the Hawai'i Invasive Species Council to advise and coordinate invasive species-related efforts with and between local, state, federal, international, and private programs, and to coordinate the State's position with regard to invasive species; now, therefore,

BE IT RESOLVED that the Hawai'i Invasive Species Council recognizes that the prevention, management, and control of invasive plants must be prioritized to mitigate future wildfire threats and improve Hawaii's climate resiliency for the protection and health of communities, native species, businesses and industries, and way of life in the islands; and

BE IT FURTHER RESOLVED that the Hawai'i Invasive Species Council supports a holistic approach for land-use planning, including fire codes and taxation policies to incentivize risk reduction and enhance ecosystem services and public well-being that includes identifying support mechanisms that empower ranchers and local agricultural producers to reduce existing fuel loads while also meeting food security goals, and setting aside land for fire buffers around communities using low-fire risk crops, and considering the use of biocontrol strategies for landscape level control, a process that does take into consideration economic and ecological implications as well as potential impacts to critical industries; and

BE IT FURTHER RESOLVED that the Hawai'i Invasive Species Council recommends using native plants or non-native plants that are low risk of becoming invasive for revegetation efforts whenever feasible and that local seed sources are used whenever possible to reduce the risk of new invasive plant introductions; and

BE IT FURTHER RESOLVED that the Hawai'i Invasive Species Council recommends amplifying production of locally appropriate native seed and other plant materials to provide adequate resources for post-fire recovery and fuels conversion projects to reduce fire risk; and

BE IT FURTHER RESOLVED that the Hawai'i Invasive Species Council recommends sourcing organic materials for erosion control and re-vegetation from on-island sources, and ensuring if a local source is not available, that material is inspected or treated before transporting to the site for invasive species like coconut rhinoceros beetles (*Oryctes rhinoceros*) and little fire ants (*Wasmannia auropunctata*); and

BE IT FURTHER RESOLVED that the Hawai'i Invasive Species Council does not recommend revegetating or creating fire breaks with plants that are considered invasive or high-risk by the Hawaii-Pacific Weed Risk Assessment and the Weed Fire Risk Assessment Tools, both of which are scientifically established and validated methods for assessing a plant's risk of invasion or being fire-promoting respectively; and

BE IT FURTHER RESOLVED that certified copies of this Resolution be transmitted to the Governor of Hawaii, the President of the State Senate, the Speaker of the State House of Representatives, and to the

directors or chairpersons of each HISC agency.

Adopted by the Hawai'i Invasive Species Council on the following date: December 19, 2023

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