BILL 109 (2025), AMENDING CHAPTER 20.35, MAUI COUNTY CODE, RELATING TO OUTDOOR LIGHTING (WAI-11): Water and Infrastructure Committee

2 September 2025

Aloha kakahiaka Chair Cook, Chair Lee and members of the committee. I am Jay Penniman, I live in Ulumalu, in Hamakualoa, I am the Special Projects and Development Specialist for Maui Nui Seabird Recovery Project. I am a member of the Hawai'i State Dark Night Skies Protection Advisory Committee. I am here to respectfully request this committee direct the Department of Public Works to fully implement Ordinance 5434, which goes a long way toward protecting wildlife from outdoor lighting and sets the stage for preserving dark night skies, while maintaining public safety and allowing exemptions for nighttime sports and recreation. Maui County joined Hawai'i County in 2022 by limiting the short wave length spectral content of most outdoor lighting to less than 2% between 400 and 500 nanometers. Hawai'i County has streetlights and their harbors and airports lit with ordinance compliant lights for a decade and a half. Hawai'i County has not experienced a degradation of their safety nor an increase in accidents on their roads since they implemented these standards. The body of scientific literature documenting the deleterious effects of short wavelength light at night continues to grow. All life on earth evolved with darkness at night and what light was available was long wave length light, that is flames from fire - the yellow to red end of the visible spectrum. All life needs to have full spectrum light in the daytime and darkness at night. In our modern societies we need to operate at night and we are best adapted to operate in the presence of long wavelength light. Bill 109 would effectively gut ordinance 5434. There is a requirement that the color rendering of lights be at least 70%. There is no standard from which this is taken and the street lighting that has been in place for decades, High Pressure Sodium, has color rendering of 21-30%, to which there have been no complaints. DPW has been offered compliant LED options that have better color rendering, at 50%, yet they have not chosen to avail themselves of these options. There is nothing unsafe about the lighting required in ordinance 5434. Section 20.35.060 General Requirements. Paragraph A would exempt existing lights from the requirement of being fully shielded. Full shielding has been in the Maui County Outdoor Lighting Ordinance for decades; this would be a huge step backward. Paragraph B states that lighting shall not exceed 3000 Kelvin when wildlife compatible lighting is recommended to be no more than 2200 and preferably 1800 Kelvin. But Kelvin values do not represent the amount of short wave length content. That is why the Hawai'i and Maui County ordinances require less than 2% spectral content between 400 and 500 nanometers. I could go on but my three minutes would be exceeded. Please discard Bill 109 and require DPW to fully implement and enforce ordinance 5434. Mahalo.