COUNCIL OF THE COUNTY OF MAUI CLIMATE ACTION, RESILIENCE, AND ENVIRONMENT COMMITTEE

June 21, 2022

Committee Report No. _____

Honorable Chair and Members of the County Council County of Maui Wailuku, Maui, Hawaii

Chair and Members:

Your Climate Action, Resilience, and Environment Committee, having met on February 23, 2022, March 16, 2022, and June 1, 2022, makes reference to the following:

- 1. County Communication 21-546, from Councilmember Kelly Takaya King, relating to seabird and biodiversity protection.
- 2. Bill 21 (2022) entitled "A BILL FOR AN ORDINANCE AMENDING CHAPTER 20.35, MAUI COUNTY CODE, RELATING TO OUTDOOR LIGHTING FOR PROTECTION OF SEABIRDS."

Bill 21's purpose is to regulate all outdoor lighting fixtures, including swimming and decorative pool lighting, to be light emitting diode fixtures that are down directed, fully shielded, and mounted as low as physically possible to limit light trespass and reflection off ground surfaces to protect native Hawaiian seabirds from becoming disoriented by artificial light.

Your Committee notes that native Hawaiian seabirds are an essential part of Maui's biodiversity. Protection of these seabirds is critical, as their vital connection with mountain watersheds and seashore reefs greatly benefit the health of our ecosystem.

Your Committee further notes that artificial lighting has a major negative impact on various species of animals, but is particularly harmful to birds.

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Your Committee expressed concern that residential compliance may be challenging due to the availability of conforming outdoor light fixtures at retail establishments.

Your Committee agreed to amend Bill 21 (2022) to require the Director of Public Works to establish and maintain a list of compliant outdoor light fixtures, and develop administrative rules that set height restrictions for outdoor lighting.

The Department of Public Works will also be responsible for community education and outreach programs.

Your Committee supported the three-year implementation period that would allow adequate time for the County and residents to comply with the new requirements.

Your Committee voted 6-1 to recommend passage of Bill 21, CD1 (2022) on first reading and filing of the communication. Committee Chair King, Vice-Chair Sinenci, and members Johnson, Lee, Molina, and Paltin voted "aye." Committee member Sugimura voted "no."

Your Committee is in receipt of Bill 21, CD1 (2022), entitled "A BILL FOR AN ORDINANCE AMENDING CHAPTER 20.35, MAUI COUNTY CODE, RELATING TO PROTECTING SEABIRDS FROM OUTDOOR LIGHTING," incorporating your Committee's recommended revisions and nonsubstantive revisions.

Your Climate Action, Resilience, and Environment Committee RECOMMENDS the following:

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- 1. That Bill 21, CD1 (2022), as revised herein and attached hereto, entitled "A BILL FOR AN ORDINANCE AMENDING CHAPTER 20.35, MAUI COUNTY CODE, RELATING TO PROTECTING SEABIRDS FROM OUTDOOR LIGHTING," be PASSED ON FIRST READING and be ORDERED TO PRINT; and
- 2. That County Communication 21-546 be FILED.

This report is submitted in accordance with Rule 8 of the Rules of the Council.

Kelly 7. King KELLY TAKAYA KING, Chair

care:cr:22074aa:brs

ORDINANCE NO.

BILL NO. _____ (2022)

A BILL FOR AN ORDINANCE AMENDING CHAPTER 20.35, MAUI COUNTY CODE, RELATING TO PROTECTING SEABIRDS FROM OUTDOOR LIGHTING

BE IT ORDAINED BY THE PEOPLE OF THE COUNTY OF MAUI:

SECTION 1. The purpose of this Ordinance is to protect native Hawaiian seabirds from becoming disoriented by artificial lights during their maiden flights from their burrows out to sea. This is often referred to as "fallout" and leaves the birds at risk of predation by cats, mongoose, and other predators, as well as vulnerable to vehicle collisions and starvation.

Native Hawaiian seabirds are an important part of Hawaiian history and were traditionally used by navigators to find their way back home to their islands. They also help our fishermen locate schools of ahi and are critical to our watersheds by helping to fertilize the soils and nearshore coral reef habitats with marine nutrients found in their droppings.

The Council's intent is to protect native Hawaiian seabirds as much as possible from interference of onshore sources of artificial light.

SECTION 2. Section 20.35.060, Maui County Code, is amended to read as follows:

"20.35.060 General Requirements. A. All new outdoor lighting fixtures [shall] <u>must</u> comply with the requirements of section 20.35.090.

B. All outdoor lighting fixtures that were legally installed before January 25, 2007, [shall] <u>must</u> comply with section

20.35.090 [by January 1, 2020; except class III lighting fixtures that were legally installed before January 25, 2007 shall be exempt from section 20.35.090].

C. Mercury vapor [shall] <u>must</u> not be used for new outdoor lighting fixtures or for the replacement of existing outdoor lighting fixtures. All existing mercury vapor outdoor lighting fixtures [shall] <u>must</u> be removed [within ten years of the enactment of this ordinance.] by January 25, 2017.

D. All outdoor lighting fixtures, except for neon, must be filtered light emitting diode fixtures that limit short wavelength content to no more than two percent of blue light content. "Blue light content" means the ratio of the amount of energy emitted by the outdoor light fixture between 400 and 500 nm divided by the amount of energy between 400 and 700 nm.

E. All outdoor lighting fixtures, except for neon, must be:

<u>1.</u> Down directed with no light shining above the horizontal. Wall-mounted fixtures must have opaque shields to direct all light down, and, if the light hits a wall surface, the surface must be non-reflective (e.g., not a polished or glass surface; painted surfaces must have matte paint).

2. Fully shielded, including shielding that ensures no light shines over the ocean.

<u>3.</u> The director of public works must develop administrative rules that set height restrictions for outdoor lighting within one year of the effective date of this ordinance.

<u>F.</u> The director of public works must establish and maintain a list of light fixtures that comply with this chapter."

SECTION 3. Section 20.35.070, Maui County Code, is amended to read

as follows:

"**20.35.070 Exemptions.** <u>A.</u> The following [shall be] <u>are</u> exempt from the provisions of this chapter:

[A.] <u>1.</u>All outdoor lighting fixtures producing light directly by the combustion of fossil fuels, such as kerosene and gasoline[;].

[B.] <u>2.</u>Low wattage fixtures used for holiday decorations only[;].

[C. Temporary lighting used for public safety, road construction or emergency repair, field harvesting, and road crossing;

D. Temporary hotel and condominium beach security lighting;

E. Safety and security lighting for water features, except that water feature lighting such as for waterfalls, jet sprays, and

bubblers shall be subject to the usage restrictions of section 20.35.090;

F. Replacement of outdoor lighting fixtures legally installed before the enactment of this ordinance with the same or like fixtures; provided, that such lighting fixtures shall be subject to sections 20.35.060.B and 20.35.060.C;

G. Outdoor lighting fixtures on a motion sensor timed to turn off within a five-minute time limit;

H. Lighting on federal and State properties and on areas under the jurisdiction of the federal and State government, including, but not limited to, Hawaiian home lands, State conservation districts, airports, and harbors.]

B. All outdoor lighting fixtures installed prior to the enactment of the ordinance establishing subsections 20.30.060(D) and (E) are exempt from the provisions of those subsections for a period of three years from the date of enactment of the ordinance establishing those subsections; except that lighting for sports and athletic fields on state of Hawaii department of education properties, private school properties, and County parks and facilities may remain exempt from subsection 20.30.060(D) beyond the three-year period if, and for only as long as, there are no compliant lighting fixtures available that meet industry standards for sporting events."

SECTION 4. Section 20.35.090, Maui County Code, is amended to read

as follows:

"20.35.090 Shielding requirements and usage restrictions. Outdoor lighting fixtures [shall] <u>must</u> conform to the following shielding requirements and usage restrictions:

Lamp Туре	Shielding Requirement	Usage Restrictions
Class I		
Augmented	Fully shielded	None
monochromatic		
Low pressure sodium	Fully shielded	None

Metal halide	[Partially] <u>Fully</u> shielded	Off from 11:00 p.m. to
		sunrise*
All others	Fully shielded	None
Class II		
Augmented	Fully shielded	None
monochromatic		
Low pressure sodium	Fully shielded	None
All others (existing)	Fully shielded	None
All others (new)	Fully shielded	None
Class III		
Low pressure sodium	Fully shielded	None
High pressure sodium	Fully shielded	None
Neon	None	Off from 11:00 p.m. to
		sunrise*
Others	Fully shielded	None
Others	[Partially] <u>Fully</u> shielded	Off from 11:00 p.m. to
		sunrise*
Class IV		
Existing	Fully shielded	None
Low pressure sodium	Fully shielded	None
High pressure sodium	Fully shielded	None
Others	Fully shielded	None

*These lights may be used between 11:00 p.m. and sunrise if business or recreational activities are taking place, but [shall] <u>must</u> be turned off no later than one hour after conclusion of activities."

SECTION 5. Material to be repealed is bracketed. New material is underscored. In printing this bill, the County Clerk need not include the brackets, the bracketed material, or the underscoring.

SECTION 6. This Ordinance takes effect on approval.

care:misc:074abill07

INTRODUCED BY:

Kelly 7. King KELLY TAKAYA KING