Climate Action, Resilience, and Environment Committee on 2022-03-16 9:00 AM

Meeting Time: 03-16-22 09:00

eComments Report

Meetings	Meeting Time	Agenda Items	Comments	Support	Oppose	Neutral
Climate Action, Resilience, and Environment Committee on 2022-03-16 9:00 AM	03-16-22 09:00	6	37	32	0	0

Sentiments for All Meetings

The following graphs display sentiments for comments that have location data. Only locations of users who have commented will be shown.

Overall Sentiment



Climate Action, Resilience, and Environment Committee on 2022-03-16 9:00 AM 03-16-22 09:00

Agenda Name	Comments	Support	Oppose	Neutral
CARE-81 MISC ENVIRONMENTAL PROTECTION (GRANT G5537; UNIVERSITY OF HAWAII) (CARE-81)	2	2	0	0
CARE-74 CC 21-546 BILL 21 (2022), SEABIRD AND BIODIVERSITY PROTECTION (CARE-74)	35	30	0	0

Sentiments for All Agenda Items

The following graphs display sentiments for comments that have location data. Only locations of users who have commented will be shown.

Overall Sentiment



Agenda Item: eComments for CARE-81 MISC ENVIRONMENTAL PROTECTION (GRANT G5537; UNIVERSITY OF HAWAII) (CARE-81)

Overall Sentiment



Guest User

Location: Submitted At: 7:41am 03-16-22

I represent Hawai_i Wildlife Fund, and we have worked for a lighting ordinance to help protect our night skies and wildlife for decades. We are excited about this grant to help educate the public about our native seabirds and are in full support. Mahalo nui,

Hannah Bernard Executive Director Hawai_i Wildlife Fund

Christina Levang

Location:

Submitted At: 9:22am 03-14-22

Growing up in Kihei, I remember the streetlights being installed for the first time where I lived as a child. My parents and neighbors strongly opposed it, but we adapted, buying stronger blinds that mitigated the light from entering our bedrooms. The first few months my parents could not sleep but after a while they adapted and learned to simply accept it. As time passed, I saw development increase, buildings obstructing the ocean and Haleakala. With that development, of course more lights came with it. It bugged me so much I wrote a paper in the 7th grade about light pollution in Hawaii. This was in 2006. 16 years later, I am beginning to forget the way things were. Yet, I still remember the dark night sky and the light I did see was coming only from the stars and the moon. It was peaceful and quiet. Being able to hear the waves and see nothing but the faint lines of Haleakala. The dark night should never become a privilege that only some benefit in. It is a natural resource that we all should have and needs to be protected in these fast and changing times. With that said, I am in full support of the outdoor lighting ordinance.

Agenda Item: eComments for CARE-74 CC 21-546 BILL 21 (2022), SEABIRD AND BIODIVERSITY PROTECTION (CARE-74)



Overall Sentiment

Gary Elster

Location: Submitted At: 10:33am 03-16-22

We definitely need to improve our dark skies ordinance and so i support the bill. there are at least a couple of very bright lighted facilities in the valley that make a mockery of the existing ordinance. see attached photo as an example.

Guest User

Location: Submitted At: 8:43am 03-16-22

I am in support of Bill 21 to amend Maui County Chapter 20.35, because it specifies lighting uses that protect wildlife while addressing human needs. It includes a replacement schedule for existing lighting that is problematic as well as prohibitions on new installations of certain bulb types, light wavelengths and direction of illumination. Light pollution is growing exponentially across Maui County, making life for native seabirds and other marine animals more difficult with each passing night.

The specifics regarding shielding and lights used in and around pools or reflective surfaces are especially important too as people build more along the shore, and install more pools, water features and reflective solar panels.

Young seabirds head out to sea for their very first flight in life on an empty belly. They look for starlight reflecting on the ocean, where they will find food. They fly at night because most of their food comes to the surface of the waters at night. They move away from dark land because it should not reflect starlight. Over-lighting on land mimics starlight on the ocean. Young birds fly into lighted areas on land where they circle, confused, until they are exhausted, landing in streets and yards where they can fall victim to dogs and cats.

This not about aesthetics, its about restoring ecosystem functions humans cannot replicate without extensive technology or expense. Seabirds once inhabited all elevations above the waterline throughout Hawai'i nei. 'Ua'u (Pterodroma sandwichensis), a petrel found only in Hawai'i, is endangered. They nest in the highest areas of our mountains, burrowing into cinder and rock cliff faces. Other species nest in our wet rain forests, the 'ua'u kani

(Pufinus pacificus) nests in dunes near beaches and we can hear their calls at night. For eons they fished out to sea and returned to land to nest, bringing with them the gifts of their guano, to all these elevations and habitats, evenly distributed around the islands. Rainy, tropical soils the world over are notoriously lacking in an element critical to plant growth: nitrogen. This is no small matter. In 1856 the US created the Guano Act, giving itself permission to seize islands for the purpose of harvesting guano during the "guano wars,' this included Kure and Laysan in the NWHI. When seabirds poop on land, they complete the nitrogen cycle. Without their deliveries, we cannot repair our native forests and restore our native trees which have proven superior to introduced species for preventing erosion, sequestering carbon and collecting and storing freshwater in forest soils: all necessary ecosystem functions as we face climate change. Nitrogen from sea bird sources has even been proven to be superior to anthropogenic nitrogen for coral reef growth. To mimic this ecosystem function, we would need an army of people hiking 50-pound bags of fertilizer into steep forested areas, or we can reduce the challenges we have created for these birds, make some minor changes to get out of their way and let them do their work. The birds are connected to the land, our forests, our water supplies and back again to protecting the reefs from run-off.

My 35 years of working in conservation in Hawai'i doesn't prepare me to speak as someone born and raised in the culture, but I can speak to a conservation concept that needs more emphasis. The modern definition of a cultural landscape is more than an archeological site. It's a place where you can directly experience the sights, sounds and species that your ancestors would have seen and heard generations ago, and sharing those experiences can help us today understand the origins of a culture. Being able to hear seabirds call at night, to see stars used in navigation may not have scientific or ecosystem function/economic benefits, but those priceless resources and experiences are just as important at preserving the language of a culture.

If we want to prepare our islands for the next human generations in the face of climate change, we have to make room for the next generations of seabirds, the original inhabitants of the islands, to call them back home. Careless and over-lighting does not protect us, it robs us of these ecosystem functions and diminishes the intangible experiences necessary to understand cultural origins. Bill 21 works to restore the broken links in nutrient cycling and cultural connections.

Jeff Bagshaw Communications and Outreach Specialist State of Hawaii, Division of Forestry and Wildlife, Maui Nui Branch Jeff.w.bagshaw@hawaii.gov (808)264-7891

Guest User

Location: Submitted At: 8:38am 03-16-22

My name is Debra Greene, president of the Maui Meadows Neighborhood Association (MMNA), and this testimony is on behalf of the MMNA.

Dark skies are increasingly rare and are a very important natural and cultural resource on Maui. We are in support of this bill which would help limit the effects of light pollution, especially the blue light part of the spectrum.

We would like to see the bill go further and require existing outdoor fixtures to comply with the low blue-light and shielding requirements.

Maui Meadows is zoned rural and those who live in this neighborhood love the rural feel of this area. That includes being able to see the night sky without the pollution from outdoor lighting.

We of course are also concerned about protecting seabirds and sea turtles, which are impacted by light pollution. Check out www.MauiNuiSeaBirds.org/dark-skies for more information on that.

With the proposed Honua'ula (W670) project right next to us, we're also concerned about the "temporary" lighting that would be allowed under this proposed bill, because a huge project like that can have construction or security lighting for years on end. That would be potentially harmful to sea birds, for sure, and also disruptive to our neighborhood. At least "temporary" should be well defined if that is kept in the bill.

Please support the bill and consider these modifications. Mahalo.

Sincerely,

Debra

Debra Greene, PhD MMNA President www.MauiMeadowsNA.com MauiMeadowsNA@gmail.com

Guest User

Location: Submitted At: 7:57am 03-16-22

SUPPORT OF INTENT OF BILL 21 SEABIRD AND BIODIVERSITY PROTECTION (CARE-74)

Climate Action, Resilience, and Environment Committee Meeting March 16, 2022 9:00 a.m.

Aloha mai kakou Chair King, Vice-Chair Sinenci, and members of the Committee:

I am Hannah Bernard and am submitting testimony on behalf of Hawai_i Wildlife Fund in strong support of the intent of Bill 21, which would amend Maui County's lighting ordinance to increase protections for Hawai'i's imperiled seabirds. We have worked for decades with the County to conceive more protective lighting measures for our native wildlife, especially seabirds and sea turtles. We welcome the efforts of this Committee to improve upon our Outdoor Lighting Ordinance and strengthen wildlife protection. Bill 21 would update the lighting ordinance to reflect the latest science on how best to minimize harm from artificial lighting, which can attract fledging Hawaiian petrels, band-rumped storm petrels and Newell's shearwater, resulting in fallout and death. Bill 21 recognizes that it is vital to reduce short wavelength light in outdoor lighting fixtures, prevent outdoor lighting from shining upward or over the ocean, and eliminate reflective surfaces that bounce light into the sky.

We share the same concerns about Bill 21 that our colleagues at the Sierra Club and Earthjustice have voiced: that—in both its original form and with the amendments proposed in the March 10, 2022, correspondence from the Committee Chair—it fails to address the harm that existing artificial lighting poses to imperiled seabirds. See proposed § 20.35.060.D (limits on short wavelength light apply to only "outdoor lighting fixtures installed after enactment of" Bill 21); § 20.35.070.F (generally exempting "[r]eplacement of outdoor lighting fixtures legally installed before the enactment of [the County's lighting ordinance]"). Hawai'i imperiled seabirds are suffering from fallout associated with existing lights, which must be addressed if we are to prevent the loss of our native species. While there may be concerns about requiring the upgrade of all existing outdoor lighting immediately, when existing lights burn out, Bill 21 should require that replacement lights be seabird-friendly and comply with proposed sections 20.35.060.D and E.

The existing lighting ordinance exempts other harmful lights from the new requirements, including "[t]emporary lighting used for public safety, road construction or emergency repair, field harvesting, and road crossing," section 20.35.070.C, "[t]emporary hotel and condominium beach security lighting," section 20.35.070.D, "[s]afety and security lighting for water features," section 20.35.070.E, and "[l]ighting on federal and State properties and on areas under the jurisdiction of the federal and State government," section 20.35.070.F. These types of outdoor lighting fixtures are just as harmful to imperiled seabirds as the outdoor lighting fixtures that Bill 21 requires to comply with proposed sections 20.35.060.D and E. The Committee should amend Bill 21 to eliminate the exemption from for these lights.

Finally, to clarify the short wavelength light content limits that are necessary to minimize harm to imperiled seabirds, section 20.35.060.D should use the following language to specify the spectral content of the outdoor lighting fixtures that are required: "All outdoor lighting fixtures ... must be filtered light emitting diode fixtures (1) with a CCT of < 2200 Kelvin; or (2) that contain less than 2% blue-green light content." The following definition

should be added to section 20.35.040 of the lighting ordinance: "Blue-green light content' means the ratio of the amount of energy emitted by the outdoor light fixture that is between 350 and 550 nm divided by the amount of energy between 350 and 700 nm."

Mahalo nui loa for your kind k_kua in this important matter, Hannah Bernard Executive Director, Hawai_i Wildlife Fund P.O. Box 790637 Paia, HI 96779

Guest User

Location: Submitted At: 11:52pm 03-15-22

From Sierra Club, Maui Group March 15, 2022 PO Box 791180, Pa'ia HI 96779

To: Maui County Council CARE Committee

Re: Agenda Item (CARE-74) Bill 21-Seabird and Biodiversity Protection

Aloha Chair King and Committee Members,

Sierra Club Maui Group strongly supports the need for and intent of Bill 21 to help native seabirds and ecosystems by limiting lighting that emits the shorter-wave light spectrum (500 nanometer and lower) and requires more shielding of outdoor lighting. Considerable research has shown that these short-wavelengths of outdoor lighting contribute to the unneeded mortality of endangered native seabirds.

We are, however, concerned because the bill excludes existing outdoor lighting from compliance with the new requirements in Section 20.35.070.E. The draft bill currently allows existing lighting to be replaced by the same type of lighting formerly in place, even if this lighting emits the shorter-wave light spectrum that has been found to disorient our endangered native seabirds. This language should be amended.

Practically speaking, most of our urbanized coastal area on Maui island is already developed- with lighting already installed. The current language would mean that all of the lighting at these existing shoreline resorts, even if it replaced, will be exempt from any requirement to install the wildlife friendly types of bulbs that avoid the shorter wave length emissions.

We are also concerned that many types of "temporary" outdoor lighting uses are also exempt from the new provisions of Bill 21. There is no definition given of "temporary" that we could find in Section 20.35. 040 of the Maui County Code. and some of these types of lighting may affect the flight paths of native sea birds. Some communities have Outdoor Lighting Ordinances that do define "temporary" lighting. We would ask that the length of time temporary lighting is in use, be more clearly defined in Section 20.35- the Maui County Outdoor Lighting ordinance. IThe exception language in Bill 21 should be refined and amended to include more protections for the sea birds from "temporary" lighting that may be in place for many months.

Rural neighborhoods like Maui Meadows value their night sky views and peaceful settings and are concerned that neighboring urban style developments proposed like Wailea 670 will create a large amount of light pollution (defined as outdoor lighting emissions that are not not serving any useful purpose, but merely creating a haze of light in the night skies),

While the new shielding and short-wave lighting provisions of Bill 21 are very much needed and will improve the situation, there are also additional strategies to limit impacts to our dark skies. Maui Meadows residents asked that some means to address this potential light pollution be included in settlement negations with the Wailea 670/Honua'ula development in 2016.

This was done, and the settlement provides for several areas of the project that are required to meet the model

Dark Sky ordinance developed by astronomers and the Illuminating Engineering Society (IES.) This provided for an adequate but limited "light budget" for development adjacent to proposed native flora and fauna Preserves and the existing rural Maui Meadows neighborhood.

Much of our current Outdoor Lighting Code is oriented not towards the amount of light emitted, but towards the type of lighting fixtures used. Section 20.35.10 MCC states:

"The purpose of this chapter is to establish standards to limit degradation of the night visual environment by minimizing light glare, pollution, and trespass through regulation of the type and use of outdoor lighting."

The Dark Sky ordinance while also specifying acceptable types of downward facing light fixtures, additionally prescribes the amount of light an overall area can emit and the length of time lights should operate. These are important considerations if the true goal of an Outdoor Lighting Code is to "limit degradation of the night visual environment by minimizing light glare, pollution, and trespass..."

Dark Sky standards, when implemented in developments are also said to lead to considerable energy savings. Our lighting ordinance should made it clear that neighborhoods should have the flexibility of adhering to these innovative Lighting Standards, and still be in compliance with Maui County Code requirements for electrical permits.

Mahalo for the opportunity to comment Lucienne de Naie Chairperson, Sierra Club, Maui Group

Dustin Palos

Location: Submitted At: 11:40pm 03-15-22

Aloha mai kakou,

I would like to write to you in regards to supporting CARE-74 CC 21-546 BILL 21 (2022), SEABIRD AND BIODIVERSITY PROTECTION (CARE-74). Hawai_i is the extinction capital of the world primarily due to the anthropogenic impacts. The Maui Nui Seabird Recovery Project and their efforts for protecting the seabirds of Maui Nui. Supporting conservation is vital for the survival of endemic species including the ua_u kani. Seabirds become disoriented from light sources and birds end up getting seriously injured or die because of the light pollution. Supporting this ordinance will help ensure the survival of these seabirds and other nocturnal seabirds will have a stronger survival rate and will help with repopulating this endangered species.

Mahalo,

Dustin Palos

Guest User

Location: Submitted At: 9:42pm 03-15-22

This is really Karen Comcowich, writing on my own behalf. I support Bill 21 for a stricter outdoor lighting ordinance.

(I let my brother, John Comcowich, use my phone to submit testimony, just realized it showed up in my name. It is fitting because Johnny is the one who showed me how awesome the native 'Ua'u kani are when we helped tag the birds at Hawea Point.)

I support bill 21 for the native birds and turtles, and also for PEOPLE. The increase in bright light at night decreases our ability to see the stars with our bare eyes. During 2020 one of the nicest parts of hotels being closed was the decrease in ambient light. Maui's sky so was free of light pollution that in L_hain_ we could see the milkway with our bare eyes. My kids saw the multi colored nebulae twinkling in the sky. I want future generations to enjoy that same simple pleasure.

Furthermore, blue light at night is not good for humans. Too much blue in general is not, that is why blue blocker glasses became so popular when school was on zoom. Too much blue light at the wrong time of day messes with our cicadian rythms causing insomnia, and contributing to the development of cancer, diabetes, heart disease, and obesity. (Many sources for the including Web MD, Harvard Medical School, etc.) Finally, safety is something people use as a reason we need light. While we need light, bright light can actually

be more dangerous. Think about when you are driving and a car with bright halogen lights comes towards you, for a moment everything is brighter, illuminated like it is day. Then it is hard to see anything while your eyes readjust. The same is true is a brightly lit area. The well lit area is fine, but the areas around it are more dangerous. Bright lighting does not make a space feel safe. It can blind and disorientate and create dark shadows at the edges.

We need a safe healthy level of lighting for animals and humans to thrive. Please support bill 21.

Karen Comcowich

Location: Submitted At: 6:18pm 03-15-22

John Comcowich testifying on my own behalf.

I support this bill because the science shows that the bright lights affect the sea birds in a dramaticly detrimental way.

Guest User

Location: Submitted At: 5:02pm 03-15-22

TESTIMONY IN SUPPORT OF INTENT OF BILL 21 SEABIRD AND BIODIVERSITY PROTECTION (CARE-74)

Climate Action, Resilience, and Environment Committee Meeting March 16, 2022 9:00 a.m.

Good morning, Chair King, Vice-Chair Sinenci, and members of the Committee:

My name is David Lane Henkin, and I am an attorney with Earthjustice. I submit this testimony on behalf of the Center for Biological Diversity and Conservation Council for Hawai'i in strong support of the intent of Bill 21, which would amend Maui County's lighting ordinance to increase protections for Hawai'i's imperiled seabirds. Bill 21 would update the lighting ordinance to reflect the latest science on how best to minimize harm from artificial lighting, which can attract fledging Hawaiian petrels, band-rumped storm petrels and Newell's shearwater, resulting in fallout and death. Bill 21 recognizes that it is vital to reduce short wavelength light in outdoor lighting fixtures, prevent outdoor lighting from shining upward or over the ocean, and eliminate reflective surfaces that bounce light into the sky.

Our concern with Bill 21 is that—in both its original form and with the amendments proposed in the March 10, 2022, correspondence from the Committee Chair—it fails to address the harm that existing artificial lighting poses to imperiled seabirds. See proposed § 20.35.060.D (limits on short wavelength light apply to only "outdoor lighting fixtures installed after enactment of" Bill 21); § 20.35.070.F (generally exempting "[r]eplacement of outdoor lighting fixtures legally installed before the enactment of [the County's lighting ordinance]"). Hawai'i imperiled seabirds are suffering from fallout associated with existing lights, which must be addressed if we are to prevent the loss of our native species. While there may be concerns about requiring the upgrade of all existing outdoor lighting immediately, when existing lights burn out, Bill 21 should require that replacement lights be seabird-friendly and comply with proposed sections 20.35.060.D and E.

The existing lighting ordinance exempts other harmful lights from the new requirements, including "[t]emporary lighting used for public safety, road construction or emergency repair, field harvesting, and road crossing," section 20.35.070.C, "[t]emporary hotel and condominium beach security lighting," section 20.35.070.D, "[s]afety and security lighting for water features," section 20.35.070.E, and "[l]ighting on federal and State properties and on areas under the jurisdiction of the federal and State government," section 20.35.070.F. These types of outdoor lighting fixtures are just as harmful to imperiled seabirds as the outdoor lighting fixtures that Bill 21 requires to comply with proposed sections 20.35.060.D and E. The Committee should amend Bill 21 to eliminate the exemption from for these lights.

Finally, to clarify the short wavelength light content limits that are necessary to minimize harm to imperiled seabirds, section 20.35.060.D should use the following language to specify the spectral content of the outdoor lighting fixtures that are required: "All outdoor lighting fixtures ... must be filtered light emitting diode fixtures (1)

with a CCT of < 2200 Kelvin; or (2) that contain less than 2% blue-green light content." The following definition should be added to section 20.35.040 of the lighting ordinance: "Blue-green light content' means the ratio of the amount of energy emitted by the outdoor light fixture that is between 350 and 550 nm divided by the amount of energy between 350 and 700 nm."

Thank you for the opportunity to provide this testimony. I will be available at the Council meeting to answer any questions you may have. I can also be reached via email at dhenkin@earthjustice.org or via telephone at 808-599-2436.

Danya Weber

Location: Submitted At: 3:00pm 03-15-22

Humans arrived to Hawaii by following the navigation of seabirds. Seabirds also allowed for the development of plant life on our islands. Seabirds are the building blocks of Hawaiian ecosystems and culture. We humans are capable of adapting our lives in order to accommodate these creatures that have contributed so much to Hawaii.

Guest User

Location: Submitted At: 2:01pm 03-15-22

I support this bill for the seabirds, bats, current humans and all of ancestral star gazers. Less light is better for everyone and everything on the islands for the most part. Less light can help improve our near ocean and reef health by lowering the growth rate of invasive algae. I've with my own eyes seem birds downed and killed by light blinding events. Please help our native species and do the right thing to ultimately help the planet and ourselves. I could pile on scientific papers and evidence espousing the negative aspects of light pollution but I'm pressed for time with this testimony.

Please do the right thing.

Lynx Gallagher, wildlife biologist in Hawaii for the last decade.

Guest User

Location: Submitted At: 1:10pm 03-15-22

Testimony for Bill 21 (CARE 74) County Council's CARES committee Wed. March 16, 2020, 9am meeting.

Hi, my name is David Dorn, speaking as a resident and on behalf of the South Maui Save the Wetlands Hui (savethewetlands.org), and the Sierra Club Maui.

This bill can help limit lights that affect the native sea birds that live in wetlands, and along our shorelines and aims to reduce the harm that lights that emit the shorter wave "blue spectrum" have on wildlife. However the bill needs to also include other types of harmful lighting that are currently excluded.

The Center for Biological Diversity has done a lot of research on this topic: The sub-550nm wavelength lighting is not good for seabirds, and may even have an effect on humans. The blue

light wave part of the spectrum has been found to disorient the native birds.

The Center for Biological Diversity supports the fact that the Bill:

Limits the amount of short wavelength light for new outdoor lighting fixtures (no more than 5 percent of visible emissions less than 550nm) and,

Requires shielding, non-reflective surfaces and other minimization measures for most fixtures (new or old), as found in Section 20.35.060.D & E of the proposed Bill

The ordinance should be amended to include all types of harmful lights:

The existing lighting ordinance still allows other types of harmful lighting. Examples, Temporary lighting used for public safety, road construction or emergency repair, field harvesting, and road crossing. Temporary hotel and condominium beach security lighting. The bill needs to require these types of lights comply with the less-harmful "low blue-light" requirements, as "temporary" lighting is not defined under Maui County Code section 20.35 and

"temporary" lighting devices can often remain in place for long periods of time.

Regards, David Dorn

References:

In a new study published in Journal of Experimental Zoology Part A: Ecological and Integrative Physiology, researchers scanned the literature and studied the effects of LEDs on insects, sea turtles, salmon (Salmo salar) and Newell's shearwaters (Puffinus newelli), a Hawaiian seabird. https://onlinelibrary.wiley.com/doi/abs/10.1002/jez.2184

Overall, blue and white lights had the most negative impact on wildlife, causing issues such as attraction and disorientation. Amber and green were better for wildlife because they avoid colors to which the groups investigated are most sensitive.

https://wildlife.org/increasing-use-of-led-lamps-may-affect-wildlife/

Carol Riccio

Location: Submitted At: 9:32am 03-15-22

Please support this Bill 21 to protect native Hawaiian seabirds from becoming disoriented by artificial lights. The sea birds need our protection from the man-made hazards we have allowed to be created. Thank you. Carol Riccio, Kihei resident for 24 years

Guest User

Location: Submitted At: 9:27am 03-15-22

I've been coming to Maui since 1979 I now have a beachfront condo and part of the wonderful charming Maui's to sit on the beach and watch the sunset and then watch the stars come out if the lights continue to grow it'll be just like another place that has been overrun by progress. We can have growth but we can also keep our starry skies alive and well thank you. Doug Bockmiller

Guest User

Location: Submitted At: 8:51am 03-15-22

Aloha! My comment is in regard to CARE 74 Bill 21, I'm a current junior in high school and have begun to notice the increase in infrastructure over the years. It saddens me to see the island lose its authenticity and integrity. Maui has always been different from the city, but now I struggle to see the difference. Mahalo, Aggie Hunziker

Guest User

Location: Submitted At: 8:49am 03-15-22

I live in Malibu CA. We have a dark sky ordinance and it has done wonders in bringing back all sorts of wildlife species that had migrated to less populated areas.

Cheryl King

Location: Submitted At: 8:47am 03-15-22

Aloha Council Members!

I support everyone's efforts that are finding practical solutions to this lighting issue! I'm no lighting expert, but have decades of experience helping wildlife that have been negatively affected by it. To put a stop to any more needless deaths and injuries, I humbly provide this insight.

I have one specific suggestion for 20.35.060 under Section E., number 3.:

E. All outdoor lighting fixtures must be:

3. Mounted as low as physically possible to limit light trespass and reflection off ground surfaces. Fixtures must not have bulbs visible from above "or the coastline".

Adding "or the coastline" (and even including "or the ocean") to the end of the sentence addresses a large portion of "problem lights" that are detrimental to ocean wildlife. For enforcement purposes, this is easy to recognize: if you're anywhere along the coast and you can see a light bulb (a point source), that would be a violation. This is a common factor in lighting ordinances that aim to eliminate these point source lights that misdirect sea turtle hatchlings and nesters.

This one change doesn't address the sky glow problem or help the seabirds when they are flying from mauka to makai, but it's a significant positive step for sea turtle and coastal seabird conservation.

Ideally, we'd also consider adding language that addresses interior lights along our coastline. Taken from the Hilton Head Island, SC 2021 lighting ordinance (to eliminate sea turtle misorientations caused by lighting):

All coastal buildings must "use opaque material (curtains, blinds, drapes, etc.) and/or solar screens to cover windows and glass doors that are visible from the beach ..."

Window tints and screens are something that help immediately, and don't have to be manually attended to each night. Educational materials need to be posted to let people know the importance of their actions to block their lights from wildlife, so that can be challenging for property managers, but it's another significant step in the right direction.

There are so many lighting scenarios, which can certainly be confusing, so...

To sum it up, the ideal light would be strategically placed to obtain the desired lighting outcome and not flood neighboring properties: be a low-mounted fixture that uses bulb(s) that produce low intensity, long wavelength light (560 nanometers or greater, which is amber, orange or red light), is fully shielded, activated by motion-sensors, directed downward and inland, and not visible from above or the coastline/ocean.

Here's a simple checklist of how to recognize wildlife friendly lighting:

- 1. No light trespass
- 2. Low-mounted
- 3. Motion-activated
- 4. Long wavelength bulbs (amber, orange or red), AKA "bug lights"
- 5. Low intensity
- 6. Fully shielded
- 7. Directed downward (no up-lighting)
- 8. Oriented inland (does not shine on or cause a reflection on the ocean)
- 9. The direct point source bulb is not visible from the coastline/ocean
- 10. Windows and doors are tinted and/or have coverings (drapes, curtains, blinds, etc.)

These are totally achievable specifications that benefit humans (financially and physically), wildlife and astronomy. I highly recommend visiting the Hotel Wailea for examples of smart and stylish uses of minimal lighting that still take into account the safety and security of their guests.

Mahalo, ~Cheryl King Maui Nui Seabird Recovery Project: MauiNuiSeabirds.org Hawaiian Hawksbill Conservation: HIhawksbills.org Hawai'i Association for Marine Education and Research: HAMERinHawaii.org

Guest User

Location:

Guest User

Location: Submitted At: 8:14am 03-15-22

It is a fact that seabird colonies provide healthier coral reefs and forests in the mountains. This means cleaner ocean waters, more drinking water, and continued resilience for the island ecosystem. Seabirds deposit deep sea nutrients to the land and nearby shores, which fertilizes soil. Seabirds are ecological engineers that can act as a vital sign indicting the health of a particular ecosystem.

Seabirds use the entire landscape from mauka to makai. Artificial lights at night distract these native and endangered seabirds from making their way to mountains and/or the ocean. They use the moon and the stars to navigate. If they become distracted by the bright lights at night many of these nocturnal species get confused, disoriented, or make their way to harmful situations rather than to the open ocean. They spend most of their life at sea but need the land to reproduce and nest. Seabirds are a unique part of our Hawaiian ecosystem that have been here since the creation of the islands. Navigators use them to make their way to land, fishermen and women use them to find food, and they help us live in a cleaner environment.

Light pollution is a problem for more than just the seabirds. Light pollution can effect our health, drain our energy, harm wildlife, and take away our inspiration from the dark night sky.

People of Maui say, "Keep the Country Country", why not listen and protect the environment, ourselves, and the reasons that make Maui a truly unique place. Each year over the past 6 years working for the Maui Nui Seabird Recovery Project there have been roughly 100 + seabirds that "fallout" due to light pollution and other man-made objects (structures and wires included).

That's around ~600 seabirds that have been recovered in the last 6 years, with increased light pollution that number could increase. In that same timeframe we have educated thousands of individuals in Maui County and beyond about this problem of seabird fallout. Unfortunately, it's still happening, and yes people know where to find us when they find a seabird but Bill 21 and a new outdoor lighting ordnance would help to ensure that we are addressing the root of the problem and making a lasting difference for the future of Maui County. Light pollution is a problem that can be solved. There are lots of light options to select from, and different techniques to apply, let's work together to find solutions that work for both people and wildlife. Thank you for supporting Bill 21 and responding to the vital signs that our native ecosystems and wildlife professionals are sharing with you. Aloha, Emily J. Severson - resident of Haiku and Outreach Liaison for the Maui Nui Seabird Recovery Project

Guest User

Location: Submitted At: 7:59am 03-15-22 I fully support Bill 21. Our seabirds require our diligence for their protection. Light intrusion is everywhere.

Guest User

Location: Submitted At: 7:49am 03-15-22

Aloha! My name is Nick. I called Maui nui seabird recovery group in 2021 when I found a koa'e kea seabird in front of the dojo that was in front of my apartment. Marty came fairly quickly and acquired the seabird from me and took it to safety. I did not attempt to touch the bird until shortly before Marty arrived the bird took flight into the street off the sidewalk and went head first but rather gently into a vehicle! So I then ran into the street and saved the bird and kept it calm until Marty was able to take it to sanctuary.

Guest User

Location: Submitted At: 7:44am 03-15-22

We have some seabirds on our property and I would like to keep them around for the keiki. Condo lights are crazy bright everywhere

Guest User

Location: Submitted At: 7:37am 03-15-22

Aloha,

I fully support bill 21 as I believe that it is important to show some respect to Hawaii's native seabirds. While working with these marvels of nature, I've learned that these seabirds are responsible for taking part in developing the very ground that makes up the islands of Hawaii. I also believe that it would be fair/the right thing to do all we can to help protect these seabirds because of the many benefits that they do for both the ecosystem and us.

Best,

Maui County Resident

Guest User

Location: Submitted At: 6:20am 03-15-22

Dear CARE Committee,

I am in full support of Bill 21. This bill will further aid seabird conservation here in Maui County. Light pollution and distraction are huge causes of seabird and sea turtle fatality. Excessive lighting from light pollution is also harmful to us humans. With the increased regulation, addressing short-wave length lighting proposed in Bill 21 we can create a more healthy environment for us and wildlife alike on Maui.

With gratitude, Mariah Rivera Haik_ resident

K_ Kahakalau

Location: Submitted At: 5:37am 03-15-22

Aloha. My name is Dr. K_ Kahakalau and I am a Native Hawaiian educator, researcher and consultant residing on the island of Hawai_i, but involved in consulting work on Maui. My family and I strongly support Bill 21 (CARE agenda item #74), which updates the current outdoor lighting ordinance, increasing regulation on outdoor lighting with the goal of reducing light pollution. This bill will directly help to reduce harm to native seabirds and other wildlife, since the current outdoor lighting ordinance does not address short-wave length content in outdoor lighting, which is known to cause harm to marine life, as well as plants and humans. As a family of native Hawaiian practitioners, with not only ancestral ties to Maui, but current _ohana members (daughter, son in law and grandchildren) residing there, we ask you to please pass Bill 21, which would safe electricity, allow for a dark night sky to engage in cultural practices and reduce harm native birds and other species. Mahalo nui.

Guest User

Location: Submitted At: 1:53am 03-15-22

Im in full support of CARE 74 Bill 21!!

Maui needs a revision to the outdoor night time lighting system because we are quickly losing our nighttime sky which affects the lives normal of our birds and other mammal ecosystems.

Guest User

Location: Submitted At: 10:19pm 03-14-22

I am writing in support of Bill 21 which will protect native species by reducing light pollution. The bio-rhythms of wildlife and humans are disrupted with night lighting. Many endangered wildlife like seabirds and sea turtles have to be recovered or rescued each year due to light pollution. Fixing light pollution = better health, dark skies, protected seabirds and other wildlife, energy savings, and continued inspiration from our visible night sky.

Guest User

Location:

Submitted At: 9:12pm 03-14-22

Please protect Maui's endangered wild life and residents from unnecessary light pollution so we may all thrive

Guest User

Location: Submitted At: 7:42pm 03-14-22

This bill is a very important step in minimizing the negative affects of artificial light pollution on the seabird population. I live on Molokai and I am so encouraged by the amazing increase in the seabird population. I can attribute much of this to the fact that we have nminimal artificial light sources here.

Guest User

Location: Submitted At: 6:31pm 03-14-22 Mahalo for helping to protect seabirds and the night sky. I'm in support of CARE 74 Bill 21.

Guest User

Location: Submitted At: 6:09pm 03-14-22 Dear CARE Committee,

Please support Bill 21. Given that seabirds are among the world's most endangered groups of birds, we must do what we can to support their survival. Reducing Maui County's artificial light pollution is a highly achievable step that will significantly aid seabird conservation efforts. As a wildlife biologist in Maui County, I have responded to many seabirds that were disoriented and grounded due to artificial lighting. It is imperative that we initiate change. And reducing Maui County_s artificial light pollution will benefit more than just the seabirds. It will promote human health and provide a better quality of life to a variety of other native wildlife on the islands. Mahalo nui for your consideration.

Sincerely, Cecelia Frisinger Makawao resident

Guest User

Location: Submitted At: 4:14pm 03-14-22

I am in support of Bill 21 because it will reduce light pollution and help protect endangered wildlife, while also addressing human needs. This is an important step that must be taken to restore our seabird populations. Dark skies are necessary for fledging seabirds to find the ocean for the first time so they can forage and socialize before coming back to land to breed. The endemic seabird species that inhabit Maui are part of the reason that this island is so special and unique. Seabirds also play a key role in maintaining a functioning ecosystem that provides the people here with fresh water, fertilized soil and flourishing coral reefs. Mahalo Nui Skye Anderson

Field Biologist with Maui Nui Seabird Recovery Project

Guest User

Location: Submitted At: 1:56pm 03-14-22

Please support this bill to decrease harmful light pollution and protect native seabirds.

Guest User

Location: Submitted At: 3:08pm 03-13-22 Dear Care Committee.

Please support Bill 21 as we need to do all in our power to decrease artificial light pollution on our island. We

have endangered seabirds that are regularly disoriented and downed due to artificial lights. Additionally, a part of Maui's appeal is its isolation away from all sorts of pollution. People come here to be closer to nature whether that's the opportunity to swim in the ocean, breathe air without smog, or have the opportunity to see many stars and the Milkyway without the interference of light pollution. The stars on Maui are part of the splendor of Hawaii that people pay extra to visit here vs a hotel in California or Florida.

Thank you for your consideration of this important Bill. Arianna Feinberg Lifelong Upcountry Resident

Guest User

Location: Submitted At: 2:51pm 03-13-22

Bill 21's purpose is to protect native Hawaiian seabirds from becoming disoriented by artificial light during their maiden flights from their burrows out to sea. As a resident of Kihei, I have witnessed downed seabirds clearly disoriented by unnecessary bright lights. Please support Bill 21. Mahalo for your care for our aina and our native Hawaiian Seabirds.

Alan Espiritu Resident of Kihei, Maui

