

**JOSH GREEN, M.D.**  
GOVERNOR | KE KIA'ĀINA

**SYLVIA LUKE**  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



**STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA**

P.O. BOX 621  
HONOLULU, HAWAII 96809

**DAWN N.S. CHANG**  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

**RYAN K.P. KANAKA'OLE**  
FIRST DEPUTY

**CIARA W.K. KAHAHANE**  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES  
ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

**Testimony of  
DAWN N. S. CHANG  
Chairperson**

**Before the Senate Committee on  
TRANSPORTATION AND CULTURE AND THE ARTS  
Tuesday, March 25, 2025  
3:20 PM  
State Capitol, Conference Room 224 and Via Videoconference**

**In consideration of  
SENATE CONCURRENT RESOLUTION 12  
AND  
SENATE RESOLUTION 8  
RECOGNIZING INTERNATIONAL DARK SKY WEEK**

Senate Concurrent Resolution 12 and Senate Resolution 8 establishes that April 21 through April 28, 2025, shall be recognized as International Dark Sky Week in Hawai'i. **The Department of Land and Natural Resources (Department) supports this measure.**

The Department recognizes the significance of dark skies for both the people and wildlife of Hawai'i. Artificial light pollution affects wildlife, including seabirds and turtles, while also disrupting astronomy and cultural traditions. Promoting awareness of dark sky conservation helps protect wildlife, preserve cultural heritage, support human health, and supports astronomical research.

Mahalo for the opportunity to provide testimony in support of this measure.

**SCR-12**

Submitted on: 3/21/2025 6:16:43 PM

Testimony for TCA on 3/25/2025 3:20:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Ted Bohlen	Individual	Support	Written Testimony Only

Comments:

SUPPORT!

It would be great to see the stars at least one week a year!

**SCR-12**

Submitted on: 3/23/2025 2:27:32 PM

Testimony for TCA on 3/25/2025 3:20:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Dylan P. Armstrong	Individual	Support	Written Testimony Only

Comments:

Mahalo for considering this timely and thoughtful measure.

**SCR-12**

Submitted on: 3/23/2025 4:36:23 PM

Testimony for TCA on 3/25/2025 3:20:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Amena Lee Schlaikjer	Individual	Support	Written Testimony Only

Comments:

Dear Committee Chairs,

My name is Amena Lee Schlaikjer and I am a private citizen, sister of a Hawaii State resident, and person of Polynesian ancestry. I am submitting testimony in support of recognizing International Dark Sky Week and urge you to pass bill SCR12 (and SR4) to become leaders in legislating free education to the detriments of light pollution to our ecology and communities.

There are many scientific and economic reasons why this bill should be considered (ie. from the ecological effects of light pollution on animal species to the human side effects from prolonged exposure to light ongoing to the negative effects on tourism). However, I personally want to highlight the significance of the dark sky in preserving our spiritual connection to the beyond from someone with indigenous roots.

As a Polynesian (of indigenous Amis Taiwanese heritage), I am related by blood to the indigenous peoples of Hawaii. Each time I visit your islands, I feel the kinship and aloha spirit that underlies a broader culture of collective appreciation for the land, the sea and the sky from which we come. Indigenous cultures worldwide have looked to the skies throughout history as they served as guides for navigation, calendars, and a source of spiritual connection, with specific constellations and celestial events marking important seasons and events. Our ancestors ability to use the stars made it possible 40,000 years ago to travel by boat (from what is today known as Taiwan) to the islands of Hawaii (and much of Polynesia and Micronesia). The stars are the very root of why Hawaii is inhabited by people -- that cultural root in itself needs preserving, reminding, and regenerating.

Travelling to many places with indigenous polynesian roots, I am saddened by the lack of awareness around light pollution and our disappearing dark skies by the young indigenous peoples who need to preserve the significance of land, sea and sky in their culture. Environmental protection has become such a modern, western, left-brained scientific pursuit. Not that this is wrong...it is only incomplete without the human stories that underpin our sense of self, place, and wonder with the beyond. These cultural and spiritual roots need to be observed, protected, and passed down to the younger generations. And International Dark Sky Week would be a good starting place to raise this awareness. In doing so, we can lean on the stories *and* the science behind why and how we can live in symbiosis with our ecosystems to protect our future.

Thank you for the opportunity to provide this testimony,  
Amena Lee Schlaikjer

**SCR-12**

Submitted on: 3/23/2025 9:07:31 PM

Testimony for TCA on 3/25/2025 3:20:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Lorn Douglas	Individual	Support	Written Testimony Only

Comments:

Aloha from Lower Puna

Living in remote Hawaii I appreciate how beautiful the night sky appears every night. I often realize while admiring the Milky Way how blessed we are and how so many billions of urban people have never even seen this wonder.

Please give this bill your full support to keep this resource alive in our beautiful state.

Lorn Douglas

**SCR-12**

Submitted on: 3/24/2025 6:25:42 AM

Testimony for TCA on 3/25/2025 3:20:00 PM

Submitted By	Organization	Testifier Position	Testify
Michael Marlin	Individual	Support	Remotely Via Zoom

Comments:

Aloha,

Today I am representing Dark Sky International as a recognized delegate of this global organization and a longtime resident of Big Island's Kalapana area. I have been involved with Dark Sky advocacy since 1987 when I first moved to Hawaii. By adopting this resolution to recognize Dark Sky Week, Hawaii is taking an important step towards protecting the natural resource that is a dark sky. As the author of "[Astrotourism: Star Gazers, Eclipse Chasers, and the Dark Sky Movement](#)" I am a leading voice in this field and have provided expert testimony to state tourism agencies in Nebraska and Idaho, as well as the [City Council of Lake Tahoe](#) and the [County Council of Hawaii](#). More on my testimony to Big Island County Council [here](#).

My [TedX Talk “Embracing Darkness”](#) speaks to the impact of light on our environment and how the making of light almost drove whales, those hunted in the Hawaiian waters in the 19th century, to extinction in the pursuit of making light. And yet, little is done to protect nocturnal animals from light we make in the 21st century.

There is more a stake than simply preserving dark skies for its awe inspiring beauty. Dark sky initiatives have been shown to save energy, reduce costs, and reduce carbon emissions. Proper night time lighting reduces the inherent harm that light pollution causes for night pollinators, insects, turtles, marine life, and migratory birds. [The Hawaiian Petrel and Shearwater](#) are both collateral damage from over lighting and it doesn't have to be this way. **Bright lights have contributed significantly to the catastrophic 94 percent decline in the seabirds' population since the 1990s. At the same time, Hawaiian petrel numbers on Kauai have plummeted by 78 percent. Remnant breeding populations of the imperiled seabirds cling to survival on Maui and Lanai.** Properly shielded lights along with lower kelvin temperatures can go a long way to prevent the disorientation of birds and other nocturnal animals.

High intensity lighting creates glare. The most prevalent example of this are the white LED [headlights found on automobiles](#). In [2016 the AMA](#) released a study showing the harm from high intensity LED lights "The new AMA guidance encourages proper attention to optimal design and engineering features when converting to LED lighting that minimize detrimental health and environmental effects."

From my experience in addressing the public who are concerned about the increase of crime due to lower lighting, usually do not consider that if light prevented crime, there would be no crime during the daylight hours. Dark sky initiative isn't about *no* lighting, it is educating the public how to *light the night right*. Improving safety is an ongoing effort and educational process and my testimony and advocacy in [Idaho prompted the Town of Stanley to retrofit their street lights to 2200Kelvin](#).

Light pollution creeps like an invasive species on the landscape, the darkness is not lost quickly, but over time. As a long time resident of lower Puna, the skyglow coming from the lighting of Pahoa is now evident on the horizon where it wasn't just ten years ago.

Protecting a dark sky preserves the legacy of Hawaiian heritage as it was the stars that led people to these islands. The culture has its own stories about the stars that deserve to be passed on to future generations. These stories are preserved with our protection of the night skies. As example, for Hawaiians, the North Star, is known as "Hōkūpaʻa, and the Little Dipper that circles Polaris the North Star, is a bird circling its nest. The curved tail in the constellation Scorpio, is seen by Hawaiians as the hook that the folk hero Maui, used to pull the islands out of the ocean.

Preserving and protecting dark skies provides the opportunity to participate in the rapidly growing travel trend of astrotourism. It creates high paying jobs, preserves local culture, is sustainable, and is a low impact form of tourism. It spreads the tourist dollars to economically depressed areas that are unable to participate in the revenue stream created by visitors to Hawaii. From New Zealand to Chile, Namibia and South Africa to Northumberland in the UK, local residents across the globe are finding economic opportunities by preserving a protecting dark skies. The Ka'u District is a prime location for a Dark Sky Reserve.

It is necessary to address the fact that though the County of Hawaii complies with the needs of the astronomical industry by using amber lighting, there are no such compliance ordinances in place for business or residents. At my home in Puna Beach Palisades a neighbor is free to shine their outdoor lighting into my house which is my current predicament. I have used all avenues to address this by speaking with the neighbor and the police but there is no recourse to protect my property and home from light trespass. Everybody has a right to darkness and residents should not be allowed to take that away from their neighbors by shining their lights into other people's yards or homes.

Compared to other forms of pollution, light pollution is a low hanging fruit and inexpensive to correct compared to cleaning up a watershed. There was a time when we didn't protect the oceans. But now it is a matter of course and [Hawaii is taking steps to address the issue](#). With the support of this proclamation, Hawaii can begin to address the detrimental impact of light pollution and preserve and protect the heritage that is our night sky for future generations.

In 1843 Kamehameha III said, **Ua mau ke ea o ka aina i ka pono** and 182 years later it is time to be in action so that the "The life of the land is perpetuated in righteousness", by supporting SCR12 and SR8.

Mahalo nui loa

**Roger Kintz**

2200 I Street  
Sacramento, CA 95816

March 23, 2025

Dear Senate Committee,

I am writing to you as a private citizen and a strong advocate for the Dark Sky International's proposed "Dark Sky Week".

As an environmental scientist program manager with the California Environmental Protection Agency, I can state with the backing of my experience and scientific knowledge, that I unequivocally support SCR 12 and the approval of Dark Sky Week for Hawaii.

For the following reasons:

- Approving Dark Sky Week will greatly increase awareness about the impacts of light pollution both on people, flora, and fauna of Hawaii.
- Light pollution has significant negative economic and environmental consequences for the ecology and human health of all communities
- Dark Sky Week will create economic opportunities for Hawaii with star gazing tourism and awareness of Hawaii's unique cultural history and reliance on celestial navigation and astronomy
- Dark Sky Week and Initiatives have been successfully passed in several states in the United States, including California South Lake Tahoe.
- Dark Sky Week will promote energy conservation, municipal cost savings, and opportunities for learning to prepare for power outages and emergency conditions, and opportunities to study reduction in public safety incidents during the event
- Dark Sky International is the globally recognized authority on light pollution and has established International Dark Sky Week to raise awareness about light pollution.

Sincerely,

Roger Kintz