



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

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DAVID Y. IGE
GOVERNOR

LUIS P. SALAVERIA
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

Statement of

LUIS P. SALAVERIA
Director

Department of Business, Economic Development & Tourism

before the

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION

Tuesday, January 31, 2017

8:30 a.m.

State Capitol, Conference Room 325

in consideration of

HB 427
RELATING TO DARK NIGHT SKIES PROTECTION.

Chair Lee, Vice Chair Lowen, and Members of the Committee. The Department of Business, Economic Development and Tourism **strongly supports** this Administration bill to establish a Dark Night Skies Protection Advisory Committee to assist the University of Hawaii in developing a statewide dark skies protection strategy.

Light pollution is a statewide issue that requires the cooperation of state and county agencies to develop and help implement a statewide strategy to reduce nighttime light pollution which, in turn, could help preserve Hawaii's dark skies for astronomy, protect endangered species, improve human health, and reduce nighttime energy consumption.

Although Act 287, SLH 2012 was successful in addressing appropriate temperature and shielding for State light fixtures, a more comprehensive strategy coordinating State laws with county, federal, military, and private sector lighting practices and regulations is needed to help preserve Hawaii's dark nighttime skies. We believe the proposed dark night skies protection advisory committee will play a strategic role in achieving this goal.

DBEDT strongly urges the House Committee on Energy and Environmental Protection to pass this measure.

Thank you for the opportunity to testify on this measure.

DAVID Y. IGE
GOVERNOR



Testimony by:
FORD N. FUCHIGAMI
DIRECTOR

Deputy Directors
JADE T. BUTAY
ROSS M. HIGASHI
EDWIN H. SNIFFEN
DARRELL T. YOUNG

IN REPLY REFER TO:

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

January 31, 2017
8:30 a.m.
State Capitol, Room 325

H.B. 427
RELATING TO DARK NIGHT SKIES PROTECTION.

House Committee on Energy and Environmental Protection

The Department of Transportation (DOT) offers **comments** to this bill to establish a dark night skies protection advisory committee to assist the University of Hawaii in the development of a statewide dark night skies protection strategy to preserve dark night skies and reduce light pollution.

The DOT finds its membership on the committee useful and recommends the Occupational Safety and Health Administration be included in Section 2(c) to maintain and ensure transportation safety and security are carefully considered and that recommendations by the committee are thoughtful and economically feasible while protecting dark skies.

Thank you for the opportunity to provide testimony.

DAVID Y. IGE
GOVERNOR OF
HAWAII



SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON, P.E.
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
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FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

Testimony of
SUZANNE D. CASE
Chairperson

Before the House Committee on
ENERGY & ENVIRONMENTAL PROTECTION

Tuesday, January 31, 2017
8:30 AM
State Capitol, Conference Room 325

In consideration of
HOUSE BILL 427
RELATING TO DARK NIGHT SKIES PROTECTION

House Bill 427 proposes to establish a dark night skies protection advisory committee to assist the University of Hawaii in developing a statewide dark night skies protection strategy. **The Department of Land and Natural Resources (Department) supports this bill.**

Artificial lighting reduces the natural dark sky environment and directly impacts biological resources of the islands by altering wildlife behavior. Marine birds and sea turtles in Hawaii, some of which are endangered or threatened, are particularly sensitive to artificial light, attracting fledgling birds and hatchling turtles, which become disoriented and are frequently injured or killed, impacting their populations. There are many documented cases of night lighting in Hawaii attracting and killing coastal and pelagic birds and turtles every year. Newell's shearwaters and Dark-rumped petrels are particularly vulnerable, and research indicates that artificial night lighting is a major contributor to their respective population declines.

Additionally, dark night skies hold important cultural, astronomical, and tourism-related values, which are all negatively impacted as a result of artificial lighting. Excess artificial lighting also increases energy consumption, which contributes to wasted fossil fuel resources and exacerbates global climate change.

The committee would, among other things, examine issues related to artificial lighting and recommend workable solutions to reduce the negative impacts of lighting on natural and cultural resources and other activities.



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
House Committee Energy & Environmental Protection
Tuesday, January 31, 2017 at 8:30am

By
Günther Hasinger, Director
And
Richard Wainscoat, Astronomer
Roy Gal, Assistant Astronomer/Outreach Coordinator/UH NGO
Institute for Astronomy
University of Hawai'i at Mānoa

HB 427 – RELATING TO DARK NIGHT SKIES PROTECTION

Chair Lee, Vice Chair Lowen, and members of the committee:

The University of Hawai'i strongly supports the establishment of a dark skies advisory committee via HB427.

Dark night skies are a tremendously important natural, cultural, scientific, educational, and economic resource for Hawai'i. But the dark night sky is under increased threat from urban lighting.

Maunakea observatory has one of the darkest skies in the world, thanks to over 25 years of careful lighting on the Island of Hawai'i. The sky at Haleakalā observatory is less dark, partly due to less stringent lighting rules on Maui, and also due to its proximity to Honolulu.

Dark skies are vitally important for Hawai'i's two major astronomical observatories. These are among the best astronomical sites on the planet. If the sky is allowed to become bright over these observatories, the telescopes will lose their ability to see faint objects. On Haleakalā, the University of Hawai'i is engaged in a NASA sponsored effort to search the sky for dangerous asteroids. The aim is to find any dangerous asteroid that may hit Earth early enough that it can be deflected before impact. This search relies heavily on the dark night sky, and it would be significantly weakened if the sky on Maui becomes any brighter.

The advisory committee described in this bill will bring together representatives from the state, the counties and the public, and will provide a valuable forum for exchanging information regarding nighttime lighting and for preservation of the dark night sky.

Light Emitting Diodes (LEDs) are rapidly being introduced to replace older forms of lighting. These offer some energy benefits, but their blue light is harmful to astronomy and to endangered species such as birds and turtles. The committee described in this bill will be able to provide excellent advice on limiting blue light, thereby preventing costly mistakes. Kaua'i is a prime example of a location where many expensive light replacements have had to be done because of the impact of unshielded lights on endangered birds. Recent developments related to LEDs include a recommendation by the American Medical Association to limit exposure to blue light at night, new findings that suggest road safety is improved by limiting blue light, and big improvements in energy efficiency in low correlated color temperature LEDs.

From: mailinglist@capitol.hawaii.gov
Sent: Monday, January 30, 2017 6:33 AM
To: EEPtestimony
Cc: darakawa@lurf.org
Subject: Submitted testimony for HB427 on Jan 31, 2017 08:30AM

HB427

Submitted on: 1/30/2017

Testimony for EEP on Jan 31, 2017 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
David Z. Arakawa	Land Use Research Foundation of Hawaii	Comments Only	No

Comments: The Land Use Research Foundation of Hawaii (LURF) supports the intent of HB 427, which establishes a Dark Night Skies Protection Advisory Committee to assist the University of Hawaii in developing a statewide dark night skies protection strategy. However, LURF provides the following COMMENTS: The committee should include the major stakeholder groups who will be affected by the statewide dark night skies protection strategy, including, but not limited to, the counties, Retail Merchants of Hawaii, the tourism industry, the construction industry, the Chamber of Commerce, and organizations involved in sports events at night.

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From: mailinglist@capitol.hawaii.gov
Sent: Friday, January 27, 2017 4:09 PM
To: EEPtestimony
Cc: cchaudron08@gmail.com
Subject: Submitted testimony for HB427 on Jan 31, 2017 08:30AM

HB427

Submitted on: 1/27/2017

Testimony for EEP on Jan 31, 2017 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Camila Chaudron	Individual	Support	No

Comments: Hi, my name is Camila Chaudron, and I live in the Manoa/Makiki area. I support this measure to protect our community and our environment against light pollution. Thank you for supporting this measure. Mahalo.

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LATE

From: mailinglist@capitol.hawaii.gov
Sent: Tuesday, January 31, 2017 9:43 AM
To: EEPtestimony
Cc: skaye@hawaii.edu
Subject: *Submitted testimony for HB427 on Jan 31, 2017 08:30AM*

HB427

Submitted on: 1/31/2017

Testimony for EEP on Jan 31, 2017 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Springer Kaye	Individual	Support	No

Comments:

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