

JAN 26 2011

S.B. NO. 1493

A BILL FOR AN ACT

RELATING TO LIGHT POLLUTION.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that the night sky is a
2 tremendously valuable natural and cultural resource for the
3 residents of Hawaii, and for visitors to Hawaii. The dark night
4 sky has tremendous scientific value for astronomy, and is
5 vitally important for endangered species in Hawaii including
6 birds and turtles. Mauna Kea, on the island of Hawaii, is the
7 best astronomical observatory site in the northern hemisphere,
8 and arguably the best site on Earth. Haleakala on the island of
9 Maui is also a world class astronomical observatory site.

10 The legislature further finds that unnecessary light
11 pollution is threatening the dark night sky over the Hawaiian
12 islands. This includes sky glow, energy waste, glare, light
13 trespass, visual confusion and environmental harm. The
14 legislature finds that light can travel enormous distances
15 through the Earth's atmosphere, and therefore does not respect
16 county boundaries. Light pollution therefore spreads across the
17 entire state and must be addressed using statewide legislation.



1 Furthermore, endangered species that are affected by light at
2 night live on many of the Hawaiian islands.

3 The legislature further finds that many of the problems
4 with light pollution that Hawaii faces are caused by improperly
5 shielded lights. Poorly shielded lights direct energy straight
6 into the atmosphere, where it is wasted. This light produces
7 sky glow, which limits residents' ability to see stars. For
8 example, in Honolulu, only about the brightest twenty stars are
9 visible, whereas about two thousand stars can be seen from a
10 dark location. Poorly shielded lights also cause glare, which
11 diminishes our ability to see at night. Poorly shielded lights
12 also enter locations where the light is unwanted (light
13 trespass), including bedrooms, making it difficult for residents
14 to sleep. Excessive light in the sleeping environment has
15 recently been linked to an increased incidence of breast cancer.
16 Improperly shielded lights on the island of Kauai have led to
17 many birds deaths, particularly for the endangered Newell's
18 shearwater.

19 Act 161, Session Laws of Hawaii 2009, formed a temporary
20 advisory committee to assist the department to develop a
21 statewide starlight reserve strategy to preserve the quality of
22 the night sky and its associated cultural, scientific,



1 astronomical, natural, and landscape-related values. The
2 temporary advisory committee recommends the enactment of certain
3 measures in the 2011 regular session to conserve energy and
4 promote responsible use of light.

5 The purpose of this Act is to implement the recommended
6 legislation of the temporary advisory committee pursuant to
7 Act 161.

8 SECTION 2. Chapter 201, Hawaii Revised Statutes, is
9 amended by adding a new section to be appropriately designated
10 and to read as follows:

11 "§201- Starlight reserve strategy. (a) Every new and
12 replacement outdoor light fixture, whether commercial or
13 residential shall be fully shielded; provided that artificial
14 light on shoreline and ocean waters shall be subject to section
15 205A-71. A light fixture is considered fully shielded when:

16 (1) The light fixture is constructed so that no light is
17 emitted above the horizontal plane; and

18 (2) The light fixture is installed in a manner that does
19 not allow light to be directed above the horizontal
20 plane.

21 (b) The following lighting shall be exempt from this
22 section:



- 1 (1) Light sources of three thousand lumens or less;
- 2 (2) Emergency lighting used by police, firefighters,
- 3 correctional personnel, or medical personnel for the
- 4 duration of the emergency;
- 5 (3) Temporary outdoor lighting used for construction or
- 6 major renovation of buildings or for highway
- 7 improvements or construction; and
- 8 (4) Navigational lights that are required for waterways
- 9 and aircraft.

10 (c) This section shall be considered to be supplemental to
11 any county lighting ordinance and shall not be construed to
12 supersede or modify county lighting ordinances or rules;
13 provided that the ordinance is not less restrictive than this
14 section."

15 SECTION 3. This Act does not affect rights and duties that
16 matured, penalties that were incurred, and proceedings that were
17 begun before its effective date.

18 SECTION 4. New statutory material is underscored.

19



1 SECTION 5. This Act shall take effect on July 1, 2011.

2

INTRODUCED BY:

Will Evers
Malik



Report Title:

Outdoor Lighting; Starlight Reserve

Description:

Requires every new and replacement outdoor light fixture, whether commercial or residential, to be fully shielded. Defines fully shielded. Provides exemptions.

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

