Written Testimony Presented Before the House Committee on Economic Revitalization and Business Tuesday, February 15, 2011 at 8:00 a.m.

by
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and

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Chair, Light Pollution Working Group, International Astronomical Union

HB 1362 RELATING TO STARLIGHT RESERVE

Chair McKelvey and members of the Committee. My name is Richard Wainscoat and I am here today to submit this testimony in my capacity as an astronomer at the University of Hawai'i, and as Chair of the Light Pollution Working Group of Commission 50 of the International Astronomical Union. I strongly support the extension of the termination date of the Starlight Reserve Committee by 2 years to June 30, 2013.

Mauna Kea on the island of Hawai'i, and Haleakalā on the island of Maui, are two of the best astronomy sites in the world. Dark night skies are essential for these observatories to continue to operate. However, increasing urban lighting is threatening the dark night skies over these observatories. Light pollution extends well beyond county boundaries; lights from O'ahu have a major and growing impact on Haleakalā. Statewide legislation is needed to protect the observatories.

The Starlight Reserve Committee was established by the 2009 legislature to address light pollution issues at a statewide level. Astronomers are not the only people affected by light pollution. Light pollution affects many endangered species across Hawai'i, including birds and turtles. It produces enormous energy waste. Poorly designed lighting compromises safety.

Act 161 asked the Starlight Reserve Committee to assist DBEDT to develop legislation to implement a statewide intelligent lighting and light pollution law that takes into consideration the following:

- Develop rules regulating the requirements of outdoor lighting to guarantee the protection of night sky quality;
- Incorporate measures to conserve energy and promote responsible outdoor night lighting;
- 3. Develop standards for intelligent lighting design in architecture, urban planning, engineering, and infrastructure development;

- 4. Strengthen statewide commitment to preserving the night sky by adopting intelligent lighting in the public sector;
- 5. Promote labeling to recognize intelligent lighting fixtures and products;
- 6. Develop alliances with both public and private entities primarily responsible for outdoor night lighting;
- 7. Develop measures to avoid obtrusive light and improve the quality of life of local populations; and
- 8. Educate local residents about existing solutions, as well as the environmental, personal, and energy-savings benefits that intelligent lighting entails.

It is clear that the Starlight Reserve Committee still has much work to do. The work that the committee is doing is very important for the future of astronomy in Hawai'i and at the University of Hawai'i.

Testimony Related to

House Bill 1362

RELATING TO STARLIGHT RESERVE

Presented before the

House Committee on Economic Revitalization and Business

The Twenty-Sixth Legislature

February 15, 2011

by

Richard J. Wainscoat

Chair Starlight Reserve Committee

Chair McElvey and members of the Committee. My name is Richard Wainscoat and I am here today to submit this testimony in my capacity as Chair of the Hawaii Starlight Reserve Committee. I strongly support the extension of the termination date of the Starlight Reserve Committee by 2 years to June 30, 2013.

The Starlight Reserve Committee was established by the 2009 legislature. The previous administration delayed the formation of the committee by approximately one year due to budgetary concerns. The committee held its first meeting-in July 2010, and has met on four occasions. The committee received extensive input from many stakeholders, and has already concluded that full shielding of bright outdoor light sources is an important first step in saving energy and protecting Hawaii's environment, including endangered species, the dark night sky, and astronomy.

Act 161 asked the Starlight Reserve Committee to assist DBEDT to develop legislation to implement a statewide intelligent lighting and light pollution law that takes into consideration the following:

- 1. Develop rules regulating the requirements of outdoor lighting to guarantee the protection of night sky quality;
- 2. Incorporate measures to conserve energy and promote responsible outdoor night lighting;
- 3. Develop standards for intelligent lighting design in architecture, urban planning, engineering, and infrastructure development;
- 4. Strengthen statewide commitment to preserving the night sky by adopting intelligent lighting in the public sector;

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- 5. Promote labeling to recognize intelligent lighting fixtures and products;
- 6. Develop alliances with both public and private entities primarily responsible for outdoor night lighting;
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- 8. Educate local residents about existing solutions, as well as the environmental, personal, and energy-savings benefits that intelligent lighting entails.

It is clear that the Starlight Reserve Committee still has much work to do. The committee discussed the amount of time that it felt was needed to accomplish these tasks, and believes that an extension by 2 years to June 30, 2013 is appropriate.



HOUSE COMMITTEE ON ECONOMIC REVITALIZATION & BUSINESS

February 15, 2011, 8:00 A.M. (Testimony is 1 page long)

TESTIMONY IN SUPPORT OF HB 1362

Aloha Chair McKelvey and Members of the Committee:

The Sierra Club, Hawaii Chapter, with 8,000 dues paying members and supporters statewide, supports HB 1362. This measure extends the advisory committee from 6/30/2011 to 6/30/2013.

We believe the Starlight Reserve Task Force has the potential to help the environment, and support giving this task force the time necessary to complete its work. Every year, thousands of baby birds (fledglings) leave their nests for their first flight to the ocean. Many of them are disoriented by bright night-time coastal lights, often scenic ocean spotlights in residential coastal communities but also airport and facility lights. After flying to exhaustion (or collision) and falling to the ground, exhausted fledglings are extremely susceptible to predation.

Adult seabirds, including the endangered Hawaiian petrel (Pterodroma sandwichensis) and the threatened Newell's shearwater (Puffinus auricularis newelli), also suffer the negative impacts of artificial night lighting. The wedge-tailed shearwater (Puffinus pacificus), while not yet listed as threatened or endangered, is protected under the Migratory Bird Treaty Act and adversely impacted by artificial night lighting. These protected seabirds are found in many areas throughout the State and transit coastal areas that are fully developed. In addition to protecting Hawaii's native and endangered species, residents and visitors alike share a great appreciation of dark Hawaiian skies for stargazing—and romantic walks along the moonlit beach.

Mahalo for the opportunity to testify.