UNIVERSITY OF HAWAIʻI SYSTEM
Legislative Testimony

WRITTEN TESTIMONY ONLY
Presented Before the
House Committee on Economic Development and Business
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SB 1157 SD2 – RELATING TO STARLIGHT RESERVE

Chair Kawakami, Vice Chair Kong, and members of the Committee:

My name is Richard Wainscoat and I submit this testimony in my capacity as an astronomer at the University of Hawaiʻi, and as a member of Commission 50 of the International Astronomical Union. I strongly support the continuation of the Starlight Reserve Committee.

Mauna Kea on the island of Hawaiʻi, 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 Oʻahu have a major and growing impact on Haleakalā. Statewide legislation is needed to protect the observatories. The economic impact of astronomy in Hawaiʻi is between $150 and $200 million per year.

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 Hawaiʻi, 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:

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;
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.

Act 287 of the 2012 State Legislature added new requirements for state lighting in a manner recommended by the Starlight Reserve Committee. The requirements of this act become effective July 1, 2014. In order to eliminate cost, the changes in lighting mandated by the Act will occur over long time periods of time, as fixtures become old and need to be replaced. There is a corresponding need for the Starlight Reserve Committee to continue well into the future to monitor changes and improvements in light pollution as this Act takes effect.

Furthermore, many of the motivations for creating the Starlight Reserve Committee, including protection of astronomy, energy savings, and protection of endangered species are long term endeavors.

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.