



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Written Testimony Presented Before the
Senate Committee on Economic Development and Technology
Friday, February 25, 2011 at 1:15 p.m.

by

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and

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SB 81 – RELATING TO STARLIGHT RESERVE

Chair Fukunaga 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 economic impact of astronomy in Hawai'i 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 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:

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.

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.