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Committee Environment and Transportation
Testimony on: HB452 “Outdoor Lighting - Guidance and Use of State Funds”
Position Favorable
Hearing Date: February 12, 2025

The Maryland Chapter of the Sierra Club urges a favorable report on HB452. The bill expands the scope of a 2011 law requiring state-funded outdoor lighting fixtures that maximize energy conservation and minimize light pollution at state buildings and state facilities. It expands the existing provisions to state-funded outdoor lighting at parks and trails. The bill also requires the Maryland Green Building Council to update or develop guidance for the purchase of outdoor lighting fixtures in consideration of recommendations regarding light pollution and color temperature published by the American Medical Association.

The bill also limits the color temperature of state-funded outdoor lighting to 3,000 Kelvin, consistent with 2016 American Medical Association (AMA) guidance.¹ 3,000K is considered “warm white” and is less disruptive to the health and behaviors of nocturnal wildlife, including fireflies, and night pollinators. A study by Hood College in Frederick County found that fireflies drastically reduced their light-blinking behavior when exposed to just one tenth the light of a streetlamp using cooler colors, threatening their ability to mate, control mosquitoes, and pollinate flowers.² The Bethany Beach Firefly is now rated “highly state rare” by the Department of Natural Resources and is found only in Wicomico County, partly due to light pollution.³ The bill also requires the Department of the Environment (MDE), in consultation with other agencies, to develop outdoor lighting standards that consider energy consumption, the environment, and public health and safety.

The benefit of this legislation is that it expands efforts to address the harmful effects of artificial lighting at night. As discussed in a January 2023 article in the journal *Science*,⁴ excessive artificial lighting at night can have a detrimental impact on the welfare of animals and humans alike.

For over two decades, our state has recognized the need to address light pollution. In 2001, former Treasurer Nancy Kopp championed a joint resolution to establish the Task Force to Study Lighting Efficiency and Light Pollution in Maryland which issued an important report in 2002.⁵ Chapter 353 of 2011 established the current policy of requiring efficient/shielded fixtures

¹ 2016 “American Medical Association adopts guidance to reduce harm from high intensity street lights.” <https://www.ama-assn.org/press-center/press-releases/ama-adopts-guidance-reduce-harm-high-intensity-street-lights>

² Costin, K.J., and Boulton, A.M., “A Field Experiment on the Effect of Introduced Light Pollution on Fireflies (Coleoptera: Lampyridae) in the Piedmont Region of Maryland,” *The Coleopterists Bulletin*, vol. 70, no.1, (2016), <http://www.bioone.org/doi/10.1649/072.070.0110>.

³ *Ocean City Today*, 7-14-2023, Where are all of Maryland's fireflies? | Lifestyle | oceancitytoday.com

⁴ *Science*, January 19, 2023, vol. 379, no. 6629, “Light Pollution is Skyrocketing,” <https://www.science.org/doi/10.1126/science.adf4952>

⁵ March 2002 Report of the Task Force to Study Lighting Efficiency & Light Pollution in Maryland, <https://msa.maryland.gov/megafile/msa/speccol/sc5300/sc5339/000113/000000/000008/unrestricted/20030006e.pdf>

for new/replacement outdoor lighting at state buildings and state facilities. In 2014 the Maryland Department of General Services and the Green Purchasing Committee (established by Chapter 594 of 2010) published specifications for the purchase of environmentally friendly lighting.^{6,7}

By regulating outdoor lighting to modern scientific environmental, safety and efficiency standards, HB452 helps our state government to continue to lead by example in efforts to address harms caused by light pollution.

For these reasons, we urge a favorable report on HB452.

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⁶ Maryland Green Purchasing Committee Approved Specification – Lighting Products
<https://dgs.maryland.gov/Documents/GreenPurchasing/Specs/LightingProductsSpecification.pdf>

⁷ Maryland Department of General Services lighting resource page on Green Purchasing
<https://dgs.maryland.gov/Pages/GreenPurchasing/Resources/Lighting.aspx>