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## Committee: Environment and Transportation Testimony on: HB 22 "State Highway Administration – Vegetation Management – Pollinator Habitat Plan" Position: Support Hearing Date: February 7, 2024

The Maryland Chapter of the Sierra Club strongly supports HB 22, which would significantly increase habitat for pollinators through minor adjustments to vegetation management along more than 5,200 miles of state roads. The bill will help reverse widespread declines in populations of pollinating insects – such as bees and butterflies – that are essential to our fruit and vegetable crops and to nearly 90 percent of our wild trees, shrubs, and flowers.<sup>1</sup>

In North America, nearly a third of all bumblebee species are threatened with extinction as are twenty percent of butterflies. Three of Maryland's 15 bumblebee species have disappeared from the state and three others are now rare,<sup>2</sup> as is the Maryland state insect, the Baltimore Checkerspot butterfly.<sup>3</sup> In Ohio, the number of butterflies counted in any one year has dropped by one third over 21 years.<sup>4</sup> A major cause of these declines is a widespread shortage of flowers and habitats that these pollinators require, both of which can be provided by well-managed roadsides. For these reasons, states from Texas, Oklahoma, and Kansas to Minnesota, Vermont, and Virginia are managing their roadways to promote habitat for Monarch butterflies and other pollinators.<sup>5</sup>

In 2016, Maryland began addressing these declines by enacting the Pollinator Habitat Plans Act, which required three state agencies to develop plans to increase pollinator habitat on their lands.<sup>6</sup> As part of that effort, the Department of Transportation's State Highway Administration (SHA) commissioned a study to determine whether vegetation along state roadways could be managed in such a way as to provide pollinator habitat.<sup>7</sup>

This three-year study on state roadsides in Frederick and Carroll Counties showed that, with minor adjustments to vegetation management, roadsides can support pollinators with shelter, nesting sites, pollen, and nectar while helping to connect fragmented habitats. Even small areas managed for pollinators produced 68 species of native plants and supported 83 species of native bees, more than a fifth of the known bees in the entire state.. The study concluded that these

<sup>2</sup> https://www.marylandbiodiversity.com/checklist/?genus=Bombus

<sup>&</sup>lt;sup>1</sup> F. Sánchez-Bayo and K. A.G. Wyckhuys, "Worldwide decline of the entomofauna: A review of its drivers," *Biological Conservation*, vol 232, 2019, 8-27. <u>https://www.sciencedirect.com/science/article/abs/pii/S0006320718313636;</u> https://www.theguardian.com/environment/2021/jul/25/the-insect-apocalypse-our-world-will-grind-to-a-halt-without-them

<sup>&</sup>lt;sup>3</sup> Butterfly Conservation Working Group (maryland.gov)

<sup>&</sup>lt;sup>4</sup> Butterflies are disappearing in Ohio. Here's what that means for insects everywhere | PBS NewsHour

<sup>&</sup>lt;sup>5</sup> https://monarchjointventure.org/get-involved/who-are-you/department-of-transportation/monarch-highway

<sup>&</sup>lt;sup>6</sup> https://law.justia.com/codes/maryland/2016/agriculture/title-2/subtitle-18/section-2-1801/

<sup>&</sup>lt;sup>7</sup> Kuder, Lisa, <u>Evaluating Integrated Roadside Vegetation Management (IRVM) Techniques to Improve Pollinator Habitat (State</u> <u>Highway Administration and Department Of Entomology, University Of Maryland, 2019).</u>

practices show "great potential in supporting pollinators" and are "are timely and practical to implement on a landscape scale."

HB 22 addresses this problem by requiring SHA to (a) develop a pollinator habitat plan specifically for roadsides (strengthening their current plan focused on rest stops, welcome centers, and office buildings); (b) use pollinator-friendly plants along state roads; and (c) follow the Federal Highway Administration guidelines on roadside pollinator habitats.<sup>8</sup> These guidelines promote pollinator habitat only where safety is not compromised. In fact, studies show that a diverse pattern of roadside vegetation helps alleviate driver drowsiness, enhance alertness, and increase overall highway safety.<sup>9</sup>

The bill also requires SHA to track federal programs that provide grants for roadway pollinator habitats and apply for them when appropriate. In January 2024, the federal Monarch and Pollinator Highway Act of 2021 went into effect, requiring the U.S. Dept. of Transportation to provide grants to states such as Maryland to fund pollinator-friendly practices along highways.<sup>10</sup> Finally, SHA would be required to engage in educational efforts through signage, its website and social media, and outreach to organizations and elected officials.

For all these reasons, we believe HB 22 has outstanding potential. We urge the Committee to support this bill and recommend its passage by the General Assembly.

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<sup>8</sup>https://www.environment.fhwa.dot.gov/env\_topics/ecosystems/Pollinators\_Roadsides/BMPs\_pollinators\_landscapes.aspx

<sup>&</sup>lt;sup>9</sup> Effects of the roadside visual environment on driver wellbeing and behaviour – a systematic review - ScienceDirect <sup>10</sup> <u>https://www.nrdc.org/bio/daniel-raichel/infrastructure-bill-boosts-bees-butterflies</u>.