



Kim Coble
Executive Director

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SUPPORT: SB 526 - Natural Resources - Forest Preservation

Chairman Feldman and Members of the Committee:

Maryland LCV is grateful for Senator Elfreth's leadership for introducing SB 526 in recognition of our need to renew our forest preservation goals and update our methods for protecting and increasing our forest cover. Trees and forests provide an enormous value to our state, however our current policy for forest conservation has been inadequate in accounting for these benefits when permitting the removal of trees and forest acreage. As a result we must update our existing systems as we strive to balance forest conservation amidst the ever present pressures of development. SB 526 will improve our ability to preserve forest in Maryland and moves us towards the necessary goal of a net gain of forest acreage. For this reason, Maryland LCV is pleased to support SB 526.

Last year, the Harry R. Hughes Center for AgroEcology released the "Technical Study on Changes in Forest Cover and Tree Canopy in Maryland." The study found loss of forests to be greatest in central Maryland, especially in areas adjacent to Washington D.C., and that overall, the state had yet to achieve our state's goal of "no net loss." SB 526 offers an appropriate response to this documented forest loss in our state and will provide the necessary update to Maryland's Forest Conservation Law.

SB 526 will:

1. **Set clear goals and metrics to reach a net gain forest cover**, as well as tree canopy cover - leaving flexibility for urban and suburban jurisdictions.
2. **Protect priority forests** and reduce forest fragmentation.
3. Establish clear and appropriate definitions of the terms forest and tree canopy.
4. Differentiate replanting ratios for different land uses.
5. Affirm the value of street trees and support gains in urban canopy cover.

Why do we need to protect our forests? Ecologists have found that a single oak tree can provide food for over 500 different types of caterpillars and its acorns are eaten by more than 100 different animals. There is no question trees and forests are essential habitat for wildlife, but they are also essential for people. Trees provide a vast array of ecosystem services, including:

Reducing urban heat island effect¹.

- Trees provide shade, which can keep temperatures as much as 20–45 degrees F cooler than unshaded surfaces.
- Trees also provide evaporative cooling effect from their ecological process of evapotranspiration² (the absorption of heat while releasing water vapor).
- Trees provide much needed cooling, greenspace, and air quality improvements in areas that have faced decades of disinvestment.

Removing pollutants from stormwater³

- Both forests, with immense water storage capacity, but also urban street trees, are important for their abilities to move stormwater and the excess nutrients it carries into storage in the soil.⁴

Removing pollutants from the air⁵.

- The US Forest Service reported trees in 11 parks in the National Capital area remove more than 1.1 million metric tons of air pollutants annually.⁶
- A study of tree canopy in New York City determined a tree cover increase of just 10% provided more than a third of the reduction needed to achieve air quality standards.⁷

Mitigating greenhouse gas emissions

- Preserving forests is one of the most effective and least expensive mitigation measures for absorbing greenhouse gas emissions. Ten acres of mature trees sequester about 8-10 tons of carbon annually⁸ (or the equivalent carbon dioxide emitted from a gas-powered car driving more than 22,000 miles).

Supporting vital human health outcomes

- A 2022 World Wildlife Fund report investigated the many researched connections between human health and forests. The report found exposure to forests reduced incidences of infectious diseases and noncommunicable diseases like cancer, reduced diabetes and cardiovascular disease, and supported good mental health.⁹

Trees and forests are essential to our health while also supporting a myriad of positive environmental goals. It is imperative that we update our Forest

¹Urban heat island effect occurs as hardened surfaces, like pavement and buildings, absorb heat by solar radiation, then radiate that heat back into the air. Temperatures in urban neighborhoods can differ by as much as 20 degrees Fahrenheit due to this effect (<https://www.heat.gov/pages/urban-heat-islands>).

² <https://www.epa.gov/heatislands/using-trees-and-vegetation-reduce-heat-islands>

³ Stormwater is a growing source of pollution to the Chesapeake Bay.

⁴ <https://www.nature.com/articles/s41598-021-01804-3>

⁵In 2020, even with traffic reduced due to COVID-19 pandemic restrictions, EPA data showed Baltimore experienced 43 days of elevated air pollution. (<https://insideclimatenews.org/news/19102021/air-pollution-baltimore/>)

⁶ <https://www.nps.gov/articles/000/uerla-trees-air-pollution.htm>

⁷ [Trees at Work: Economic Accounting for Forest Ecosystem Services in the US South](#), Chapter 4. Forest Ecosystem Services: Carbon and Air Quality. Nowak, David J., Poudyal, Neelam C. and Steven G. McNulty. (51.) Accessed from: https://www.srs.fs.usda.gov/pubs/gtr/gtr_srs226/gtr_srs226_ch4.pdf

⁸ <https://www.sunjournal.com/2021/06/11/energy-matters-does-your-10-acres-cover-your-carbon-footprint-2>

⁹ <https://www.worldwildlife.org/press-releases/new-report-demonstrates-strong-scientific-link-between-forests-and-human-health>

Conservation Law with SB 526 to reduce forest fragmentation and work toward a new goal of a net gain of forests in Maryland. Maryland LCV urges a favorable report on this bill.