Climate Assessment

Office of Legislative Oversight

BILL 26-25: VEGETATION – INVASIVE PLANTS

SUMMARY

The Office of Legislative Oversight (OLO) anticipates Bill 26-25 will likely have a small, positive impact on the County's community climate resilience as encouraging the planting of native plants by exempting native species from weed removal requirements and prohibiting the sale of bamboo, an invasive species, would positively impact community climate resilience.

BACKGROUND AND PURPOSE OF BILL 26-25

In Montgomery County, bamboo is considered an invasive species. Invasive bamboo, due to their extremely fast growth and resilience, are difficult to contain and displace native plants. In Maryland, four main groups of bamboo species are considered invasive.¹

Native plants and grasses refer to plant species which occur naturally in a region.² Generally, native plants support local wildlife by providing food and shelter.³ They can also reduce environmental impacts associated with lawn care as native plants require less water and pesticides compared to lawns, prevent erosion by increasing the soil's capacity to store water and reduce runoff, reduce air pollution related to lawncare, and promote biodiversity.⁴

Bill 26-25 would prohibit the sale of invasive bamboo in the County and exempt native plants and grasses from weed removal requirements.⁵ The Bill is a part of the Native Plant Protection Act which includes a zoning text amendment (ZTA) that would require all landscaping in new construction projects to include at least 50% of plants native to the Mid-Atlantic region.

Bill 26-25 was introduced by the County Council on June 17, 2025.

METHODOLOGIES, ASSUMPTIONS, AND UNCERTAINTIES

Methodology. OLO reviewed literature on lawns, including their environmental impacts and ways to mitigate these impacts, including using native grasses. OLO also reviewed literature on invasive bamboo and its impacts.

Assumptions. This assessment assumes property owners with lawns made up of native grasses would use less lawncare treatments such as water, pesticides, fertilizers, and mowing compared to lawns with non-native grasses.

Uncertainties. OLO is unable to determine the number of lawns in the County using non-native grasses vs. native grasses, nor the overall amount of maintenance required for lawns, such as frequency of mowing, fertilizers and pesticides used, and other inputs.

ENVIRONMENTAL IMPACTS OF INVASIVE PLANTS AND ENCOURAGING THE USE OF NATIVE GRASSES AND PLANTS

Native plants and grasses are those that occur naturally in a region. Some grasses native to Maryland include Blue Fescue, Bottlebrush grass, and Big and Little Bluestem.⁶ Conversely, invasive plants and grasses are those that do not occur naturally in a region. Invasive plants and grasses are difficult to contain and can displace native plants. In Maryland, four main groups of bamboo species are considered invasive.⁷

Bamboo, due to its rapid growth, can easily crowd out and harm native species in regions where bamboo is invasive.⁸ Invasive bamboo species, specifically running bamboo, can rapidly spread underground and new shoots grow from the underground stems called rhizomes. Containing and removing running bamboo is extremely time and cost intensive.⁹ In Montgomery County, bamboo growth has damaged nearby structures, such as driveways, and has harmed native grasses, plants, and shrubs.¹⁰

In general, lawn care impacts the environment negatively. Typical lawns in America consist of one species of grass¹ and maintenance associated with lawns, including frequent mowing, pesticides, fertilizers, and other chemicals applied to lawns decreases local water quality through runoff.¹¹ Chemicals in pesticides not only impact human health but impact wildlife, particularly aquatic life.¹² Intensive lawn care, particularly for lawns made up of a single non-native species, can reduce food sources for local pollinators, such as bees. Overall, intensive lawn care and non-native grasses can negatively impact local water quality and biodiversity.¹³

There are ways to mitigate environmental impacts of lawns, which includes planting native grasses. Native grasses typically require less maintenance, such as less irrigation, less frequent mowing and less pesticides and

¹ Also referred to as monoculture lawns

fertilizers.¹⁴ Further, switching from a monoculture lawn to different types of lawns, like meadows, can be even more beneficial for the local environment. Adding multiple varieties of native plants support local wildlife, including pollinators and insects which control pests. Compared to monoculture lawns, they require less watering, fewer chemicals, and for some ornamental grasses, no mowing.¹⁵

Switching to more sustainable landscaping that includes native grasses and plants can improve community climate resilience. Particularly, landscaping which requires less irrigation or no irrigation at all, saves a significant amount of water. As extreme heat and global temperatures continue to rise due to climate change, more intensive lawn care and more intensive watering will be needed to keep up with maintenance needs of monoculture lawns, particularly those that use a non-native species. Lawns and landscaping which require less mowing can improve local air quality by decreasing the use of gas-powered mowers and other lawn equipment.

ANTICIPATED IMPACTS

The Bill proposes the ban of sales on invasive species of bamboo in the County and removing native grasses from weed control requirements. These changes would likely encourage the use of native grasses and plants in landscaping around the County. Banning the sale of invasive bamboo would likely decrease the use of bamboo in landscaping, which would have a positive impact on biodiversity and protect native grasses and plants which are harmed by the spread of invasive bamboo. Removing native grasses from weed control requirements would allow native grasses to thrive and could encourage increased use of native grasses and plants in County landscaping. Native grasses and plants improve biodiversity and local water quality, as they provide food and habitation for pollinators and insects and typically need less water, mowing, and chemicals for maintenance compared to non-native plants and grasses.

Encouraging increased use of native grasses in landscaping can lead to more sustainable and climate resilient landscapes in the County. Lawns and gardens that require less water and maintenance can improve local community climate resilience.

As the Bill proposes changes that would likely encourage increased planting of native plants and would prohibit the sale of bamboo, an invasive species, OLO anticipates Bill 26-25 would have a small, positive impact on the County's climate resilience.

RECOMMENDED AMENDMENTS

The Climate Assessment Act requires OLO to offer recommendations, such as amendments or other measures to mitigate any anticipated negative climate impacts.¹⁹ OLO does not offer recommendations or amendments as Bill 26-25 is likely to have a small, positive impact on the County's contribution to addressing climate change, including the reduction and/or sequestration of greenhouse gas emissions, community resilience, and adaptative capacity.

CAVEATS

OLO notes two caveats to this climate assessment. First, predicting the impacts of legislation upon climate change is a challenging analytical endeavor due to data limitations, uncertainty, and the broad, global nature of climate change. Second, the analysis performed here is intended to inform the legislative process, not determine whether the Council should enact legislation. Thus, any conclusion made in this statement does not represent OLO's endorsement of, or objection to, the bill under consideration.

PURPOSE OF CLIMATE ASSESSMENTS

The purpose of the Climate Assessments is to evaluate the anticipated impact of legislation on the County's contribution to addressing climate change. These climate assessments will provide the Council with a more thorough understanding of the potential climate impacts and implications of proposed legislation, at the County level. The scope of the Climate Assessments is limited to the County's contribution to addressing climate change, specifically upon the County's contribution to greenhouse gas emissions and how actions suggested by legislation could help improve the County's adaptative capacity to climate change, and therefore, increase community resilience.

While co-benefits such as health and cost savings may be discussed, the focus is on how proposed County bills may impact GHG emissions and community resilience.

CONTRIBUTIONS

OLO staffer Kaitlyn Simmons drafted this assessment.

¹ "Containing and Removing Bamboo", University of Maryland Extension, Accessed July 8, 2025.

² "Ornamental and Native Grasses for the Landscape", University of Maryland Extension, Accessed July 8, 2025.

³ "Why Native Plants Matter", Audubon Society, Accessed July 8, 2025.

⁴ "Native Gardening: Why Garden with Native Wildflowers?", U.S. Forest Service, Accessed July 8, 2025.

⁵ Introduction Staff Report for Bill 26-25, Vegetation - Invasive Plants, Montgomery Council, Introduced June 17, 2025.

⁶ "Ornamental and Native Grasses for the Landscape", University of Maryland Extension, October 24, 2024.

⁷ "Containing and Removing Bamboo", University of Maryland Extension, Accessed July 8, 2025.

⁸ "Impacts of bamboo spreading: a review", Buziquia, S. T., et. al., Biodiversity and Conservation, December 2019.

⁹ "Containing and Removing Bamboo", University of Maryland Extension, Accessed July 8, 2025.

¹⁰ "County Council bill would ban sale of invasive bamboo in MoCo", Bethesda Magazine, June 18, 2025.

¹¹ "Lawns and Toxins: An Ecology of the City", Robbins, P., Polderman, A., and Birkenholtz, T., Cities, December 2001.

¹² Ibid.

¹³ "Ecological and economic benefits of low-intensity urban lawn management", Watson, C. J., et. al., Journal of Applied Ecology, October 21, 2019.

¹⁴ "Sustainable plants in urban parks: A life cycle analysis of traditional and alternative lawns in Georgia, USA", Smetana, S. M. and Crittenden, J. C., Landscape and Urban Planning, February 2014.

¹⁵ "Native Plants Add Beauty and Support Wildlife", Maryland Grows: University of Maryland Extension, April 28, 2023.; Meadow Planting | Harford County, MD

¹⁶ "Sustainable plants in urban parks: A life cycle analysis of traditional and alternative lawns in Georgia, USA", Smetana, S. M. and Crittenden, J. C., Landscape and Urban Planning, February 2014.

¹⁷ "More Sustainable (and Beautiful) Alternatives to a Grass Lawn", Natural Resources Defense Council (NRDC), September 30, 2016.

¹⁸ Ibid.

¹⁹ Bill 3-22, Legislative Branch – Climate Assessments – Required, Montgomery County Council, Effective date October 24, 2022