Date: February 7, 2023

To: Montgomery County Council President, Evan Glass and Councilmembers

From: Roberta G Steinman,

Subject: Testimony on Bill 25-22, Forest Conservation - Trees

In this time of climate chaos, plunging biodiversity, and worldwide forest Loss, retaining and increasing our natural forest ecosystems is the best technology and our best hope to mitigate the worst impacts of climate disruption and help bring back balance to our planet, our home.

According to the 2022 Maryland Forest Technical Study, Montgomery County had a **net loss of 3,444 acres of forest** and **2,340 acres of tree canopy outside of forests** between 2013 and 2018 — or, a total net loss of **5,457 acres of trees**. The loss was due primarily to rapid development, which continues unabated to this day. This trend of forest loss and forest fragmentation in Montgomery County due to development is a red flag signal that we are headed in the wrong direction. When we lose forests, we also lose the complex ecological relationships and ecosystem services that are essential to the health of our world.

To protect our forests and ecosystems, **Bill 25-22 needs to be strengthened in 7 critical areas**:

- 1. Establish **Net Gain of Forests** as the goal. We need to move the goal from *no net loss of forests* to a **net gain of forests** to meet the immense global challenges of our time. The "No Net Loss" vision is not a viable strategy because it does not protect existing forest ecosystems.
- 2. **Protect all remaining forests and designate and treat them as priority forest ecosystems**. The November 2022 Maryland Forest Study suggests that the most effective reforestation measure is protecting more existing woodlands: "the state should prioritize forest protection as a mechanism for not only maintaining, but also increasing, forest area."
- 3. **Prohibit the removal of forest or tree cover** in the following areas:
 - Floodplains; Stream Buffers; Forested Stream Buffers along Ephemeral Streams; Steep Slopes; Critical Habitats; Contiguous Forests; Forest Connective Corridors; habitats of Rare, Threatened, & Endangered Species; sites with Historic Trees, Champion Trees and other exceptionally large trees; in "Priority Save Areas" in Master Plans or any Functional Plan.
- 4. **Prioritize natural riparian forest regeneration**. To improve the water quality in Montgomery County, allow for the reforestation of riparian areas that are currently without forest cover to regenerate naturally. This applies to watercourses of all sizes. If natural regeneration is not practical, replant only with locally native species. Upland forest regeneration is also very important but should not be prioritized ahead of the riparian forest restoration.
- 5. **Encourage natural regeneration as a pathway to reforestation**. "Forests of the eastern U.S. originated from natural regeneration, not tree planting." Natural regeneration is a proven pathway to reforestation. It

¹ See table 12, p. 51 of <u>Technical Study on Changes in Forest Cover and Tree Canopy in Maryland</u>

² See Figure 22, Forest and Tree Canopy Change Associated with Development, p.53 of <u>Technical Study on Changes in Forest Cover and Tree Canopy in Maryland</u>

³ A full forest ecosystem includes healthy soil, drainage, healthy fungi in the soil, healthy micro-biotic communities in the soil, biomass; groundcover; shrub layer, tree understory layer; tree canopy layer, diversity of different types of trees and plants.

⁴ Technical Study on Changes in Forest Cover and Tree Canopy in Maryland, p.14.

⁵ See Oct 4, 2022, for a full discussion of natural forest regeneration, see Boucher testimony, pp. 4-7, https://www.montgomerycountymd.gov/COUNCIL/Resources/Files/agenda/col/2022/20221004/testimony/item4-Dr_DouglasH_Boucher.pdf

requires no tree planting, can be done at a fraction of the cost, and ensures that natives will repopulate the area. Areas with invasive plant species will require some follow-up maintenance to help ensure the growth of the young native saplings. Planted forests and planted forest mitigation banks, though well intended, do not replicate forest ecosystems and cannot provide the ecosystem functions of a naturally regenerated forest. Furthermore, "tree planting efforts can fail because of the significant time and long-term investment and maintenance required to develop newly planted trees into healthy, mature forests that provide the full suite of desired ecosystem services."

- 6. End the practice of allowing existing forests to be used as mitigation banks. Continuing to allow existing forests to be used as mitigation banks will result in the continued loss of forests. Current law permits the preservation of existing off-site forests to satisfy replanting obligations. Developers in Montgomery County rely on this practice. They can pay to protect existing off-site forests instead of replacing trees on-site that their construction has cleared, or planting trees elsewhere. While conservation of existing forest stands is valuable, continued reliance on the practice of allowing existing forests to be used as mitigation banks leads to a net loss of mature or maturing forests. The loss of these forests spells the loss of the complex ecological relationship that are the basis of our existence.
- 7. **Strengthen tree replacement requirements at a 2:1 ratio based on Diameter at Breast Height**. Per section 22A.00.01.08 General Forest Conservation Plan Provisions, section F Tree Save Plans: if there is to be tree replacement, state and local entities should calculate tree replacement replanting at a 2 to 1 ratio based upon the diameter at breast height (dbh) lost. For example, the loss of one 24"dbh tree would be replaced with sixteen 3 inch dbh trees or twelve 4 inch dbh.

CONCLUSION

Forests are vitally important for sustaining life on Earth and play a major role in the fight against climate change. The window is quickly closing for effective climate action. If we are really serious about tackling climate change, halting the decline in biodiversity, and achieving a "Net Gain in Forests," we need to preserve all of our remaining forests, and encourage the expansion of our forests through a natural regeneration process. These are the most proven and most cost-effective ways to prevent a worsening of the effects of climate change. Preserving and expanding our forested ecosystems is crucial for sustaining life on Earth!

⁶ Technical Study on Changes in Forest Cover and Tree Canopy in Maryland, p.65.

⁷ In October 2020, Attorney General, Brian Frosh responded to a question from Steuart Pittman, Anne Arundel County Executive as to whether the Forest Conservation Act permitted existing forests to be used as mitigation banks rather than using created (afforestation) or restored (reforestation) forests as mitigation banks. Frosh concluded that the language of the Forest Conservation Act made a clear case that "the only forests in Maryland that are eligible for treatment as "forest mitigation banks" from which developers may buy credits for that offset method are forests that were "intentional[ly]" created or restored "expressly" for that purpose." In other words, existing forests were not allowed to be used as mitigation banks under the Forest Conservation Act. I believe this interpretation offers the correct course of action for our time. https://www.naiopmd.org/wp-content/uploads/Forest-Conservation-AG-Opinion.pdf, p.28.