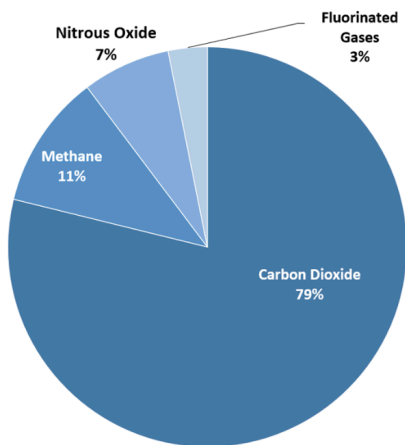


To Montgomery County Council Feb. 7, 2023
Re: In favor of passing Bill 25-22

Thank you, Council President Glass and Council Members for the opportunity to testify in support of Bill 25-22 Amendments to Forest Conservation Law and thank you CM Albornoz for sponsoring this bill.

I am a retired NASA-scientist, a volunteer Maryland Naturalist and am testifying on behalf of Montgomery County Climate Action Plan (CAP) Coalition. The CAP Coalition, is a network of 17 local organizations and many individuals advocating to reduce greenhouse gas emissions 80% by 2027 and 100% by 2035 and to build resilience to impacts of climate change for County residents. As you know, conservation of forests contributes effectively and positively to sequestration of carbon dioxide, the major greenhouse gas in our atmosphere. Additionally, the presence of trees and contiguous greenways plays a vital role protecting our waterways, reducing rising air temperatures, enhancing our communities, and promoting the well-being of its residents. This coalition supports passage of the proposed amendments put forward at the request of the planning board staff.

Overview of U.S. Greenhouse Gas Emissions in 2020



Total U.S. Emissions in 2020 = 5,981 Million Metric Tons of CO₂

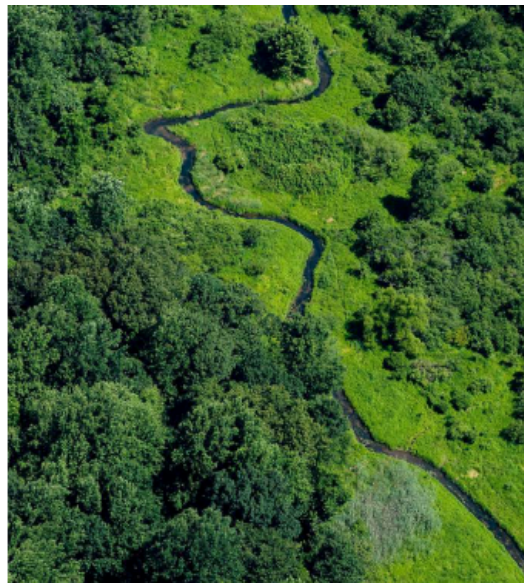
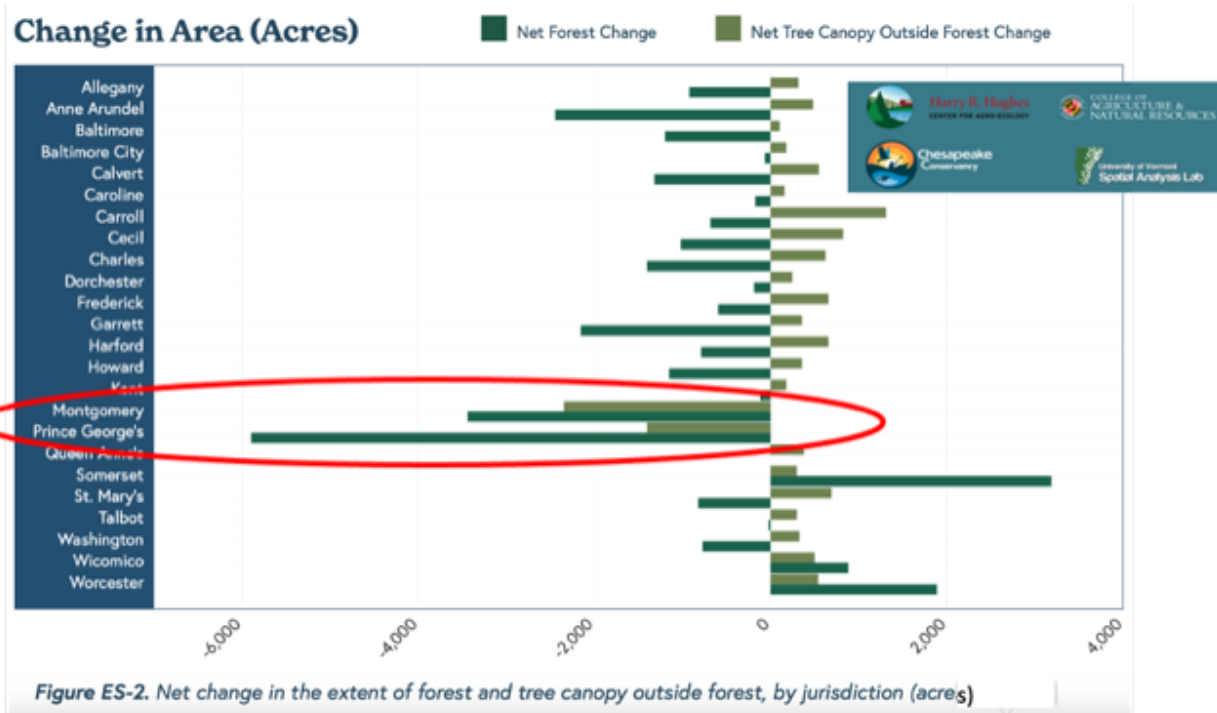


Fig. Left-from web site cited below

Fig. Right-from cover of Hughes report

We have reviewed the proposed amendments, and in collaboration with MoCo Forest Coalition, engaged in discussions with planning board staff members, Kristin Taddei and Christine Sorrento. We have also considered the proposed amendments in light of the release, in November 2022, of the Maryland Forest Technical Study on Changes in Forest Cover and Tree Canopy in Maryland (hereafter referred to as the Hughes report, the organization leading the study along with UMd College of Agriculture & Natural Resources, Chesapeake Conservancy, U. Vermont Spatial Analysis Lab).

Why should this bill be passed now? In the Hughes Report, Montgomery County stands out in its loss of contiguous forest and tree canopy outside of forest, second only to Prince George's County (see Fig. ES-2 from the report).



Furthermore, while the *rate* of forest and tree canopy loss state-wide has decreased in the past couple of decades (Hughes Report, p. 17), the existing canopy has become fragmented and stressed by non-native invasive species of plants with negative impacts on water quality, reduction of wildlife habitat and increased temperatures in urban areas with low tree canopy (heat island effects). This fact was highlighted in the State's study of forest and tree cover. The fragmentation of forest and tree canopy is shown to be due to development (Executive Summary pp.10-14, p. 53 and Conclusions pp.77-80).

Bill 25-22 provides incentives to clear *less* forest, protect watershed areas, plant trees in previously unforested areas (afforestation), requires planting and maintenance of forest and trees on institutional lands, among a list of additional items noted in the transmittal letter to the Council.

CAP Coalition supports MoCo Forest Coalition's position in:

- Asking that Council approves Bill 25-22 now, does not delay this bill any longer, and does not water it down any further.
- Asking that Council protects all existing contiguous forests in the county and that forest protection includes all forest ecosystems.
 - A full forest ecosystem includes healthy soil, drainage, healthy fungi in the soil, healthy micro-biotic communities in the soil, biomass; ground cover;

shrub layer, tree understory layer; tree canopy layer, diversity of different types of trees and plants.

- Requesting higher expectations for preserving forest on development sites.
- Adopting stronger replanting requirements to replace more of what is cleared.
- Dedicating and establishing a fund for controlling invasive plants and long-term tree maintenance.

Additionally, some comments from my Oct 3, 2022 testimony that I ask Council to consideration include:

- We understand that the planning board's intent in seeking landscaping in existing high-density areas where there may not be room to reforest as contributing toward beneficial afforestation. However, landscaping alone does not sufficiently mitigate the deleterious effects of heat islands nor provide other benefits that come with neighborhood trees. We ask that this provision be considered carefully and ensure that this landscaping provision doesn't defeat the goal of providing equitable benefits of trees in vulnerable communities where trees are most needed. It is those communities that suffer the greatest from urban heat island effects.
- There are places in the proposed bill where language is used that might effectively dilute the law and make some parts impossible to enforce. Examples include:
 1. line 189 "make a reasonable effort to minimize land disturbance..."
 2. lines 238-240 "to the extent practicable, entities providing public utilities...in a manner that avoids identified conservation areas and minimize tree loss."
 3. line 506 "preferred sequence" for afforestation and reforestation...

We note that Bill 25-22 doesn't address the need to *increase* forest and tree canopy in the county for the sake of climate resilience. More work needs to be done both to achieve no net forest loss and, in light of the climate emergency that we live with every single today, to *increase* forest and tree canopy in our County because trees are the most effective mechanism for sequestration of CO2.

I ask for your vote in support of this bill without delay, so that we as citizens of Montgomery County and you as our leaders can make progress toward greenhouse gas reduction per the County's Climate Action Plan. Thank you.

References:

Technical Study on Changes in Forest Cover and Tree Canopy in Maryland, Nov. 2022.
<https://www.chesapeakeconservancy.org/mdforeststudy2022>

Overview of Greenhouse Gases, US Environmental Protection Agency
<https://www.epa.gov/ghgemissions/overview-greenhouse-gases>