## The Frederick News-Post

## **County Council should strengthen forest protections**

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The Frederick County Council is considering two bills to ensure "no net loss" of forested acreage in our county. One bill would amend the Forest Resource Ordinance to require land developers to replace, acre for acre, any forest removed during development. The other bill would change the Zoning Ordinance to require evaluation and protection of "sensitive environmental areas" (forests, floodplains, wetlands and steep slopes) during the planning stages of any zoning reclassification.

As a plant ecologist and Frederick County forest owner, I strongly support passage of these measures.

We need forests. They combine low cost, little effort, and natural beauty to help solve many of the county's environmental concerns. Forests protect stream water quality and drinking water supplies by reducing stormwater runoff and taking up pollutants. Forest soils take up 40% more water than urban areas and tilled soils. Every 10% increase in forest cover in a watershed produces double the savings in water treatment downstream, according to research reported by the conservation group American Forests. Forests reduce flooding, and their loss can result in increases in public money spent to manage flood water.

The Maryland Forest Service (MFS) cites research indicating that tree loss in the Baltimore-Washington region since 1973 has resulted in a 19% increase in stormwater runoff at a cost of \$1.08 billion. What portion of that was Frederick County's?

Intact, mature forests are crucial components of Maryland's efforts to combat climate disruption, as they sequester and store carbon for decades, even centuries. Moist temperate forests like Frederick's store about 250 tons of carbon per acre. The Maryland Greenhouse Gas Emissions Inventory estimates that "carbon sinks" like forests currently mitigate about 15 percent of Maryland's greenhouse gasses. Even more carbon is stored in soil than in trees. When forested soils are disturbed during tree removal, they release carbon. Warmer soils, like those unshaded by forest trees, release more carbon than cooler soils. We can reduce our footprint by keeping carbon in forested soils.

There are many other forest benefits. Here are just a few. Trees provide us with oxygen. MFS states that an acre of functioning forest produces four tons of oxygen – enough to supply oxygen for a year for 18 people! Forests stabilize streambanks and steep slopes. They provide habitat for diverse animal and plant communities and function as wildlife corridors. And they provide humans with places for recreation and rejuvenation.

The ideas in the bills the County Council are considering are straightforward: 1) protect existing forest; 2) replace any trees you must cut down. Livable Frederick, our county's forward-looking comprehensive plan, states that between 2001 and 2014, we lost over 420 acres of forest annually. We should be working hard to retain existing forests, and to grow new ones. These bills are the first step towards implementing Livable Frederick's Tree Canopy and Forest Coverage initiative.

I am writing as a member of the Executive Committee of the Climate Change Working Group of Frederick County. This group of knowledgeable citizens works to implement societal and governmental actions at the local level that address the planet's climate crisis. I recently retired from my position as Invasive Plant Ecologist for the Maryland Department of Natural Resources, where I spent my career studying and protecting Maryland's forests. From the perspective of both roles, I urge the Council to pass these bills.

Source: <a href="https://www.fredericknewspost.com/opinion/columns/county-council-should-strengthen-forest-protections/article\_1fdcdfaf-14d8-5e23-89c0-2bee0c709aef.html">https://www.fredericknewspost.com/opinion/columns/county-council-should-strengthen-forest-protections/article\_1fdcdfaf-14d8-5e23-89c0-2bee0c709aef.html</a>