

# **HB1133\_IndivisibleHoCo\_FAV\_PeterAlexander.pdf**

Uploaded by: Alexander, Peter

Position: FAV



**Bill Number:** HB-1133 – “Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings”

**Name:** Peter Alexander, PhD

**Position:** Favorable

**RE:** Testimony before the House Environment and Transportation Committee

**Date:** February 24, 2021

Mr. Chairman, Mr. Vice Chair, and members of the Committee,

I represent the 700+ members of Indivisible Howard County MD. I am writing in support of **HB-1133**, which establishes a program supplemental to the plan mandated by the 2019 Draft Greenhouse Gas Emissions Reduction Plan to plant 500,000 trees in underserved areas of the State by the end of December 2030.

**HB 1133** establishes progress toward reversing inequities in urban tree cover throughout Maryland and as well as furthering establishment of a Maryland-based carbon offset market to support more tree plantings.

***Tree plantings in underserved areas will help Maryland address longstanding inequities***

This legislation’s 500,000 tree planting goal for underserved urban communities could help reverse inequities through addressing urban heat island effect, delivering improved health and mental health outcomes, and increasing property values and social connections. Urban trees are proven to be one of the most cost-effective water quality filters, cleaning streams and rivers, and creating a healthy environment for marine life. This protects the health and safety of those who swim and fish from local waterways.

***Trees capture carbon and deliver a host of co-benefits***

The planting of trees in urban areas serve as one of the most cost-effective natural filters of polluted runoff. The Commission established in HB 1133 will design a tree planting plan to mitigate heat desserts, maximize water quality, air quality, and carbon sequestration. Native trees are also especially critical habitat for wildlife throughout the state.

***A Maryland-based carbon offset market could support additional tree plantings after the expiration of this bill***

This bill envisions a Commission that would draw on existing expertise to develop a plan for establishing a carbon offset market in Maryland. A carbon offset market could help support additional tree plantings by drawing on private investment.

**We urge a favorable report.**

Peter Alexander, PhD  
Columbia, MD

**HB 1133\_FAV\_MML.pdf**

Uploaded by: Bailey, Angelica

Position: FAV



## Maryland Municipal League

*The Association of Maryland's Cities and Towns*

# TESTIMONY

February 24, 2021

**Committee:** House Environment and Transportation

**Bill:** \_\_\_\_\_ HB 1133 Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings

**Position:** Support

**Reason for Position:**

The Maryland Municipal League supports House Bill 1133, which establishes a goal of 500,000 native species trees planted in Maryland by 2030 partially through providing grants to municipalities.

Local governments recognize the value of forests to our communities, from impacts on individual health to climate resiliency. These impacts are most apparent in our underserved communities. Afforestation and reforestation can be expensive, but the funding and logistical assistance provided through the Urban Trees Program proposed in this bill would go a long way to helping local governments make positive environmental progress.

For these reasons, the Maryland Municipal League supports House Bill 1133 and respectfully requests a favorable committee report.

**FOR MORE INFORMATION CONTACT:**

Scott A. Hancock	Executive Director
Angelica Bailey	Director, Government Relations
Bill Jorch	Director, Research and Policy Analysis
Justin Fiore	Manager, Government Relations

1212 West Street, Annapolis, Maryland 21401

410-268-5514 | 800-492-7121 | FAX: 410-268-7004 | [www.mdmunicipal.org](http://www.mdmunicipal.org)

**written testimony HB1133 2021.pdf**

Uploaded by: Cardin, Nina

Position: FAV



HB1133  
Favorable

Dear Chairman Barve, Vice-Chair Stein and Honorable Members of the Committee,

The Maryland Campaign for Environmental Human Rights supports HB **1133** as contributing toward the reversal of inequities in urban tree cover throughout Maryland and as furthering the establishment of a Maryland-based carbon offset market to support more tree plantings.

Through my years working at the Baltimore Orchard Project, I learned and saw the many benefits of planting trees in urban environments.

### **Tree plantings in underserved areas address longstanding inequities**

- This legislation's 500,000 tree planting goal for underserved urban communities could help reverse inequities through addressing urban heat island effect, delivering improved health and mental health outcomes, and increasing property values and social connections
- Urban trees are proven to be one of the most cost-effective water quality filters, cleaning streams and rivers, and creating a healthy environment for marine life. This protects the health and safety of those who swim and fish from local waterways

### **Trees capture carbon and deliver a host of co-benefits**

- Trees capture carbon and deliver a host of co-benefits including serving as one of the most cost-effective natural filters of polluted runoff
- The Commission established in HB 1133 will design a tree planting plan to mitigate heat deserts, maximize water quality, air quality, and carbon sequestration.
- Native trees also provide essential habitat for wildlife.

### **A Maryland-based carbon offset market could support additional tree plantings after the expiration of this bill**

- This bill envisions a Commission that would draw on existing expertise to develop a plan for establishing a carbon offset market in Maryland
- A carbon offset market could help support additional tree plantings by drawing on private investment

**We urge your support of HB 1133 and the Committee's favorable report.**

Nina Beth Cardin  
Maryland Campaign for Environmental Human Rights





# **HB1133\_CBF\_Support\_RobinClark.pdf**

Uploaded by: Clark, Robin Jessica

Position: FAV



# CHESAPEAKE BAY FOUNDATION

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Environmental Protection and Restoration  
Environmental Education

## House Bill 1133

Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings

Date: February 24, 2021  
To: House Environment and Transportation  
Committee

Position: **Support**  
Contact: Robin Jessica Clark, Maryland Staff  
Attorney

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Chesapeake Bay Foundation **SUPPORTS** HB 1133. This legislation sets a goal for planting 500,000 trees in underserved urban areas, acknowledging the environmental and societal value of trees.

### **500,000 urban trees are a positive step to addressing stormwater runoff pollution into the Bay**

This legislation sets out a goal for the State to plant 500,000 trees in underserved urban areas of the State. The definition of underserved is an urban area as defined by the US Census and one of the following:

- Public housing,
- Neighborhoods that were red-lined;
- Census tracts with high unemployment above state average; or
- Census tracts with median incomes representing 75% of the state average.

Urban areas are Maryland's most intensely developed areas. In these zones, a network of roadways, roofs, paths, and parking lots creates slick "impervious" surfaces that drive rainfall quickly and directly into waterways, carrying nutrient and chemical pollution. Breaking up those smooth pathways with well-positioned leaves and roots will help slow and filter the rainwater. In this was this legislation's 500,000-tree goal may help address stormwater pollution, a rising source of nutrient pollution into the Chesapeake Bay.

### **Stormwater runoff pollutes streams in underserved communities**

Stormwater pollution is an increasing problem for the Chesapeake Bay, yet existing statewide plans largely ignore it. Failure to address stormwater aggravates existing inequalities in our State. While stormwater runoff is an issue for the Bay, it is also an issue for local waterways, and in particular, local waterways in developed areas of the State with a disproportionately high share of disadvantaged residents.

### **Trees plantings in urban areas will deliver a range of co-benefits**

The Climate Solutions Now Act directs that at least 500,000 of the 5 million trees named in the statewide goal should be planted in underserved areas of the State. These trees will be planted through the Chesapeake Bay Trust's partnerships with local neighborhood and community groups who apply for tree plantings.

Tree plantings lessen dangerous urban heat-island effects and filter harmful airborne particulates that are common in urban environments. In areas with more trees, residents have better physical and mental health, improved ability to cope with stress, and increased mental clarity. Social cohesion is stronger in communities with trees.

**Maryland Office | Philip Merrill Environmental Center | 6 Herndon Avenue | Annapolis Maryland 21403 | 410 268-8816 | CBF.ORG**

*The Chesapeake Bay Foundation (CBF) is a non-profit environmental education and advocacy organization dedicated to the restoration and protection of the Chesapeake Bay. With 300,000 members and e-subscribers, including over 109,000 in Maryland alone, CBF works to educate the public and to protect the interest of the Bay and its resources.*



# CHESAPEAKE BAY FOUNDATION

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*Environmental Protection and Restoration  
Environmental Education*

## **An urban tree planting goal incorporates additional equity into State and local tree planting goals**

There are at least three current State environmental goals that rely on tree planting. The State's Phase III Watershed Implementation Plan, the State's Climate Watershed Implementation Plan, and the State's Greenhouse Gas Reduction Plan. A robust urban tree planting goal will help the State's progress toward its existing goals and help ensure that the progress is achieved in a way that benefits all communities.

A number of cities and towns in Maryland have urban tree canopy goals. Through additional funding and technical support from the Chesapeake Bay Trust, this legislation will help local communities attain their tree canopy goals. It will also ensure that the trees planted with State funding are planted in underserved areas.

## **A Commission will help maximize water quality and climate benefits of tree plantings**

A Commission with membership from relevant State agencies and relevant stakeholders including the Maryland Association of Counties and Maryland Municipal League, the Commission on Environmental Justice and Sustainable Communities, statewide environmental advocates, the Farm Bureau, the University of Maryland, and the Maryland Forestry Foundation will help guide the tree plantings under this legislation. The Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings will report by October 31, 2022 with a plan for tree planting, including guidelines for plantings to maximize carbon sequestration, mitigate urban heat islands, and improve water and air quality.

## **Private investment may become a long-term source of funding after State funding expires**

HB 1133 makes use of existing environmental funds to support the tree plantings goal. As the State is completing upgrades to its major wastewater treatment plants, there is funding available in the Bay Restoration Fund to support other needed water quality practices. This legislation would dedicate \$10 million per year for eight years to tree plantings in underserved areas. The legislation's Commission will investigate methods for seeking private capital for tree plantings and consider using Water Quality Revolving Loan Funds (WQRLF) to back Environmental Impact Bonds for tree plantings.

## **The trees will be native species, sustainable, and properly maintained**

The 500,000 trees will be native, sustainable species and will be maintained. The legislation's Commission will determine a list of native species for plantings. Using this list, the Chesapeake Bay Trust will work with community and neighborhood organizations who apply for grant funding to determine the types of trees planted. The community will discuss the possibilities, including the tree's height, appearance, and other attributes and requirements for growth. The Chesapeake Bay Trust will include provisions for verification that tree-plantings are being implemented and maintained as planned in the grant agreement with the community group receiving the trees.

**CBF urges the Committee's FAVORABLE report on HB 1133.** For more information, please contact Robin Jessica Clark, Maryland staff Attorney at [rclark@cbf.org](mailto:rclark@cbf.org) and 443.995.8753.

Maryland Office | Philip Merrill Environmental Center | 6 Herndon Avenue | Annapolis Maryland 21403 | 410 268-8816 | CBF.ORG

*The Chesapeake Bay Foundation (CBF) is a non-profit environmental education and advocacy organization dedicated to the restoration and protection of the Chesapeake Bay. With 300,000 members and e-subscribers, including over 109,000 in Maryland alone, CBF works to educate the public and to protect the interest of the Bay and its resources.*

**BaltimoreCounty\_FAV\_HB1133.pdf**

Uploaded by: Conner, Charles

Position: FAV



JOHN A. OLSZEWSKI, JR.  
*County Executive*

CHARLES R. CONNER III, ESQ.  
*Director of Government Affairs*

JOEL N. BELLER  
*Deputy Director of Government Affairs*

**BILL NO.: HB 1133**

**TITLE:** Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings

**SPONSOR:** Delegate Bridges

**COMMITTEE:** Environment and Transportation

**POSITION:** **SUPPORT**

**DATE:** February 24, 2021

Baltimore County **SUPPORTS** House Bill 1133 – Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings. This legislation would support and encourage tree-planting efforts, with a goal of planting and helping to maintain in the State 500,000 sustainable trees in underserved areas by the end of 2030.

Trees are one of nature’s best methods to maintain climate, limit levels of CO2 in the air and generate a healthy environment. Baltimore County Executive Olszewski understands that climate change is no longer an issue to be cast aside and that leaders must take bold action to mitigate the impacts of greenhouse emissions. Planting trees and reforestation urban areas is one of the most effective ways to work toward greener government.

House Bill 1133 sets out the ambitious goal of planting 500,000 trees in Maryland by 2030 primarily in areas that experience disproportionate underinvestment from the State. In addition to tracking the progression of tree planting, this legislation would also make available funding for local forestation efforts. The County’s ongoing efforts to plant urban trees and continue investing in underserved communities are limited due to funding, staff availability, and specific requirements under existing state laws. This will provide the county an opportunity to pursue more funding for tree planting efforts already underway.

Accordingly, Baltimore County requests a **FAVORABLE** report on HB 1133. For more information, please contact Chuck Conner, Director of Government Affairs, at [cconner@baltimorecountymd.gov](mailto:cconner@baltimorecountymd.gov).

**HB1133 Testimony\_Preservation Maryland\_FAV.pdf**

Uploaded by: Cowan, Eleanor

Position: FAV

Testimony of Elly Cowan  
Director of Advocacy, Preservation Maryland

Before the  
House Environment and Transportation Committee  
February 24, 2021

Pertaining To: HB1133, Tree Planting – Urban Trees Program and Commission for the  
Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings

*Support*

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On behalf of the staff and Board of Directors of Preservation Maryland, I thank you for the opportunity to provide testimony on the value of smart growth and preservation in Maryland. Through our Smart Growth Maryland program, Preservation Maryland advocates for a more environmentally and economically sustainable future that creates opportunities for all Marylanders through better development patterns.

### SUPPORT FOR HOUSE BILL 1133

Preservation Maryland supports HB 1133 which will go a long way toward reversing inequities in urban tree cover throughout Maryland and will further the establishment of a Maryland-based carbon offset market to support more tree plantings in the future.

Urban trees are proven to be one of the most cost-effective water quality filters, cleaning streams and rivers and creating a healthy environment for marine life. This protects the health and safety of those who swim and fish from local waterways. Trees capture carbon and deliver a host of co-benefits including serving as one natural filters of polluted runoff. Native trees are also especially critical habitat for wildlife throughout the state, including in urban areas. HB1133 seeks to support and encourage both public and private tree planting efforts, focusing on a goal of planting and helping to maintain 500,000 native trees in Maryland's underserved urban areas by 2030.

In addition to the obvious environmental benefits, this legislation can also help Maryland address longstanding inequities. The additional tree coverage resulting from the planting 500,000 trees through HB1133 could help mitigate the urban heat island effect, deliver improved health and mental health outcomes, and increase property values and social connections for underserved urban communities.

This bill would also establish a Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings. It envisions a Commission that will design a tree planting plan to mitigate heat deserts, maximize water quality, air quality, and carbon sequestration. Additionally, the Commission that would draw on existing expertise to develop a plan for establishing a carbon offset market in Maryland. A carbon offset market could help support additional tree plantings by drawing on private investment. A Maryland-based carbon offset market could support additional tree plantings after the expiration of this bill, extending the positive impacts of this legislation well into the future.

Preservation Maryland urges the Committee's favorable report of HB1133.

Contact: Elly Cowan, [ecowan@presmd.org](mailto:ecowan@presmd.org)



# **CBT Testimony - HB 1133.pdf**

Uploaded by: Davis, Jana

Position: FAV



## House Bill 1133 (Delegate Bridges) – Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings Written Testimony

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**Date: February 24, 2021**

**Position: SUPPORT**

Submitted to: House Environment and Transportation Committee

Submitted by: Jana Davis, Executive Director, Chesapeake Bay Trust

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The Chesapeake Bay Trust supports its urban tree planting role outlined in HB 1133. The Trust is a grant-making organization established by the General Assembly in 1985 and has administered similar programs in the past, such as the Green Streets, Green Jobs, Green Towns Initiative, a partnership with the U.S. Environmental Protection Agency and the Maryland Department of Natural Resources.

Project type is often left up to our grantees, and tree planting is strongly desired and often requested by many of our applicant communities. The reason: Tree planting in all communities - urban, suburban, and rural - has multiple positive impacts, and communities recognize these co-benefits:

Economic/Energy: Trees have economic benefits, reducing energy costs by providing shade.

Economic/Commercial: Studies show that the aesthetic value of trees in business districts can increase revenue.

Livability: The shade provided by trees counters heat island effects in urban areas, and recent studies show a drop in crime in greened neighborhoods.

Physical and Mental Health: Trees and other green spaces,

both urban and non-urban, have been shown to improve physical and mental human health<sup>1234</sup>.

Improved health leads to longer lifespans and lower medical costs through preventative means, top of mind for many in these times of COVID. Urban greening projects may be one tool to combat health disparities in certain communities.

Climate: Trees are a sink for carbon dioxide, serving as a mitigation tool for climate change.

Water Quality: Trees uptake excess nutrients, serving as a water quality best management practice, so positive for local waters and the Chesapeake Bay.



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<sup>1</sup> Wolf KL, Robbins AS. 2015. Metro nature, environmental health, and economic value. *Environ Health Perspect* 123:390–398; <http://dx.doi.org/10.1289/ehp.1408216>

<sup>2</sup> South et al., 2018, Effect of Greening Vacant Land on Mental Health of Community-Dwelling Adults: A Cluster Randomized Trial. *JAMA Netw Open*. 2018;1(3):e180298. doi:10.1001/jamanetworkopen.2018.0298

<sup>3</sup> White, M.P., Alcock, I., Grellier, J. *et al.* 2019. Spending at least 120 minutes a week in nature is associated with good health and wellbeing. *Sci Rep* 9, 7730. <https://doi.org/10.1038/s41598-019-44097-3>

<sup>4</sup> Spending Just 20 Minutes in a Park Makes You Happier. Here's What Else Being Outside Can Do for Your Health. 2019. *Time* magazine <https://time.com/5539942/green-space-health-wellness/>.

Flooding: Trees uptake water, contributing to reduction of flood risk (Figure 1).

Habitat: Trees provide habitat to many other species.

The economic return from health benefits alone as a result of greening projects have been shown in some models to exceed costs to implement them, creating a significant return on investment. We will explore whether other benefits listed above, such as carbon credits, can be used to supplement the revenue stream for these tree projects.



Figure 1: Impact of street tree planter boxes on flooding. Prior to this Chesapeake Bay Trust-funded urban greening grant, local business basements flooded. After the project, businesses report no basement flooding.

Over the past 5 years, the Trust has funded (with about 25 other funding partners who aggregate funds at the Trust for distribution, including Baltimore City, Prince George’s County, Montgomery County, Anne Arundel County, Harford County, Howard County, Charles County, City of Salisbury, City of Gaithersburg, the U.S. Environmental Protection Agency, the National Park Service, BGE, and more) **298 projects** led by over 200 unique entities that had a predominant or significant tree planting focus through grants to communities and schools. Those projects planted **140,133 trees total, 20,555 in underserved** areas, averaging \$264 per tree in underserved areas. The 298 projects were funded at **\$16.2m** (\$5.4 million in underserved areas). Approximately half of the funds from these awards were distributed to local businesses, such as nurseries to supply trees and contractors to plant them. Additional jobs at nonprofit entities are supported, and a total of **62,386 total people** were involved in the projects (volunteers, teachers, students), with **26,322 people of color** (42%).

The Trust can support only about a third of grant requests due to current funding levels, and outreach is tempered to available funding. We anticipate, therefore, that should more resources be available, more communities would access them.

The demand is there: About 100 local jurisdictions or communities across Maryland, from Cumberland to Cambridge and many in between, have either been working on or adopted tree canopy goals and have supported neighborhood nonprofits within them to help accomplish those goals. These urban tree canopy goals call for thousands of acres of additional trees to be planted: In Baltimore City alone, increasing from current levels of 28% to the 40% goal means an additional approximately 2400 acres are needed.<sup>5</sup> Cumberland had 1200 acres of tree canopy in the urbanized area at last assessment, and had identified another 2000 urban acres where tree canopy could be planted<sup>6</sup>.

<sup>5</sup> <https://bcrcp.baltimorecity.gov/forestry/treebaltimore/canopy>; <https://www.nrs.fs.fed.us/news/release/Baltimore-tree-canopy>

<sup>6</sup> [https://www.chesapeakebay.net/channel\\_files/22153/cb\\_utc\\_goals-progress.pdf](https://www.chesapeakebay.net/channel_files/22153/cb_utc_goals-progress.pdf)

We believe that capacity of organizations will quickly grow to match the goals outlined in the bill.

The science of implementing tree canopy projects exists: Various programs at the Maryland Department of Natural Resources<sup>7</sup> and the EPA-coordinated Chesapeake Bay Program<sup>8</sup> offer guidelines for implementing tree canopy goals.

### **About the Chesapeake Bay Trust**

The Trust was created by the Maryland General Assembly in 1985 as a non-profit grant-making organization with a goal to increase stewardship and citizen engagement in the restoration of the state's local rivers, streams, parks, and other natural resources in diverse communities across the state, from the mountains of Western Maryland and the Youghiogheny watershed to the marshes of the Coastal Bays. The goal was to create an entity that could complement state agency work and reach large numbers of groups on the ground: schools, nonprofit organizations, faith-based institutions, homeowners associations, community and civic associations, and other types of groups.

The Trust invests in local communities and watersheds through grant programs and special initiatives and is known for its efficiency, putting on average 90 cents of every dollar into programs. The Trust has awarded over \$120 million through more than 12,000 grants and projects in every county in Maryland since 1985. We make 350-400 grants and other awards a year and have about 1,000 active grantees at any one time.

The Trust does not receive a direct state appropriation, and instead supported through revenue from the Chesapeake Bay vehicle license plate; half of the Chesapeake and Endangered Species Fund checkoff on the state income tax form; two new donation options through Maryland's online boating, fishing, hunting license system, one that focuses on veterans' rehabilitation; partnerships with federal, state, local agencies, family foundations, and corporate foundations; and individual donors.

The types of projects supported by the Trust include urban tree plantings, stream and park clean-ups, wetlands restoration, living shorelines, oyster seeding, local stream water quality monitoring, and outdoor educational experiences for children and adults. The Trust's programs reach about 80,000 K-12 students and 20,000 adult volunteers each year across the state. Due to its efficiency, the Trust has been rated with the maximum four-star rating by the nation's leading charity evaluator, Charity Navigator, for fourteen years, putting it in the top 1% of non-profits in the nation.

One of the Trust's basic tenants in its strategic plan is to engage under-engaged audiences in natural resources issues. Every individual in our area benefits from healthy natural resources, and in turn, every individual can help natural resources. Three under-engaged audiences of particular focus identified by our Diversity and Inclusion Committee are the faith-based sector, communities of color, and the human health sector. The Trust has seen much success: The number of students, volunteers, and teachers of color engaged in our grants match the demographics of Maryland. Close to 10% of our grants supported work at faith-based institutions of 13 different religions. We make grants for work at hospitals and other human health centers, but would like to do more. The funds generated from the program created in this bill will continue to support work with under-engaged audiences.

Thank you very much for the opportunity to present to the Committee. If you should have any questions regarding the Trust's testimony, please contact me 410-974-2941 x100 or [jdavis@cbtrust.org](mailto:jdavis@cbtrust.org).

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<sup>7</sup> <https://dnr.maryland.gov/forests/Pages/programs/urban/treecanopygoals.aspx>

<sup>8</sup> [https://www.chesapeakebay.net/documents/3b\\_Urban\\_Tree\\_Canopy\\_final.pdf](https://www.chesapeakebay.net/documents/3b_Urban_Tree_Canopy_final.pdf);  
[https://www.chesapeakebay.net/documents/UTC\\_Guide\\_Final.pdf](https://www.chesapeakebay.net/documents/UTC_Guide_Final.pdf)

# **HB1133- National Aquarium - FAV.pdf**

Uploaded by: Fredriksson, Ryan

Position: FAV



Date: February 24, 2021

Bill: HB 1133- Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings

Position: Support

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Dear Chair Barve and Members of the Committee:

The National Aquarium respectfully requests a favorable report for **House Bill 1133- Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings**, which will help reverse the inequities in urban tree cover throughout the state and takes steps towards establishing a Maryland-based carbon offset market to support more tree plantings.

Trees play a fundamental role in regulating city microclimates — filtering air pollution, improving water quality, providing shade, capturing carbon, as well as reducing the urban heat island effect. Additionally, urban trees can deliver improved health and mental health outcomes and increase property values.

In 2018, the National Aquarium contributed to a study examining the urban heat island effect in Washington, D.C., Richmond, Virginia, and Baltimore City. The results suggested that the urban microclimate was highly variable across all of these cities—with differences of up to 10°C between coolest and warmest locations at the same time—and that these air temperatures were primarily dependent on underlying landscape features<sup>1</sup>. Disparities in the maximum air temperatures were amplified by dense, sparsely vegetated urban cores. Volunteers in the study observed a relationship between lower income areas and the lack of heat mitigating features, including trees and open space.

By passing HB 1133, Maryland would be taking important steps towards creating a cleaner, healthier Maryland. ***We urge the Committee to issue a favorable report on HB 1133.***

Contact:

**Ryan Fredriksson**

Vice President, Government Affairs

410-385-8276

[rfredriksson@aqua.org](mailto:rfredriksson@aqua.org)

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<sup>1</sup> Shandas, V., Voelkel, J., Williams, J., & Hoffman, J. (2019). Integrating Satellite and Ground Measurements for Predicting Locations of Extreme Urban Heat. *Climate*, 7(1), 5. doi:10.3390/cli7010005

**2021.02.22\_Gray\_support\_HB1133.pdf**

Uploaded by: Gray, Robinne

Position: FAV

## **Citizen testimony in support of HB1133**

### Urban Tree Planting and establishment of carbon markets

As a resident of the Anacostia River watershed, most of which is in Prince George's and Montgomery County, I support HB1133 because I have experienced firsthand the importance of trees to the health of our rivers and our air, and how trees are appreciated and beloved by residents in our urban metropolitan area.

The bill's provision for planting half a million trees in under-served communities ensure that future generations in neighborhoods such as Colmar Manor, Cottage City, Edmonston, East Riverdale, and Bladensburg – which are otherwise located near densely developed areas and an industrial park – will enjoy the cooling shade of healthy trees during our hot and humid mid-Atlantic summers that are expected to get hotter in the coming years. Maryland residents will also enjoy the oxygen that trees provide, and the birds and other wildlife that a robust tree canopy will support.

Trees can live a long time, but all trees eventually die. Today we need to act with the foresight of maintaining and replacing our tree cover for our own good and for the good of the natural world that supports all life.

Please vote in support of HB 1133.

Robinne Gray

Berwyn Heights, Maryland 20740

Prince George's County, District 22

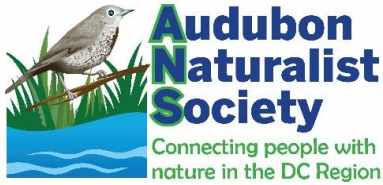
February 22, 2021



**HB1133\_ANS\_FAV.pdf**

Uploaded by: Guitarra, Denisse

Position: FAV



February 22, 2021

**Written Testimony for [HB1133](#)**- Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings

**Position:** Favorable

**Submitted by Denisse Guitarra**

Maryland Conservation Advocate, Audubon Naturalist Society (ANS)

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Dear House Environment and Transportation Committee,

For 124 years, Audubon Naturalist Society has inspired people to enjoy, learn about and protect nature. We thank the Environment and Transportation Committee for the opportunity to provide testimony for HB1133. ANS supports HB1133.

This legislation proposes the best nature-based solution to combat climate change, planting 500,000 native sustainable trees by 2030. Trees provide countless ecological services such as flood prevention, carbon sequestration, air and water purification, and reduction of urban heat island effects. These services cannot easily be replaced by built infrastructure, and it will always be much more expensive to try to do so. Furthermore, these 500,000 trees would be planted in underserved urban communities across the state. It is critical to plant more trees in urban centers to mitigate the “heat island effect,” which is only being worsened as the climate changes. Passing HB1133 will be critical to help create more resilient communities around the state, in both these urban areas and elsewhere. Additionally, this legislation calls for the creation a commission with a broad group of stakeholders which will study the carbon benefits and serve as support for more urban trees in the future.

On behalf of ANS and our 28,000 members and supporters, we recommend that the House Environment and Transportation Committee support the passage of HB1133.

Sincerely,

Denisse Guitarra

Maryland Conservation Advocate

Audubon Naturalist Society

Woodend Sanctuary | 8940 Jones Mill Road, Chevy Chase, Maryland 20815 | 301-652-9188

Rust Sanctuary | 802 Childrens Center Road, Leesburg, Virginia 20175 | 703-669-0000

[anshome.org](http://anshome.org)

# Hb1133 Urban Tree Planting.pdf

Uploaded by: Harbeson, Kristen

Position: FAV



MARYLAND LEAGUE  
OF CONSERVATION VOTERS

February 24, 2021

**SUPPORT HB1133: Tree Planting – Urban Trees Program and  
Commission for the Innovation and Advancement of Carbon Markets  
and Sustainable Tree Plantings**

**Maryland League of  
Conservation Voters**

Lynn Heller, Board Chair  
Maris St. Cyr, Vice Chair  
Michael Davis, Treasurer  
Hon. Virginia Clagett  
Stuart Clarke  
Candace Dodson-Reed  
Verna Harrison  
Melanie Hartwig-Davis  
Ed Hatcher  
Hon. Steve Lafferty  
Bonnie Norman  
Katharine Thomas

Kim Coble  
Executive Director

30 West Street  
Suite C  
Annapolis, MD 21401

410.280.9855  
mdlcv.org  
marylandconservation.org

Dear Chairman Barve and members of the committee,

Maryland League of Conservation Voters strongly supports HB 1133 Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings and thanks Delegate Bridges for his leadership on this Maryland LCV and environmental community priority legislation.

HB1133 is similar to an important provision of the Climate Solutions Now Act that we support as a legislative priority. We support HB1133 because it would fund the planting 500,000 sustainable native trees in urban and underserved areas. In many cities in Maryland, trees are sparse in underserved areas and some neighborhoods of color. The lack of trees exacerbates social inequities.

Trees provide Marylanders enormous health benefits. Trees and forests across the U.S. absorb 17.4 million tons of air pollutants, preventing 670,000 cases of asthma and other acute respiratory symptoms annually. Trees can help reduce surrounding air temperatures by as much as 9° F. This can significantly reduce heat stroke and hospitalizations due to heat waves that are becoming all too common under climate change. According to American Forests, “In cities nationwide, trees prevent approximately 1,200 heat-related deaths and countless heat-related illnesses annually.” Views of trees reduce stress. Studies show that populations living near forested areas exhibit lower asthma, diabetes, and high blood pressure rates. Urban trees help build stronger communities. Nature and trees provide settings in which relationships grow stronger and violence is reduced.

Our trees, forests, and urban tree canopy is incredibly valuable in terms of cost savings in Maryland. For example, Prince George’s County found that their trees filter 4.3 billion gallons of rainwater per year. The cost to filter this water without them would be \$12.8 billion per year. Those are real costs that the county avoided to comply with its Clean Water Act NPDES permit.

Each tree does so much for Marylanders. Over 20 years, one red maple tree can:

- Save 570 kWh of electricity and 20 MMBtu of fuel for cooling and heating from nearby communities by providing shade and winter wind block
- Remove over 3,000lbs of carbon dioxide
- Catch 27,000 gallons of rain and floodwater
- Stop 4,800 gallons of runoff pollution
- Reduce UV-B exposure by about 50%
- Filter 15 pounds of ozone, nitrogen dioxide, and sulfur dioxide from the air we breathe.

However, not everyone has been able to share in these benefits equally. In Maryland, analysis of demographic and land cover data confirms that low-income communities and communities of color have more impervious surfaces and less tree canopy, on average, than communities that are wealthier and predominantly white. Statewide, the quartile of census tracts with the most non-white residents are 35% impervious on average, whereas the whitest quartile of census tracts is only 13% impervious. The quartile of census tracts with the highest poverty rates have a tree canopy cover of 31% on average, compared to a 50% tree canopy cover in the quartile of census tracts with the lowest poverty rates. In fact, the implementation of green infrastructure including urban trees in Maryland has not been equitable. According to data downloaded from MDE's StormwaterPrint GIS web application, green infrastructure implementation in wealthier and whiter census tracts within Maryland's Phase I MS4 jurisdictions has far outpaced green infrastructure implementation in census tracts with higher poverty rates and non-white populations.

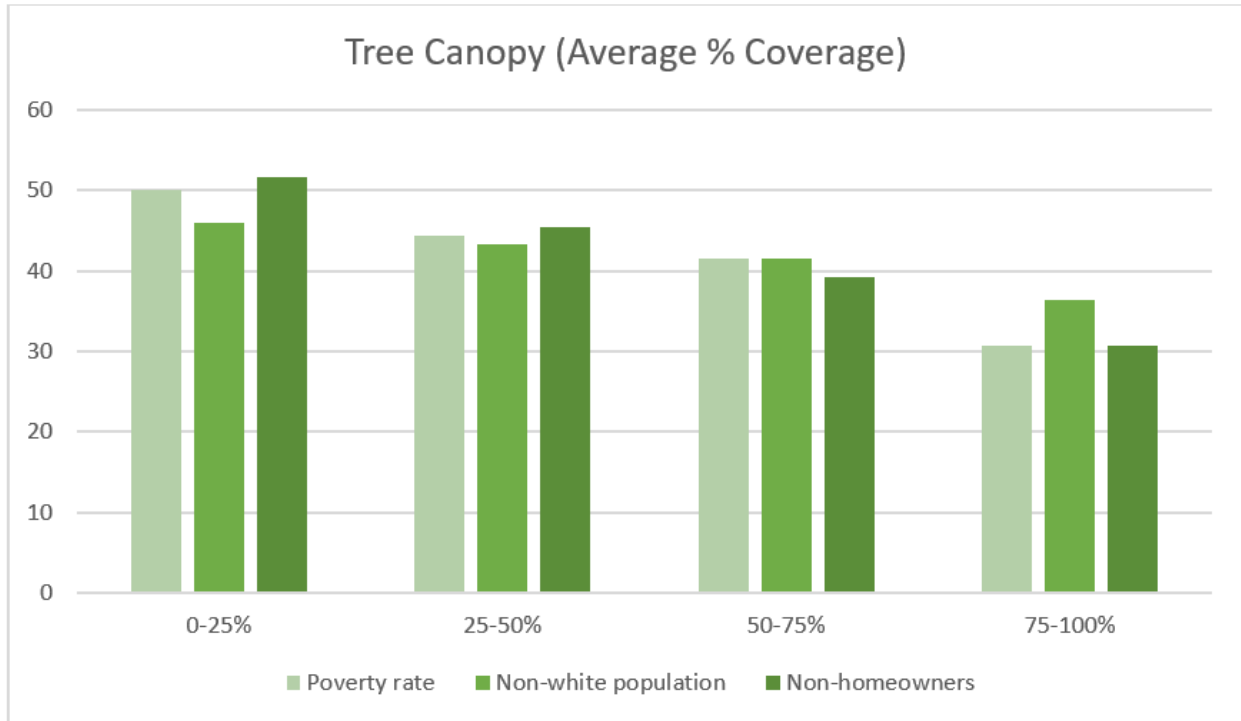


Figure 1: Tree canopy percentages were obtained from the Maryland high-resolution tree canopy data layer developed as part of NASA’s Carbon Monitoring System study.

For public health, racial justice, equity, climate change, clean water, the Chesapeake Bay, and the wellbeing of Marylanders, we support HB1133. Thank you for your consideration of this bill, and if you have any questions, please contact Ben Alexandro, water program director, at [balexandro@mdlcv.org](mailto:balexandro@mdlcv.org).

**We strongly urge a favorable report on HB1133.**

### 1. Marylanders and the Bay at risk

One big hurricane could scour out a huge amount of sediment laden with all sorts of pollution that is built up behind the Conowingo dam and send polluted water downstream resulting in significant impacts to the Bay. The dam did not create the sediment, primarily Pennsylvania agriculture did. However, the dam operation does prevent the polluted sediment from going downstream and significantly affecting the health of the river and Bay.

Studies show that the operation of the dam itself is causing some of this scouring and pollutant loading (up to 20% of the pollution coming past the dam in big storm events). A large enough storm could destabilize much of the sediment behind the dam and dump much of it into the Bay. This would not only have negative impacts on the ecosystem of the Bay, but it is also worth noting that according to [Maryland EJScreen Mapper](#), the area just below the dam in Harve de Grace and Perryville is an environmental justice hotspot. These already

overburdened communities would feel the disproportionate impacts of pollution going through the dam.

Under the Clean Water Act and Maryland state law, a federal permit to any facility that discharges to navigable waters may not be issued unless the state certifies that the activity does not violate state water quality standards or limitations. The dam is not meeting water quality standards and therefore, should not receive a permit.

## 2. Loss of billions of dollars

The settlement only requires Exelon pay \$200 million over nearly 50 years. However, much of the work these funds would be applied is already underway and has nothing to do with water quality. In fact, only about \$61 million in cash payments, or about \$1.2 million worth of pollution reduction per year, would be required. Studies show that the actual cost of meaningfully reducing the nutrients and sediment behind the dam has been estimated at approximately \$41 – \$172 million each year. While the financing to address the sediment pollution at the Conowingo Dam is currently being discussed, at this point in time, the state should not agree for the next 50 years that Exelon’s obligations are limited to approximately 1% of the financial needs.

## 3. Disastrous ‘fine print’

3.6 SRBC, Conowingo WIP, Chesapeake Bay TMDL, and Similar Proceedings (a) Collateral Proceedings states: *“As part of this Settlement Agreement and throughout its Term, MDE agrees that it shall not seek to impose upon Exelon, as part of (1) any SRBC proceeding, the Conowingo Watershed Implementation Plan (or “Conowingo WIP”), the Chesapeake Bay TMDL or any proceedings related thereto including proceedings of the Chesapeake Bay Program partnership (each, a “Collateral Proceeding”), or (2) any NPDES permit for the Dam, any State Discharge Permit for the Dam, any modification of the New License throughout its Term, any new CWA Section 401 water quality certification issued in connection with a federal permit requirement for any construction related to the FERC Relicensing Proceeding, or any similar proceedings”* This language means that under the settlement, Maryland would agree to not make the WIP or the NPDES permit stronger for nearly 50 years. Conowingo desperately needs a stronger WIP and NPDES permit if we want to reach our 2025 goals to restore the Bay and keep it healthy for years beyond. **“MDE agrees that it shall not seek to impose upon Exelon” any additional requirements under these provisions even if it becomes apparent during the dam’s 50-year license that additional requirements are necessary to assure compliance with the Clean Water Act and/or water quality standards.**

**NPDES Permit:** Under the settlement, MDE could not put in place a more stringent permit than what the current permit requires and the current NPDES Clean Water Act permit is woefully inadequate. Under the current NPDES permit, that would essentially remain in effect under this settlement, 398.41 pounds of sediment would be permitted to be discharged

per day on average.<sup>1</sup> ‘Emergency releases’ would also be allowed. So, this allows all those litter filled dam releases we see summer after summer and could lead to increasingly devastating problems in the future. The fact we see this release happen time and time again shows that the underlying controls are inadequate. The permit also does not address a lot of issues such as possible catastrophic scouring, effects on fish populations, and effects that changes in flow rates have downstream.

**Conowingo Watershed Implementation Plan:** Under the proposed settlement, Maryland would not be able to significantly improve the Conowingo Watershed Implementation Plan (CWIP). The current CWIP has no plan to address the millions of pounds of sediment behind the dam. It does not require enough best management practices to mitigate the influx of pollution coming down to the Bay from upstream, and it does not hold Exelon financially accountable for cleaning up the pollution. The CWIP goals that are laid out cannot be performed without sufficient funding. Finally, because no feasible funding source was identified for the CWIP, the nitrogen, phosphorus, and sediment loads at the dam will need to be allocated among the other states if this plan falls through. In terms of both funding and additional loads, officials from Bay partner states have already sounded their concerns over the inequity of this approach. HB 427 would help Maryland from having to rely on vague cleanup plans and inequitable offsets.

### **Conclusion:**

HB 427 is a bi-partisan bill that will prevent Maryland from entering into a settlement agreement that waives the state's authority under Section 401 of the Clean Water Act and jeopardizes the state's clean-up efforts for the next 50 years. **For all the above reasons, Maryland League of Conservation Voters urges a favorable report of SB 427.**

If you have any questions, please email Water Program Director Ben Alexandro at [balexandro@mdlcv.org](mailto:balexandro@mdlcv.org).

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<sup>1</sup>A monthly average of 30mg/L and daily maximum of 45mg/L of suspended solids. Average design flow is 47.74 MDG (MDG= Millions of Gallons per day). Since 1mg/L is 8.3454e-6 gallons, that means 398.41 pounds of sediment permitted to be discharged per day on average equating to 145,519 pounds of sediment permitted per year legally to be discharged.

<https://mde.maryland.gov/programs/Water/WetlandsandWaterways/Documents/ExelonMD/FERC/Conowingo-Vol1-Public.pdf#page=180&zoom=100,249,344>



# **HB 1133 Chesapeake Bay Commission Written Testimon**

Uploaded by: Hoffman, Mark

Position: FAV



# CHESAPEAKE BAY COMMISSION

*Policy for the Bay • [www.chesbay.us](http://www.chesbay.us)*

## Written Testimony

Bill Number/Title: HB 1133 / Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings  
Committee: Environmental and Transportation  
Hearing: February 24, 2021  
Position: Favorable

The Chesapeake Bay Commission is a tri-state legislative commission created by law in Maryland, Pennsylvania, and Virginia to advise the members of the three general assemblies on matters of watershed-wide concern. Its fundamental purpose is to assist each assembly and the U.S. Congress to develop legislation and policies that foster the collaborative and practical restoration of the Chesapeake Bay and its watershed.

### Position

The Commission supports HB 1133. Trees provide innumerable benefits critical to the restoration of the Chesapeake Bay watershed, such as rainwater filtration and carbon sequestration, while providing habitat for living resources. Additionally, for too long, environmental programs have ignored restoration in underserved communities.

HB 1133 would create a well-defined program to address both these concerns using the proven grant-making skills of the Chesapeake Bay Trust. And by leveraging other sources of funding, the economic value of the program would far exceed the state's investment. This would result in a win-win for both the Bay and our urban communities.

The proposed Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings would have an important role in guiding the tree-planting program, and perhaps more importantly, would work to develop policies to further leverage the value of the urban tree planting program and incentivize additional tree planting through the carbon offset market.

# **HB 1133 Tree Planting – Urban Trees Program and Co**

Uploaded by: Kerr, Cait

Position: FAV

**Wednesday February 24, 2021**

**TO:** Kumar Barve, Chair of House Environment & Transportation Committee; and Committee Members

**FROM:** Caitlin Kerr, The Nature Conservancy, Conservation & Climate Policy Analyst

**POSITION:** Support HB 1133 Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings

The Nature Conservancy (the Conservancy) supports HB 1133 offered by Delegate Bridges. HB 1133 seeks to further Maryland's progress on reversing inequities in urban tree cover throughout the state. It also advances the Maryland-based carbon offset market's establishment in order to support more tree plantings. Urban trees provide cost-effective, economically valuable co-benefits including ecosystem services like carbon dioxide sequestration, water filtration, flood mitigation, heat reduction, air quality improvement, and native trees provide critical wildlife habitat. These impacts can improve both mental and physical health. Furthermore, a carbon offset market could draw on private investment to support additional tree plantings. The Conservancy has significant experience here in Maryland and around the world working with private finance to implement conservation projects. This bill creates an opportunity to engage with and enhance the participation of private finance to both accelerate tree planting and reduce the costs of plantings, while also gaining the most significant and cost-effective co-benefits.

Nature is the climate solution hiding in plain sight. Natural climate solutions (NCS) protect biodiversity, restore watersheds, and improve human health. The Conservancy led the foundational science on NCS<sup>1</sup> and we know that intense collaboration between frontline communities, governments, large and small non-governmental organizations (NGOs), private financing is essential to achieve the transformational change that is necessary to combat climate change.

Urban trees provide critical public health benefits. In Baltimore City, temperatures reach up to 21°F hotter than in surrounding rural areas. By 2050, the city is estimated to experience five times as many dangerous heat days with a heat index over 105°F as we did at the start of the century. These impacts are not limited to cities; across Maryland, we average ten days a year when heat exceeds dangerous levels. This number is predicted to rise to forty days annually by 2050. Extreme heat can worsen existing illnesses, posing severe threats to vulnerable individuals. It can also cause mental and physical stress, heat-related illnesses, and sometimes deaths. Shaded surfaces can be up to 20-45°F cooler than peak temperatures of unshaded surfaces. Evaporation and transpiration processes in plants can reduce peak temperatures in the area by 2-9°F.

The Conservancy commends Delegate Bridges for working to reverse existing inequities in tree cover and also advancing natural climate solutions that can provide valuable environmental, economic, and public health co-benefits for years to come.

**Therefore, we urge a favorable report on HB 1133.**

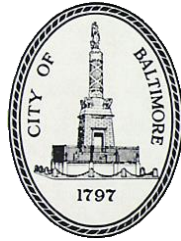
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<sup>1</sup> <https://www.pnas.org/content/114/44/11645>

**HB1133-ET-FAV.pdf**

Uploaded by: Mehu, Natasha

Position: FAV



**BRANDON M. SCOTT**  
MAYOR

*Office of Government Relations  
88 State Circle  
Annapolis, Maryland 21401*

**HB 1133**

February 24, 2021

**TO:** Members of the House Environment and Transportation

**FROM:** Natasha Mehu, Director of Government Relations

**RE:** HOUSE BILL 1133 – Tree Planting – Urban Trees Program and Commission For The Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings

**POSITION: SUPPORT**

Chair Barve, Vice Chair Stein, and Members of the Committee, please be advised that the Baltimore City Administration (BCA) **supports** House Bill (HB) 1133.

House Bill 1133 will support and encourage tree-planting efforts, with a goal of planting and helping to maintain native species in the State's underserved areas. The Bill also establishes and provides funding for an Urban Tree Program administered by the Chesapeake Bay Trust.

Baltimore City, like many other Maryland jurisdictions, has developed its own Climate Action Plan (adopted in 2012) and set a GHG emissions reduction goal of 25 percent reduction by 2020 and 30 percent by 2025 (relative to 2007). While the rise of global emissions are a serious threat to all, adverse effects from a changing atmosphere can compound existing poverty in a city like Baltimore, where almost 35 percent of households earn less than \$25,000 annually. The City has also established a goal to increase its tree canopy coverage to 40 percent tree.

The bill also supports the goals in our 2019 Sustainability Plan in the Trees and Forests chapter: Plant and establish more trees ensuring equitable planting distribution; Assess and manage the city's tree canopy for long-term health; and, Preserve the city's existing tree canopy.

For these reasons, the BCA respectfully requests a **favorable** report on House Bill 1133.

# **Testimony02242021-HouseBill\_1133**

Uploaded by: Parker, Patricia

Position: FAV



**House Bill 1133 (Delegate Bridges) – Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings**

**Written Testimony**

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**Date: February 24, 2021**

**Position: SUPPORT**

Submitted to: House Environment and Transportation Committee

Submitted by: Patricia Hayes-Parker, Executive Director, Central Kenilworth Avenue Revitalization Community Development Corporation (CKAR CDC, Inc.)

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Central Kenilworth Avenue Revitalization Community Development Corporation (CKAR CDC) supports the passage of HB 1133. CKAR CDC is a 501c3 non-profit charitable organization headquartered in northern Prince George's County, Maryland. We support passage of this bill because it is aligned with our mission to promote the social, environmental, and economic development of Greater Riverdale. The need is great in our community to add tree cover because of the positive impact trees have on health and wellness, economics and energy reduction, water quality and climate change. Trees are a part of appropriate development.

We have participated in the tree planting programs sponsored by Prince George's Department of the Environment and The Chesapeake Bay Trust for several years beginning in 2017. These organizations supported our tree planting programs through funding and technical expertise allowing CKAR to engage community residents in the importance of increasing tree cover in our communities. CKAR serves a very diverse population of 36,000 residents located inside the Beltway. Many of the homes and apartment dwellings date from the 1960s. Many homeowners have trees that need care and, in some cases, need to be removed. We are replacing them with healthy native species. Most residents need additional tree cover because there are very few trees on their property. Large areas suffer due to the amount of impervious paving in these very dense communities. Greater Riverdale is geographically diverse and ethnically diverse with 55% Hispanic or Latino, 32% black, 9% white and 2% Asian. Ten per cent (10%) of our area's population is below the poverty line; compared to 8% county-wide. The pockets of poverty in our community must be treated with equity.



There are environmental disparities in America's cities today. In 2004 G.C. Gee and Payne-Sturges of Washington, D.C. noted that there are environmental health disparities derived from a framework that integrates psychosocial and environmental concepts.<sup>1</sup> Minority neighborhoods tend to have higher mortality, morbidity and health risk factors compared with white neighborhoods due to environmental conditions that play an important role in producing and maintaining these health disparities.

In 2016, A. Regulon described a complex landscape of inequity in access to urban parks. He states that compared to mostly white communities, communities of color have historically has less access to green spaces – and less access to their physical, social and mental health benefits.<sup>2</sup> Greenspaces are associated with improved cognitive performance in children.<sup>3</sup> Finally, greenery can improve mental health and lower stress.<sup>4</sup>

Our community is an urban suburb with some housing built as early as the 1960s with some historic properties that date from the nineteenth century. Our community has undergone a substantial amount of change including in-fill housing and suburban-type strip shopping centers with large imperviously paved parking lots. A large amount of green space has been removed in our community. Most recently, the Purple Line light rail system will bring more development further decreasing the amount of green space.

Recently, CKAR CDC received national attention for its “Grow Green” tree program from The Starbucks Foundation. They provided support to CKAR in an award through their National Neighborhood Grants program. CKAR has worked over the last five years with several partners that include the Neighborhood Design Center, Prince George's County Department of the Environment and Public Works & Transportation, the UMD School of Landscape Architecture and The Chesapeake Bay Trust. These partnerships have provided CKAR an opportunity to plant over 800 trees in the community, contract each year with a local minority tree company that hires minority employees to plant and mulch the trees, use local nurseries as vendors, engage college students to assist us to reach out and inform the community about the value of trees on their property. We started planting 100 trees per season. Now we are planting 300 trees per season. Property owners are given options for the kind of tree that can be planted. We plant the right tree for the right space for every client.

We urge your support of HB 1133. Thank you for this opportunity to offer these comments. If you need more information, please visit our website ([www.ckarcdc.org](http://www.ckarcdc.org)) or call me at (240) 608-2527 or via email at [peparker@ckarcdc.org](mailto:peparker@ckarcdc.org).

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<sup>1</sup>Gee, G.C. & Payne-Sturges, D.C. (2004) Environmental health disparities: a framework integrating psychosocial and environmental concepts. *Environmental health perspectives*, 112 (17), 1645-1653.

<sup>2</sup>Regulon, A. (2016). A complex landscape of inequity in access to urban parks: A literature review. *Landscape and Urban Planning*, 153, 160-169.

<https://doi.org/10.1016/j.landurbplan.2016.05.017>

<sup>3</sup>" Greenspaces have been associated with improved cognitive performance in primary school children" Dadvand, Payam; et al. *Proceeds of the National Academy of Sciences*, May 2015, Vol. 112, No.26. doi: 10.1073/pnas.1503402112.

<sup>4</sup>Access to Green Space, Physical Activity and mental health: A Twin Study" Cohen-Cline, Hannah; Turkheimer, Eric; Duncan, Glen E. *Journal of Epidemiology and Community Health*, 2015, 69:523-529. Doi: 10.1136/jech-2014-204667.

**HB1133\_Urban\_Trees\_Program\_MLC\_FAV.pdf**

Uploaded by: Plante, Cecilia

Position: FAV



**TESTIMONY FOR HB1133**  
**TREE PLANTING – URBAN TREES PROGRAM AND COMMISSION FOR THE**  
**INNOVATION AND ADVANCEMENT OF CARBON MARKETS AND SUSTAINABLE**  
**TREE PLANTINGS**

**Bill Sponsor:** Delegate Brooks

**Committee:** Environment and Transportation

**Organization Submitting:** Maryland Legislative Coalition

**Person Submitting:** Cecilia Plante, co-chair

**Position:** FAVORABLE

I am submitting this testimony in favor of HB1133 on behalf of the Maryland Legislative Coalition. The Maryland Legislative Coalition is an association of activists - individuals and grassroots groups in every district in the state. We are unpaid citizen lobbyists and our Coalition supports well over 30,000 members.

Carbon capture is an important element in reducing greenhouse gases. Trees and green spaces in urban settings also help clean the air by absorbing odors and pollutant gases (nitrogen oxides, ammonia, sulfur dioxide and ozone) and filter particulates out of the air by trapping them on their leaves and bark. Communities that have suffered from fossil fuel infrastructure and the damaging effects of air pollution from them are in need of simple solutions that will help mitigate the problem.

This bill would create an urban tree planting program that would require planting of 500,000 sustainable, native species of trees in underserved urban areas that have suffered the most from fossil fuel pollutants. The Chesapeake Bay Trust and the Department of the Environment will manage the program, using funds from the Bay Restoration Fund.

Our members support the investment that we would be making in our underserved urban areas, and the investment in greenhouse gas reduction, which would help us meet our greenhouse gas reduction targets. This bill recognizes that those in underserved areas should get the most benefit from our environmental remediation policies.

The Maryland Legislative Coalition supports this bill and recommends a **FAVORABLE** report in committee.

# **BTT Written Testimony for HB 1133.pdf**

Uploaded by: Poirot, Thomasina

Position: FAV



# BALTIMORE TREE TRUST

## House Bill 1133 (Delegate Bridges) – Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings Written Testimony

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**Date:** February 24, 2021

**Position:** SUPPORT

Submitted to: House Environment and Transportation Committee

Submitted by: Thomasina Poirot, Co-Chair, Baltimore Tree Trust

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**10,000 Trees Per Year is the Goal and HB1133 can help get us there.** Baltimore's tree canopy is woefully deficient. Due to disease, lack of maintenance, and lack of planting organizations, Baltimore's canopy is 13% below the 40% recommended level for healthy cities. Climate change, heat maps, lack of stormwater management, and hotter than normal summers have increased constituent discussions about the importance of trees; approval of HB1133 would provide organizations like BTT (though the Chesapeake Bay Trust) with resources to scale operations resulting in more trees, healthier cities, and more JOBS for Maryland residents!

**Workforce Development. Equity. Environmental Justice. Public Health.** The Baltimore Tree Trust solves all of these issues, one tree at a time. Founded in 2008, the Baltimore Tree Trust (hereinafter "BTT"), is a 501(c)(3), is dedicated to restoring Baltimore's urban forest through tree planting and maintenance, which are all accomplished by workforce development initiatives.

**Mandatory Maintenance.** BTT mandates that its higher caliper trees are planted pursuant to arborist recommendations, and each and every tree is watered for a period of two years after planting. This operations protocol has resulted in a higher tree survival rate and faster results to greener neighborhoods. Baltimore City residents have reported that children are more active in their new tree-lined streets and excitement about trees is growing!

Best of all, BTT's plantings are being done by **BALTIMORE CITY RESIDENTS** pursuant to partnerships with other local non-profits committed to return to work and work preparation programs. BTT has a workforce development pipeline program called the Urban Roots

Apprenticeship Program which recruits, trains, mentors and connects Baltimore residents with successful careers in the landscaping industry.

BTT is one of the only organizations planting trees in Baltimore City and is leading the way—in 2020, BTT planted more than 3,000 trees. HB 1133 and its economic provisions would help to support BTT's capacity to plant 10,000 trees per year over the next 5 years, equating to more than 60 total jobs created through Urban Roots Apprenticeship and on a path forward to the 40% canopy restoration goals.

Thank you for your consideration,

A handwritten signature in blue ink, appearing to read 'Thomasina Poirot', with a long horizontal flourish extending to the right.

Thomasina Poirot

# **HB1133 - Tree Plantings .pdf**

Uploaded by: Richards, Annie

Position: FAV





Testimony in Support of **House Bill 1133-Tree Plantings - Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings**

February 24, 2021

Dear Chairman Barve and Members of the Committee,

Thank you for this opportunity to submit testimony **in support of HB1133 - Tree Plantings - Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings** - on behalf of ShoreRivers. ShoreRivers is a river protection group on Maryland's Eastern Shore with 3,500 members. Our mission is to protect and restore our Eastern Shore waterways through science-based advocacy, restoration and education.

There is a distinct lack of tree canopy and native species tree populations within historic municipalities and underserved communities of the Eastern Shore, and we are in need of state support to remedy this problem. Tree plantings are a cornerstone in our efforts to retrofit stormwater management practices, reduce runoff, sequester carbon and cool pavement and other impermeable surfaces. Environmental organizations like ShoreRivers are leading the charge to advocate and implement these practices. **Increased funding for the implementation and maintenance of trees in municipalities will extend our ability to take on new projects, increase our momentum to complete them, and provide resources for participating communities and municipalities to maintain projects for years to come.**

ShoreRivers has experience working with historical and underserved communities on the Eastern Shore with tree planting programs. These programs usually consist of conducting an urban tree canopy assessment and planting plan which allows the community to take stock of their existing canopy coverage and strategically plan and prioritize ways to increase that coverage to maximize benefits such as water quality treatment. The Town of Chestertown, Town of Easton, Town of Greensboro and the City of Cambridge have completed these assessments, giving them the appropriate tools and guidance to implement meaningful urban tree canopy programs. **However, the necessary capital investment from these rural and often underserved communities stands in the way of actually carrying out the tree planting and maintenance work.**

Increased funding through this bill will provide the support needed for these communities that are already set-up to carry out this important work. For this reason and the examples described above, ShoreRivers urges the committee to adopt **House Bill 1133**.

Sincerely,

**Annie Richards, Chester Riverkeeper and Matt Pluta, Choptank Riverkeeper** on behalf of:

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**ShoreRivers**

Isabel Hardesty, Executive Director

Annie Richards, Chester Riverkeeper | Matt Pluta, Choptank Riverkeeper

Elle Bassett, Miles-Wye Riverkeeper | Zack Kelleher, Sassafras Riverkeeper

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# **Safe Skies Maryland Testimony SUPPORT HB-1133 Urba**

Uploaded by: Southerland, Mark

Position: FAV



**Testimony:** HB 1133 Urban Tree Planting Bill  
**Position:** Favorable  
**Committee:** House Environment and Transportation Committee  
**Hearing Date:** February 24, 2021

**Safe Skies Maryland** is a statewide conservation initiative with members representing a diverse and active body of citizens seeking to advance sustainability. We advocate for birds and other wildlife and their relationship with human quality of life.

**Tree plantings in underserved areas will help Maryland address longstanding inequities**

- The 500,000-tree planting goal for underserved urban communities could help reverse inequities through addressing the urban heat island effect, delivering improved health and mental health outcomes, and increasing property values and social connections
- Urban trees are proven to be one of the most cost-effective water quality filters, cleaning streams and rivers, and creating a healthy environment for aquatic life and people that swim and fish local waterways

**Trees capture carbon and deliver a host of co-benefits**

- Trees capture carbon and deliver a host of co-benefits including serving as one of the most cost-effective natural filters of polluted runoff
- The Commission established in HB 1133 will design a tree planting plan to mitigate heat deserts, maximize water quality, air quality, and carbon sequestration
- Native trees are also especially critical habitat for wildlife throughout the state
- Wildlife, especially migratory songbirds, provide one of the most enjoyable and healthful connections to nature for urban communities with trees

**Maryland-based carbon offset market could support additional tree plantings after the expiration of this bill**

- This bill envisions a Commission that would draw on existing expertise to develop a plan for establishing a carbon offset market in Maryland
- A carbon offset market could help support additional tree plantings by drawing on private investment

**HB 1133 would be one of the most cost-effective means of improving the quality of life in underserved communities, while providing climate mitigation and environment benefits for all.**

We are asking for a favorable report on HB 1133.

Mark Southerland PhD  
Legislative Director  
Safe Skies Maryland  
mark.t.southerland@gmail.com

# **HB1133 - Tree Planting—Urban Trees Program and Com**

Uploaded by: Tulkin, Josh

Position: FAV



**SIERRA  
CLUB**

7338 Baltimore Ave  
Suite 102  
College Park, MD 20740

**Committee: Environment and Transportation**

**Testimony on: HB1133 – “Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings”**

**Position: Support**

**Hearing Date: February 24, 2021**

The Maryland Sierra Club supports HB1133 which sets a goal of planting 500,000 trees in urban areas throughout Maryland, and establishes programs and processes to accomplish this.

Urban tree planting is particularly vital given the beneficial impacts on cities’ air quality through the absorption of air pollutants by tree leaves. Just one maple tree filters 15 pounds of ozone, nitrogen dioxide, and sulfur dioxide from the air, saves 570 KWh of electricity for cooling and heating, intercepts 27,000 gallons of rainfall, and avoids 4,800 gallons of runoff over the course of 20 years.<sup>1</sup> Just think of the positive effect in Maryland, which ranks 22nd nationally in air pollution,<sup>2</sup> with the addition of a half million new trees!

This type of program has proved very feasible in other cities.<sup>3</sup> A human-made forest as small as 130 square feet can create a dense, native, maintenance-free forest in as little as two to three years.<sup>4</sup> A co-benefit is that urban forestry and green professions are growth industries with an annual economic impact of \$147.8 billion and the potential to provide tens of thousands of new jobs.<sup>5</sup>

We also have the potential to make progress toward reversing inequities in urban tree cover throughout Maryland and incentivize tree plantings with the establishment of a Maryland-based carbon offset market. These markets have been found to support tree planting and decrease emissions by about four percent.<sup>6</sup>

We urge a favorable report of HB 1133.

Lily Fountain  
Natural Places Committee Chair  
Lily.Fountain@MDSierra.org

Josh Tulkin  
Chapter Director  
Josh.Tulkin@MDSierra.org

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<sup>1</sup> iTree (2019). Tree Benefits. <https://www.itreetools.org/cta-tree-benefits>.

<sup>2</sup> America’s Health Rankings (2020). <https://www.americashealthrankings.org/explore/annual/measure/air/state/MD>

<sup>3</sup> Ulmer, J. M., et al. (2016). Multiple health benefits of urban tree canopy: The mounting evidence for a green prescription. *Health and Place*, 42, 54-62.

<sup>4</sup> Miyawaki Method of Forest Creation. <https://www.afforestt.com/methodology>.

<sup>5</sup> Peterson, C. L., Brandt, L. A., Elias, E. H., & Hurteau, S. R. (2021), Community forests prepare for climate change. *Eos*, 102, <https://doi.org/10.1029/2021EO154456>. Published on 11 February 2021.

<sup>6</sup> Bayer, P. & Aklın, M. (2020). The European Union Emissions Trading System reduced CO2 emissions despite low Prices. *Proceedings of National Academy of Sciences of the United States of America*, 117 (16), 8804-8812. <https://www.pnas.org/content/117/16/8804#:~:text=According%20to%20our%20estimates%2C%20EU,the%20possibility%20of%20carbon%20leakage>.

Founded in 1892, the Sierra Club is America’s oldest and largest grassroots environmental organization. The Maryland Chapter has over 75,000 members and supporters, and the Sierra Club nationwide has over 800,000 members and nearly four million supporters.

# **HB1133\_StrongFutureMaryland\_FAV.pdf**

Uploaded by: Wilkerson, Alice

Position: FAV



**Testimony in Support of HB 1133 –**  
Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of  
Carbon Markets and Sustainable Tree Plantings  
(Del. Bridges)

**FAVORABLE**

February 25, 2021

Dear Chairman Barve and Members of the Environment and Transportation Committee:

On behalf of Strong Future Maryland, we write in support of HB 1133. Strong Future Maryland works to advance bold, progressive policy changes to address systemic inequality and promote a sustainable, just and prosperous economic future for all Marylanders.

Across Baltimore, the hottest areas tend to be the poorest and that pattern is not unusual. In dozens of major U.S. cities, low-income neighborhoods are more likely to be hotter than their wealthier counterparts, according to a joint investigation by NPR and the University of Maryland's Howard Center for Investigative Journalism. Those exposed to that extra heat are often a city's most vulnerable: the poorest and disproportionately, people of color. According to a Howard Center analysis of U.S. census data and air temperature data obtained from Portland State University and the Science Museum of Virginia, the hottest neighborhoods in Baltimore can differ by as much as 10 degrees from the coolest.

According to the U.S. Environmental Protection Agency (EPA), trees and other plants help cool the environment, making vegetation a simple and effective way to reduce urban heat islands. In addition, the EPA notes that trees and vegetation that directly shade buildings decrease demand for air conditioning, and trees and vegetation decrease the production of associated air pollution and greenhouse gas emissions reduce runoff and improve water quality by absorbing and filtering rainwater. And, the EPA notes, the benefits are almost always higher than the costs.

Notably, trees and vegetation also remove air pollutants. In Baltimore, a 20-year gap in life expectancy exists between the city's poor, largely African American neighborhoods and its wealthier, whiter areas. A baby born in Cheswolde, in Baltimore's far-northwest corner, can expect to live until age 87. Nine miles away in Clifton-Berea, near where *The Wire* was filmed,

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@FutureMaryland @StrongFutureMD

the life expectancy is 67, roughly the same as that of Rwanda, and 12 years shorter than the American average.

How much pollution you breathe in depends mainly on where you live and how close you are to things like highways or factories. That drives racial disparities, according to a 2019 study that compared consumption and housing patterns across different demographic groups.

In addition to the air quality and health benefits, planting billions of trees across the world is one of the biggest and cheapest ways of taking CO<sub>2</sub> out of the atmosphere to tackle the climate crisis, according to scientists. Earlier this year, researchers with the USDA Forest Service and Portland State University published their findings from modeling various scenarios to determine how carbon sequestration would increase if the agency increased its financial investment in tree planting and forest conservation programs. The research team found that afforestation and reforestation policies yielded the greatest return in carbon sequestration.

Maryland must do more for climate action — in the name of environmental justice, for the health of our communities, and for the future of our families. This committee can make a commitment to that work by issuing a favorable report on HB 1133.

*John B. King Jr.*  
*Founder and Board Chair*

*Alice Wilkerson*  
*Executive Director*



**HB1133\_MDE\_LOI.pdf**

Uploaded by: abbott, tyler

Position: INFO



# Maryland

## Department of the Environment

Larry Hogan  
Governor

Boyd Rutherford  
Lieutenant Governor

Ben Crumbles  
Secretary

February 24, 2021

The Honorable Kumar P. Barve, Chair  
Environment & Transportation Committee  
House Office Building, Room 251  
Annapolis, Maryland 21401

**Re: House Bill 1133 – Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings**

Dear Chairman Barve and Members of the Committee:

The Maryland Department of the Environment (MDE or “the Department”) has reviewed House Bill 1133, entitled *Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings* and would like to provide some information about this bill.

HB1133 has a goal of “planting and helping to maintain in the state’s underserved areas, 500,000 sustainable trees of Maryland native species by the end of Calendar Year 2030.” This bill transfers \$10 million per year in fiscal years 2022 through 2030 from the Bay Restoration Fund (BRF) to the Chesapeake Bay Trust for a new Urban Trees Program. The Urban Trees Program established would be administered by the Chesapeake Bay Trust (CBT). The Department would be responsible for tracking the state’s progress in meeting this goal and serve as the lead agency to receive data from the Chesapeake Bay Trust regarding tree plantings accomplished through the urban trees program. MDE and the Chesapeake Bay Trust must jointly report to the Senate EHEA Committee and House E&T Committee annually on the state’s progress toward meeting the goal established under the bill.

The purpose of the program is to plant native species of trees in underserved areas of the State. CBT is required to make grants to qualified organizations (nonprofits; schools; community associations; service, youth, or civic groups; institution of higher ed; counties or municipalities; or forest conservancy district boards) for tree-planting projects in underserved areas. Eligible program expenses include personnel costs, supplies, site preparation, and other expenses and materials related to planning, implementing, and maintaining tree-planting projects in underserved areas. Grant agreements under the program are required to specify the allowed use of the funds and include provisions for verification that tree-planting projects are being implemented and maintained as planned.

The funding being transferred annually (\$10 million per year; \$90 million total) from the BRF under the bill would be transferred after making payments on existing BRF bonds, upgrading cost-effective minor Wastewater Treatment Plants (WWTPs) to Enhanced Nutrient Removal (ENR), and operation & maintenance funding for ENR WWTPs. The transferred funds are being diverted from the BRF Wastewater account, which provides grant funding to local governments for projects needed for consent orders, state permits, local water quality improvements and the Chesapeake Bay clean up including:

- stormwater control measures related to water quality, climate resiliency, and flood control;
- combined and sanitary sewer overflow abatement; and
- septic connections to Biological Nutrient Removal or Enhanced Nutrient Removal WWTPs.

The Honorable Kumar P. Barve

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The Department receives substantially more funding applications for BRF grants than it can fund on an annual basis. To address the large number of eligible applications, the Department must prioritize the use of the BRF funding based on water quality, climate resiliency, flood control, and public health benefits. The Department recently updated its clean water scoring system to include climate resiliency and flood control as required by Chapter 44 of 2020. This update includes nutrient reductions from riparian forest buffers planted with native trees. Projects applications are ranked on a competitive basis, with those scoring the highest across the different categories being awarded BRF grant funding.

The Department agrees that urban tree practices can be a cost-effective best management practice (BMPs) to meet the state's Bay TMDL requirements, as well as mitigate the effects of climate change. Urban tree BMPs include urban forest planting, urban forest buffers, and urban tree planting. Urban forest planting and urban forest buffers can be very cost effective BMPs at \$7.14 and \$28.49 per pound of nitrogen removed. However, urban tree planting is much more costly at \$175.26 per pound of nitrogen removed. This demonstrates the importance of prioritizing funding to be awarded to the most cost-effective urban tree BMPs, especially if funding is being diverted from other pressing priorities such as consent decrees for sewer overflows and connecting failing septic systems to public sewer.

Additionally, capital projects have been included in the proposed FY22 capital budget to utilize all FY22 BRF revenues, including the \$10 million in revenues that would be transferred out of the BRF under this legislation. Some FY22 projects will need to be cancelled or delayed if funds are required to be transferred out of the BRF in FY22. The FY22 projects that would be impacted would be a Stormwater Mangement Project in Fruitland - Wicomico County, a Sanitary Sewer Reconstruction Project in Prince George's County, and Combined Sewer Overflow Abatement Project in Cumberland. All of these projects are required under an MDE issued permit or consent order.

Thank you for your consideration. We will continue to monitor House Bill 1133 during the Committee's deliberations, and I am available to answer any questions you may have. Please feel free to contact me at 410-260-6301 or by email at [tyler.abbott@maryland.gov](mailto:tyler.abbott@maryland.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Tyler Abbott", written over a horizontal line.

Tyler Abbott

cc: The Honorable Tony Bridges

**HB01133\_DNR\_LOI-2.pdf**

Uploaded by: McKittrick, James

Position: INFO



Larry Hogan, Governor  
Boyd Rutherford, Lt. Governor  
Jeannie Haddaway-Riccio, Secretary

February 24, 2021

The Honorable Kumar Barve  
Chair, Environment and Transportation Committee  
Room 251, House Office Building  
Annapolis, MD 21401

The Honorable Dana Stein  
Vice Chair, Environment and Transportation Committee  
Room 251, House Office Building  
Annapolis, MD 21401

***Re: Letter of Information – House Bill 1133 – Tree Planting – Urban Trees Program and Commission for the Innovation and Advancement of Carbon Markets and Sustainable Tree Plantings***

Dear Chair, Vice Chair, and Committee Members,

The Maryland Department of Natural Resources provides the following information on House Bill 1133. This bill creates a new State goal of planting and maintaining 500,000 trees by 2030. The Chesapeake Bay Trust will administer the Urban Trees Program and provide grants to qualified organizations for tree planting projects in underserved areas. MDE's Bay Restoration Fund will provide \$10 million in funding each year to the Chesapeake Bay Trust toward the new goal.

Currently, Maryland is committed to participating in two different watershed-wide tree planting goals of 900 miles per year of riparian forest buffers and 2,400 acres of urban tree canopy through the 2014 Chesapeake Bay Watershed Agreement. Additionally, meeting our larger Chesapeake Bay restoration and greenhouse gas reduction goals involve a wide array of tree planting practices. The Maryland Department of the Environment's recently released 2030 Greenhouse Gas Reduction Act Plan provides for the planting of 7.25 million trees including 2.65 million urban trees. The Chesapeake Bay Program currently recognizes and tracks 10 different tree planting best management practices all with different units of measure and outcomes. It is challenging to meet and track the already crowded field of existing goals let alone new mandates. Adding another large-scale goal will have the result of confusing and hindering Maryland's continuing tree planting and maintenance programs and progress.

Thank you for allowing the department to provide the above information on HB 1133 for the committee's careful consideration.

Respectfully submitted,

James W. McKittrick  
Director, Legislative and Constituent Services

Contact: James McKittrick, Director, Legislative and Constituent Services  
JamesW.McKittrick@maryland.gov ♦ 443-510-5013