

Department of Legislative Services  
 Maryland General Assembly  
 2019 Session

FISCAL AND POLICY NOTE  
 First Reader

House Bill 120 (Delegate Love, *et al.*)  
 Environment and Transportation

Natural Resources - No Net Loss of Forest - Definition

This bill changes the definition of “no net loss of forest” for the purposes of Maryland’s no net loss of forest policy. The definition changes from “40% of all land in Maryland is covered by *tree canopy*” to “40% of all land in Maryland is covered by *forest land*.”

Fiscal Summary

**State Effect:** General fund expenditures increase by at least \$1.9 million in FY 2020 for contractual costs to complete a baseline assessment of forest land in the State. Potential significant increase in general fund expenditures in future years for continued data gathering. Revenues are not affected.

(in dollars)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	1,900,000	-	-	-	-
Net Effect	(\$1,900,000)	\$0	\$0	\$0	\$0

*Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; (-) = indeterminate decrease*

**Local Effect:** The bill’s changes do not directly affect local government finances.

**Small Business Effect:** Minimal or none.

## Analysis

### **Current Law/Background:**

#### *Relevant Definitions*

“Forest land” is defined in statute as a biological community dominated by trees and other wood plants that are capable of producing timber or other wood products with a stocking of at least 100 trees per acre with at least 50% of those trees having a 2-inch or greater diameter at 4.5 feet above the ground. “Forest land” includes forested areas that have been cut but not converted to other land uses.

#### *No Net Loss of Forest Policy*

It is the policy of the State to encourage the retention and sustainable management of forest lands by, among other things, achieving “no net loss of forest,” as discussed below. “No net loss of forest” means 40% of all land in Maryland is covered by *tree canopy*.

#### *History of Maryland’s Forest Conservation Act and No Net Loss of Forest Policy*

The General Assembly passed the Maryland Forest Conservation Act (FCA) in 1991, which establishes minimum forest conservation requirements for land development. In addition to FCA, the State has implemented other programs and incentives to preserve and promote forest acreage.

When it was initially enacted, some stakeholders viewed FCA as a means to achieve a policy that results in no further loss of forest land in the State. This policy goal is commonly referred to as a no net loss of forest policy. However, FCA did not function as a mechanism for implementing a no net loss of forest policy. A 10-year review of FCA completed by the Department of Natural Resources (DNR) in 2004 found that FCA had resulted in the retention of 79,174 acres of forest land, the planting of 13,611 acres of forest land, and the clearing of 42,906 acres of forest land. Thus, during the review period, more forest acreage was cleared than planted under FCA.

In 2013, in response to recommendations from the Task Force to Study a No Net Loss of Forest Policy and the Sustainable Forestry Council (an advisory body within DNR), DNR submitted a report to the General Assembly that supported a definition proposed by the Sustainable Forestry Council for “no net loss of forests,” and recommended implementing the policy. The report also noted that, regardless of the policy mechanisms used to implement a no net loss of forest policy, the State must be able to track forest losses and gains.

In response to these conclusions, the General Assembly amended FCA with the passage of Chapter 384 of 2013. That Act, among other things, established that it is the policy of the State to achieve “no net loss of forest,” meaning that 40% of all land in Maryland is covered by tree canopy. The Act also required DNR to provide local jurisdictions with a statewide forest resource inventory at least every five years to be available for their local comprehensive plan review. In practice, DNR has provided local jurisdictions with tree canopy raw data for the specific jurisdiction upon request. The data is intended for use in the local jurisdiction’s geographic information system database.

### *Forest and Tree Canopy Data for Maryland*

DNR’s Forest Service relies on three main sources for measuring forest and tree canopy in the State. Among other things, this data is used to evaluate Maryland’s progress related to the State’s no net loss of forest policy.

*Digital Tree Canopy Data:* Two of the sources used by the Maryland Forest Service are digital raster maps: (1) the Chesapeake Conservancy’s *High Resolution Land Cover Assessment* from 2013; and (2) the University of Maryland’s *Analysis of Tree Canopy* from 2011. These maps provide detailed information about Maryland’s tree canopy. The Chesapeake Conservancy plans to update the data every two to five years. Both the University of Maryland and the Chesapeake Conservancy data are intended to make maps and to identify trees and tree canopy precisely at many scales. Gathering aerial and satellite tree canopy data is relatively less expensive than gathering data manually from field crews on the ground.

*U.S. Forest Service’s Forest Inventory Analysis:* The U.S. Forest Service’s Forest Inventory Analysis (FIA) Program, which provides data to assess America’s forests, sends out field teams to conduct annual surveys throughout the country, including Maryland. DNR uses this data to track forest area and collect information about forest land in the State. According to DNR, FIA has identified 985 permanent forest plots across Maryland and measures one-seventh of the plots annually. FIA publishes an annual State report, which is a compilation of seven years of information, including a statistical determination of the forest resources of the State. DNR notes that, among other things, the report includes information on wood plants that are capable of producing timber, which is part of the statutory definition of “forest land.” However, DNR advises that the FIA report does not address whether State forests contain wood products with a stocking of at least 100 trees per acre with at least 50% of those trees having a 2-inch or greater diameter at 4.5 feet above the ground, which is the second part of the statutory definition of “forest land.”

**State Expenditures:** General fund expenditures increase by at least \$1.9 million in fiscal 2020 for DNR to contract with FIA to conduct a statewide assessment of forest land in the State in order to establish a new baseline for the State’s no net loss of forest policy.

This estimate, which is based on information provided by DNR, does not include any additional costs that might be incurred for field verification, which could be significant.

As mentioned above, FIA measures one-seventh of the forest plots in the State annually. Other data collection sources only measure *tree canopy* (pursuant to the current definition of no net loss of forest). DNR advises that, in order to establish a new baseline for the State's no net loss of forest policy as redefined by the bill, all of the forest land in the State needs to be measured in one year. DNR reports that, in the past, FIA has offered to conduct a statewide assessment if Maryland funds the cost of the remaining six-sevenths of the assessment, which is estimated to total \$1.9 million.

According to DNR, the FIA assessment does not evaluate forest areas based on the Maryland statutory definition of "forest land." Thus, additional field verification is necessary to determine whether identified forest area meets the definition. It is unknown at this time whether U.S. Forest Service field crews can add the additional verification to their field process during the FIA assessment or whether DNR must contract to conduct this verification independently. Accordingly, costs to establish the baseline may be higher.

Future year expenditures are unknown, but may be significant, depending on how the ongoing assessment of forest land in the State is conducted, how often it is conducted, and the rigor of the verification standards. To the extent that ongoing tracking can be satisfied through the annual FIA assessment, ongoing costs are likely minimal. However, if data on State forest land needs to be gathered and tracked independently, ongoing costs are likely significant. Also unknown is the level of field verification that will be needed in future years and how often future baseline assessments must be conducted.

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### Additional Information

**Prior Introductions:** None.

**Cross File:** SB 203 (Senator Young, *et al.*) - Education, Health, and Environmental Affairs.

**Information Source(s):** Department of Natural Resources; U.S. Department of Agriculture; U.S. Forest Service; Department of Legislative Services

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