**Chesapeake Forestry WIP Guide- DRAFT**

**Executive Summary**

The Forestry Workgroup created “A Guide for Forestry Practices in Chesapeake TMDL” to help localities, conservation agencies, community groups, states, and others who are planning and implementing best management practices (BMPs) for the Watershed Implementation Plan (WIP) process.

Forests are the best land use for protecting water quality in the Chesapeake Bay watershed and forest BMPs are some of the most cost-effective for Bay restoration. This guide will show the value of forest retention and tree plantings, convey information about the various forest BMPs in the Chesapeake Bay Watershed Model, and provide examples of forest BMP scenarios in the Chesapeake Assessment Scenario Tool (CAST). The guide will show partners what information is available, where to find it, and how to use it.

The forest BMPs covered in this Guide and their definitions are listed in the chart below. Information on each BMP includes the pollution-reduction credit, credit expiration, progress reported, and the opportunity to do more restoration according to the current land use assessment.

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| **Urban Forest Buffer BMP** |
| Forest buffers are linear wooded areas that help filter nutrients, sediments and other pollutants from runoff as well as remove nutrients from groundwater. The recommended buffer width is 100 feet, with a 35 feet minimum width. |
| **Urban Tree Canopy Expansion BMP** |
| Tree plantings on developed land (impervious or turf grass) that result in an increase in tree canopy but are not intended to result in forest-like conditions. |
| **Urban Forest Planting BMP** |
| Urban forest planning includes any tree planting except those used to establish riparian forest buffers. Trees are planted on pervious areas. |
| **Agricultural Riparian Forest Buffer BMP** |
| Forest buffers are linear wooded areas that help filter nutrients, sediments and other pollutants from runoff as well as remove nutrients from groundwater. The recommended buffer width is 100 feet, with a 35 feet minimum width required. |
| **Agricultural Tree Planting BMP** |
| Tree planting includes any tree planting, except those used to establish riparian forest buffers, targeting lands that are highly erodible or identified as critical resource areas. |
| **Forest Harvest BMPs** |
| Forest harvesting BMPs are a suite of BMPs that minimize the environmental impacts of road building, log removal, site preparation and forest management. These practices help reduce suspended sediments and associated nutrients that can result from forest operations. |
| **Forest Conservation BMP** |
| Forest conservation BMP applies only to Maryland at this time because of the Maryland Forest Conservation Act that requires developers to maintain at least 20% of a development site in trees (forest condition). This is a preventative BMP which alters the rate of urban conversion. The acreage is calculated from the annual urban increase (population based). |

The average forestry BMP costs are:

* $86.17 for Urban Forest Buffers,
* $66.75 for Urban Tree Canopy Expansion,
* $82.57 for Urban Forest Plantings,
* $99.53 for Agriculture Forest Buffers,
* $70.72 for Agriculture Tree Plantings,
* $64.01 for Forest Harvesting Practices, and
* $0 for Forest Conservation.

The CAST model gives states the opportunity to assess the costs per unit of each specific BMP. To access their own state cost profile, states should downloads reports from the “Cost Profile” tab on the CAST website. Optimization tools are currently in progress for the CAST software. States should use their existing information about pounds of nutrients reduced per acre of forest BMPs to calculate the most cost-effective BMP in their state.

All BMP information submitted to the Chesapeake Bay Program Office must be compatible with National Environmental Information Exchange Network (NEIEN) protocols. All BMPs reported in 2018 are expected to be verified. The Forestry Workgroup developed [Verification Guidance](http://www.chesapeakebay.net/documents/Appendix%20B%20Forestry%20BMP%20verification%20guidance.pdf) for Chesapeake Bay Program partners. [State forestry BMP verification protocols](http://www.chesapeakebay.net/channel_files/24877/bmp_verification_state_protocol_forestry_excerpts.pdf) were developed from the Guidance document to heighten awareness of what level of verification states are requiring.