

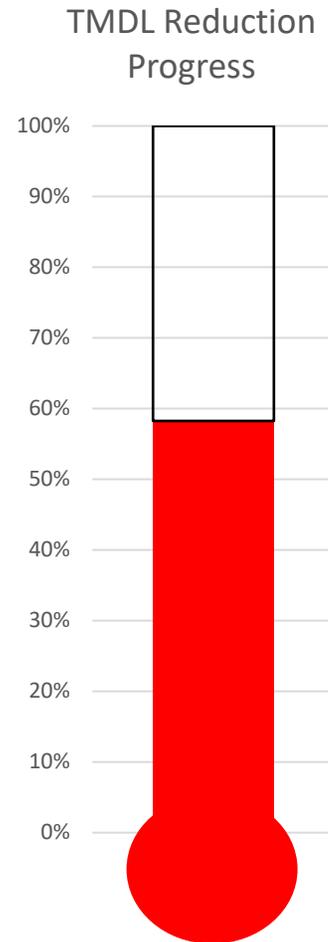
## Summary

Hanover County's Municipal Separate Storm Sewer (MS4) permit requires the County to develop a Chesapeake Bay TMDL (Total Maximum Daily Load) Action Plan. The purpose of the Action Plan is to improve water quality by reducing nutrient loading (phosphorus, nitrogen, and sediment) to the Chesapeake Bay.

These reductions will be achieved through various projects that will occur in a phased approach over a 15 year period (2013-2028). Planned and completed projects for the first two 5 year permit cycles are provided in the [County's TMDL Action Plan](#).

The primary nutrient being targeted is phosphorus (graphic shown on right). Hanover County is required to reduce phosphorus loading to the Chesapeake Bay by a total of 637 lbs/yr over the 15 year period. Splitting up this reduction by contributing watersheds to the Bay, 473 lbs/yr needs to be reduced in the James River watershed and 164 lbs/yr needs to be reduced in the York River watershed.

Completed Action Plan projects are shown below.



## Completed Projects

### Church of the Creator Stream Restoration

Before



After



### Laurel Meadows Wet Pond Enhancement

Before



After



Henderson Hall Stream Restoration

Before



After



Eagles Point Stream Restoration

Before



After



L-5 Pond Floating Wetland Plants



Liberty Hall Hills Pond Floating Wetland Plants



Locust Hill Constructed Wetland



High Point Farms Constructed Wetland



Covenant Woods Pond Floating Wetland Plants



Rose Hill Pond Floating Wetland Plants

