Water Matters – January 2010
Chesapeake Bay TMDL

The Chesapeake Bay watershed has the largest estuary in the United States, encompassing six states and the District of Columbia (64,000 square miles). It has 10,000 miles of shoreline (longer than the west coast of the U.S.).

It also is home to 17 million people and this number is growing. For these reasons officials have said that the Total Maximum Daily Load (TMDL) implementation plan currently being created for the Bay is the most challenging that has ever been undertaken.

The impairments to the Bay are nitrogen, phosphorous and sediment. For years, various programs and volunteer actions have tried to decrease the levels of these pollutants. However, the 2010 deadline is here and the Bay is still in trouble. Therefore, as promised by the Environmental Protection Agency, a TMDL is now in effect for the Bay which means an implementation plan will be created detailing the actions necessary to meet water quality standards.

This TMDL is significant to Virginia since 45% of the phosphorous going to the Bay comes from the Commonwealth. Pennsylvania is the next largest contributor at 24%, followed by Maryland at 19% and West Virginia, Delaware, DC and New York at 5% or less.

For nitrogen, Virginia contributes 26% with Pennsylvania coming in at 41%. Maryland is at 20%, New York 6%, and West Virginia, Delaware and DC at 3% or less.

What is different about the Bay TMDL, besides the size and scope of the undertaking, is the approach: the EPA will set a pollution "diet" to meet states' water quality standards for each tidal basin. This means the waters emptying into the Bay may only contain a certain level of pollutants and it will require the efforts of all upstream communities to meet the standards. Caps will be set for nitrogen, phosphorous and sediment for all 6 watershed states including DC, and the states will set load caps for point and nonpoint source pollution based on the major individual watersheds. These caps will be determined on various scales including down to the local level.

Improvement milestones will also be set at 2 year intervals with a goal of cleaning up the Bay by 2025. This is a departure from the previous ten and fifteen year time periods.

Perhaps most importantly, if the 2 year milestone goals are not met, there will be consequences. These include withholding, reallocating or conditioning federal grant funds, limiting or prohibiting new or expanded discharges (that is waste water or stormwater) of nutrients or sediments and assigning more stringent pollution reductions to permitted point sources such as waste water treatment facilities, confined animals feeding lots and stormwater runoff).

As with other TMDLs, like those conducted on the Mill and Hawksbill Creek watersheds, the challenge is decreasing the impairment while balancing the needs of farmers, citizens, development, industry and aquatic life. The deadline for creating the implementation plan is December 2010 and there will be opportunity for public input. Contact the Page County Water Quality Advisory Committee if you are interested in learning more about the TMDL process, the Chesapeake Bay or our local water resources.

In summary, the water quality in the Chesapeake Bay, officially designated a “national treasure”, will improve by focusing on improving and protecting local water quality. Officials have stressed that improving water quality requires the participation from everyone – farmers, industry, citizens, local governments, developers, etc. The goal is to protect a shared resource and everyone will have to share in the effort.

This is the twentieth article in a series addressing Page County’s Water Resources and was written by Chris Anderson, Page County Environmental Coordinator. For more information on the Chesapeake Bay TMDL go to www.epa.gov/chesapeakebaytmdlor stop by the Department of Environmental Services located at 101 South Court Street, Luray.