

Improving Water Quality from Your Local Streams to the Chesapeake Bay

The Rappahannock-Rapidan Region drains to the Chesapeake Bay, and is almost entirely within the Rappahannock River Watershed, with the River's headwaters in Fauquier and Rappahannock Counties. While our streams may look clean, the region contains 550 miles of impaired streams, mostly due to E. coli bacteria, which poses risks for fishing and swimming.

Storms carry nutrient and sediment pollution from exposed soil and hard surfaces such as farm fields, construction sites, parking lots and rooftops, as well as improperly maintained septic systems. As water moves over the land, it picks up sediment, nutrients, chemicals, trash and other pollutants, which it then deposits into local water bodies. These pollutants can have harmful effects on aquatic plants and animals as well as our enjoyment of local streams and the Bay they

Good Water Quality Matters to:

- Recreation such as fishing, boating, and swimming
- Wildlife and vegetation
- Local tourism and economic development
- Seafood lovers



What is the Chesapeake Bay TMDL?

The Chesapeake Bay Total Maximum Daily Load (TMDL) is essentially a pollution diet for the Bay with target pollution reduction goals to be met by 2025. According to the US Environmental Protection Agency (EPA), despite extensive restoration efforts, the TMDL was prompted by insufficient progress and continued poor water quality. It is required under the U.S. Clean Water Act.

In 2010, 2012 and 2019, each of the six Chesapeake Bay states and the District of Columbia were required to develop Watershed Implementation Plans (WIP) that detail how and when they will meet the pollution goals. In Virginia, the Department of Environmental Quality (DEQ), together with the Virginia Department of Conservation and Recreation, developed the three WIPs. EPA assesses interim state progress every two years.

How do local TMDLs relate to the Chesapeake Bay TMDL?

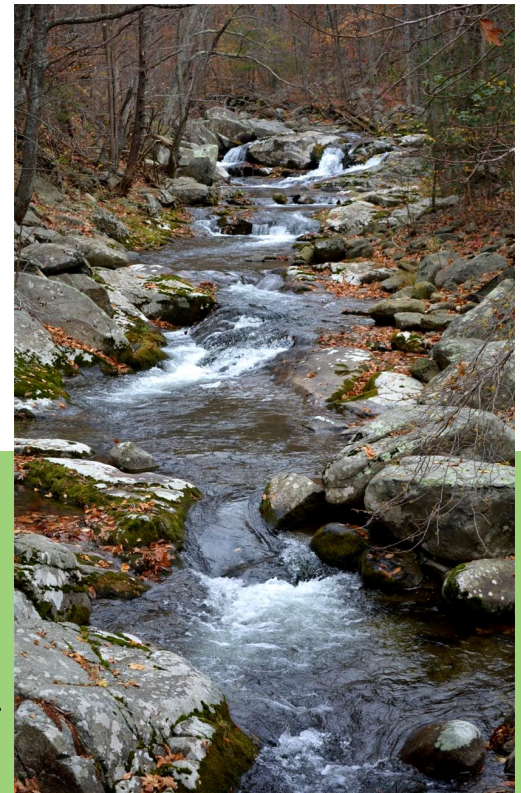
Local TMDLs focus on improving local water quality issues, while the Bay TMDL was developed to address the larger Bay watershed. However, our local streams flow into the Bay, so the two are interrelated. Reducing local water pollution reduces the amount of pollution entering the Bay.

The Bay TMDL is intended to protect the Chesapeake Bay and its tidal waters from excessive nitrogen, phosphorus and sediment. Although some local TMDLs were based on reducing nutrients or sediment, most were written for other pollutants. In the Rappahannock-Rapidan Region, the vast majority of local TMDLs focus on reducing e. coli bacteria pollution.

RRRC's Chesapeake Bay TMDL Efforts

The Rappahannock-Rapidan Regional Commission (RRRC) coordinated the region's urban sector input for the Phase II and Phase III WIPs. This included topic areas such as stormwater management, septic systems, and tree planting. For 2019 Phase III WIP, RRRC compiled proposed Best Management Practices, implementation strategies and resource needs to meet the region's pollution reduction goal. DEQ then aggregated each region's input into a state level plan.

DEQ has contracted RRRC to provide coordination and technical assistance to local governments and other stakeholder groups in the region with implementation efforts. For more information please visit RRRC's website at www.rrregion.org/chesbaytmdl.html or contact Michelle Edwards at medwards@rrregion.org. For local TMDL information visit rrregion.org/tmdl_ip.html.



Proof Virginia's Bay Effort is Working



In 2014-2015, Submerged Aquatic Vegetation increased by 21%, to the highest levels in the last three decades. Abundance of underwater grasses is a good indicator of water quality because they require clear water and sunlight.



Blue crab, shad, rockfish and oyster fisheries have all increased, especially blue crabs, whose number of adults have tripled since 2014.

Indirect effects of the Chesapeake Bay Effort

- Reduced flooding
- Groundwater protection
- Less frequent dredging of ponds and lakes
- Beautification of public spaces with street tree planting and rain gardens
- Economic development from green jobs and enhanced recreation



5 Examples of What You Can Do to Help

1. Purchase a rain barrel from Friends of the Rappahannock or your local Soil and Water Conservation District to capture roof runoff, which can later be used to water your garden.
2. Volunteer to plant trees in your community and/or plant trees on your own property.
3. Pump out your septic tank a minimum of every five years and contact your local Soil and Water Conservation District for financial assistance with repairs.
4. Contact your local Master Gardeners or Friends of the Rappahannock for an assessment of your yard, and add no more fertilizer than instructions suggest.
5. Read the Rappahannock-Rapidan Homeowner's Guide to a Watershed-Friendly Backyard for more ideas, links to additional resources and local contact information at www.rrregion.org/chesbaytml.html.