

TMDLs and the Town of Christiansburg

Known for its natural beauty, excellent fishing and abundant hunting, southwestern Virginia is enjoyed and revered by outdoorsmen and recreation enthusiasts alike. The area is considered by some to be one of the most attractive regions in the country. The Town of Christiansburg is nestled in this area, right in the heart of the Blue Ridge Mountains. However, just like many other regions, natural resources have been impacted by modern development and industrialization. This development lead to Federal initiatives to help preserve these natural resources and can be dated back as far as Teddy Roosevelt's presidency. One of these initiatives was called the Clean Water Act.



The Clean Water Act (CWA) regulates quality standards for surface waters. The original bill, called the Federal Water Pollution Control Act, was created in 1948. The Act was significantly expanded in 1972 and "Clean Water Act" became the common name, with amendments, in 1977.



Section 303(d) of the Clean Water Act and the Environmental Protection Agency's (EPA's) Water Quality Planning and Management Regulations (40 CFR Part 130) require states to develop a Total Maximum Daily Load (TMDL) Priority List and Report for water bodies that do not meet the water quality standards. The TMDL establishes the allowable level of pollutants for a water body based on the relationship between pollution sources and in-stream water quality conditions. The TMDL is intended to help establish or restore water quality.

The Virginia Department of Environmental Quality (DEQ) works in coordination with the Virginia Department of Conservation and Recreation (DCR), the Virginia Department of Mines, Minerals, and Energy (DMME), and the Virginia Department of Health (VDH) to establish an effective TMDL process.



The Town of Christiansburg (Town) has two streams on this list that have had a TMDL created: Crab Creek and Wilson Creek.

The Crab Creek watershed is part of the New River basin. Within Town, there are several unnamed tributaries and two named tributaries that feed into Crab Creek. The picture to the right is of Town Branch, one of the named tributaries. Crab Creek discharges into the New River, which flows into the Ohio River, which flows into the Mississippi River and ultimately reaches the Gulf of Mexico. Crab Creek was placed on Virginia's TMDL Priority List



due to violations of water quality standard for fecal coli form bacteria and sediment. Sediment reaches the Crab Creek watershed through surface runoff, natural erosive processes and streambank erosion.

Wilson Creek is a tributary to the North Fork Roanoke River. Approximately 23.09 river miles of Wilson Creek, Ore Branch and the Roanoke River were listed on Virginia's TMDL due to violations of water quality standard for fecal coli form bacteria.

Potential sources of fecal coli form in Crab Creek and Wilson Creek include failed and malfunctioning septic systems; sanitary sewer overflows; land application of biosolids; and wildlife, livestock and pet waste.



A copy of the Crab Creek TMDL can be viewed [here](#) and a copy the Wilson Creek TMDL may be found [here](#).

For more information, please visit following websites:

EPA

<http://www.epa.gov/>

EPA TMDL

<http://www.epa.gov/owow/tmdl/>

VA DEQ TMDL Page

<http://www.deq.state.va.us/tmdl/>

Stream Mapping GIS Application

<http://www.deq.virginia.gov/wqa/adbims2008.html>