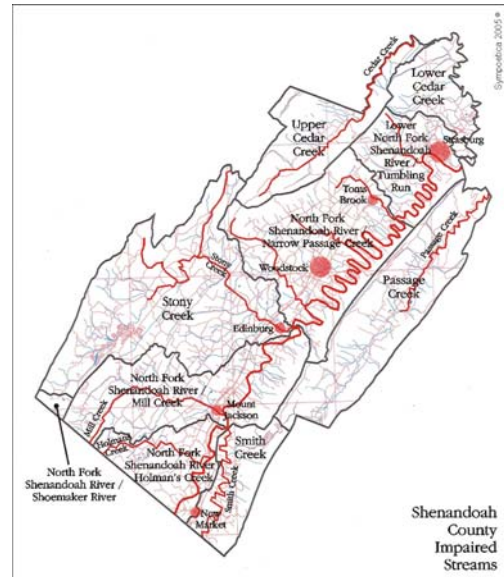


Water Quality Challenges in the Shenandoah Valley

Water Quality Issues

- Since adoption of the Clean Water Act in 1972, the U.S. and Virginia have made a great deal of progress toward cleaning up our rivers and streams.
- Many of our water resources do not meet Federal and State water quality standards.
 - 6,948 miles of “impaired” streams in Virginia.
 - 28 streams plus the Shenandoah River, a total of 573 stream miles, in Frederick, Clarke, Warren and Shenandoah counties
- Water quality monitoring shows that these “impaired” streams are not safe for swimming, fishing (fish consumption) and/or healthy aquatic life.
- Plus, we have evidence that our region’s water quality problems are not limited to surface waters. Groundwater may also be contaminated in some areas.
- Pollution from our streams and others is also causing the Chesapeake Bay to be “impaired.”
- Primary water quality problems: fecal coliforms (bacteria), sediment (affecting benthic organisms), nutrients (phosphorus & nitrogen), toxics (PCBs from Avtex & mercury from Dupont).



Shenandoah County Water Body	Size	Impairment	Source
Orndorff Spring Branch	0.2 mi.	Benthic	Trout Farm
Holmans Creek	10.4 mi.	Fecal Coliform, Benthic	Ag./Wildlife NPS
N.F. Shenandoah River	53.0 mi.	Fecal Coliform	Ag./Wildlife NPS
Smith Creek	31.2 mi.	Fecal Coliform, Benthic	Ag./Wildlife NPS
Mill Creek	19.8 mi.	Fecal Coliform, Benthic, Temperature	Ag./Wildlife NPS, Natural, Unknown
Stony Creek (downstream of George’s Chicken plant)	5.7 mi.	Fecal Coliform	Ag./Wildlife NPS
Stony Creek	18.4 mi.	Temperature	Natural conditions
Stony Creek (headwaters above Little Stony Creek)	6.5 mi.	Fecal Coliform	Ag./Wildlife NPS
Laurel Run	5.2 mi.	Benthic	Atmospheric deposition
Little Stony Creek	6.5 mi.	Benthic	Atmospheric deposition
Toms Brook	7.1 mi.	Benthic	Ag./Urban NPS
Narrow Passage Creek	10.7 mi.	Fecal Coliform	NPS
Pughs Run	5.9 mi.	Fecal Coliform	NPS
Tumbling Run	4.1 mi.	Fecal Coliform	NPS
Cedar Creek	18.9 mi.	Temperature	Natural conditions
Cedar Creek (headwaters)	2.5 mi.	Benthic	Atmospheric deposition
Passage Creek	18.5 mi.	Fecal Coliform	NPS
Total Miles	209.9 mi.		