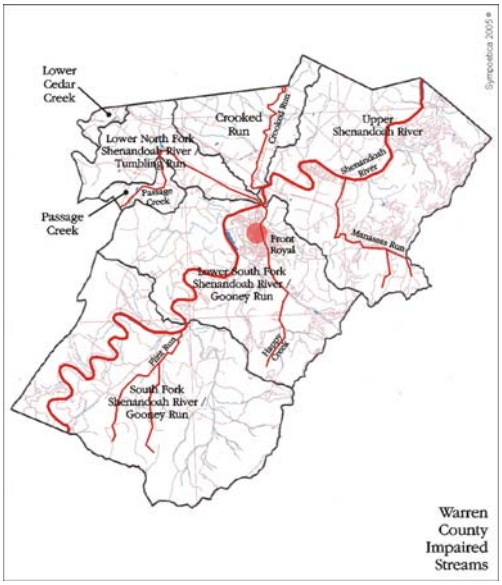
TMDLs and Tributary Strategies

Water Quality Issues in the Shenandoah Valley



- 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.
- TMDL studies and implementation plans are designed to address the water quality problems in "impaired" streams. TMDL stands for Total Maximum Daily Load. It refers to the total amount of pollution a water body can receive each day and still meet water quality standards.
- Pollution from our streams and others is also causing the Chesapeake Bay to be "impaired." The Tributary Strategies are designed to address the Bay's pollution problems.
- Primary water quality problems: fecal coliforms (bacteria), sediment (affecting benthic organisms), nutrients (phosphorus & nitrogen), toxics (PCBs from Avtex & mercury from Dupont).

Warren County Water Body	Size	Impairment	Source
Shenandoah River (Main stem, N. Fork and S. Fork)	51.1 mi.	PCBs	Avtex site
Flint Run	11.5 mi.	Fecal Coliform	NPS
Happy Creek	8.5 mi.	Fecal Coliform	NPS
Passage Creek	18.5 mi.	Fecal Coliform	NPS
Manassas Run	14.7 mi.	Fecal Coliform	NPS
South River, Shenandoah River (Main stem, N. Fork and S. Fork)	128.8 mi.	Mercury	Dupont
Crooked Run	12.8 mi.	Fecal Coliform	NPS
Stephens Run	7.9 mi.	Fecal Coliform	NPS
Total Miles	253.8 mi.		