

# **Total Maximum Daily Load (TMDL) to Address Fish Mercury Levels**

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# TMDL Background

- DEQ is required by law (Federal and State) to develop Total Maximum Daily Loads (TMDLs) for “impaired” waters that fail to meet applicable Water Quality Standards
- TMDLs describe the amount of pollution a stream can receive and still meet water quality standards
  - TMDLs identify all sources of the pollutant in the watershed
  - TMDLs set pollutant allocations for point and non-point sources
  - TMDLs set reductions to meet those allocations



# South River/SF Shenandoah Impairment

- Designated Use of Fish Consumption - Partially supporting
- Mercury levels in fish tissue and sediment caused Va Health Department to issue fish consumption advisory



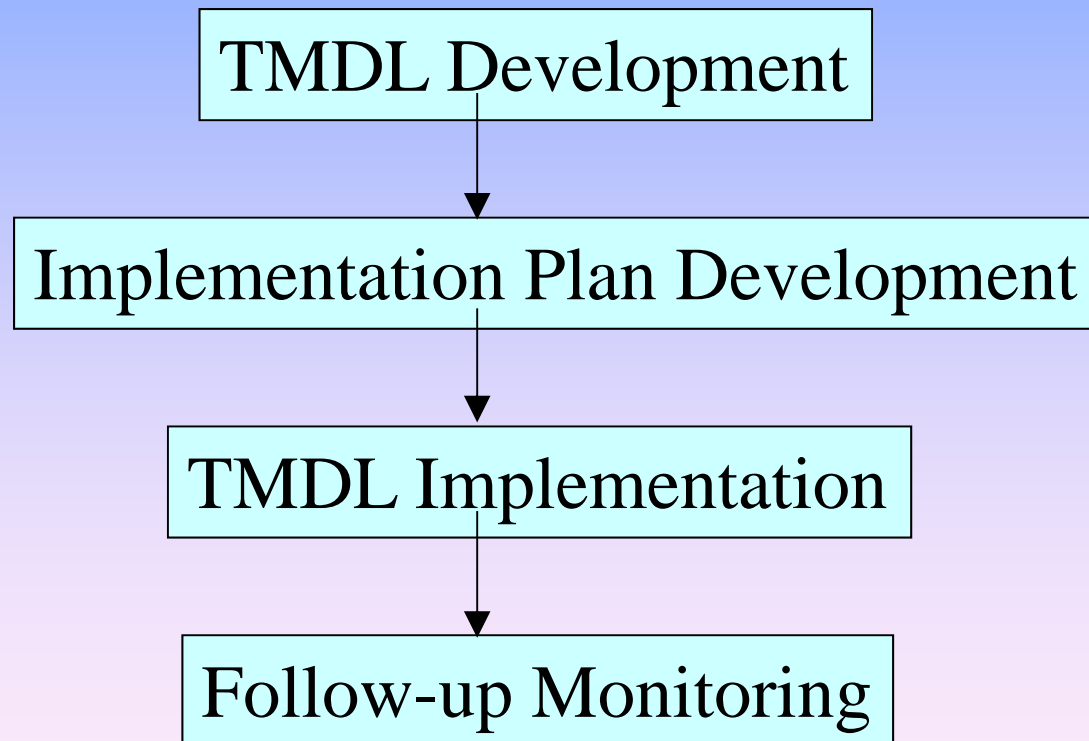
# Extent of Impairment

- **South River:** DuPont foot bridge to mouth
- **SF Shenandoah River:** Headwaters to Warrenton Power Dam
- **NF Shenandoah River:** 0.43 miles upstream of confluence to confluence
- 128.8 miles



# TMDL Schedule

- Scheduled for TMDL development in **2010**



# Development Issues

- TMDL for a legacy contaminant
  - how is the load defined
  - how can the load be allocated or reduced
- Risk characterization/Risk management
- Sediment dynamics; distribution, movement, burial, and resuspension
- Bioavailability and trophic transfer
- Atmospheric deposition

