



## USDA-CSREES 2006 National Water Quality Conference

### Virginia's TMDL Implementation Efforts

The Center for TMDL and Watershed Studies at Virginia Tech (hereafter, the Center) has developed some 28 TMDLs in Virginia for a variety of water quality impairments. Within the last year, the Center began developing TMDL implementation plans (IPs) in three watersheds where the Center had developed TMDLs. Two of these watersheds are urbanizing and subject to NPDES Phase II stormwater permits (MS4), while the third remains predominately rural. Each watershed has produced unique challenges as the TMDL IP development process has unfolded.

Developing a TMDL and the associated report is only the first step in a process designed to restore water quality. The TMDL report quantifies the necessary reductions in pollutant loadings from each source category (e.g., pasture, cropland, urban land, point sources) that will be needed to achieve water quality standards, but the TMDL report does not describe how those reductions will be achieved. To translate reductions specified in the TMDL into changes in the watershed, a *TMDL Implementation Plan (IP)* is developed. A TMDL IP is a 'road map' that outlines corrective actions and strategies that are designed to restore water quality. In Virginia, TMDL IPs are required under the state's Water Quality Monitoring Information and Restoration Act (WQMIRA).

The objective of Center's TMDL IP projects is to develop comprehensive TMDL IPs that, when implemented, will reduce the load the offending pollutant(s) to the stream of and restore water quality. Center partners in these projects include the sister universities (in Virginia and West Virginia), state and local government, and local watershed interest groups. An extensive stakeholder engagement effort has been conducted as a part of these TMDL IP projects.

This presentation details the Center's development of TMDL IPs and the lessons learned.

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