

# TOTAL MAXIMUM DAILY LOAD (TMDL) IMPLEMENTATION PLAN (IP) FACT SHEET UPPER HAZEL RIVER WATERSHED IN THE COUNTIES OF CULPEPER, MADISON & RAPPAHANNOCK

**What is a TMDL?** Total Maximum Daily Load (TMDL) is a term used to describe the amount of a pollutant that a stream can receive and still meet water quality standards. A TMDL study identifies sources of pollution and reductions needed to attain standards. A TMDL study considers both **point sources**, such as residential, municipal or industrial discharges, and **nonpoint sources**, such as residential, urban, forestry or agricultural activities. Additional information on Virginia's TMDL program can be found at <http://www.deq.virginia.gov/tmdl>

**Why were TMDLs prepared for the Upper Hazel River Watershed?** The goal of the Clean Water Act is that all streams should be suitable for recreational uses, including swimming and fishing. **Fecal coliform and Escherichia coli (*E. coli*) bacteria** are used to indicate the presence of pathogens in streams and to determine support of the recreational use standard. Portions of the **Hazel River, Hughes River and Rush River**, which are all part of the **Upper Hazel River Watershed**, do not support the recreational use standard.

**What portion of the Upper Hazel River Watershed is addressed in the TMDL study?** The impaired segments include: **16.67 miles in length of the Hazel River** which begins at the Route 707 bridge and continues downstream until the confluence with an unnamed tributary to the Hazel River, at river mile 16.03, **3.68 miles in length of the Hughes River** beginning with the confluence of Kilby's Creek continuing downstream to the confluence with the Hazel River, and **4.55 miles of the Rush River** which begins at the confluence of an unnamed tributary to the Rush River at rivermile 8.78 and continuing downstream to the confluence of Big Branch which is approximately 0.98 rivermile upstream of Route 621 (please see attached map).

**What happens now that the TMDLs have been completed?** EPA approved the Upper Rappahannock River TMDL's, of which the Upper Hazel Watershed is a part, on January 23, 2008. After approval, a **TMDL implementation plan (IP)** is developed to identify the corrective actions needed to meet the TMDL water quality goal. IPs must include a schedule of actions and their respective costs and benefits, measurable goals, a monitoring plan, and a target date for achieving compliance with water quality standards. Development of the IP begins in April 2008 and is anticipated to be complete in late 2008.

**How will the TMDL be implemented?** Nonpoint source TMDLs are implemented through **best management practices (BMPs)** that will reduce the amount of the pollutant loadings identified in the TMDL. Implementation will occur in stages and local, state, and federal agencies and other organizations will assist landowners and other citizens in facilitating the actual implementation of BMPs. Progress will be monitored during the

implementation phase through the tracking of practices installed and water quality monitoring.

**How will the public participate in TMDL IP development?** Two formal public meetings are planned as part of the TMDL IP development process. The **first public meeting will be held on September 16, 2008 at the Rappahannock High School, 12576 Lee Highway (Route 211), Washington, VA 22747 from 7-9 pm** to inform the public about the impairment, implementation plan development process, and to obtain public comment. The second meeting will be held in spring 2009 to present a draft IP.

**What funding will be available to help support the stakeholders' efforts in implementing the TMDLs?** Currently state funding from the Water Quality Improvement Fund is being targeted to the Upper Hazel River Watershed to address agricultural sources of bacteria. Other sources of funding, such as the Virginia Revolving Loan Funds and various federal grant programs that can be utilized to fund corrective actions will be identified in the TMDL IP. The Virginia TMDL IP Guidance Manual includes additional information on funding sources. Information on DEQ and DCR programs, including information on TMDLs, may be found at [www.deq.virginia.gov](http://www.deq.virginia.gov) and [www.dcr.virginia.gov](http://www.dcr.virginia.gov)

**What are the expected benefits of the TMDL and Implementation efforts?** Implementation of the bacteria TMDL will work towards restoring the beneficial uses of the **Hazel River, Hughes River and Rush River** so they support various recreational opportunities. Implementation of the bacteria TMDL will work towards restoring the beneficial use of these rivers, making it possible for individuals to swim and wade without the risk of waterborne illness. In addition to improved recreational opportunities, the installation of certain BMP's may result in improved riparian habitat and property values. Slight impairments to the aquatic life use standard in two of the river segments may also be improved with these measures.

**Whom may I contact to participate in, comment on or learn more about the Upper Hazel River IP development?**

May Louise Sligh, Virginia Department of Conservation and Recreation, P.O. Box 1425, Tappahannock, VA 22560, telephone (804) 443-1494/e-mail [may.sligh@dcr.virginia.gov](mailto:may.sligh@dcr.virginia.gov) or Deirdre Clark, Rappahannock-Rapidan Regional Commission, 420 Southridge Parkway, Suite 106, Culpeper, VA 22701, telephone (540) 829-7450/e-mail [dbclark@rrregion.org](mailto:dbclark@rrregion.org).

A **public meeting** is scheduled for **September 16, 2008 at the Rappahannock High School library, 12576 Lee Highway (Route 211), Washington, VA 22747 from 7-9 pm**. Agricultural and residential stakeholder working group meetings will also take place during that time. These meetings will help to ensure that the information used in the IP is accurate and that the final IP reflects the concerns/issues of the watershed stakeholders. All public meetings will be advertised in local newspapers, through direct mailings, and in the Virginia Register.