

Residential Working Group Fact Sheet

Implementation Plan for Upper Rapidan Watershed Madison, Greene, Orange, Albemarle Counties, VA

Why Do A TMDL Implementation Plan?

The development of a TMDL implementation plan is required by Virginia's Water Quality Monitoring, Information, and Restoration Act, which directs the State Water Control Board to "develop and implement a plan to achieve fully supporting status for impaired waters." Implementation plans provide communities with a framework for restoring water quality in their watershed, and often provide opportunities to receive funds for restoration efforts from several sources including federal and state government.

How Can I Participate?

One of the primary means of public participation in this TMDL implementation plan process will be through three working groups: residential, agriculture, and government. Citizens may also serve on the steering committee, which will help to guide the overall implementation plan development process. The working groups provide citizens with a venue for active participation in the planning process. Both working groups will report their ideas and recommendations to the steering committee for consideration to be included in the implementation plan. Strong public participation in these groups ensures that the final implementation plan reflects local concerns and ideas with regard to water quality improvements.

What will the Residential Working Group address?

The Residential Working Group will focus on human sources of bacteria in the Upper Rapidan watershed including septic systems, pet waste, and any uncontrolled discharges of human sewage into the creeks (straight pipes). The working group will discuss different ways to reduce bacteria coming from these sources including septic system repairs and replacements, managing pet waste at residences and units where dogs are confined, and elimination of straight pipes. The principle objective of the residential working group is to identify obstacles to implementation of practical solutions to reduce human and pet sources of bacteria. The group will focus on the following tasks:

- Ways to address/identify and eliminate straight pipes and failing septic systems
- Identify potential means of funding corrections
- Determine how to get landowners to come forward when there may be a fear of regulatory action and un-known costs
- Evaluate technical assistance needed and how to administer assistance
- Determine educational tools that are most likely to help
- Evaluate ways to reduce bacteria from pet waste

Who makes up the Residential Working Group?

Residential working groups typically consist of homeowners, local citizen organizations, and local and state agency representatives.

Examples of Residential/Recreational Corrective Actions to Remove Human Sources of Bacteria

Septic tank pump-out:

Septic tanks are pumped to remove solids that have accumulated in the tank. This maintenance can prevent potentially costly problems in the future. It can also allow an opportunity for an inspection of the distribution box to assess if the effluent from the septic tank passing through the distribution box is being distributed to the drainfield properly.



Septic tank system repair:

Repairing a malfunctioning septic system will improve water quality by removing raw or partially treated sewage on the land surface that can enter surface water or ground water during storm events, or sewage that is a direct source of contamination to surface water or groundwater. A repair may include a septic tank pumpout, and repair or partial replacement of the components of the septic tank system including the septic tank, distribution box, and subsurface drain lines.



Septic tank system installation/replacement:

Replacement of a malfunctioning septic system that cannot be repaired or a straight pipe will improve water quality by allowing for the appropriate treatment of sewage. Septic system installation may include the installation of septic tank and subsurface drainfield components. Before a malfunctioning septic system can be replaced, the septic tank may require pumping in order to remove solids from the tank.

Alternative on-site waste treatment systems:

In some cases, an alternative waste treatment system is required to replace a malfunctioning septic system or straight pipe. Alternative systems are capable of functioning under conditions where a conventional septic system may not be appropriate (e.g., insufficient land area available for drainfield, unsuitable soils for drainfield). Examples of alternative systems include: sand filters, elevated sand mounds, constructed wetlands, peat filters, vault privies, incinerator toilets, and composting toilets.



Pet Waste Management:

Pet waste composters that are portable and inexpensive are a cost-effective way to keep dog feces cleaned up on residential property. These units function like a septic tank in that the waste is held in a storage container along with water. Treatment enzymes are added to break down the solid material and as water is added to the unit routinely the effluent discharges from two baffles at the top to the soil profile where additional treatment takes place. Homeowners should also be educated to pick up dog feces and flush it in the toilet or place in the trash if a composter is not used. Pet waste stations and signs can also help in popular dog walking areas. Improper disposal of pet waste directly into creeks, wetlands or woods can contribute additional bacteria contamination, further degrading local water quality.



VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

Questions? Contact May Sligh, TMDL Nonpoint Source Coordinator, may.sligh@deq.virginia.gov, 804-450-3802