

# **Carter Run, Great Run, Thumb Run, and Deep Run TMDL Implementation Plan Development**

## **Residential Working Group Report to Steering Committee**

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### **Working Group Members**

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### **Meeting Dates**

Thursday, June 2, 2005, 7:00 – 9:00 PM  
Monday, October 3, 2005, 7:00 – 9:00 PM

### **Goal and Tasks**

The primary objective of the Residential Working Group (RWG) was to address the sources of bacteria attributable to residential and business land uses, such as straight pipes, failing septic systems, and also pet wastes; come up with means of educating and involving the public with regard to accepted best management practices; identify potential obstacles to implementation, such as lacking or incomplete data; and seek practical solutions to those obstacles.

### **Key Topics and Recommendations**

The following key topics and recommendations resulted from the two RWG meetings:

#### *Education and Technical Assistance*

- An organized education and outreach program, with genuine incentives for participation, will be essential in order for the implementation effort to succeed. The Fauquier County Health Department is willing to accept responsibility to administer the education and technical assistance efforts to address the bacteria sources attributed to failing and inadequate on-site sewage disposal systems based on 319 funding to hire a person.
- Several education/outreach techniques need to be utilized during implementation. The focus must be on obstacles that property owners face in correcting problems (e.g., money, information, understanding of issues). Need to identify techniques applicable to area. Suggestions include:

- Articles describing the TMDL process, the reasons why high levels of bacteria are a problem, the methods through which the problem can be corrected, the assistance that is currently available for landowners to deal with the problem, and the potential ramifications of not dealing with the problem should be made available to the public through as many channels as possible (e.g. newsletters, flyers included with utility bills, and targeted mailings).
  - Small community meetings, workshops, and demonstrations should be organized to show landowners the extent of the problem (e.g., septic system failure), the effectiveness of control measures, and the process involved in obtaining technical and financial assistance. Lord Fairfax Community College was mentioned as a possible location.
  - Educational tools, such as a model septic system that could be used to demonstrate functioning and failing septic systems, and video of septic maintenance and repair, could be set-up in public building such as the library or county administration building.
  - Notices using all media outlets (e.g. cable tv public access channel programming, links on county website) will be posted regarding septic systems (e.g. a reminder to pump-out septic tank every 3-5 years).
  - Educational program should include description of proper maintenance of septic systems and the economic advantages associated with proper maintenance.
  - Literature or demonstration could be set-up at the county fair.
  - An educational packet will be included about septic system issues for new homeowners. Need to work through Realtors.
  - A residential specialist dealing with residential sources will contact homeowners after identification of straight pipes or failing septic systems and explain options available for correcting the problems and for funding sources. This individual will also target outreach to residential areas where there is greater potential for straight pipes and failing septic systems based on age of structures, soils, proximity to streams, etc.
  - Post informative signage about proper pet waste disposal.
  - Provide information kiosks with pick-up bags and/or receptacles for disposal of pet waste at area parks, common areas, etc.
  - Promote developers to provide signage about proper pet waste disposal, pick-up bags and/or receptacles along common walking areas.
- In addition, the following tasks were identified as being required (of implementing agency personnel) in order for outreach to be successful:
1. Identify failing septic systems & straight-pipes (e.g. stream walks, analysis of aerial photos, mailings, monitoring, home visit) and report to VDH.
  2. Track septic system repairs/ replacements/ installations (traditional and alternative).
  3. Handle and track cost-share.
  4. Develop educational materials & programs.

5. Organize educational programs (e.g. demonstration septic pump-outs).
6. Distribute educational materials (e.g. informational pamphlets on TMDL & on-site sewage disposal systems).
7. Assess progress toward implementation goals.
8. Follow-up contact with property owners who have participated in the program(s).

Best Management Practices

- The following practices are potential BMPs under the cost-share program that may be utilized during implementation:
  - RB-1 Septic Tank Pumpout;
  - RB-2 Connection of Malfunctioning On-site Sewage Disposal System or Straight Pipe to Public Sewer;
  - RB-3 Septic Tank System Repair;
  - RB-4 Septic Tank System Installation / Replacement; and
  - RB-5 Alternative On-site Waste Treatment System.
- Other strategies to consider:
  - Indirect actions
    - Signage on public land
    - Survey to determine pet waste disposal practices
    - Educational materials identifying acceptable pet waste disposal methods
    - Inventory of pet kennels
    - Leash law
  - Pet waste collection and removal
  - Vegetative buffers
  - Structural BMPs (e.g., retention pond)

Potential Funding Sources

- Identified potential funding sources, with applicability to residential implementation include:
  - Virginia Water Quality Improvement Fund (WQIF), administered by the Virginia Department of Conservation and Recreation
  - Community Development Block Grant Program (CDBG), administered by the Virginia Department of Housing and Community Development
  - Federal Clean Water Act Section 319 Incremental Funds
  - Virginia Revolving Loan Program
  - Southeast Rural Community Assistance Project

Timeline and Targeting

- The 5-year implementation timeline and 10-year stream de-listing timeline seem reasonable.