

# Robinson River & Little Dark Run TMDL Implementation Plan Development

## Government Working Group Report to Steering Committee November 30, 2010

Madison Volunteer Fire Company  
1223 North Main Street  
Madison, VA

### **Attendance:**

Dave Allen, Madison County Board of Supervisors  
James Arrington, Madison County Board of Supervisors  
Jenny Biche', Rappahannock-Rapidan Regional Commission  
Dan Boring, Culpeper Town Council  
Jennifer Carlson, VA Department of Environmental Quality  
Deirdre Clark, Rappahannock-Rapidan Regional Commission  
Katie Conaway, VA Dept. of Environmental Quality  
Dwayne Dixon, Virginia Department of Health  
Ray Goodall, Madison County Planning Commission  
Sue Hansohn, Rappahannock-Rapidan Community Services Board, R-RRC Board  
Janet Herr, Rapidan Better Housing Corporation  
R. Clay Jackson, Madison County Planning Commission  
Bob Lee, Virginia Outdoors Foundation  
Rodney Lillard, Chair, Madison Planning Commission  
Isabel McLoughlin, Rappahannock-Rapidan Regional Commission  
Byron Petrauskas, Blue Ridge Environmental Solutions, Inc.  
Cindy Reid, Rapidan Better Housing Corporation  
Bob Slusser, VA Dept. of Conservation and Recreation  
Greg Wichelns, Culpeper Soil and Water Conservation District

**MEETING DATE: August 18, 2010**

### **RESPONSIBILITIES:**

The primary responsibilities of the Government Work Group are:

- Identify funding sources and technical resources currently available;
- Evaluate additional programs/technical resources that could enhance implementation;
- Identify lead agencies for agricultural and residential implementation;
- Identify regulatory controls currently in place that could promote water quality improvement efforts, and
- Discuss monitoring component.

## KEY TOPICS:

The following is a summary of issues discussed at the Government Working Group Meeting:

### ○ On-site Sewage Disposal Systems

Dwayne Dixon, VA Dept. of Health provided a summary of the local program addressing on-site sewage disposal.

#### Madison County:

- The Madison Sewage Treatment Plant empties into a tributary of Little Dark Run. It operates under a DEQ permit and is in compliance with all permit requirements;
- Currently, there are no sewer taps available; any approved new construction would require a permit for an individual septic system.
- There are no plans to expand the existing sewage treatment facility.
- Areas where there may be problems with failing septic systems are along the Rapidan River and Madison County line and the Crigglersville area where homes are older.
- Currently, there are no detailed records, including permit types and dates, on septic systems in Madison County.
  - A comprehensive review of tax maps and door-to-door surveys could identify older homes that might have systems in need of repair or replacement;
  - Permits issued before 1982 were based on sewage disposal rather than treatment;
  - Contact with identified property owners could facilitate the distribution of technical information and system repair programs;
  - Citizen groups would be more successful than a government agency in collecting meaningful survey data.
- Madison County does not have a pump out requirement.
- Madison's sewage treatment plant will not accept septage from pump outs; it must be hauled elsewhere for disposal, usually Charlottesville or Remington.
- Approximately 30 alternative on-site sewage treatment systems have been installed in Madison County in the last year. Maintenance contracts with semi-annual testing are required for all alternative waste treatment facilities.
- Plow and Hearth has the only mass drain field in Madison County. Past problems with maintenance and monitoring have been resolved.
- New residents and perspective buyers appear to be more informed regarding septic system function and maintenance than long term residents. Educational outreach should be focused on long time county residents.

- Madison County Health Department uses GPS to locate systems; however, VITA firewalls prevent Health Department links to the county database.

Culpeper County:

- Culpeper County has a 5 year pump out requirement, but no enforcement.
- Culpeper accepts septage for treatment on a limited basis.
- Virginia Cooperative Extension offers grant-funded groundwater testing and monitoring.

○ **Residential and Commercial Pet Waste**

- DEQ identified pet waste as a bacteria source through 12 months of monitoring using antibiotic resistance analysis testing.
- It was suggested that a system similar to that implemented by Fauquier County's SPCA could be installed in a confined canine facility in Culpeper or Madison to serve as a model for proper pet waste management in the region. Grant funding could be used to upgrade an existing facility.
- Area small animal veterinarians could help promote responsible pet waste management.

○ **Agriculture**

- It is estimated that the cattle count has decreased significantly in the Little Dark Run watershed area since the TMDL study was completed in 2005.
- There has been significant increase in streamside fencing and water trough installation in the Hebron Valley area.
- Due to braided streams, streamside fencing is not seen as a practical solution as it would greatly reduce the amount of pasture and be too expensive.
- Water trough installation alone, without stream exclusion, is not cost shared; however, the state does offer a 25% tax credit toward the producer's cost of installation.
- Cost-share for stream fencing is from 50% to 85%, based on options.
- With a reduced stream exclusion buffer of 10 feet, a producer can receive 50% cost-share on the watering system, grazing components, and stream fencing.

○ **Educational Outreach**

- Many educational outreach programs are available to address Agricultural concerns; the focus of new programs should be residential.
- Small acreage horse farms were identified as educational outreach opportunities and models for management as promoted by Prince William SWCD.

- Rappahannock County's "Cow College" could be replicated to provide information for Culpeper and Madison large animal owners.
- Madison County has recently completed a resource inventory/green infrastructure assessment.
- Bob Lee, Executive Director, VA Outdoors Foundation (VOF), provided an overview of the foundation's programs:
  - Over 10,000 acres in Madison County are currently under conservation easements;
    - GIS analysis of the watersheds indicates a significant opportunity for conservation easements;
    - Income tax credit of 40% of appraised value that can then be sold to any Virginia taxpayer (currently \$0.80 on the \$1.00 with at \$106 million dollar cap).
    - All programs are voluntary with no regulatory aspect to them.
    - Currently there is more demand for conservation easements than there is funding available;
    - Priority is given to easements that protect water quality; requirements include 35 ft. riparian buffers and property that house rare or endangered wildlife or plants.
    - VOF will work with a variety of partners;
- **Potential Funding Sources** – See attached Actions Chart
  - Few federal and state funding sources currently available
  - Attendees were asked to update/add to the Action Chart and submit to Deirdre Clark or Bob Slusser.
  - The Upper Hazel River has private funding available through PEC and grant funding through the National Fish and Wildlife Foundation for stream exclusion fencing.
- **Proposed Responsibilities/Roles of Government Agencies in IP**
  - In order to provide long-term water quality improvements, assistance is needed from local government to assure that BMPs are in place and maintained for beyond the required 10 year life span period typical of most state and federal programs.
- Government agencies at all levels are encouraged to develop and implement educational programs for pet waste management and septic system maintenance.

A local action plan is needed that includes a tracking system for all septic systems, including alternative systems.

Technical assistance for residential and agricultural BMPs is available through many public agencies including Culpeper Soil and Water Conservation District, Madison and Culpeper County, VA Cooperative Extension, the VA Dept. of Forestry, VA Dept. of Health, etc.

- **Regulatory Controls**

- Recommend that ordinances include LID strategies. Currently LID is encouraged but not required but in Madison County it is included in the Comprehensive Plan.
- There has been little to no reportable complaints through the Agricultural Stewardship Act process.
- Culpeper County has an ordinance on how many animals units per acre allowed but Madison does not.
- From time to time Wildlife Fish and Game Department allows for deer and geese reduction.

- **Monitoring During Implementation**

Katie Conaway, DEQ, provided information on DEQ's monitoring program:

- DEQ's ambient monitoring program will help validate progress during implementation of plan.
- The Robinson River is well monitored with two trend stations, historical data and biological monitoring.
- Currently there are no citizen monitoring groups, however grants are available to any group who may be interested. It was suggested that perhaps the Silver Citizens Group in Culpeper, high school students, college students or eagle scouts could be contacted and recruited to develop a volunteer monitoring program.
- Increased monitoring is recommended to create a baseline for the IP.
- Attendees at the first public meeting commented on the need for more extensive monitoring, as well as an update in changes in land use since the TMDL study was written.

## **RECOMMENDATIONS**

### **On-Site Sewage Disposal Systems**

- Collaborate with the Culpeper SWCD Office in the development of a comprehensive survey of existing on-site septic systems and alternative systems in Madison County, such as Crigglersville area where homes are older.
- Collaborate with Culpeper SWCD in the development of a sign-up for septic system pump-out, repair, replacement or installation of a conventional system.
- Expand the existing VA Dept of Health database currently utilized in Fauquier County to include Madison County.

- Consider development of a draft ordinance for a 5-year pump out requirement in Madison County on all conventional on-site septic systems. Although, past history expressed by county elected officials indicate citizens favored less government regulation and allowing residents to be responsible on their own.
- Consider a collaborative effort with the VA Dept. of Health to review existing tax records, existing paper trail from other sources and other deductive reasoning processes to determine if a septic system may be located on a given property.
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#### **Residential and Commercial Pet Waste**

- Explore the feasibility of Culpeper or Madison County willingness to pursue a grant funded pilot project handling confined canine pet waste.
- Identify small animal veterinarians who would promote pet waste management.

#### **Agricultural**

- Encourage use of water troughs as a 25% tax credit.
- Encourage use of stream side fencing with a 50% to 85% cost share.
- Encourage 50% cost-share for stream exclusion buffer of 10 feet for the components of a watering system, grazing components and stream fencing.

#### **Educational Outreach**

- Focus on older residential areas especially those needing repair or replacement of septic systems.
- Collaborate with Prince William SWCD in the adoption of an education outreach program to small acreage horse operations through a WQIF grant.
- Replicate Rappahannock County's "Cow College" to provide information for Culpeper and Madison large animal owners.
- Encourage a collaborative relationship between the county and organizations that manage property easements (e.g. VA Outdoors Foundation and Piedmont Environmental Council).

#### **Potential Funding Sources**

- Submit proposals for DCR WQIF RFPs in 2011 and Farm Bill opportunities through NRCS.
- Explore private funding sources such as the PEC and the National Fish and Wildlife Foundation for 2011.
- Research incentive payment programs to Madison County through private sources similar to those used in Fauquier, Rappahannock and Culpeper Counties (e.g. housing authorities).

#### **Regulatory Controls**

- Consider development of a draft ordinance for Madison County that controls the number of animals allowed per acre.

**Monitoring During Implementation**

- Focus initial citizen monitoring efforts on suspected hot spots of the Robinson River and Little Dark Run watershed for follow-up monitoring actions by DEQ.
- Update GIS maps reflecting land use changes on a frequency basis to be determined by the Office of the County Administrator.