

Upper York River Watershed TMDL Implementation Plan Development
STEERING COMMITTEE MEETING

June 7, 2011

6:00pm

Town of Orange Public Works Community Room
235 Warren Street
Orange, VA

Steering Committee Meeting Summary

Attendance:

Josh Bateman, Director, Community Development, Town of Orange
Jenny Biche', Rappahannock-Rapidan Regional Commission
Jennifer Carlson, VA Department of Environmental Quality
Katie Conaway, VA Department of Environmental Quality
Lee Frame, Orange County BOS
Courtney Lipski, VA Department of Health
Allan Lassiter, Citizen
Etta Lucas, Tri-County/City Soil and Water Conservation District
Christopher Owens, Citizen
Byron Petrauskas, Blue Ridge Environmental Solutions, Inc.
Mary Radloff, Citizen
May Sligh, Department of Conservation and Recreation
Bob Slusser, Department of Conservation and Recreation
Doug Smith, Citizen
Richard Street, Spotsylvania County
Ron Wisniewski, USDA Natural Resources Conservation Service
Greg Wichelns, Culpeper Soil and Water Conservation District
Lindsay Woolfolk, Jr., Citizen
Erin Yancey, Thomas Jefferson Planning District Commission

Welcome and Introductions:

Attendees were welcomed and introductions were made. Copies of reports to the Steering Committee from the agricultural, residential and government working groups, as well as a copy of the Action Chart were provided for review.

Residential Working Group Report:

Mr. Christopher Owens presented the Residential Working Group Report to the Steering Committee, noting the following:

- Louisa and Spotsylvania counties require permits for repairs to septic systems and require 100% reserve;
- Possible lake water intruding into ground water in both Louisa and Spotsylvania counties;
- Repairs to failing septic systems will have a greater effect at reducing the bacteria exceedence rate versus pump-outs;

- Education is needed to encourage voluntary compliance of Spotsylvania County's septic pump out ordinance, with regulation a last resort;
- Most owners of alternative and conventional septic systems are uninformed of mechanical function, costs and failure rates;
- To reach all property owners, include septic system information with tax assessments or any other county correspondence;
- Raise awareness that technical assistance is available, especially when VDH notifies a homeowner of a septic tank failure. Funding may be available;
- Recommend the definition of the bacteria standard (235 E.coli colony forming units per 100mL water) be put in terms that the general public can understand;
- The issue of specific soils being unsuitable for septic systems is addressed in the Louisa County Comprehensive Plan;
- Develop and implement public information campaigns on pet waste management;
- Seek funds to install kennel waste management program as pilot project and consider offering a "clean kennel" award; and
- Determine if coordination with the Army Corps of Engineers Lake Anna Ecosystem Restoration Project would be beneficial to the TMDL-IP process in terms of information gathered.

Comments following the presentation included:

- A colony forming unit (CFU) is a measure of the viable bacteria in a sample of water and is used to demonstrate the degree of bacterial contamination. A single bacterium or a clump of cells grow to become a colony. Colonies are counted and averaged per petri dish, which contains the medium to grow the bacteria. The bacteria standard used in determining these stream impairments was 235 cfu/100ml for an individual sample;
- Louisa County's Comprehensive Plan soil type evaluation for septic system suitability can be a valuable tool to use in land use planning;
- Spotsylvania County sends flyers reminding homeowners to have their septic tanks pumped and requests a receipt confirming it has been done, however no one monitors if the homeowner complies. Spotsylvania County pays for the mailings and is required by the Chesapeake Bay Act to contact all homeowners having septic systems;
- No outreach is currently conducted targeting older homes with possible straight pipes. The Department of Health does educate homeowners when a site visit is conducted, such as in the case of a home addition to evaluate system capacity. However if an outside contractor provides the site visit, education is not often provided to the homeowner. Utilization of contractors will gradually eliminate the local knowledge of the Department of Health; and
- Loudon County can be a model for tracking and identifying failing septic tanks and straight pipes using GIS and real estate tax records to identify older homes. 9-1-1 systems provide a building footprint to determine street addresses so that a building layer can be compared to the septic system permit layer. Grant funding may be available to build the GIS data layer for better tracking of septic system maintenance. Madison County is currently doing a similar project through a Water Quality Improvement Fund grant.

Agricultural Working Group Report:

Mr. Greg Wichelns presented the Agricultural Working Group Report to the Steering Committee, noting the following:

- If a fence is constructed using cost-share funding and is destroyed due to a natural disaster such as a flood, it may be replaced one time if the disaster did not take place within the same year as the construction of the fence;
- With regard to cost-share programs, Farm Labor and Contractor Labor cost credit may vary depending on the county. Orange county credits farm and contractor labor equally. In Spotsylvania County, contractor labor receives a higher value than farm labor. It was recommended that farm labor and contractor labor be credited equally within the watershed. Cost estimates should be irrelevant of who does the work;
- While irrigation promotes using soil as a filter, it would not have a big enough impact on the bacteria load within the watershed and was therefore eliminated as a recommendation;
- There is a 50% cost share program available to horse owners for grazing paddocks with a \$15,000 cap. Horse owners are also eligible for cost-share for the LE-IT, LE2T and SL-6T practices at 50% up to 85% cost share. Some felt more should be done to assist and address the equine industry. For cattle, the issue is getting them out of the streams. For horses, the issue is waste management. Horse farmers need to focus on mud management while cattle farmers need to focus on pasture management. Cost share programs reflect this;
- Two Full Time Equivalent (FTE) technical assistants are recommended for the entire project area (between 3 SWCDs) to complete the 10 year implementation plan at a cost of approximately \$10 million; and
- Pasture management, not just exclusion fencing, is an important factor in achieving the reduction loads.

Comments following the presentation included:

- Meeting minutes from the February 8, 2011 meeting stated that District funding is limited. Greg Wichelns, Culpeper Soil and Water Conservation District argued that funding is higher than it has ever been through DCR's Water Quality Improvement Fund. Ron Wisniewski, USDA, Natural Resources Conservation Service, stated that generous funding has been approved this year too, but budget issues will dictate future funding level; and
- All three Soil and Water Conservation Districts have continually received applicants for cost-share programs.

Governmental Working Group Report:

Mr. Josh Bateman presented the Governmental Working Group Report to the Steering Committee noting the following:

- Based on soil types and Health Department experience within the region, all three counties estimate funds addressing septic systems for the Implementation Plan be allocated as follows:
 - ✓ 60% towards repairs

- ✓ 30% for replacement, and
- ✓ 10% for alternative waste treatment systems;
- A measureable action plan is needed that includes a tracking system for all septic systems, including alternative systems—Albemarle or Gloucester could be used as a model;
- Grant funding should be sought to assist kennel owners in improving their facilities. Information on grant opportunities can be shared as they become available;
- Additional Storm Water Management practices recommended for residential and urban development include rain gardens, retrofitting retention ponds, underground tension, LID, etc.;
- Homeowners should be informed of pump out recommendations/requirements and cost share programs available for pump-outs and repairs. GIS can be utilized to identify those homes that should be targeted and projects like the one in Goldmine Creek done by the Thomas Jefferson SWCD may help in determining hotspots; and
- The Extension Office has water testing and soil testing kits available. Citizen monitoring also exists throughout the region and could be expanded to these impaired streams.

Comments following the presentation included:

- Recommend construction of public sewer lines to the Orange Public Wastewater Treatment Plant;
- Director of Community Development for the Town of Orange, Josh Bateman, will provide Byron Petrauskas, Blue Ridge Environmental Solutions, Inc., with an estimate of the number of hooks ups available in the project area for the Town of Orange; and
- The Town of Orange invested \$24 million in a new wastewater treatment facility and could expand its capacity, especially to serve low to moderate income families who are eligible for higher cost share amount. Gravity sewer should be a priority rather than pump stations due to additional maintenance concerns.

Action Chart:

- In an effort to allow enough time to critique the Draft TMDL Implementation Plan power point presentation, attendees were asked to review the Action Chart hand out and forward any questions or comments to May Sligh, Department of Conservation and Recreation, or Jenny Biche', Rappahannock-Rapidan Regional Commission before the public meeting on June 21, 2011 (contact information listed below).

Review of Presentation Prepared for Public Meeting:

The power-point presentation prepared for the upcoming final public meeting was reviewed. Attendees were asked to provide feedback on the content as well as the presentation of information. Comments and recommendations were as follows:

- Hard copies of the maps presented in the slides are recommended for the public meeting;

- Include statement noting participation in the Agricultural Best Management Practices for the TMDL-IP is voluntary;
- It was recommended a Board of Supervisor from one of the three counties within the watershed inform audience on the differences between the local TMDL and the Chesapeake Bay TMDL;
- In the slide listing the bacteria sources, it was suggested percentages of each source be included, possibly a pie chart as a helpful visual to attendees;
- An explanation of the monitoring process should be done at a layman's level. The methodology should be explained. Department of Environmental Quality (DEQ) will provide hand outs with the information;
- Stress that bacteria is the only contaminant being address in the TMDL Implementation Plan and that it is a public health problem;
- Lake Anna is not impaired for bacteria and is not being address in the Upper York Watershed TMDL-IP. Only the six tributaries listed;
- Explain why bacteria is a problem;
- Protection of the shoreline around Lake Anna is not a focus of the Upper York Watershed TMDL-IP;
- Consider changing the title of the photo "land application" to "manure application";
- The TMDL-IP focuses on non-point sources of bacteria. Bio-solids are permitted and therefore are regulated by Department of Environmental Quality, NPDES, or National Pollution Discharge Elimination System permit;
- Bio-solids can be incorporated by disc-in on cropland, but not on pasture;
- Steering Committee chose to remove the suggestion that "bio-solids should be injected in" from the Agricultural Working Group Report recommendations because they are in dry form, unlike manure stored in a lagoon;
- Aerial maps showing the six tributaries (one map for each of the three counties) identifying where exclusion fencing is needed will be brought to the public meeting;
- Under "Implementation Actions," Cropland should remove "bio-solids;"
- Photos representing Reforestation would need to show a whole field being converted to accurately represent the SL-1 cost share program or if photo in slide is used, change the caption to "Stream Protection/Field Buffers;"
- Lake Anna Civic Association's (LACA) offer to fund an exclusion fencing demonstration project can be mentioned but not included in the Action Chart;
- FR-4 cost share is not used often. Typically it is utilized when a non-farmer purchases a farm, but chooses not to be a farmer and converts it into a forest;
- Photo of home made pet waste compost photo should be removed;
- An inquiry was made as to whether or not more focus should be on storm water best management practices. The TMDL model focuses on failing septic tanks and pet waste. If all of the failing septic tanks are addressed and corrected, the remaining bacteria load is reduced through proper pet waste management. Not a lot of funds are allocated for storm water best management practices (bmps). Storm water bmps are more effective to remove nitrogen and phosphorus than bacteria;

- An inquiry was made as to whether or not to include wetlands as a possible storm water and/or agricultural bmp. It could be both, however it is very expensive-- \$65,000 per acre. Development is used to drive the installation of an artificial wetland, but the last building permit issued was in 2003. It may be possible to secure funding for constructed wetlands to treat runoff;
- Construction of a new Lake Anna Nuclear Reactor in Spotsylvania County will raise the elevation of the lake by 3 inches and will create more wetlands. Permits are currently under consideration;
- The cost for 2 Full Time Equivalent (FTE) technical assistance position for 10 years will cost approximately \$1 million a year. Federal technical assistance staff is not included in the estimate but is also available;
- Under Funding Sources, separate Chesapeake Bay Watershed Initiative (CBWI) fund from EQIP fund;
- Please forward any information on Regional/Local/Private funding source to Byron Petrauskas, Blue Ridge Environmental Solutions, Inc. (contact info listed below);
- Change Residential Scenario example to 50% cost share at \$4,000;
- Under Contact Information, change Spotsylvania County address to 9019 and add Orange office number 540-672-1523 for Culpeper Soil and Water Conservation District Orange County office;
- The Focus Areas/Priorities should line up with the funding break down.
- An inquiry was made as to whether or not half of the money to implement the plan is spent on 10% of the problem. The Implementation Plan has two stages. Stage 1 will focus on Agriculture and on-site sewage. Stage two will focus on cropland and pet waste;
- The slide with photos of the pet waste composters should be changed so that there are 2 photos of pet waste composters, one of the rain garden, and one of a kennel; and
- Connection to public sewer availability in Louisa County should be included in the recommendations to allow for future grant opportunities.

Next Steps:

Local newspapers will be provided a news release highlighting the upcoming public meeting to be held on June 21, 2011 at 6:00pm at the Town of Orange Public Works Community Room. Attendees were encouraged to invite others to attend. Fliers will be distributed throughout the watershed advertising the upcoming meeting.

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