

Rush River, Hughes River, and Hazel River TMDL Implementation Plan Development

Agricultural Working Group Report to Steering Committee

February 23, 2009

Working Group Members:

Jenn Allen – Friends of the Rappahannock
Melissa Allen – John Marshall Soil and Water Conservation District
Bob Anderson – Chair, Rappahannock County, Board of Supervisors; R-RRC Board; Farmer
Debbie Cross – Department of Conservation and Recreation
Greg Dixon – Farmer
Helen Dixon – Farmer
Edward Dorsey – Citizen
Ron Frazier – Rappahannock County, Board of Supervisors
James Henshaw – Citizen
Bev Hunter – RappFLOW
Phillip Hurst – Citizen
Bev Jones – Citizen
Kaye Kohler – Realtor, Citizen
Rick Kohler – Realtor, Citizen
Bryant Lee – Rappahannock County, Board of Supervisors
Don Look – Piedmont Environmental Council
Charlie Lunsford – Department of Conservation and Recreation
David Massie – Culpeper Soil and Water Conservation District
Mike Massie – Farmer
John McCarthy – Rappahannock County
Bob Miller – Madison County, Board of Supervisors; R-RRC Board
Caroline Parrish - Citizen
Chris Parrish – Rappahannock Farm Bureau
Beth Pastore – Piedmont Environmental Council
Byron Petrauskas – Engineering Concepts, Inc.
Herbert Reynolds – Virginia Department of Forestry
Joe Rossetti – Virginia Department of Forestry
Bob Slusser – Department of Conservation and Recreation
Augustus Vogel – Farmer
Greg Wichelns – Culpeper Soil and Water Conservation District
Vivian Yancey – Citizen

Meeting Dates:

- September 16, 2008
- November 18, 2008
- January 12, 2009

Responsibilities

The Agricultural Working Group (AWG) addressed the sources of bacteria that can be attributed to agricultural operations. The group focused on identifying obstacles to implementation of best management practices to reduce bacteria coming from agricultural operations, and practical solutions to these obstacles. Reductions in bacteria coming from agricultural operations can be achieved by decreasing direct deposition of fecal matter in

the streams by livestock and reducing the amount of bacteria being carried across the land to the stream network during storm events.

The group focused on the following tasks:

- Identify constraints to the implementation of best management practices,
- Consider alternative best management practices that are both effective and more affordable for the participants,
- Identify alternative funding sources/partnerships that will promote implementation,
- Identify timeline for achieving implementation goals, and
- Review implementation strategies from an agricultural perspective.

Key Topics and Recommendations

The following is a summary of issues discussed and recommendations from the three AWG meetings:

Overview

- Potential practices listed in the Virginia Agricultural BMP Handbook that may be utilized during implementation were discussed.
- Other BMPs such as pasture management system and manure/biosolids incorporation were noted.

Stream Fencing Estimates

- Spatial analysis to determine streamside fencing (e.g., one-sided, two-sided, or none) was outlined. It was pointed out that RappFLOW had examined aerial photographs to determine stream-side buffer zones; however, it was difficult from some aerial photographs to actually tell whether there were buffers in place. To diminish this uncertainty, it will be important to cross check information with the Culpeper SWCD, NRCS, Virginia Cooperative Extension, producers, and AWG.
- Livestock exclusion fencing estimates initially presented to the AWG were for major streams only. Comments were made at the 2nd meeting that all perennial streams needed to be included in the analysis. At the 3rd meeting, it was decided to take the all perennial stream estimate and consider what adjacent pasture land has grazing animals that needed to be excluded from the stream.

Education / Outreach

- Concerns that most producers in the watershed already know about BMPs and have been approached about implementing the cost-share practices. What will be different now from past?
 - It was noted in the Fauquier TMDL IP that not all farmers knew everything about all the programs available especially the new / transitional land owners or renters.
- Steps taken in the Fauquier TMDL IP included
 - Water quality letter sent to all land owners in the watershed
 - Watershed investigation to determine areas to target
 - Outreach to targeted areas from full time staff member

Cost-share / Potential Funding Sources

- CREP is a big program in Rappahannock County.
- The Culpeper SWCD pointed out that it is possible to combine multiple programs in order to increase the cost-share percentage. Larger farm tracts installing buffers have a greater chance of obtaining cost-share near 100%. Typical cost-share for smaller farm tracts is 50% – 90%.
- Concerns were expressed that details for all the programs were difficult to follow. This could be a big hindrance to getting folks involved and interested in implementing BMPs. Typical paperwork associated with an easement was suggested as an appropriate style for explaining programs.
- Explanation was used that cost-share program is a trade-off => producer fences stream and receives a clean water source
- It was noted that incentive payment of \$200/ac for pasture management system detailed in the Fauquier TMDL IP was high and a lesser payment, yet to be determined, should be expected. Question was asked

whether any private funding had actually been utilized to provide support for BMP implementation in the Fauquier TMDL implementation project

- Response was private funding support was in the planning stage and not utilized to date
- Potential private funding sources mentioned were: Chesapeake Bay Funders and Friends of the Rappahannock River
 - Non-government funding may have less stringent requirements for BMP installation (e.g., shorter buffer distance) that some producers may only be willing to meet.
 - It was discussed that using two-strand electric poly-wire fencing at top of the streambank would remove the direct deposition load from livestock, but not treat the bacteria land load. Therefore, the fencing would be counted in the implementation efforts as addressing livestock direct deposition only.

Implementation Constraints / Concerns

- Stream water is easy water (i.e., easily accessible and free)
- Loss of good bottom-land pasture to buffer
- Loss of shade
- Replacement of fence after a flood event
- Invasive plant species in buffer
- Buffer aesthetics
- Buffer requirement of 35-feet would greatly reduce the land available to raise livestock for certain farmers.
- Up-front expenses and not getting reimbursed for several months

Other

- Concern was raised regarding the direct pathway to streams ditches alongside roadways provide.
- Questions were raised about what legal action could be taken to enforce implementation.
 - Agricultural Stewardship Act allows citizens to submit complaints about bad agricultural practices observed to be detrimental to the environment. The complaint is investigated by the Department of Agriculture and remedial actions prescribed if deemed necessary. Bacteria are not referenced in the act; however, will be considered in next revision.
 - House Bill 1150 directs the state to develop action plan to clean-up impaired waters, part of process will be looking at necessary regulations
- Impact farm ponds could have on bacterial loadings was discussed
- Easements can be a good option, but not appropriate for everyone.

Recommendations

- CREP program or equivalent incentives need to continue to ensure participation in BMP programs.
- Incentive payment for proposed pasture management system needs to reflect energy costs, since fuel would constitute majority of farmer's cost to implement.
- Potential private funding sources and/or partnerships needs to be pursued during implementation. (e.g., Chesapeake Bay Funders and Friends of the Rappahannock River).
- Implementation options afforded by non-government funding should be covered with producers.
- Due to amount of exclusion fencing required, implementation timeline should be at least 10 years.
- Livestock exclusion and pasture load reductions should be a priority over cropland load reductions. Cropland acreage listed in TMDL report over-estimates actual area in watersheds and substantial manure collection and land application from confined beef cows is not prevalent in these areas.
- Future implementation actions and/or requirements should consider the viability of an individual producer or agricultural as a whole. Overall, Rappahannock County residents appreciate the farming community and rural aspects of the county and do not want it impacted.
- Two new stream exclusion fencing practices offered through the state cost-share program, effective January 15, 2009, address buffer-width, fencing specifications, and increased level of incentives concerns that were discussed by the AWG.