

**The Catoctin Creek TMDL Agricultural
Program Implementation**

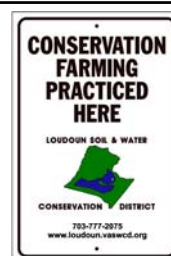
January 2005-Today



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The purpose of the Agricultural portion of the Catoctin Creek TMDL Project is to help farmers install Conservation Best Management Practices on their farms, and by doing so to help lower the level of Fecal Coliform Bacteria (and sediment) in Catoctin Creek and its Tributaries

What causes elevated levels of Fecal Coliform?

- Horse, cattle, and other livestock waste entering streams
- Human waste (malfunctioning septic systems, straight pipes, etc) entering streams
- Wildlife waste including deer, geese, and raccoons entering streams
- Pet waste entering streams



All these contribute to elevated bacteria levels.

Loudoun Soil and Water Conservation District was tasked with helping to curb agricultural waste

**What practices help limit fecal coliform from
agricultural sources from entering streams?**

1. Stream Fencing for livestock exclusion
2. Riparian Buffers (minimum 35 feet to receive 85% cost share, 10 feet to receive 50% as of 2009 cost share program.)
3. Alternative water systems
4. Hardened Crossings



These practices may be installed as part of larger farm management plan which can include rotational grazing, cover crops on crop fields, and a nutrient management plan to plan for the proper application for manure and fertilizer.



**Livestock Exclusion Stream Fencing
With 35 Foot Wide Buffer**



**Successful WP-2T
Fencing and Buffer
Installed 2006**





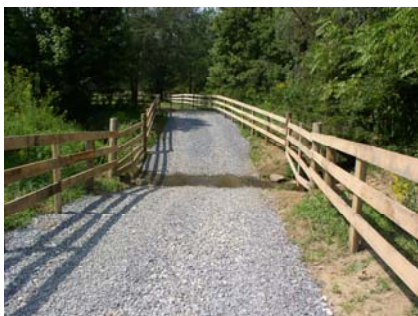
Riparian Buffer

With Fencing, Mowed to Prep for Tree Planting



Frost Free Water Trough

Installed with Livestock Exclusion Stream Fencing and 35 foot Buffer



Hardened Crossing

Installed with Livestock Exclusion Stream Fencing and Buffer

Outreach Techniques to Publicize Program

- Project Introduction Mailing (**4470 Recipients**)
- Follow up mailings to Ag and Forestal Districts (**371 recipients**), targeted largest parcel owners (**20 personal letters**), etc.
- Final Mailing (Combined Ag and Residential Program) **4961** postcards sent
- Flyer postings (Southern States, Tractor Supply, Loudoun Milling, gas stations, post offices, etc.) Approximately **50 flyers** have been posted to publicize the program
- Twilight Dinner Meeting, Hillsboro, 2007
- Twilight TMDL Farm Tour, Hamilton, 2008



Outreach, Continued

- Presentations and articles for livestock and producer groups (Loudoun Valley Sheep Producers (1) Loudoun Cattlemen (1), Loudoun Horse Association (2), Loudoun Llama and Alpaca Owners (1), Tri County Horse Club (1), Farm Bureau (many times!), Ag Summit Group (1), Forum for Rural Innovation (3), VOPCA (2).
- Where Pasture Meets Stream Blog on Loudoun Times-Mirror website (**33 Articles** to date)
- News articles in local papers
- Stories on WAGE radio, and Public Service Announcement
- Presentations to realtor groups



Summer 2008
Twilight TMDL Farm
Meeting
Hamilton, VA



What has been installed as of July 27, 2009?

48 BMP practices

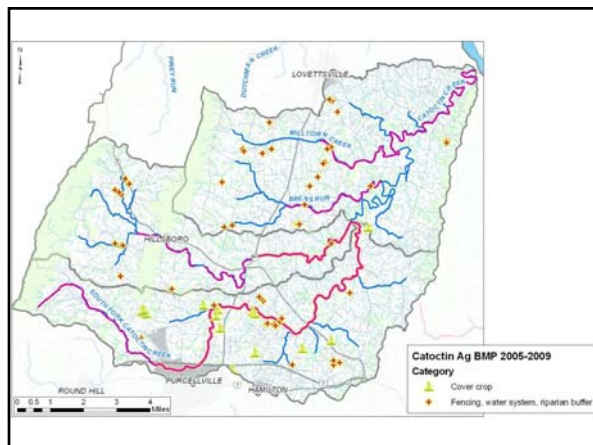
- 22,016 feet of stream, pond, and wetland livestock exclusion fencing (over 4 miles!)
- 17 acres of stream buffer
- 14 Water Troughs
- 331 acres of winter cover crops or permanent grassland conversion



What is contracted to be installed by December 31, 2009?

22 BMP practices

- 17,210 feet of stream, pond and wetland fencing
- 11 Water Troughs



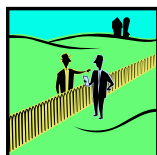
What Outreach Worked... and What Did Not

- Mailings brought initial interest early in the program in 2005. Follow up mailings, and targeted personal letters brought little response.
- Final 2009 mailing brought the largest response of all. Reasons?
 - Spring time mailing
 - New program offerings
 - Coordinated effort with newspaper article, Blog, etc
 - At least 10-12 practices attributable to final mailing
- Field Events had limited attendance and success in Catoctin
- Flyer postings at local businesses were cheap, easy, and brought some cost share customers
- Newspaper articles and Blog were successful, got general information out to the public.



What Worked, Continued

- -Presentations at local producer meetings were excellent for getting general knowledge about the program "out in the field."
- -Making contractors aware of the program brought additional sign ups.
- -Word of mouth, always the best outreach. Neighbors telling neighbors that they were happy with the program. (Example, Hampton Road/South Fork area)



Facts Effecting Implementation

- The "new" TMDL cost share practices, LE-1T and LE-2T were not available until the final year of implementation in Catoctin.
- The agricultural landscape in Loudoun is changing rapidly. More small operations, and non traditional products being produced. How will this effect water quality?
- The population of the watershed has grown substantially since the TMDL was established. Cattle numbers down, Horse numbers up/holding steady, human numbers, WAY UP!



Challenges

- Cost Share does not cover ALL costs, landowners are still left with a substantial bill for practices
- Some pastures/farming situations do not fit with the cost share program (ex. A long slender pasture in a stream valley.)
- Lack of ownership of farmland or long term rental agreements in Catoctin.
- Uncertainty of economics or future of the farm with development pressure.
- Uncertainty about new regulations from the state (this works for and against cost shared BMP installation)
- Long standing generous availability of cost share funds in Loudoun meant no backlog of producers waiting for available cost share funding to become available.



Successes of Catoctin TMDL

- Conservation is on the ground. BMPs that otherwise would not have been installed are now implemented in the watershed.
- Outreach to new ag sectors. Smaller producers who are new to farming and/or the area now know about LSWCD programs. Reaching beyond farms that have been the traditional cooperators for LSWCD programs.
- Good will with the various producer groups through increased communication and interaction.
- Increased communication and integration with other local ag and conservation efforts.



Successes Continued

- -Adoption of the new LE-1T and LE-2T practices specific to TMDL areas. Recommendations for practices for solely TMDL watersheds were made in the proposal written early in the implementation by LSWCD and DCR personnel.
- Higher cost share rate/buffer flexibility was crucial in getting sign ups late in the implementation.



The Future

- Funding for TMDL outreach and cost share is secured through 2009.
- Beyond 2009 what can be done to keep momentum?
- We must apply the outreach lessons from Catoctin the rest of the county and other TMDLs.

