

**Little Calfpasture River Water Quality Improvement Plan**  
Agricultural Working Group Meeting: Rockbridge Baths Fire Hall  
September 27, 2016

***PARTICIPANTS***

Rosalie Bull	Karen Kline (VA Tech)	Gene Yagow (VA Tech)
Donald Vess	Phyllis Vess	Lee Cummings (NBSWCD)
Pat Calvert (JRA)	Tom Stanley (VCE)	Conrad Wyrick (DEQ)
Sandra Stuart (RACC/NBSCD)	Nesha McRae (DEQ)	

***MEETING SUMMARY***

Nesha McRae, from the Virginia Department of Environmental Quality (VADEQ) provided an overview of the role of the agricultural working group in the planning process. She also shared updates on the project regarding planning activities that have occurred since the public meeting held in August. She provided a brief summary of the discussion that took place at the lake management working group meeting held last week. At the meeting, the group discussed illegal dumping of trash above Lake Merriweather and how it was part of the reason that the Boy Scouts have to draw the lake down each fall (to clean out large debris). Participants noted that in addition to the dumping site up at the bluffs on 601, there is another site on 601 going up to Craigsville across the Wilson bridge. DEQ and VATEch staff has also been working with the Game Commission to identify and map forest harvesting sites in the watershed and account for changes in land use and potential sediment loading to the river. DEQ staff shared a summary of agricultural BMPs installed since the TMDL was completed, noting that they will be credited towards implementation goals established in the plan. Preliminary estimates of livestock exclusion fencing needed in the watershed have been developed, with an overall estimation of 13 miles of fencing needed in the watershed. A large portion of this fencing is in one particular subwatershed where the Augusta Correctional Center is located. The group discussed the fact that the Correctional Center has over 200 livestock, all of which have unrestricted access to Smith Creek, a tributary of the Little Calfpasture River. One participant noted that the farm at the center is managed by VA Agricultural Services, a state organization. The center has worked with VA Cooperative Extension and VA Tech on research projects in the past, and receives some assistance from VA Tech on general farm management. The VA Tech Veterinary School has also done some research out at the farm. DEQ staff suggested that they could work with VCE to approach the prison about installing livestock exclusion fencing. Unfortunately, the prison won't be able to use prisoners on site to assist with installation and maintenance since it is a medium security prison. One participant noted that the center just recently updated its wastewater treatment facility as well (about 18 months ago)

The group moved on to discuss the general status of agriculture in the Little Calfpasture River watershed. It was noted that the farming population in the watershed is aging and that few young farmers are returning to farm family farms. The older population is less interested in trying new things on their farms including livestock exclusion fencing.

The group was asked whether there are any new or innovative management practices that they thought should be considered for inclusion in the plan. It was noted that VCE recently held a fencing field day

where they looked at the use of poly flex fencing to keep cattle out of the stream. This fencing costs around \$0.18/ft and has a life span of 10-20 years. Something like this could be paired with the portable solar powered watering system the VCE staff has been working with up in Augusta County as a less expensive, less management intensive option to keep cows out of the stream.

One participant noted that there is a new poultry operation in the watershed on Troxell Gap Road above the prison. They have two poultry houses and are in need of a little storage shed. They have had trouble getting cost share for a facility.

Obstacles to livestock exclusion were discussed. The loss of shade and land was noted as a significant management problem. One participant noted that someone at VATEch has been conducting research on silvopastoral practices. While this practice requires a big management commitment and requires farmers to take a longer term view on their operation, it can be implemented along with rotational grazing in order to provide shade for livestock and better utilize pastures. The researcher at Tech, John Fike, could be consulted about the potential for a research project in this area up at the prison.

The group discussed the best ways to reach out to farmers. In this particular area, there really aren't many active community groups that can assist with outreach, nor is there a very large agricultural community. There are a few absentee landowners, but not many, and some leasing of land for grazing in the watershed. One on one communication and mailings were identified as the two more effective means of getting the word out about water quality issues and BMP implementation. Participants were only aware of two farmers in the watershed who have cropland, and it only totals 50-60 acres making cropland BMPs a low priority. The group discussed potential meeting locations. It was noted that the Craigsville Fire Department might have a meeting room and that the Goshen Fire Department would be a little closer for participants for the next meeting. The next meeting will be held on either Tuesday, October 25 or Tuesday, November 1. The group agreed that 6:30 was a suitable time to meet since it will be getting dark by then in late October.

In order to gage local interest in different BMP options and identify the most suitable livestock exclusion fencing systems for inclusion in the plan, a survey was distributed to meeting participants. Everyone was asked to rank a series of BMPs along with a series of obstacles to livestock exclusion. The results are summarized in the two tables below:

**Table 1. Potential best management practices for consideration.** Average rankings are shown below (8 total) with 1 being the highest priority practice and 7 being the very lowest priority.

Best management practice	Description	Rank (1-8)
Streamside livestock exclusion fencing	Excluding livestock from streams with fencing, providing alternative water sources or limited access points to the stream	1
Streambank stabilization	Sloping back and stabilizing eroding or undercut streambanks using vegetation and other natural materials. May also include placement of in stream structures using rocks and logs to prevent further erosion.	2

Rotational grazing	Establishing a series of grazing paddocks with cross fencing and rotating livestock to maximize forage production while preventing overgrazing	4
Forested streamside buffers	Planting trees and shrubs in strips (35 foot minimum) along streams adjacent to pasture and cropland	2
Grassed streamside buffers	Planting grasses in strips (35 foot minimum) along streams adjacent to pasture and cropland)	3
Forestation of crop, pasture or hayland	Convert existing pasture, crop or hayland to forest (hardwood or conifers)	7
Continuous no-till	Cropland is planted and maintained using no-till methods, only effective in reducing bacteria for cropland receiving manure applications (not commercial fertilizer)	5
Cover crops	A cover crop (e.g. rye, barley) is planted and left on crop fields through the winter to keep soil covered until a field is planted again in the spring.	6

**Table 2. Obstacles to streamside livestock exclusion.** Average rankings are shown below (5 total) with 1 being the most common obstacle to address and 5 being the least common obstacle.

<b>Obstacle</b>	<b>Rank (1-5)</b>
The cost of installing fencing and off stream water is too high, even with cost share assistance from federal and state programs	2
Cannot afford to give up the land for a 35 foot buffer	2
General maintenance of fencing is time consuming and expensive	1
Grazing land is rented with short term leases and landowners are not interested in installing and/or maintaining streamside fencing and off stream water	3
People do not trust the government and do not want to work through state and federal cost share programs to installing fencing systems	3

The meeting was adjourned following completion of the survey.