

# Upper Goose Creek, Cromwells Run, and Little River Implementation Plan Public Meeting Meeting #1

June 21, 2016  
Meeting Notes

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**Location:** Wakefield School  
4439 Old Tavern Road  
The Plains, Virginia 20198

**Start:** 6:00 p.m.  
**End:** 7:00 p.m.

**Meeting Attendance:**

May Sligh, VA Department of Environmental Quality (DEQ), Facilitator  
Heidi Moltz, Interstate Commission on the Potomac River Basin (ICPRB), Facilitator  
Kevin Jennings, Manager of Archwood Farms and owner of Kinloch Farm, Speaker  
Jenny Biche, Rappahannock-Rapidan Regional Commission (RRRC), Scribe  
Rebecca Shoemaker, VA Department of Environmental Quality  
Tim Mize, Virginia Tech Extension Agent  
Tom Turner, John Marshall Soil and Water Conservation District  
Neely Law, Center for Watershed Protection  
Alston Horn, Chesapeake Bay Foundation  
Deirdre Clark, John Marshall Soil and Water Conservation District  
Kimberly Fogle, Director of Community Development, Fauquier County  
Edward Fogle, Citizen  
Scott Kaiser, Interstate Commission on the Potomac River Basin  
Charlie Lunsford, VA Department of Environmental Quality  
Jeff Sledjeski, Soil Tech, Inc.  
Dave Manning, Loudoun Wildlife Conservancy  
Maunette Makowski, 3E Consulting  
Andrew Hopewell, Assistant Chief of Planning, Fauquier County Community Development  
Jim McGuinness, Goose Creek Watershed Association  
Jeff Millington, Citizen  
Linda Millington, Citizen  
Dawn Jennings, Kinloch Farm  
Ben Shoemaker, Loudoun Water  
Tim Ohlwiler, Virginia Tech Extension Agent  
Tom Grizzard, Virginia Tech  
Gem Bingol, Piedmont Environmental Council  
Pat McIlvaine, Loudoun Soil and Water Conservation District

## Meeting Minutes:

Attendees were welcomed and key staff from DEQ, RRRC and ICPRB were introduced. Heidi Moltz, ICPRB, presented an overview of the Total Maximum Daily Load (TMDL) Update and Implementation Plan elements through a PowerPoint presentation. Following ICPRB's presentation, May Sligh, DEQ, shared information on the TMDL Implementation Plan Public Participation Process through a PowerPoint presentation. Kevin Jennings, Manager for Archwood Farms, which is located on property surrounding the Wakefield School, shared his experience participating in various agricultural best management practices (BMP) cost share programs offered by DEQ along with the technical support provided by the John Marshall Soil and Water Conservation District (JMSWCD) and National Resource Conservation Service (NRCS). Through a PowerPoint presentation, he shared pictures of the BMPs at various stages of installation and provided maps to show the entire system for watering the cows once they were excluded from entering the stream. After the presentations, the following "Questions and Answers" were shared:

- An inquiry was as to how much out-of-pocket expense Mr. Jennings incurred implementing the cost share programs and how long it took for him to recover those out-of-pocket costs.

*Mr. Jennings replied that the BMPs were installed in three phases. For phase 1, the total cost exceeded the cap for the cost share program. The Landowner of Archwood Farms elected to utilize the maximum cost share program available, 75%, which required the exclusion fencing to have a 35 foot set back from the stream. The Landowner fronted the money for the cost of the project and once the practices were approved was reimbursed the 75% immediately. The total project took 4 years to complete. The return on investment to the landowner included improved water quality, improved herd health and 100% utilization of the pastures.*

- A follow-up question was shared inquiring as to what specific examples there were for the recovery of out-of-pocket costs, such as less vaccines being used, etc.

*Mr. Jennings replied that indeed less vaccines were needed, the weight of the herd increased, the herd grazed evenly across the fields which resulted in the distribution of the manure evenly throughout the field and improved soil and pasture overall. While the landowner lost 3-4 acres of pasture for grazing, the herd now had numerous water troughs available throughout the pasture due to the cost share program. They were able to utilize the entire pasture for grazing and spent less time traveling back and forth to the stream. They found that they did not need to have as many vet visits to the farm since*

*implementation of the BMPs, with hoof rot decreasing since the herd no longer stood in the streams. In the 35 foot set back the landowner chose to make the area into a wildlife habitat. Mr. Jennings said the return of investment was not immediate, and was not obtained in the first year, but over time.*

*Tom Turner, JMSWCD, stated that another farmer who participated in the cost share program indicated his herd gained 30 pounds per animal since implementing the BMPs. Mr. Jennings shared that he had heard from a dairy farmer that his cows increased their milk production after one year of installing a second water trough at the other end of their dairy barn through the cost share program. Mr. Turner also mentioned that animals that are not getting the bacteria from impaired streams are able to use the energy they would have had to expend to fight off parasites into producing more muscle.*

*May Sligh, DEQ, stated that an article on the effects of impaired waters on herd health written by large animal vet Dr. Scott Nordstrom was included among the handouts provided to attendees.*

- Charlie Lunsford, DEQ, mentioned that sometimes landowners who lease their farmland can be less interested in participating in the cost share programs and asked what motivated the landowner of Archwood Farm to participate.

*Mr. Jennings said that quite simply Archwood Property wanted to improve the water quality and saw the program as a win-win-win. The landowner wins by getting monetary assistance, the cattle win by becoming healthier and the environment wins by reducing the impairments.*

*Mr. Jennings also stated that the stream, Broad Run, that runs through Archwood Farm, flows north to Manassas, Fairfax and eventually into the Potomac River. By being good stewards of the environment in The Plains, he is able to prevent water quality issues to the north and to the Potomac River. He said that the landowner appreciates wildlife and was thrilled to participate. Mr. Jennings said a healthier herd, a herd that is not stressed, and a healthier environment was the motivating factor for the landowner. Since the loss of shade was an issue when the herd was fenced out of the stream, trees were planted in the pasture. The whole system cost went above \$50,000, which was the cap for the 75% cost share for the project. However, the system works beautifully and the gravity-fed water troughs ensure that the cows don't have to wait in line to get a drink. The engineering of the system was designed so that the water troughs refilled as fast as the cows drink it.*

Following the "Question and Answer" Session, attendees were invited to take a short break, enjoy the refreshments, and then join either the Agricultural or Residential Working Group Session.

The next Agricultural and Residential Working Group meetings are scheduled for September 22, 2016 with the final public meeting tentatively scheduled for December 2016.

Comments on the proposal were requested to be submitted by July 21, 2016 and can be sent to:

May Sligh

Virginia Department of Environmental Quality

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Heidi Moltz

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# Upper Goose Creek, Cromwells Run, and Little River Implementation Plan Agricultural Working Group Meeting #1

June 21, 2016  
Meeting Notes

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**Location:** Wakefield School  
4439 Old Tavern Road  
The Plains, Virginia 20198

**Start:** 7:00 p.m.  
**End:** 8:15 p.m.

## **Meeting Attendance:**

Scott Kaiser, Interstate Commission on the Potomac River Basin, Facilitator  
Charlie Lunsford, VA Department of Environmental Quality, Facilitator  
Rebecca Shoemaker, VA Department of Environmental Quality, Scribe  
Tim Mize, Virginia Tech Extension Agent  
Tom Turner, John Marshall Soil and Water Conservation District  
Alston Horn, Chesapeake Bay Foundation  
Neely Law, Center for Watershed Protection

## **Meeting Minutes:**

The meeting started with introductions of all attendees. ICPRB presented stream exclusion fencing opportunity maps to the group and explained the process by which the maps were generated. It was noted that there is 1.2 million linear feet of fencing opportunity. Accounting for the 500,000 linear feet of fencing installed across the Implementation Plan area since 2002, there is about 700,000 linear feet of fencing opportunity still available. The SWCD confirmed the values presented and noted that a lot of the fencing opportunity may be on land that is leased. DEQ noted that some of the land shown on the map is used for hay, not pasture because NLCD does not distinguish between hay and pasture land cover. The group discussed the potential for field-verifying the accuracy of the maps; JMSWCD noted that there has already been some work done by District staff to ground-truth potential fencing areas.

The IP timeline was discussed. ICPRB noted that the timeline will be discussed in working groups and the Steering Committee and laid out in the draft report that will be presented later this year. Both ICPRB and DEQ explained that the draft plan will outline long-term milestones, likely over a period of 10, 15, and/or 20 years.

The group discussed general thoughts about the project area and potential ideas for moving forward:

- Some landowners did not want to sign up for cost-share programs even when 100% cost-share was available
- Much of the remaining fence installation opportunity exists on rental properties
- JMSWCD has already been tracking some voluntary fencing that has occurred in the project area

- Many properties have perimeter fencing in disrepair; are there ways to approach landowners with aging infrastructure (such as perimeter fencing) to package improvements with stream exclusion fencing?
- The working group may need to engage local organizations such as Goose Creek Association, whose members are engaged in the project area and have opportunities to discuss potential BMP implementation with the people who operate pasture land. Because economic incentives may not always motivate people to implement BMPs, it may be beneficial to include outreach about the other benefits of BMPs. The working group agreed that it is important to engage local landowners; there was discussion of potentially organizing a community meeting or farm tour to show how projects are implemented and their benefits.
- DEQ noted that there is currently a demonstration project in Augusta County, Virginia to supply portable water systems to farm operators; this may be a way for lessees to exclude cattle from streams using temporary fencing, a portable water supply unit and portable water troughs to establish rotational grazing. They would be able to take the equipment with them when they move from one farm to another.
- There may be opportunities to incorporate micro-loans or other financing mechanisms to help off-set the initial upfront costs of implementing practices.
- There is a lot of land in the IP area that is under conservation easement (~34% of Upper Goose Creek and ~50% of Cromwells Run) – a lot of the agreements are older and do not require fencing. There is a tendency to remove cattle when the land is under easement. There is potential to work with Virginia Outdoor Foundation about new easement agreements that could include fencing requirements.
- The working group needs to ensure that the project does not end up providing fencing only on hobby farms without addressing larger landowners.
- There are equine activities in the project area:
  - Hobby farms are often overstocked and there was a suggestion for establishing a regional composting facility
  - It was suggested that outreach would best be approached through the Middleburg Agricultural Research and Extension Center (MARE Center) and that we involve Dr. McIntosh.

The next Agricultural Working Group meeting is tentatively scheduled for September 22. ICPRB explained the intent is to refine the fencing opportunity maps and to reach out to other potential stakeholders prior to the September meeting. Also, at that meeting there will be discussion and input on the types and numbers of agricultural BMPs that can be used to reduce bacteria runoff loadings from cropland and pasture areas.

The agricultural representative for the Steering Committee is Tom Turner.

# Upper Goose Creek, Cromwells Run, and Little River Implementation Plan Residential Working Group Meeting #1

June 21, 2016  
Meeting Notes

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**Location:** Wakefield School  
4439 Old Tavern Road  
The Plains, Virginia 20198

**Start:** 7:00 p.m.  
**End:** 8:15 p.m.

## **Meeting Attendance:**

May Sligh, VA Department of Environmental Quality (DEQ), Facilitator  
Jenny Biche, Rappahannock-Rapidan Regional Commission (RRRC), Scribe  
Heidi Moltz, Interstate Commission on the Potomac River Basin (ICPRB)  
Deirdre Clark, John Marshall Soil and Water Conservation District  
Jeff Sledjeski, Soil Tech, Inc.  
Maunette Makowski, 3E Consulting  
Andrew Hopewell, Assistant Chief of Planning, Fauquier County Community Development  
Ben Shoemaker, Loudoun Water  
Tim Ohlwiler, Virginia Tech Extension Agent  
Gem Bingol, Piedmont Environmental Council

## **Meeting Minutes:**

The meeting started with the distribution of a handout and introductions of all attendees. May Sligh, DEQ, asked the group specific questions pertaining to septic system concerns, pet waste management and education and outreach methods that might work in an effort to identify areas to focus on and best management practices that would be successful in the area. She also answered questions regarding the residential cost share programs. The group shared the following comments:

- The Loudoun Health Department has a list of known areas of potential failing septic systems;
- In Loudoun County, the majority of residential cost share funds were used for replacing distribution boxes, drain fields and pump outs (Catocin Implementation Plan area);
- Education is needed to raise the awareness of homeowners who are unfamiliar with having septic systems and the systems' required maintenance;
- Fauquier and Loudoun Counties both have ordinances requiring homeowners to pump out their septic system every 5 years; Loudoun County sends post card reminders to all known septic system owners on a 5 year cycle concerning the septic tank pump out requirement. The licensed septic waste hauler will report the pump out to the Loudon Health Department, who tracks the information. Sometimes the haulers neglect to report the pump out right away and homeowners may receive another post card reminder;

- In Loudoun County, 99% of all waste from septic tank pump outs gets hauled to the Broad Run Facility, which gets overwhelmed with 20-50 trucks arriving a day. Upgrades have been made to the facility to help manage the septic waste;
- Loudoun County is currently reviewing their septic pump out ordinance with regard to noncompliance. A decision as to whether the penalty would be civil versus criminal has not yet been made;
- Many of the counties outside the Chesapeake Bay Preservation Area are adopting the 5 year pump out ordinance, like Fauquier and Loudoun, which is good;
- Additional education is needed for homeowners on what not to put in their septic systems, such as paint, and to consider not installing disposals due to the increased solids content;
- Include educational materials on how to properly maintain septic systems for both Counties as this information is not currently included in the pump out reminder notices;
- Most new homes in Loudoun County are being built with alternative systems due to the nature of the soil and the density of the developments. It was noted that these alternative systems are particularly sensitive to "mistakes" in use/operation. Any area with good soil already has a house on it;
- Cost share programs would be welcome and residents would be interested in participating;
- The average pump out is estimated to cost \$250 in the area;
- There were a lot of low income homes built on poor soils and those septic systems are now in need of repair;
- No one was aware of any educational outreach on septic system maintenance that is being done currently, even with the pump out notices. Information printed on door hangers was suggested;
- Realtors present an opportunity to help educate new home owners when completing land exchange transactions. Realtors can also help update the county health departments about septic problems;
- The health departments have lots of useful tools that can be used to get good data on septic systems. Loudoun County does an excellent job of record keeping and tracking information;
- Various county health departments, regional planning districts and soil and water conservation districts across the state have led residential cost share programs. For this project area, it may make sense for John Marshall Soil and Water Conservation District (JMSWCD) to be the lead in this watershed due to their experience in several other Implementation Plan (IP) areas in Fauquier County and since most of the project area is in Fauquier County;
- Best management practices (BMP) cost share programs associated with non-permitted bacteria sources (e.g. residential septic, agricultural) are voluntary, though practices are expected to be maintained for their specified lifespan;
- If there were not a lot of participation by homeowners in the cost share programs, then the programs will be evaluated to see if other incentives would be more successful;
- Pet waste is a real source of bacteria that can impair streams. There is data to support that it contributes to deteriorated stream conditions, but only a small percentage of the bacterial load is from pets in this IP area;
- Pet waste BMPs include pet waste stations, composters, leash bag holders and educational programs;
- Pets are often not allowed on school property in Loudoun county, so schools would not be a good location for the pet waste stations;
- There is cost share for pet waste stations, but commitments must be made to maintain them (bags);
- It was noted that at a dog walk area in a homeowners association pet owners are less likely to pick up after their pet after dark;
- Information on how much dog waste one dog contributes, along with an estimate of how many dogs are in the area, can make an impact and encourage pet owners to pick up after their pet. People are more likely to get engaged if they can connect the situation to themselves. In other watersheds, surveys showed that education on the diseases that can affect humans and pets due to lack of pet waste management provided the best incentive for picking up after one's pet;



- Many small lot homeowners associations (HOAs) in Loudoun County have pet waste stations already; less dense residential areas may be potential areas to target for additional stations;
- In Fauquier County, the only park that would be a possible location for pet waste stations would be in the Marshall area as other County parks already have them;
- In areas where there are no Public Works Facility to maintain the pet waste stations, sometimes the County Parks and Recreation Department provides the service;
- Cannon Ridge in Marshall may be a possible place for a pet waste station;
- Businesses along Main Street in The Plains may be interested in having pet waste stations available;
- Educating horse owners on BMPs may have the biggest impact, in particular practices for small horse farms and the Chesapeake Bay Friendly Farm example (paddock management);
- A suggestion for educational materials, such as a kiosk along horse trails was recommended. There are horse trails all along Little River;
- Horse owners can be reached through feed stores, Equine Alliance in Loudoun County, hunt clubs (for both horses and dogs), riding clubs, 4H clubs and the Mare Center in Middleburg;
- In Fauquier County, dog kennels must have a pet waste management plan before permits are approved. There are a large number of kennels in both Fauquier and Loudoun Counties and they may require specialized outreach efforts;
- Fauquier Society for the Prevention of Cruelty to Animals (SPCA) is a great example of a facility with proper pet waste management and treatment for their large concentration of dogs;
- Middleburg Humane Society, Friends of Homeless Animals, veterinarians, and other animal rescue groups are possible partners in educating dog owners about picking up dog waste;
- There was a suggestion to partner with Virginia Outdoor Foundation as they could help with education and outreach when they work with landowners to develop easements (since so much of the land in the area is under easement);
- While this Total Maximum Daily Load-IP focuses on reducing bacteria, the BMPs can also address nutrient reductions as well.

The next Residential Working Group meeting is tentatively scheduled for September 22, 2016.

The residential representatives for the Steering Committee will be Ben Shoemaker, Loudoun Water, and Gem Bingol, Piedmont Environmental Council.