

Buffalo River TMDL Cleanup Plan
Government Working Group
Amherst County Administration Building, Amherst, VA

Bacteria and benthic impairments. BMPs to reduce bacteria will help with the sediment impairment. Impairments include Turner, Mill, Buffalo, Long Branch and Rutledge

Information Request:

DEQ would appreciate localities sending the information listed below. While we are seeking detailed information, any form or level of information would be appreciated.

- Stormwater BMP (GIS Layers)
 - Type of BMP (Detention (Dry) Basin, Retention (Wet) Basin, Bioretention, Infiltration Trench, Manufactured Units, Constructed Wetlands, Rain Gardens, Permeable Pavement, Riparian Buffers, Urban Landuse Conversion)
 - Location of BMP
 - Drainage Area of BMP
 - Age of System
- Sewage Disposal Practices (GIS Layers)
 - Sewer Lines
 - Housing/Building Layers (with age of houses)
- Street Sweeping Practices
 - Extent and Frequency of Sweeping
 - Amount of Debris swept
- Pet Waste Program Information
 - Pet Waste Station Locations (Existing and Proposed)
 - Any ongoing educational or outreach efforts
- Streambank stabilization projects
- Stream Restoration Projects
 - Location, Length and Cost of Project
- Grant Funding Opportunities
- Ongoing or Future Watershed Plans

QUESTIONS:

Sewage Handling and Disposal:

If present, ask VDH to give an overview of their activities/programs to correct straight pipes and failing septic systems locally. **Virginia Department of Health staff discussed their activities/programs and the changes as a result of Virginia General Assembly action.**

The TMDL assumed a septic system failure rate of **20%** of the total septic systems in the watershed.

Older homes were given a higher rate of failure.

1) *In order to appropriately quantify the number of new systems or connections to public sewer that address septic system failures, do we need to adjust the estimated failure rate?*

VDH believes 20% may be an overestimate of the number of failing septic systems. It is difficult to estimate the septic failure rate. VDH has completed surveys in the past, but response rates are sometimes low. Southside Outreach Group has aided in the past. One cannot always look at age of home to determine failure rate as there are homes that have already had septic upgrades. We will keep the 20% in place for now as that came directly from the TMDL.

2) *Should there be specific failure rates by locality/watersheds?* **None were discussed**

Failing septic systems and straight pipe values for the Buffalo River watershed were estimated during TMDL development:

Category	#Failing Systems	# People per Household	People Served	Flow (gal/day) Est. 75 gal/person/day	Daily Load (#cfu/day) Est. 2.09e9 cfu/person/day
Septic Systems	525	2.26	1,186	88,950	1.78 x 10 ¹⁴
Straight Pipe	7	2.23	16	1,200	2.40 x 10 ¹²

3) *Does this number seem appropriate?* Straight pipe estimates during TMDL development were 7 for the Buffalo River watershed (Tye River Watershed TMDL). These estimates are based on a self-reported number from a question on the 1990 census and modified by the stakeholders during TMDL development. On the 1990 U.S. Census, people were asked what type of sewage disposal system that was associated with their home: sanitary sewer connection, septic system or “other”. During TMDL development, the 1990 census data labeled “other” are interpreted to mean straight pipes. The 2000 and 2010 Census did not ask questions about sewage disposal. The houses included in this category are assumed to be disposing of sewer directly via straight pipes if located within 200 feet of a stream. Number of homes in the Buffalo River watershed within each locality on public sewer, septic system, and other means. **There are more than 65 homes on septic within the Town of Amherst. There is room for sewer expansion.**

Entity	Public Sewer	Septic Tank	Other Means
Amherst County	0	2,539	7
Town of Amherst	900	65	0

- 4) *Is it appropriate to assume that all new development that has occurred since approval of the TMDLs (Tye River 2013, Buffalo River 2013) has been connected to the sanitary sewer system in some areas? If so, what areas?*

Yes, it is safe to assume for anything after 2013. There are 680 public sewer residents in the Town of Amherst.

- 5) *Are there certain communities, subdivisions, etc. that could be referenced in the IP that generally have a higher number of septic system failures? It depends on the age of home. North Fork area may be a good place to start.*

- 6) *Some counties in Virginia require homes within a certain distance of the sewer system to connect. Do localities in this area enforce this type of ordinance? If so, what is the distance to the sewer system that the ordinance addresses? County sewer is not available within these watersheds. Town staff will get back to us.*

Some 98% of VDH work is “repair” work. A drainfield replacement is considered a repair. Of the failing septic systems that need to be replaced, an estimated 98% could be replaced with a conventional system. Of the straight pipes that need to be replaced, an estimated 98% need an alternative system.

- 7) *Is there a need/interest/capability to add sewer to any areas? The sewer connection fee is a substantial cost. The Town of Amherst does not have any residential out-of-town sewer customers.*

- 8) *Are there any BMPs targeting undersized sanitary sewer or overflows (SSO’s)? The Town of Amherst is addressing inflow & infiltration (I&I) issues. The Town generally does not have overflow issues.*

- 9) *Is there a need for public sanitary sewer education? There is a need for more septic maintenance education. Include a septic pump-out program in the education program. An estimated 75% of homeowners would take advantage of septic pump-outs at a reduced cost.*

10) *If grant funds are obtained to cost-share on addressing straight pipes and failing septic systems which local agency/organization(s) would possibly be interested and best suited for this role? Southeast Rural Community Assistance Project (SERCAP), VDH, SWCDs, CVPDC? Do all of these have experience in managing grant funds?* **Local SWCD or Central Virginia Planning District Commission**

Agricultural Programs and Implementation Locally:

*If present, ask NRCS/SWCD to give an overview of the **federal** agricultural programs that local landowners are utilizing (e.g., CREP, CRP, EQIP, etc.). **CREP and EQUIP are most often used for livestock stream exclusion***

- 1) *What is the level of participation in these programs?* **Participation is typically high. Funding is limited from year to year.**
- 2) *Is there adequate funding for these programs?* **There is more state funding at the moment through the local soil and water conservation district. The percentage of cost share offered comes into play. Word of mouth is extremely important in an area like this.**

*If present, ask the SWCDs to give an overview of the **state** cost-share program in their areas. **SWCD staff were not available to attend the government working group.***

- 1) *What is the level of participation in these programs?*
- 2) *What is the estimate of farmers not participating in federal and or state cost-share programs locally?*
- 3) *How much cost-share funding does each District generally receive annually? Is there adequate funding for this program?*
- 4) *Are the Districts involved in tracking voluntary BMPs? Should voluntary BMPs be included in the IP (means we would list certain BMPs and targeted numbers that could be implemented at landowner cost (e.g., stream fencing) with or without an incentive). [CL: CCI-SE-1 is not an incentive to implement fencing. It is an incentive for a farmer to maintain voluntary fencing for 5 years and for cost-shared fencing practices coming out of the 10-year life span requirement to be maintained for an additional 5 years.]*
- 5) *How was the sign-up for 100% cost share for stream exclusion?*

- 6) How is participation in practices that would reduce loading through runoff?

Stormwater Programs (Urban Runoff)

- 1) *Are there any efforts underway through local stormwater programs that are addressing bacteria and sediment sources that should be referenced in the IP?* **The Town of Amherst is regulating what is required of them through the Code of Virginia.**
- 2) *Are there any existing illicit discharges along sewer lines in the urban areas (even if they are been addressed through corrective actions)?* **No known issues**
- 3) *Are there current stormwater BMPs that were constructed for runoff quantity control that could be retrofit for water quality improvement? Are there any existing designs and/or costs estimates for any of these BMPs?* **There may be a few on private property.**
- 4) *Are there areas where streambank restoration projects could be or are being implemented?* **Definitely some spots along Rutledge. There are also three Amherst County owned parks in the project area.**

Pet Waste

- 1) *What is going on locally to educate about and or control pet waste?* **The town has pet waste bags and trashcans out and available for use. A local veterinary facility has something as well. The county has trashcans available at local parks. The group is not sure about pet waste bags.**
- 2) *How receptive would residents in concentrated residential areas be to such a campaign?* **Residents would be most receptive when receiving written material provided by local veterinarians. The county does issue kennel licenses. Material could be included as part of license renewal.**
- 3) *Who can help identify where there are existing pet waste disposal stations in the impaired watersheds?* **The Town of Amherst can mark existing pet waste stations on a map. Check with Amherst County parks and recreation.**

- 4) *Are there some other dog walking areas where disposal stations and educational kiosks should be installed? (Parks, walking trails, etc.)* **County parks facilities at the three lakes.**

- 5) *Are there hunt clubs, kennels, other boarding facilities where dogs are confined locally long-term or either seasonally? Should these be considered as a potential source issue to address in the IP?* **None were mentioned. The group discussed reaching out to Sweet Briar College. Sweet Briar has an agricultural director now. Many students have pets.**

- 6) *Which agency and or organization would be good to help with education to address this bacteria source? (VCE, Parks and Rec, veterinarians, others?)* **Those groups would work best to provide education.**

Other Bacteria Sources

- 1) *Are there other potential sources of bacteria that have not been mentioned that should be discussed?* **The cleanup plan is not addressing wildlife. No other sources were discussed.**

Integration with Other Activities and Local Planning

- 1) *Are there existing or planned activities, studies, planning efforts that should be referenced in the IP since these could possibly help with meeting IP goals?* **Not at this time**

Regulatory Controls

We are required to identify in the IP regulatory controls in place that could be used to promote implementation. These include the state's Agricultural Stewardship Act and VDH's Sewage Handling and Disposal Regulations.

- 1) *Currently no septic tank pump-out ordinances – any in the works?* **No**
- 2) *Any sewer extensions anticipated?* **As development occurs**

- 3) *Any programs in place to control wildlife? Any anticipated?* **No**
- 4) *Any pet waste (pickup) ordinances?* **No**
- 5) *Any stormwater regulations?* **No**
- 6) *Are there other relevant regulations and ordinances?* **No**

Other Topics:

- 1) *Government Working Group representative to the Steering Committee? Volunteer?*
- 2) *Other Plans have quantified Erosion and Sediment controls (and in some cases “enhanced” E&S); would you share, in general, your locality’s/entity’s approach to E&S control?* **Amherst County is the local authority. The Virginia Department of Forestry regulates E&S control for harvested forest.**
- 3) *With regard to street sweeping, are there opportunities to modify frequency?* **There is no real street sweeping schedule. Street sweeping occurs three to four times a year.**
- 4) *What alternative funding sources are available?* **There is the Section 319(h) program available as part of the cleanup plan process. Reach out to Virginia Department of Forestry to see what funding they may have.**
- 5) *Are there any additional educational needs which should be addressed?* **Septic systems and pet waste**
- 6) *Would it be possible to use local municipal mailings (utility bills, tax bills) or space on municipals websites, or through various town registers as an avenue for education on watershed cleanup, septic education [operation, maintenance], pet waste education?* **Yes, these things could be done easily.**
- 7) *Are there any additional or planned BMPs that we need to account for?* **None were discussed**

8) *Are there any upcoming opportunities for outreach (i.e. any large gatherings of businesses) that we could piggy-back the water quality message on to?* **Amherst County Fair**