

**Roanoke River Implementation Plan Part 2: North Fork & South Fork Roanoke River,  
Bradshaw Creek and Wilson Creek**

**Combined Government Working Group Meeting #2 and Steering Committee**

**March 16, 2016, 1:30 p.m. – 3:45 p.m.  
Blacksburg Public Library, Blacksburg, VA**

**Combined Government Working Group and Steering Committee Participants:**

Doug Burton (Montgomery Co.); Javad Torabinejad; Katie Shoemaker (EEE Consulting for VDOT); Shane Sawyer (Roanoke Valley Alleghany Regional Commission); Erin Hagan, Sue Lindstrom, Ginny Snead (Louis Berger Group); Mary Dail, Charlie Lunsford, James Moneymaker (Virginia Department of Environmental Quality (DEQ)); Denny McCarthy (Virginia Department of Forestry); Chris Barbour (Skyline Soil and Water Conservation District)

Handouts: *Best Management Practices: Existing and Proposed* handout, *Best Management Practice Efficiency and Costs* handout

All attendees briefly introduced themselves. Mary Dail welcomed everyone and offered thanks for participating. James Moneymaker presented a report of the Agriculture and Residential Working Group. Mary Dail presented the Government Working Group report. Education and outreach were identified by both groups as a priority.

Since there were no questions the meeting moved on to the first agenda item.

**Key Topics and Recommendations**

The following is a summary of the issues discussed at the Combined Government Working Group and Steering Committee.

**Review of Best Management Practice Efficiency and Cost & Proposed Stormwater BMPs:**

- Information received from the localities is greatly appreciated.
- Mary Dail mentioned the possibility of setting up a Survey Monkey poll to get input from parties that were unable to attend today's meeting.
- Mary Dail discussed existing stormwater BMPs referencing Table 1.
- A participant asked if the rain barrel efficiency included in the "Best Management Practice Efficiency and Cost" handout is for sediment or bacteria. The Roanoke IP Part I included a small number of rain barrels. Why are so many being proposed for Part II?
  - Rain barrels are intended to reduce sediment runoff.
  - Do the rain barrel numbers look reasonable? Bioretention is somewhat limited in this area due to the terrain.
- A participant suggested including cisterns in the Proposed Stormwater BMP list and the group concurred that cisterns should be added.

- Montgomery County does not currently have a stormwater utility fee. The Town of Blacksburg has a flat fee for residential stormwater.
- The question was asked about what the scientific notation listed for street sweeping means? The scientific notation refers to the amount of bacteria removed per curb mile per year rather than a percentage.
- Chris Barbour with Skyline SWCD suggested that the number of infiltration trenches is not realistic due to the soil type typically found in the area. A detention facility would be recommended in such cases where the soil type is not appropriate for infiltration trench BMPs.
- Doug Burton (Montgomery County) asked about long-term maintenance of BMPs and who is responsible. Limited staff and funding are concerns.
  - Landowners receiving grant funding are required to sign an operation and maintenance agreement, as well as a landowner agreement for the lifespan of the BMP and enter into an agreement if the property is sold during BMP lifespan to repay a pro-rated amount of cost-share or transfer the maintenance responsibility through remainder of life span to the new owner.
- Why is the number of proposed BMPs so high for Wilson Creek?
  - Wilson Creek has the highest percentage of developed land amongst the four impaired watersheds (33%) and it is the only watershed that includes MS4 regulated land area.
- A street sweeping discussion ensued.
  - Street sweeping does occur in Blacksburg and Christiansburg. In the Roanoke IP Part I the recommendation was to increase the frequency of street sweeping.
  - Perhaps street sweeping is not as big of a concern for Montgomery County as the county does not have the same amount of curbing and drop inlets as Christiansburg and Blacksburg.
  - It was suggested that street sweeping be included in the IP to at least quantify an existing baseline of the current level of street sweeping and consider future projections as well.
  - Can we bring VDOT into this discussion?
    - Megan Scott is the new MS4 Coordinator for VDOT Salem District.
- The concern was mentioned that stormwater BMPs would not be accepted by private landowners.
- There was some discussion of detention versus bioretention and the group decided that including a link to the BMP definitions would be helpful.

#### **Proposed Residential Waste Treatment BMPs:**

- Louis Berger Group identified the estimated number of failing septic systems utilizing such factors as age of home, proximity to stream, etc.

- A participant asked: do the straight pipe numbers include gray water?
  - VDH considers gray water as sewage.
  - For the purposes of this TMDL Implementation Plan gray water would not be considered a “straight pipe”. A straight pipe can refer to an antiquated system that may have a lateral or direct pipe to a waterbody or discharges sewage to a drainage area that during wet weather events empties into surface water.
  
- The Mount Tabor area reportedly has a number of sink holes. Would alternative waste treatment systems be a good option when working in areas with karst topography?
  - Participants were asked about the Alternative Waste Treatment System installation BMP, specifically should more be proposed in the IP and is the cost accurate? VDH will be consulted about this BMP. It was suggested that it may be beneficial to increase the amount of Alternative Waste Treatment Systems proposed in the IP from 5% to potentially 15%.
  
- Septic funding was briefly discussed. James Moneymaker mentioned the Indoor Plumbing Rehabilitation Program (IPR). Total Action for Progress (TAP) is the local sub-recipient for the Indoor Plumbing Rehabilitation Program (IPR) working in the Counties of Bath, Alleghany, Rockbridge, Bedford, Roanoke, Craig, Giles, Montgomery, Franklin, Floyd, Henry, Botetourt, Pulaski, Patrick and the associated cities and towns.

#### **Pet Waste BMPs:**

- There was a question as to why an education campaign was not included for the unimpaired North Fork Roanoke River; should an education campaign be included in case the area does become impaired in the future? The group agreed to include the unimpaired North Fork Roanoke River subwatershed in the North Fork Roanoke River pet waste education program.
- Table 6 references the proposed pet waste station locations
  - Participants suggested adding several pet waste stations including one to the Ironto rest stop as well as one additional station each for Mid-County Park and the Boggs Mountain-Weeping Willow neighborhood.
- The comment was made that some people do not consider pet waste to be an issue.
- A recommendation was made to include pet waste composters as a pet waste BMP to further reduce the bacteria source load from pets; thereby reducing the number of stormwater BMPs needed to treat the bacteria load in runoff.

#### **Agricultural BMPs:**

- The cost for Cropland Buffer/Field Borders (CP-33 and WQ-1) should be \$1,000.
- A participant suggested that the cost for the SL-11: Vegetative Cover on critical area treatment seems low and recommended considering \$2,500 - \$3,500 per acre.

- For the SL-6: Stream Exclusion with Grazing Land Management practice, consider average cost in this area to be \$40,000 - \$45,000.
- Critical area acreage is typically low within the IP area.
  - Which BMP would be more important in early staging? Wet detention ponds more than likely will not be installed due to the high cost. Higher cost BMPs are included in later stages.
- Signup for the (FR-1) “Aforestation of Crop, Hay and Pasture Land” practice is low within the IP area. Federal USDA NRCS conservation programs for forestry mentioned to be more flexible. Increase the cost of FR-1 practice from \$560 to \$1,000 because livestock are required to be excluded before trees can be planted.
- The cost for LE-2T: Livestock Exclusion with Reduced Setback should be revised. A suggestion was made to set the cost for LE-2T at half the cost of the SL-6T. The project team decided to keep the LE-2T practice cost consistent with the Part I Roanoke River IP.
- It was mentioned that the (FR-3) Woodland Buffer Filter Area practice is not included in the BMP Efficiency and Cost table.

#### **Stream Restoration BMPs:**

- When discussing stream restoration, what are the proposed methods for restoration? Is it a stream channel design using natural materials or a structural design? Description in Part I IP – Stream restoration projects are those that use instream engineering methods and/or natural stream design techniques to protect and restore the stream and associated hydrology, stabilize streambanks, and enhance riparian plant communities which will reduce erosion and sediment transport.
  - \$300/acre is currently listed on the BMP Efficiency and Cost table and was used in the Roanoke River IP Part I. The reference to Part I will be added to the BMP Efficiency and Cost table.
  - Consider engineering fee.
- There needs to be a plan in place to facilitate the permitting process to get streambank stabilization practices installed.
- A comment was made that streambank stabilization has been successful in this area and is a lower cost per linear foot. This practice may be more likely to be implemented on agricultural land.
- What is the possibility of voluntary stream restoration generating credits for mitigation banking? There are not many banks within the area.