

Upper Roanoke River (Roanoke and Botetourt Counties, Cities of Roanoke and Salem, Town of Vinton) TMDL Implementation (Clean-up) Plan Development

Second Business Working Group Meeting Notes

February 27, 2014, 2:00 – 4:00 p.m.

Virginia Department of Environmental Quality, 3019 Peters Creek Rd., Roanoke, VA

Attendees:

- Wendy Jones - Williamson Road Area Business Association
- Bill Tanger - FORVA
- Mary Dail, Diana Hackenburg, Charlie Lunsford, Paula Nash, Emma Jones – Virginia Department of Environmental Quality (DEQ)
- Scott Shirley - Western VA Water Authority
- Nick Tatalovich & Erin Hagan - Louis Berger Group
- Cindy Linkenhoker – Roanoke County
- Shane Sawyer – Roanoke Valley Alleghany Regional Commission
- Allen Austin

Introductions were made and meeting guidelines were established.

Background: The Roanoke River is impaired for both bacteria and sediment. This clean-up plan will describe the strategies needed for reducing bacteria and sediment in the Roanoke River watershed to meet applicable water quality standards. This plan covers the Roanoke River watershed from Smith Mountain Lake to the confluence of Mason Creek and the Roanoke River, which includes 10 subwatersheds. The TMDL identified the loads of bacteria and sediment that the different subwatersheds could receive and still meet water quality standards. From these loads, reductions were estimated by source or land use such as developed, cropland, pasture/hay, etc. Clean-up plan actions to meet these reductions can include indirect measures like outreach, educational programs and signage and direct measures which are more commonly known as Best Management Practices (BMPs). The Business Working Group (BWG) will assist in determining the types and extent of BMPs needed in the subwatersheds that will result in reductions in bacteria and sediment loads from commercial areas. In addition, BWG members will help identify potential partnerships and funding sources for implementing clean up measures included in the plan. The total cost estimates presented are those identified for the clean up measures needed to meet water quality standards.

Handouts: Business Working Groups Meeting #2 Handout, Best Management Practices Efficiency and Cost (updated Draft), Best Management Practice Estimates by Subwatershed

Presentation: The Louis Berger Group (LBG) presented project background and BMP estimation approaches as well as examples from a few subwatersheds. The Project Team reiterated the hope that participants will comment today and take the meeting handouts home and submit comments at a later date. The information presented represents a “first-cut” at estimates of BMPs needed by subwatershed.

General Discussion

- Question about BMPs: do they reduce both sediment and bacteria? Answer was in most cases, yes, they address both pollutants.
- Q: After all the targeted BMPs are installed, will pollutant levels be below the TMDL? Not all the reductions are falling on the urban landuses. All of the landuses will have reductions associated with them. The BMPs that are suggested are estimated to meet the bacteria and sediment load reductions called for in the TMDL studies.
- Q: Was this modeling to instantaneous or geomean bacteria Water Quality Standard? A: Geomean bacteria standard.
- Question asked about how extreme watershed conditions were accounted for. The Bacteria TMDL has an implicit Margin of Safety (MOS) and the Sediment MOS was explicit.
- Stakeholder asked if each one of the subwatersheds included in the plan will have reductions associated with them. A: yes.
- By reducing the sediment loads in the tributaries, the cumulative loads in the mainstream Roanoke River will be reduced. Instream erosion is accounted for in the TMDLs. When there is more impervious surface (pavement/asphalt), the water shoots into the stream and causes stream erosion. Prioritization of BMP installation is a big part of this plan. Measureable goals and milestones will be included. The Plan will set a percentage of BMPs targeted for installation and the schedule (i.e. number of years it is expected to take to install said BMPs). Project Team will model to assess changes in instream bacteria and sediment loadings and predict water quality outcomes. Water quality – through monitoring – will ultimately occur after the BMPs are installed and have had a chance to be effective.
- We may detect water quality improvement (in the monitoring data) before Water Quality Standards are met.
- Q: What is the time frame? A: The time frame for implementation of the clean-up plan will be discussed in the Steering Committee meeting. It is a requirement of the plan that implementation is staged and that an estimated amount of time is attributed to each stage.
- Stakeholder suggested that the BMP map needs to be in the presentation.
- Q: What is adopt-an-inlet? A: The adopter/adopting organization is responsible for cleaning out the inlet.

Stormwater BMP Discussion

- Detention pond Q: Nick explained that the detention ponds are already in place, retrofit BMP calls for upgrading them for more efficient pollutant reduction.
- It was requested that a graphic depicting what's in place be produced and that the approach to retrofitting be explained in the Plan.
- There are costs associated with each pond and then a cost attributed to the retrofit. All of these costs need to be represented in the Clean-up Plan along with the efficiencies.
- With respect to maintenance, sediment BMPs will eventually fill up if not properly maintained; therefore the BMP efficiencies are only going to provide the expected efficiency if they are maintained properly.
- The comment was made that there will be BMP tracking. Roanoke County conducts enforcement inspections. A stakeholder spoke about how a pond that he manages is inspected
- A stakeholder observed that it appears that most of the BMPs focus on ponds that need to be retrofitted. The ponds are on private property; how do you propose that to happen? DEQ

explained the IP process and that these retrofits could be eligible for certain grant monies once the plan is in place.

- Stakeholder commented that businesses will not likely take advantage of monies to help retrofit the ponds.
- DEQ mentioned that the only BMPs that are being presented today are Urban BMPs. The other working groups will discuss BMPs related to their specific interest area (Ag, Residential, Government).
- Q: Should the locations of the ponds in the watershed be presented in this plan? If so, how would we capture this? A: Due to the focus of the plan on landuse categories, specific locations of ponds within a subwatershed is not within the scope. Keeping the plan non-prescriptive allows for flexibility when choosing specific sites for BMP installation.
- The group was asked if they thought a campaign to go to businesses and discuss retrofits would help. A: This would help with some businesses, but it won't interest others.
- Q: Are most of the ponds in the City or the County? A: They are spread out all over the city and the county and are identified in the plan by subwatershed. The following discussion ensued:
 - Most of the ponds are dry ponds.
 - County of Roanoke has the drainage areas mapped. Roanoke City isn't quite there.
 - Most of the ponds are not associated with individual business; outreach needs to target the managing entity for the ponds. The localities that provided the existing pond locations should have information about who manages these ponds.
 - The recommendation is to find ways to reduce pollutants in each of the subwatershed and not specify individual localities.
- Stakeholder suggested that it would be good to get people that want to promote wildlife on board with this retrofitting idea.
- Q: VDOT has many detention ponds; are their ponds located on this map? A: VDOT has not provided BMP information, but DEQ will specifically request VDOT's existing BMP data.
 - Stakeholder comment: VDOT is generating a large amount of sediment from roads. VDOT should have to reduce their loads.
 - MS4 permits have pollutant allocations in the TMDLs. VDOT has its own load assigned to its MS4 area, as does each MS4.
- According to CL, the loads are small for VDOT construction projects based on the 2006 TMDL study.
 - Stakeholder commented that it's not just the construction projects; it's also the runoff from the roads. They do not have ponds [associated with their roads].
- Q: By looking at the BMP location map, it appears that the ponds are mostly dry ponds; this could get very tricky to retrofit dry ponds that were installed for the purpose of flood control.
- Q: How do you retrofit wet ponds? Does this have an implication on dam safety? A: The ponds that are being suggested for retrofitting are not wet ponds; they are dry ponds.
 - Stakeholder suggested that wet ponds do not reduce bacteria loads; they attract wildlife and are therefore a source of bacteria. NT commented that there is some die-off and bacteria reduction from wet ponds.

Educational Program BMPs

- The group was supportive of a Low Impact Development (LID) symposium and specific outreach related to existing pond retrofits.

- Q: Grease disposal is a problem and can lead to back-ups. There is an opportunity to educate folks about grease disposal by targeting the general public at festivals.

Low Impact Development Discussion

- The group was asked about businesses with LID practices and/or BMPs in place
 - The Dollar Store on Williamson Road has permeable pavers.
 - Enterprise Zones are in Roanoke City and are the highest concentration of impervious area; there are grant monies available for improving these areas.
- Q for the group: Are there any planned BMPs out there?
 - Meridian has a green roof as does the City of Roanoke building.
 - The Hanging Rock park-and-ride would be a good place to install permeable pavers.
- Suggestion was made to include curb-cutting as a BMP practice: a curb retrofit.
- Q: Will people be more likely to install green roofs if they get a reduction in their stormwater fees? A: The fee offset is not that significant.

Discussion of Other BMPs

- Urban tree canopy by RVARC included identifying potential areas for tree planting. This study may be a tool that can be used to locate existing impervious cover.
- A good example of re-planting is in cloverleaves on I-581.

Closing Comments

- The group was asked to review the handouts and send comments to Mary Dail.
- A stakeholder commented that the people at the “bottom of the bowl” need to see that work is being done at the “top of the bowl.”
- Q: Is there a speaker that would come out and speak to different groups about the Plan? A: DEQ is available to present information about the Plan.
- Q: Is there an interest in reconvening the Steering Committee following completion of the Plan in order to keep up with implementation progress? There is interest and it was suggested that Steering Committee meet annually.
- Livability Initiative Plan (RVARC) means that there are additional grant funds for the Roanoke Valley.
- RVARC has established a Regional Stormwater Committee and meetings will be an opportunity for outreach and collaboration.
- Q: Are there any public events coming up in the Roanoke area? A: Kite Festival, Marathon, Clean Valley Day (April 5th), Earth Day were mentioned. Bob Clements can get DEQ in touch with different groups. Williamson Road Association has an event scheduled in October.