

**E. coli Bacteria TMDL Action Plan
for Chickahominy River
Town of Ashland
Permit No. VAR040011
November 2016**

1. **Requirement:** *The name(s) of the Final TMDL report(s);*

E. coli TMDL Development for Chickahominy River and Tributaries

- EPA approval 9/19/2012, SWCB approval 3/25/2013

Bacterial Implementation Plan Development for the Chickahominy River and Tributaries

- EPA approval 9/2/2014, SWCB approval 2/25/2016

2. **Requirement:** *The pollutant(s) causing the impairment(s);*

E. coli bacteria

3. **Requirement:** *The WLA(s) assigned to the MS4 as aggregate or individual WLAs;*

The final **annual** in-stream E. coli bacterial load modeled after TMDL allocation at the outlet of the entire Chickahominy River study area aggregated with Hanover County, Town of Ashland, and VDOT in Hanover County is 3.43E+10 cfu/yr.

The final **daily** in-stream E. coli bacterial load modeled after TMDL allocation at the outlet of the entire Chickahominy River study area aggregated with Hanover County, Town of Ashland, and VDOT in Hanover County is 9.38E+07 cfu/day.

4. **Requirement:** *Significant sources of POC(s) from facilities of concern owned or operated by the MS4 operator that are not covered under a separate VPDES permit. A significant source of pollutant(s) from a facility of concern means a discharge where the expected pollutant loading is greater than the average pollutant loading for the land use identified in the TMDL;*

- Residential street run off to MS4 from areas where pet owners walk dogs.
- Although the sanitary sewer system is owned by Hanover County Department of Public Utilities (DPU) and not owned by the Town of Ashland, leaking sanitary sewers are potential significant sources.

5. **Requirement:** *Existing or new management practices, control techniques, and system design and engineering methods, that have been or will be implemented as part of the MS4 Program Plan that are applicable to reducing the pollutant identified in the WLA;*

- Education and outreach programs (dog waste disposal, stormwater pollution) have been implemented and are ongoing.

- An Illicit Discharge, Detection, and Elimination (IDDE) program has been implemented and is ongoing.
- A program of flushing and TV inspection of Town owned stormwater pipes has been implemented and is ongoing
- Low Impact Design (LID) Town projects implemented in the Stony Run watershed:
 - Duncan Street: Filterra Bioretention Units (2)
 - Municipal Parking Lot: Permeable Pavers and Bioretention Area
 - Railroad Avenue Streetscape Phase I: Permeable Pavers and Bioretention
- LID Town projects that are being considered for the future:
 - Stream Restoration for Licking Hole Creek by June 1, 2023
 - Stream Restoration for Stony Run by June 1, 2023
- Street Sweeping has been implemented and is ongoing.
- State law requires that septic tanks located in a Chesapeake Bay Preservation Area be pumped out at least once every 5 years. The Town of Ashland sends reminders to residents with septic tanks reminding them that they need to be pumped out every 5 years.
- As mentioned earlier, Hanover County DPU owns the sanitary sewer system in the Town. The Hanover DPU maintains “on-call” capabilities and strives for a response time of no more than one hour. On-call DPU staff responds to all utility related issues including SSOs and pump station alarms to effectively minimize the length of SSO events.
Hanover County provides regular funding via its Capital Improvement Program and Operation & Maintenance budgets for sewer rehabilitation with the goals of extending asset life and minimizing the risk of SSO events.

6. Requirement: *Legal authorities such as ordinances, state and other permits, orders, specific contract language, and interjurisdictional agreements applicable to reducing the POCs identified in each respective TMDL;*

The following sections of the Town code address this requirement:

Chapter 4.1 Environmental Protection

- Article I. Stormwater Management (Virginia Code §§ 62.1-44.15:24)
- Article III. Chesapeake Bay Preservation
- Article V. Water Quality Protection
- Article VI. Municipal Separate Storm Sewer System (MS-4) Management Program

Chapter 5 Erosion and Sediment Control (Virginia Code §§ 21-89.1--21-89.15)

- Sec. 5-3. Local erosion and sediment control program.
- Sec. 5-4. Submission and approval of plans; contents of plans.
- Sec. 5-5. Permits; fees; security for performance.
- Sec. 5-6. Monitoring, reports, and inspections.
- Sec. 5-7. Penalties, injunctions, and other legal actions.

7. Requirement: *Enhancements to public education, outreach, and employee training programs to also promote methods to eliminate and reduce discharges of the POC(s) for which a WLA has been assigned;*

- Stormwater management and educational materials on Town website.
- Circulate fliers annually on stormwater pollution prevention and pet waste cleanup.
- The Town coordinates with Randolph-Macon College annually on Macon a Difference Day (MaDD) for Earth Day. Randolph Macon College students volunteer, participate and engage the community in various activities such as:
 - stream cleanup,
 - storm drain marking,
 - circulate education fliers
 - demonstrate how to make rain barrels
 - BMP maintenance
 - installing and restocking pet waste stations
 - clean up litter in parks
 - and other water pollution prevention awareness activities
- Employee Training: Town staff trained on Illicit Discharge, Detection, and Elimination in accordance with the Town’s Stormwater Pollution Prevention Employee Training Plan dated June 2014.
- Employee Training: Town staff trained on Good Housekeeping procedures in accordance with the Town’s Stormwater Pollution Prevention Employee Training Plan dated June 2014.
- Town of Ashland Public Education and Outreach Plan.

8. Requirement: *A schedule of interim milestones and implementation of the items in 5, 6, and 7;*

Practices	Implementation	Milestone
Education and outreach	On-going	Continuous
Pet waste disposal	On-going	Continuous
Illicit discharge, detection and elimination	On-going	Continuous
Stormwater pipe flushing and TV inspection	On-going	Continuous
Duncan Street: 2 Filterra Bioretention Units	Completed	--
Municipal Parking Lot: Permeable Pavers & Bioretention	Completed	--
Railroad Avenue Streetscape Phase I: Permeable Pavers & Bioretention	Completed	--
Licking Hole Creek Stream Restoration	June 1, 2023	June 1, 2023
Stony Run Stream Restoration	June 1, 2023	June 1, 2023
Street sweeping	On-going	Continuous
Employee training	On-going	Continuous
Town Code, Chapters 4 and 5	Completed	--
MS4 Permit VAR040011	On-going	Per Requirements

9. Requirement: *Methods to assess TMDL Action Plans for their effectiveness in reducing the pollutants identified in the WLAs;*

Develop and implement a method to assess TMDL Action Plans for their effectiveness in reducing the pollutants identified in the WLAs. The evaluation shall use any newly available information, representative and adequate water quality monitoring results, or modeling tools to estimate pollutant reductions for the pollutant or pollutants of concern from implementation of the MS4 Program Plan. Monitoring may include BMP, outfall, or instream monitoring, as appropriate, to estimate pollutant reductions. The Town may conduct monitoring, utilize existing data, establish partnerships, or collaborate with other MS4 operators or other third parties, as appropriate. This evaluation shall include assessment of the facilities identified in subdivision (d) of General Permit Section I.B.2.

Adequate assessment of this TMDL Action Plan will be achieved through the tracking, monitoring, and reporting of the programs and practices listed in Sections 5 and 7. The Town of Ashland will continue to implement the MS4 Minimum Control Measures and strategies as approved by DEQ, which are included as part of this TMDL Action Plan. The implementation of these activities as required under the MS4 permit are sufficient in meeting the requirements of this section. The assessment of facilities listed in Section 4 will be provided by ensuring continued routine maintenance.

10. Requirement: *Measurable goals and the metrics that the permittee and Department will use to track those goals (and the milestones required by the permit). Evaluation metrics other than monitoring may be used to determine compliance with the TMDL(s).*

Public Education and Outreach on Storm Water Impacts:

- The Town has developed and continues to implement the “Town of Ashland Public Education and Outreach Plan,” which included pet waste as one of the three high priority water quality issues.
- Continue to distribute educational flyers per MS4 Program Plan
- Continue to show slides on the Town’s public television station related to pet waste.
- Continue to send reminders to pick up after your pet on Town website and social media. At least one each quarter.
- Continue to educate property owners in CBPAs of the Town’s requirements for septic tank maintenance.

Public Involvement/Participation:

- Continue to provide for public participation during public education and outreach program development.
- “Town of Ashland Public Education and Outreach” plan is available on website. This document was subject to public input and comments.

Illicit Discharge Detection and Elimination:

- Continue program to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping as outlined in the Town’s updated

“unauthorized non-stormwater discharge detection and elimination procedures”.
Keep records and report as specified.

- Continue to inspect the Town’s MS4 outfalls as outlined in the Town’s “Illicit Discharge Detection and Elimination Procedures.” Keep records and report as specified.

Chickahominy River and Tributaries TMDL for E. coli:

- Update MS4 Program with new information on TMDL, if necessary.
- Continue public education program about picking up after pets.

11. Progress made to date.

TMDL Action Plan submitted to DEQ for review.