



Tennessee Department of Environment and Conservation
 Division of Water Resources
 William R. Snodgrass Tennessee Tower,
 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243
 1-888-891-8332 (TDEC)

Phase II Small Municipal Separate Storm Sewer System (MS4) Annual Report

1. MS4 Information

Name of MS4: City of Morristown		MS4 Permit Number: TNS076031
Contact Person: Jim Whitbeck, P.E.		Email Address: jwhitbeck@mymorristown.com
Telephone: (423) 353-1055		MS4 Program Web Address: www.mymorristown.com/departments/public_works/stormwater/index.php
Mailing Address: PO Box 1499		
City: Morristown	State: TN	ZIP code: 37816-1499

What is the current population of your MS4? 29,926

What is the reporting period for this annual report? July 1 2018 to June 30 2019

2. Discharges to Waterbodies with Unavailable Parameters or Exceptional Tennessee Waters (Section 3.1)

- A. Does your MS4 discharge into waters with unavailable parameters (previously referred to as impaired) for pathogens, nutrients, siltation or other parameters related to stormwater runoff from urbanized areas as listed on TN's most current 303(d) list and/or according to the on-line state GIS mapping tool (tdeconline.tn.gov/dwr/)? If yes, attach a list. Yes No
- B. Are there established and approved TMDLs (<http://www.tn.gov/environment/article/wr-ws-tennessees-total-maximum-daily-load-tmdl-program>) with waste load allocations for MS4 discharges in your jurisdiction? If yes, attach a list. Yes No
- C. Does your MS4 discharge to any Exceptional Tennessee Waters (ETWs - http://environment-online.tn.gov:8080/pls/enf_reports/f?p=9034:34304:4880790061142)? If yes, attach a list. Yes No
- D. Are you implementing specific Best Management Practices (BMPs) to control pollutant discharges to waterbodies with unavailable parameters or ETWs? If yes, describe the specific practices: Confirm appropriate measures are provided for construction sites which discharge to waterbodies with unavailable parameters as part of site plan review Yes No

3. Public Education/Outreach and Involvement/Participation (Sections 4.2.1 and 4.2.2)

- A. Have you developed a Public Information and Education plan (PIE)? Yes No
- B. Is your public education program targeting specific pollutants and sources, such as Hot Spots? If yes, describe the specific pollutants and/or sources targeted by your public education program: See Attachment Yes No
- C. Do you have a webpage dedicated to your stormwater program? If yes, provide a link/URL: http://www.mymorristown.com/departments/public_works/stormwater/index.php Yes No
- D. Summarize how you advertise and publicize your public education, outreach, involvement and participation opportunities: See Attachment

Phase II Small Municipal Separate Storm Sewer System (MS4) Annual Report

- E. Summarize the public education, outreach, involvement and participation activities you completed during this reporting period: See Attachment
- F. Summarize any specific successful outcome(s) (e.g., citizen involvement, pollutant reduction, water quality improvement, etc.) fully or partially attributable to your public education and participation program during this reporting period: See Attachment

4. Illicit Discharge Detection and Elimination (Section 4.2.3)

- A. Have you developed and do you continue to update a storm sewer system map that shows the location of system outfalls where the municipal storm sewer system discharges into waters of the state or conveyances owned or operated by another MS4? Yes No
- B. If yes, does the map include inputs into the storm sewer collection system, such as the inlets, catch basins, drop structures or other defined contributing points to the sewershed of that outfall, and general direction of stormwater flow? Yes No
- C. How many outfalls have you identified in your storm sewer system? 496
- D. Do you have an ordinance, or other regulatory mechanism, that prohibits non-stormwater discharges into your storm sewer system? Yes No
- E. Have you implemented a plan to detect, identify and eliminate non-stormwater discharges, including illegal disposal, throughout the storm sewer system? If yes, provide a summary: Dry weather screening is performed on all outfalls once during the permit cycle. Any observed flows are investigated to determine if the flow is an illicit discharge. Results are tracked in GIS. More frequent targeting of hot spot areas will be performed in future years. Yes No
- F. How many illicit discharge related complaints were received this reporting period? 10
- G. How many illicit discharge investigations were performed this reporting period? 10
- H. Of those investigations performed, how many resulted in valid illicit discharges that were addressed and/or eliminated? 8

5. Construction Site Stormwater Runoff Pollutant Control (Section 4.2.4)

- A. Do you have an ordinance or other regulatory mechanism requiring:
 - Construction site operators to implement appropriate erosion prevention and sediment control BMPs consistent with those described in the TDEC EPSC Handbook? Yes No
 - Construction site operators to control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste? Yes No
 - Design storm and special conditions for unavailable parameters waters or Exceptional Tennessee Waters consistent with those of the current Tennessee Construction General Permit (TNR100000)? Yes No
- B. Do you have specific procedures for construction site plan (including erosion prevention and sediment BMPs) review and approval? Yes No
- C. Do you have sanctions to enforce compliance? Yes No
- D. Do you hold pre-construction meetings with operators of priority construction activities and inspect priority construction sites at least monthly? Yes No

Phase II Small Municipal Separate Storm Sewer System (MS4) Annual Report

- E. How many construction sites disturbing at least one acre or greater were active in your jurisdiction this reporting period? 36
- F. How many active priority and non-priority construction sites were inspected this reporting period? 36
- G. How many construction related complaints were received this reporting period? 14

6. Permanent Stormwater Management at New Development and Redevelopment Projects (Section 4.2.5)

- A. Do you have a regulatory mechanism (e.g. ordinance) requiring permanent stormwater pollutant removal for development and redevelopment projects? If no, have you submitted an Implementation Plan to the Division? Yes No
 Yes No
- B. Do you have an ordinance or other regulatory mechanism requiring:
 - Site plan review and approval of new and re-development projects? Yes No
 - A process to ensure stormwater control measures (SCMs) are properly installed and maintained? Yes No
 - Permanent water quality riparian buffers? If yes, specify requirements: See Attached Yes No
- C. What is the threshold for development and redevelopment project plans plan review (e.g., all projects, projects disturbing greater than one acre, etc.)? Disturbed area greater than or equal to 1 acre, net increased impervious area greater than or equal to 0.5 acre, permanent stormwater pollutant removal required, located within 100' of a water of the state, or as designated by the City Administrator
- D. How many development and redevelopment project plans were reviewed for this reporting period? 19
- E. How many development and redevelopment project plans were approved? 18
- F. How many permanent stormwater related complaints were received this reporting period? 3
- G. How many enforcement actions were taken to address improper installation or maintenance? 1
- H. Do you have a system to inventory and track the status of all public and private SCMs installed on development and redevelopment projects? Yes No
- I. Does your program include an off-site stormwater mitigation or payment into public stormwater fund? If yes, specify. _____ Yes No

7. Stormwater Management for Municipal Operations (Section 4.2.6)

- A. As applicable, have stormwater related operation and maintenance plans that include information related to maintenance activities, schedules and the proper disposal of waste from structural and non-structural stormwater controls been developed and implemented at the following municipal operations:
 - Streets, roads, highways? Yes No
 - Municipal parking lots? Yes No
 - Maintenance and storage yards? Yes No
 - Fleet or maintenance shops with outdoor storage areas? Yes No
 - Salt and storage locations? Yes No
 - Snow disposal areas? Yes No
 - Waste disposal, storage, and transfer stations? Yes No

Phase II Small Municipal Separate Storm Sewer System (MS4) Annual Report

- B. Do you have a training program for employees responsible for municipal operations at facilities within the jurisdiction that handle, generate and/or store materials which constitute a potential pollutant of concern for MS4s? Yes No
- If yes, are new applicable employees trained within six months, and existing applicable employees trained and/or retrained within the permit term? Yes No

8. Reviewing and Updating Stormwater Management Programs (Section 4.4)

- A. Describe any revisions to your program implemented during this reporting period including but not limited to:
- Modifications or replacement of an ineffective activity/control measure. N/A
- Changes to the program as required by the division to satisfy permit requirements. N/A
- Information (e.g. additional acreage, outfalls, BMPs) on newly annexed areas and any resulting updates to your program. 0.11 square miles annexed; no updates required
- B. In preparation for this annual report, have you performed an overall assessment of your stormwater management program effectiveness? If yes, summarize the assessment results, and any modifications and improvements scheduled to be implemented in the next reporting period. See Attached Yes No

9. Enforcement Response Plan (Section 4.5)

- A. Have you implemented an enforcement response plan that includes progressive enforcement actions to address non-compliance, and allows the maximum penalties specified in TCA 68-221-1106? If no, explain. N/A Yes No
- B. As applicable, identify which of the following types of enforcement actions (or their equivalent) were used during this reporting period; indicate the number of actions, the minimum measure (e.g., construction, illicit discharge, permanent stormwater management), and note those for which you do not have authority:

<u>Action</u>	<u>Construction</u>	<u>Permanent Stormwater</u>	<u>Illicit Discharge</u>	<u>In Your ERP?</u>
Verbal warnings	<u>#12</u>	<u>#1</u>	<u>#7</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Written notices	<u>#1</u>	<u>#1</u>	<u>#1</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Citations with administrative penalties	<u>#0</u>	<u>#0</u>	<u>#0</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Stop work orders	<u>#0</u>	<u>#0</u>	<u>#0</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Withholding of plan approvals or other authorizations	<u>#0</u>	<u>#0</u>	<u>#0</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Additional Measures	<u>#0</u>	<u>#0</u>	<u>#0</u>	Describe: <u>Consent Order, Compliance Order, Show Cause Hearing, Emergency Suspension, Damage Assessment, Legal Action</u>

- C. Do you track instances of non-compliance and related enforcement documentation? Yes No
- D. What were the most common types of non-compliance instances documented during this reporting period? mud in the road

10. Monitoring, Recordkeeping and reporting (Section 5)

- A. Summarize any analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. None
- B. Summarize any non-analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. None
- C. If applicable, are monitoring records for activities performed during this reporting period submitted with this report. Yes No

11. Certification

Phase II Small Municipal Separate Storm Sewer System (MS4) Annual Report

This report must be signed by a ranking elected official or by a duly authorized representative of that person. See signatory requirements in sub-part 6.7.2 of the permit.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

GARY D. Chesney - Mayor  9/20/19
 Printed Name and Title Signature Date

Annual reports must be submitted by September 30 of each calendar year (Section 5.4) to the appropriate Environmental Field Office (EFO), identified in the table below:

EFO	Street Address	City	Zip Code	Telephone
Chattanooga	1301 Riverfront Pkwy, Suite 206	Chattanooga	37402	(423) 634-5745
Columbia	1421 Hampshire Pike	Columbia	38401	(931) 380-3371
Cookeville	1221 South Willow Ave.	Cookeville	38506	(931) 520-6688
Jackson	1625 Hollywood Drive	Jackson	38305	(731) 512-1300
Johnson City	2305 Silverdale Road	Johnson City	37601	(423) 854-5400
Knoxville	3711 Middlebrook Pike	Knoxville	37921	(865) 594-6035
Memphis	8383 Wolf Lake Drive	Bartlett	38133	(901) 371-3000
Nashville	711 R S Gass Boulevard	Nashville	37216	(615) 687-7000

City of Morristown

Attachment to Small Municipal Separate Storm Sewer System (MS4) Annual Report 2018-2019 (Year 3) Reporting Period

2.A *Does your MS4 discharge into waters with unavailable parameters (previously referred to as impaired) for pathogens, nutrients, siltation or other parameters related to stormwater runoff from urbanized areas as listed on TN's most current 303(d) list and/or according to the on-line state GIS mapping tool (tdeconline.tn.gov/dwr/)? If yes, attach a list.*

River Basin	Waterbody ID#	Cause	TMDL Approved?	TMDL Pollutant
Holston	TN06010104004T-1900 Fall Creek	Alteration in stream-side or littoral vegetative covers; Sedimentation / Siltation; Nitrate / Nitrite (Nitrite + Nitrate as N); Phosphorus (Total); Escherichia coli	Yes	E. Coli
Holston	TN06010104004T-2210 Stubblefield Creek	Other anthropogenic substrate alterations	No	N/A
Holston	TN06010104004T-2300 Turkey Creek	Nitrate / Nitrite (Nitrite + Nitrate as N); Alteration in stream-side or littoral vegetative covers; Sedimentation / Siltation; Escherichia coli	Yes	E. Coli
Nolichucky	TN06010108001-0100 Flat Creek	Escherichia coli	Yes	E. Coli
Nolichucky	TN06010108043-0400 Cedar Creek	Alteration in stream-side or littoral vegetative covers; Sedimentation / Siltation	Yes	E. Coli; Siltation and Habitat Alteration

2.B *Are there established and approved TMDLs (<http://www.tn.gov/environment/article/wrws-tennessees-total-maximum-daily-load-tmdl-program>) with waste load allocations for MS4 discharges in your jurisdiction? If yes, attach a list.*

See table in 2.A.

3.B *Is your public education program targeting specific pollutants and sources, such as Hot Spots? If yes, describe the specific pollutants and/or sources targeted by your public education program:*

Specific pollutant sources which are targeted include: litter, household hazardous waste, BOPAE (Batteries, Oil, Paint, Antifreeze, and Electronics) waste, general water pollution, construction sites, and hot spots.

New developments classified as hot spots require a Special Pollution Abatement Plan, which requires the owner to conduct employee training on pollution prevention at the site. More details on how the other pollutants and sources are targeted are contained in Sections 3.D and 3.E.

3.D Summarize how you advertise and publicize your public education, outreach, involvement and participation opportunities:

The City maintains a website which includes:

- a link to the Keep Morristown-Hamblen Beautiful (KMHB) website for education and involvement opportunities
- a summary of each minimum control measure required by the TDEC permit
- requirements for plan submittal and review
- a copy of the City's stormwater ordinance
- targeted education on stormwater pollution prevention
- rates and other information for the stormwater utility

KMHB coordinates and performs education efforts in line with the mission and focus of Keep America Beautiful. Additional education efforts are provided to the public from local partnerships that include City of Morristown, Hamblen County Litter Grant, and Hamblen County Stormwater. KMHB maintains their website and social media information based on the approved information and guidance of their Executive Director and Board of Directors. They utilize Facebook and local media (newspaper, radio stations, and the local TV cable channel) to notify the public about upcoming events, how-to's, recycling and litter prevention tips, and other ways for the public to participate.

Public notice of the Annual Report was posted on the City's website and was posted on the City's Facebook and Twitter, as well as on KMHB's Facebook and Twitter. The draft Report was posted on the City's website. Comments were accepted via e-mail and telephone.

3.E Summarize the public education, outreach, involvement and participation activities you completed during this reporting period:

Completed by KMHB

- Booths were staffed at several public events to target attendees, including both children and adults. Numerous age-appropriate educational items including litter bags, ashtrays, T-shirts, pencils, coloring pages, word search, backpacks, trash bags, water bottles, decals, stickers, and brochures were available. Events included the Belk Charity Sale (fundraiser for local non-profits), Music on the Green (downtown concert series), Project Graduation (party for graduating seniors), and the Home Show (held over three days at the mall). These events reached approximately 42,000 people, with the majority being at the Home Show.
- A BOPAE (batteries, oil, paint, antifreeze, and electronics) event collected nearly 27,000 pounds of those items from about 200 households. All participants received education materials on general water quality, litter prevention, and recycling. In addition, children

were provided with coloring books and backpacks, while smokers received ashtrays and information on preventing cigarette litter.

- The Household Hazardous Waste (HHW) collection event received nearly 3,400 pounds of flammable liquids, poisons, aerosols, corrosives, and other dangerous materials from 304 households, as well as nearly 18,000 pounds of BOPAE waste. Educational materials were provided to all participants as with the BOPAE.
- All fourth graders in Hamblen County Schools (approximately 850 students) were given a 15 minute presentation on water pollution entitled “Freddie the Fish.” Each teacher received educational material on litter, water pollution, and waste reduction, with materials including coloring books, t-shirts, brochures, and backpacks for use in their classroom.
- The Tire Collection received 35 tons of tires from 125 participants. All participants received educational items similar to those provided with the HHW and BOPAE events.
- Ten articles on stormwater topics ran in the *Lakeway Citizen Tribune*, the local newspaper. Seven provided information on the BOPAE, HHW, and Tire Collection events, such as dates, times, and items accepted. In addition, three articles on the BOPAE and HHW provided education on proper disposal.
- Volunteers performed three litter cleanups at Cherokee Park and Panther Creek State Park, the Cherokee Lake Boat Ramp, and along Panther Creek. Nine volunteers spent 19 hours on these activities.
- Recycling receptacles were provided at several outdoor events, including the Christmas Parade, Boo Fest, Mountain Makins, Little League World Series, Strawberry Festival, and ten other events. The bins offered an alternative to littering.

Completed by the City

- Stormwater personnel gave a presentation on the City’s stormwater permit and compliance program at a City Council work session.
- Two articles ran in the City’s monthly newsletter. One provided education on the definition and importance of proper disposal of HHW and included information about the HHW collection. The other noted that the City had hosted a Tennessee Stormwater Association meeting and included information on the City’s permit and on illicit discharge reporting.
- A Facebook post noted the dangers of lawn runoff, including grass clippings, leaves, and animal waste.
- Flyers focused on proper tire disposal are included with all City codes violations letters as appropriate.

3.F Summarize any specific successful outcome(s) (e.g., citizen involvement, pollutant reduction, water quality improvement, etc.) fully or partially attributable to your public education and participation program during this reporting period:

- The education efforts summarized in Section 3.E resulted in the following volunteer participation by members of the public. Note that the “volunteers” and “hours” columns in the table reflect active participation in organizing and conducting the activities. The “attendees” column is an estimate of attendees who were exposed to the education message.

Summary of Public Participation

Category	Volunteers	Hours	Attendees
BOPAE Collection	45	195.0	200
HHW Collection	20	54.0	304
Litter Cleanup	9	19.0	0
Misc Education	15	49.5	42,080
Recycling	18	24.0	19,950
Soil Conservation Field Days	14	67.5	856
Tire Collection	3	16.0	125
Total	124	425.0	63,515

- BOPAE (batteries, oil, paint, antifreeze, electronics) waste collection attendees delivered approximately 27,000 pounds of those items plus light bulbs.
- Attendees at the HHW collection delivered 3,364 pounds of waste from 304 households as well as 17,960 pounds of BOPAE waste.
- The City’s Litter Crew collected 4,044 bags of litter, or an estimated 40 tons, devoting 741 hours to the task.

6.B Do you have an ordinance or other regulatory mechanism requiring: Permanent water quality riparian buffers?

A water quality buffer zone (WQBZ), measured from the top of bank, is required as follows:

- stream with drainage area less than 1 square mile: 30’ wide
- stream with drainage area greater than or equal to 1 square mile, and/or water with unavailable parameters: 60’ wide
- wetland: 30’ wide around perimeter

Variations are permitted with approval from the Stormwater Violations Appeals Board.

7.A *As applicable, have stormwater related operation and maintenance plans that include information related to maintenance activities, schedules and the proper disposal of waste from structural and non-structural stormwater controls been developed and implemented at the following municipal operations: (Items Marked “No”)*

The City does not operate snow disposal areas or waste disposal, storage, and transfer stations.

8.B *In preparation for this annual report, have you performed an overall assessment of your stormwater management program effectiveness? If yes, summarize the assessment results, and any modifications and improvements scheduled to be implemented in the next reporting period.*

The number of volunteers participating in all activities dropped from 231 last year to 124 this year, or 46%. Volunteer hours also dropped from 627 to 425, or 32%. This drop in participation is likely due to the fact that Keep Morristown Hamblen Beautiful, which provides most of the volunteer opportunities, was operated solely by volunteers for much of the year. KMHB now has 3 staff members, so more volunteer opportunities should be available next year.

The Household Hazardous Waste (HHW) collection collected 3,364 pounds. Although this amount is down from the previous year’s total of 6,277 pounds, the number of vehicles rose from 100 to 304. Participants also delivered 17,960 of BOPAE waste.

The BOPAE event collected 26,539 pounds versus 21,806 pounds last year, with slightly fewer vehicles (200 versus 215). The City’s Litter Crew, composed of a police officer and inmates from the county jail, collected 4,044 bags and 8,266 pounds of unbagged litter during 741 hours of work.

For the overall stormwater program, 81% of the Program BMP Milestones were fully met, 6% were partially met, and 13% were not met. The partially met items included adding hot spots to the outfalls map, revising the Dry Weather Screening to target hot spots for more frequent inspections, and revising and implementing City Municipal Operations SOPs. The unmet Milestones included revising the PIE plan, providing targeted education to specified groups, coordinating with first responders, and developing and implementing a post-construction stormwater control measures inspection plan. The unmet and partially met Milestones are all very staff-intensive. Staff reviewed 19 site plans and had 36 active construction sites greater than one acre during the Annual Report period. In addition, extensive flooding occurred in February and March. Responding to complaints, performing repairs, and working with FEMA to obtain disaster assistance consumed significant staff time. Staff will work on these Milestones in the next permit year as time allows.