



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 Hendersonville		MS4 Permit Number: TNS075353
Contact Person: Helen Morrison		Email Address: hmorrison@hvilletn.org
Telephone: (615) 590-4649		MS4 Program Web Address: https://www.hvilletn.org/departments/public-works/stormwater
Mailing Address: 101 Maple Drive North		
City: Hendersonville	State: Tennessee	ZIP code: 37075

What is the current population of your MS4? 56,000

What is the reporting period for this annual report? July1 2017 to June 30 2018

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: _____. 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: The City of Hendersonville has developed and implemented a new Stormwater Program website to provide education to a broad audience. Educational videos are posted to educate grade school children, homeowners/teenagers, and developers/contractors. Education on hot spots is provided through those videos. The City has also distributed numerous educational pamphlets that address pollutants of concern. The Stormwater Inspector inspects industrial areas to locate illicit discharges. Yes No
- C. Do you have a webpage dedicated to your stormwater program? If yes, provide a link/URL: https://www.hvilletn.org/departments/public-works/stormwater Yes No

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- D. Summarize how you advertise and publicize your public education, outreach, involvement and participation opportunities: The City of Hendersonville uses five different avenues to promote educational events. Any and all events are posted on our public access Channel 3, the City Stormwater website, the City's Events webpage, email chains, and the City's Facebook page. The City of Hendersonville has also partnered with other MS4s for public outreach events. We advertise special events happening in other MS4s and they also advertise our special events. The City of Hendersonville also participates in Middle Tennessee Stormwater Group monthly meetings. Developed and implemented a drone inspection program
- E. Summarize the public education, outreach, involvement and participation activities you completed during this reporting period: The City of Hendersonville hosted a Middle Tennessee Stormwater Group stormwater inspection field trip to a construction site, participated in 250K Tree Day distributed 1,920 trees, organized our 2nd Annual Earth Day Event (cancelled due to inclement weather), distributed a series of educational pamphlets, developed a new Stormwater webpage for public education, TAB Program, . We also take the opportunity to educate citizens with questions/concerns regarding water quality. The City is promoting awareness for our State Endangered Streamside Salamander and working with State zoologist David Withers to gain access to properties within the City that provide suitable habitat for the Streamside Salamander
- 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: 250K Tree Day we successfully distributed 1,920 native trees. We had over 30 vendors signed up for our 2018 Earth Day, Citizens are cooperating with our Winter efforts to locate the Streamside Salamander

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? 18
- 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: City Ordinance 18-208 (Illicit Discharges Due to Land Disturbance); City Ordinance 18-308 (Post Construction Illicit Discharges). The Stormwater Inspector completes montly dry weather screenings of the 18 identified main outfalls and also after large rain events. The Inspector also completes inspections in the industrial areas of the City. Monthly inspections of construction sites are completed to address and eliminate illicit discharges into the MS4. Citizens can call the Public Works hotline to report illicit discharges. A new illicit discharge webpage for identification and reporting is also being developed. Yes No
- F. How many illicit discharge related complaints were received this reporting period? 4
- G. How many illicit discharge investigations were performed this reporting period? 4
- H. Of those investigations performed, how many resulted in valid illicit discharges that were addressed and/or eliminated? All were eliminated, two were referred to the Tennessee Department of Solid Waste.

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
- E. How many construction sites disturbing at least one acre or greater were active in your jurisdiction this reporting period? 72
- F. How many active priority and non-priority construction sites were inspected this reporting period? 72
- G. How many construction related complaints were received this reporting period? 22

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: 18-206(2)(b) of revised ordinance draft- "Permanent" new development and significant redevelopment sites are required to preserve water quality buffers along waters within the MS4.

Buffers shall be clearly marked on site development plans, Grading Permit applications, and/or concept plans.

(1) Stormwater discharges should enter the permanent water quality buffer as sheet flow, not as concentrated flow, where site conditions allow.

(2)Permanent water quality buffers must have the following minimum widths, based upon drainage area of the receiving stream adjacent to the project, unless site specific conditions necessitate alternative widths.

<u>Drainage Area of stream (sq. mi.)</u>	<u>Min. total buffer width (ft)</u>	<u>Min. inner zone (ft)</u>		
<u><1</u>	<u>30</u>	<u>30</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<u>1-2</u>	<u>45</u>	<u>30</u>		
<u>>2</u>	<u>60</u>	<u>40</u>		

The buffer requirement may be fulfilled with a combination of an inner and an outer zone. The predominant vegetation in the inner zone of the buffer (adjacent to the stream) should be trees. The outer zone (adjacent to the development) of 45-60 foot buffers may be composed of herbaceous cover or infiltration-based stormwater control measures.

(3)Permanent water quality buffer widths are measured from the top of bank also referred to as the ordinary high water mark. If no top of bank is readily defined, the top of bank should be set at the elevation of the 2-year storm event.

C. What is the threshold for development and redevelopment project plans plan review (e.g., all projects, projects disturbing greater than one acre, etc.)? All projects

D. How many development and redevelopment project plans were reviewed for this reporting period? 53

E. How many development and redevelopment project plans were approved? 30

F. How many permanent stormwater related complaints were received this reporting period? 1

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. City Ordinance 18-204(2)(b) Provisions are made to manage stormwater by an off-site facility. The off-site facility must be in place and designed to provide the level of stormwater control that is equal to or greater than that which would be afforded by on-site practices. Further, the facility must be operated and maintained by an entity that is legally obligated to continue the operation and maintenance of the facility. 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

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- | | | |
|---|---|--|
| Municipal parking lots? | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| Maintenance and storage yards? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Fleet or maintenance shops with outdoor storage areas? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Salt and storage locations? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Snow disposal areas? | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| Waste disposal, storage, and transfer stations? | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| 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? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| If yes, are new applicable employees trained within six months, and existing applicable employees trained and/or retrained within the permit term? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> 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. TAB was eliminated by TNSA
 Changes to the program as required by the division to satisfy permit requirements. Ordinance revisions, implement new Enforcement Response Plan, complete storm sewer mapping and permanent SCM inventory, develop and implement O & M Plans for remaining municipal facilities.
 Information (e.g. additional acreage, outfalls, BMPs) on newly annexed areas and any resulting updates to your program. Newly annexed areas in the city will be documented with new storm sewer mapping
- 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 City of Hendersonville will continue to develop and implement key components of the minimum control measures to comply with the permit requirements. With the new stormwater utility fee additional staff will be hired to help achieve total compliance. 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. The City is in the process of developing and implementing a new ERP that includes progressive enforcement actions to address non-compliance and allows the maximum penalties specified in TCA 68-221-1106. The City is working to implement administrative penalties for stormwater violations. The City is also planning to form a Stormwater Board (Public Works Committee) to hear appeals for administrative penalties. 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>0</u>	# <u>1</u>	# <u>0</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Written notices	# <u>19</u>	# <u>1</u>	# <u>4</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>3</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: _____	

- 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? Failure to properly design, install, and maintain erosion and sediment control measures, Illicit Discharge, Trash accumulation on-site.

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. The City is in the planning process of obtaining a consultant to satisfy the analytical monitoring activities required during this reporting period.
- B. Summarize any non-analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. The City is in the planning process of obtaining a consultant to satisfy the analytical monitoring activities required during this reporting period
- C. If applicable, are monitoring records for activities performed during this reporting period submitted with this report. Yes No

11. Certification

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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."

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