



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: Hamilton County including the Cities/Towns of Collegedale, East Ridge, Lakesite, Lookout Mountain, Ridgeside, Red Bank, Soddy-Daisy, and Walden		MS4 Permit Number: TNS075566
Contact Person: Crystal Bishop		Email Address: CrystalB@hamiltontn.gov
Telephone: (423) 209-7853		MS4 Program Web Address: hamiltontn.gov/waterquality
Mailing Address: 1250 Market St, Suite 3044		
City: Chattanooga	State: TN	ZIP code: 37402

What is the current population of your MS4? 168,923 (according to 2014 Census Bureau Data - Hamilton County minus Chattanooga and Signal Mountain)

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, additional protections as prescribed in the MS4 permit such as EPSC design criteria and greater water quality buffer widths. ☒ 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: NPS Pollution from urbanized and municipal areas; sediment discharge from construction activity; pathogens and household pollutants from illicit discharges; pollutants from municipal operations. ☒ Yes ☐ No
- C. Do you have a webpage dedicated to your stormwater program? If yes, provide a link/URL: <http://www.hamiltontn.gov/waterquality> ☒ Yes ☐ No

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- D. Summarize how you advertise and publicize your public education, outreach, involvement and participation opportunities: Newspaper, website, and media releases from the County's Communications office.
- 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: We hosted several events that allowed citizen involvement; 28 participants were at our River Rescue location at Mountain Creek to remove litter from the creek. 20 educators at Project WET and 21 educators at Project WILD will have an exponential effect to teach youth about being good environmental stewards. We continue to supply pet waste bags (800 bags for this reporting period) for stations within county and municipal parks, which reduces pollution from pet wastes.

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? 945
- 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: This is outlined in the Hamilton County Water Quality Field Screening SOP, which is available upon request. ☒ Yes ☐ No
- F. How many illicit discharge related complaints were received this reporting period? 5
- 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? 4

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

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- 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? 56
- F. How many active priority and non-priority construction sites were inspected this reporting period? 56; each construction site was inspected monthly at a minimum
- G. How many construction related complaints were received this reporting period? 26

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: As described in 2010 MS4 Permit (30 ft for drainage area under 1 square mile; 60 ft for drainage area equal to or greater than 1 square mile). ☒ 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.)? All projects within the Water Quality Program Boundary that distribe one acre or greater.
- D. How many development and redevelopment project plans were reviewed for this reporting period? 39
- E. How many development and redevelopment project plans were approved? 29
- F. How many permanent stormwater related complaints were received this reporting period? 0
- G. How many enforcement actions were taken to address improper installation or maintenance? 15
- 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

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|---|---|--|
| 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 checked="" type="checkbox"/> Yes | <input 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 type="checkbox"/> Yes | <input checked="" 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. No changes within the past year.
- Changes to the program as required by the division to satisfy permit requirements. none
- Information (e.g. additional acreage, outfalls, BMPs) on newly annexed areas and any resulting updates to your program. No changes since filing the NOI
- 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. No modification seem necessary at this time. An NOI was completed less than 1 year ago; a full review of the program was performed at that time. Also, TDEC performed a Compliance Evaluation and Inspection (CEI) of the Construction Program in March 2017, and deemed the Program to be complaint with the Construction Requirements of the MS4 permit.
- ☒ 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. _____ ☒ 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>20</u>	# <u>0</u>	# <u>4</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Written notices	# <u>4</u>	# <u>0</u>	# <u>1</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Citations with administrative penalties	# <u>2</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 type="checkbox"/> Yes	<input checked="" 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?
Stabilization, track out, BMP Maintenance, discharges into Waters of the State, buffer encroachments

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. Water Quality parameters (DO, Sp. Conductivity, Temperature, pH, and Turbidity) were continuously monitored at two stations on South Chickamauga Creek throughout the reporting period; additionally, discrete samples were collected during low flow for quality assurance of station calibrations and cross-sectional position bias. These data were previously submitted to the TDEC Planning and Standards office and will be used during the current permit cycle for report synthesis.
- B. Summarize any non-analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. No non-analytical monitoring activities were performed during the 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."

Todd E. Leamon, Hamilton
County Water Quality
Program Committee
Chairman

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

2A. Waters with unavailable parameters into which HCWQP MS4 discharges:

WATERBODY ID# AND NAME OF WATERBODY	NATURE OF POLLUTANT (CAUSE) OR EXCEPTIONAL
TN06020001067_2010 Ninemile Branch	Siltation, E. coli; Low DO; Habitat Alteration
TN06020001426_1000 Mountain Creek	E. coli; Habitat Alteration
TN06010001426_0200 Stringers Branch	E. coli; Habitat Alteration; Nitrate/Nitrite
TN060200011244_0400 Gillespie Springs Branch	E. coli; Habitat Alteration; Nitrate/Nitrite; Ammonia
TN06020001007_0510 Spring Creek	Siltation; E. coli; Exceptional
TN06020001007_1000 South Chickamauga Creek	Habitat Alteration; Siltation; E. coli; Total Phosphorous; Exceptional
TN06020001889_1000 Wolftever Creek	E. coli
TN06020001889_0100 Little Wolftever Creek	E. coli
TN06020001880_1000 Rogers Branch	E. coli
TN06020001889_0400 Hunter Creek	Alteration in stream side or littoral vegetative cover; Habitat Alteration
TN06010001889_0300 Wilkerson Branch	E. coli
TN06020001087_1000 Shoal Creek	E. coli ; Exceptional
TN06020001067_0100 Unnamed tributary to North Chickamauga Creek	Siltation; Habitat Alteration; E.coli
TN06020001007_0300 Mackey Branch	Habitat Alteration; Siltation; E. coli; Exceptional

2B. List of TMDLs in HCWQP jurisdiction:

WATERBODY ID# AND NAME OF UNAVAILABLE WATERBODY	PARAMETERS OF CONCERN
TN06020001007_0510 Spring Creek	E.coli
TN0602000106_0210 Ninemile Branch	Siltation/Habitat Alteration

TN06020001007_1000 South Chickamauga Creek	Siltation/Habitat Alteration; E.coli
TN06020001067_2000 North Chickamauga Creek	Siltation/Habitat Alteration
TN060200011244_0400 Gillespie Springs Branch	Siltation/Habitat Alteration; E.coli
TN06020001426_0100 Stringers Branch	Siltation/Habitat Alteration; E.coli
TN06020001426_1000 Mountain Creek	Siltation/Habitat Alteration; E.coli
TN06020001889_1000 Wolftever Creek	E.coli

2C. List of ETWs into which HCWQP MS4 discharges:

TN06020001087_1000 Shoal Creek	E. coli; Exceptional
TN06020001067_2000 North Chickamauga Creek	Exceptional
TN06020001067_0310 Little Falling Water Creek	Exceptional
TN06020001067_0300 Falling Water Creek	Exceptional
TN06020001007_0500 West Chickamauga Creek	Exceptional
TN06020001007_0410 Johnson Branch	Exceptional
TN06020001007_0400 Hurricane Branch	Exceptional
TN06020001007_0310 Ryall Springs Branch	Exceptional
TN06020001007_0300 Mackey Branch	Habitat Alteration; Siltation; E. coli; Exceptional
Unnamed Tributary to Friar Branch	Exceptional
Unnamed Tributary to Lookout Creek	Exceptional
Unnamed Tributary Pitts Branch	Exceptional
Unnamed Tributary to West Chickamauga Creek	Exceptional

3E. Summary of Public Education, Outreach, Involvement and Participation Activities:

Date	Activity	Partners	Level of Participation	# of Participants
Annual Contract	Radio Advertisements	TAB and TNSA	Participate in statewide radio campaign.	TAB records available upon request.
7/1/17 to 6/30/18	Web views hamiltontn.gov/waterquality		Provide information to public	6,745
April 2018 and June/July 2018	Kids for Clean Water Camp	Audubon Acres, CaribbeanSEA	Sponsor materials, provide support staff at camp	63
10/7/17	Tennessee River Rescue	TN Aquarium, Reflection Riding, TWRA, and many more	Sponsor materials, staff clean up zone, organize volunteers	28 Participants at Mountain Creek Zone
10/17 – 10/19/17	TNSA Conference	TNSA and many others	Manager and Project Designer organized	238
10/11 – 10/13/17	SESWA Conference	Staff Member is SESWA President	Staff Members plan and attend meetings and conferences	235
7/1/17 to 6/30/18	Pet Waste Stations for East Ridge and Soddy Daisy Parks	City of East Ridge, City of Soddy Daisy	Purchase waste bags	Supplied 800 bags
2/10/18	Save Water Drink Wine	CaribbeanSEA, TN Aquarium, South Chick Creek Greenway Alliance, Reflection Riding, others	Sponsor, Staff planned and participated in event	75
2017-18 School Year	Red Bank Elementary School STEAM Project Support	Red Bank Elementary, CaribbeanSEA, City of Chattanooga	Assist STEAM Educator with lesson plans, sponsor activities	100 5 th grade students reached
Monthly Meetings	South Chickamauga Creek Greenway Alliance Meetings	SCCGA	Attend and Assist	Average of 25/meeting

Monthly Meeting Participation	Hamilton County Local Emergency Planning Committee	HC LEPC and many other agencies	Staff member sits on Executive Committee. Group provides education and training for various hazmat related responses.	20-25/meeting
Quarterly Meetings	Public Management Committee Meetings	Each participating jurisdiction	Public meetings of the Management Committee to discuss/update Program's policies & procedures	15-20/meeting
6/5/18	Project Wet Workshop	USFS, TNACI, Cleveland, Bradley County	Plan, sponsor, staff workshop	20
July 2017 – June 2018	TennesSEA Young Professional Board	Caribbean SEA	Program Manager and staff member serve on advisory board	10
6/21/18	TN American Water Fest	TN American Water	Staff hosted booth at the festival to provide information to public	300
9/23/17	Project WILD Workshop	City of Cleveland / Hosted at Audubon Acres	Staff planned workshop to provide teacher education	21

Target Audience:

1. General Public
2. Educators
3. Municipal Employees
4. School Aged Children & Their Families
5. Professionals (Engineers, Consultants, etc.)