



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) 209-7851		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 2019 to June 30 2020

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/](http://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](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; some scheduled events were cancelled due to COVID 19
- 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; 24 participants were at our River Rescue location at Mountain Creek to remove litter from the creek. Project WET was cancelled this year due to COVID 19. 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. WaterWays, Tennessee Aquarium, TNSA, the City of Chattanooga, the City of Cleveland and Bradley County were our biggest educational programming partners.

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? 5
- H. Of those investigations performed, how many resulted in valid illicit discharges that were addressed and/or eliminated? 5

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

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- 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? 58
- F. How many active priority and non-priority construction sites were inspected this reporting period? 58
- G. How many construction related complaints were received this reporting period? 64

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 disturb one acre or greater.
- D. How many development and redevelopment project plans were reviewed for this reporting period? 46
- E. How many development and redevelopment project plans were approved? 27
- 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? 0
- 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

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- 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
- 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. 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 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. A full review of the program was performed at that time the NOI was completed in 2017, and the permit has been appealed by 3<sup>rd</sup> parties since 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>9</u>	# <u>0</u>	# <u>0</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Written notices	# <u>11</u>	# <u>0</u>	# <u>0</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Citations with administrative penalties	# <u>4</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? Work began without permits; track out; lack of BMP maintenance; failure to stabilize site; stream 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. Macroinvertebrates were collected at multiple sites.
- B. Summarize any non-analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. Qualitative habitat assessments were conducted on all stream segments where macroinvertebrates were collected.
- 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, Chairman,  
Hamilton County Water  
Quality Program Committee

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:

<b>Date</b>	<b>Activity</b>	<b>Partners</b>	<b>Level of Participation</b>	<b># of Participants</b>
Annual Contract	Social Media Ads	Tennessee Stormwater Association	Participate in statewide social media campaign.	Records available upon request.
7/1/19 to 6/30/2020	Web views hamiltontn.gov/waterquality		Provide information to public	Available on request
7/11/19	Kids for Clean Water Camp	WaterWays	Teach Kids aged 8-13 about importance of local water quality. Sponsor Materials and Support Staff	15
7/18/19	Kids for Clean Water Camp	WaterWays	Macroinvertebrate samples and water quality education camp	12
8/6/19	Chattanooga Development Symposium	City of Chattanooga, ASCE, TNSA	Sponsored Event. Staff helped plan and organize event. Program Manager gave Stream Buffer Presentation	75
8/26/19	Mountain Creek Day	WaterWays	Water Quality Education. Macro Invertebrate	17
10/05/19	Tennessee River Rescue	TN Aquarium, Reflection Riding, TWRA, and many more	Sponsor materials, staff clean up zone, organize volunteers	35 Participants at Mountain Creek Zone
11/18 – 11/21/19	TNSA Conference	TNSA and many others	Manager and Project Designer organized. Program Manager gave presentation.	239

10/9 – 10/11/19	SESWA Conference	Staff Member is on Board of Directors	Staff Members plan and attend.	250
7/1/19 to 6/30/2020	Pet Waste Stations for East Ridge Parks	City of East Ridge	Purchase waste bags	Supplied 500 bags
2/8/2020	Save Water Drink Wine	WaterWays, TN Aquarium, South Chick Creek Greenway Alliance, Reflection Riding, others	Sponsor, Staff planned and participated in event	100
3/11/2020	Hamilton County High School Science Fair	Hamilton County Schools, Clean Water Professionals of KY-TN	Staff Member was Judge	30
7/1/2019 – 6/30/2020	My Tennessee Certification	WaterWays, City of Chattanooga	Green Infrastructure and Smart Yard Certification	6 new yard certifications
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	10-15/meeting
5/19/2020	Clean Water Professionals of KY & TN Webinar	CWP – KYTN and University of Kentucky	University Partnerships for Stormwater Education Webinar; Program Manager Organized	50
08/19/19	Clean Water Professionals Conference	Clean Water Professionals of KY & TN Webinar	Program Manager gave presentation about My Tennessee Certification	30

July 2019 – June 2020	WaterWays Young Professional Board	WaterWays	3 staff members serve on advisory board	10
July 2019 – June 2020	My Tennessee Certification Program	WaterWays and City of Chattanooga	Homeowner education and creek friendly yard certification	16 certifications/ 26 applicants
July 2019 – June 2020	Subdivision Review Meetings	RPA	Monthly meetings with review staff, surveyors and engineers	10-15/meeting

Target Audience:

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