



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 Maryville		MS4 Permit Number: TNS075434
Contact Person: Dale Jayne		Email Address: dfjayne@maryville-tn.gov
Telephone: (865) 273-3512		MS4 Program Web Address: http://www.maryvillegov.com/storm-water-management.html
Mailing Address: 416 W. Broadway Ave.		
City: Maryville	State: TN	ZIP code: 37801

What is the current population of your MS4? 29,742 (source: census.gov 2019 estimate)

What is the reporting period for this annual report? July 1 2020 to June 30 2021

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: Best management practices, as listed in the City's NOI and in this annual report, address relevant stormwater management activities, which include but are not limited to construction site runoff management and the requirements and policies for permanent stormwater management. These programs are implemented in areas that discharge to waterbodies with unavailable parameters. For example, the City's construction site management program requires and oversees that applicable land developments comply with the State of Tennessee General Permit Number TNR100000 "Stormwater Discharges from Construction Activities", including section 5.4 entitled "Discharges into Waters with Unavailable Parameters or Exceptional Tennessee Waters". The permanent stormwater management program requires planning for water quality and management of stormwater beyond construction phase of development or re-development.  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

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

- 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 PIE Plan Table 1 in Appendix C  Yes  No
- C. Do you have a webpage dedicated to your stormwater program? If yes, provide a link/URL: http://www.maryvillegov.com/storm-water-management.html  Yes  No
- D. Summarize how you advertise and publicize your public education, outreach, involvement and participation opportunities: Public education, outreach, involvement and participation opportunities are advertised on the City website as well as through the Keep Blount Beautiful website.
- E. Summarize the public education, outreach, involvement and participation activities you completed during this reporting period: As a member of the Tennessee Stormwater Association (TNSA), Maryville is included in TNSA's social media campaign efforts. Educational posts are created for Facebook and Instagram that include topics like reducing toxic runoff through fertilizer control, how to dispose of household hazardous waste, litter and plastic reduction in streams, pet waste disposal, and the benefits of rain gardens. The City also supports Keep Blount Beautiful (KBB) in their cleanup events and educational programming efforts. KBB is a nonprofit organization under the Keep America Beautiful umbrella that aims to encourage and educate Blount County residents to take action to improve and beautify their community.
- 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: During the 2020-2021 reporting year, an average of 68,000 impressions (instances of content on screen) were made for each Facebook/Instagram post. An excerpt from the 20-page TNSA Social Media Report is found in Appendix D, and the full report is available upon request. During the reporting period, KBB educated 152 youth in the Maryville school system on topics including recycling, littering, and water quality. Efforts through KBB also included the removal of 4,190 pounds of trash with 200 volunteers over 19 cleanup events. See Appendix D for more information.
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? 263
- 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: IDDE Standard Operating Procedure rev. 2011  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? 3

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

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? 12
- F. How many active priority and non-priority construction sites were inspected this reporting period? 2 priority, 10 non-priority
- G. How many construction related complaints were received this reporting period? 2

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: Title 19, Chp. 7 Vegetated Buffer Zone and Stormwater Quality Management and policy manual  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
- D. How many development and redevelopment project plans were reviewed for this reporting period? 35
- E. How many development and redevelopment project plans were approved? 30
- 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

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

**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?                              | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
| Municipal parking lots?                                | <input checked="" type="checkbox"/> Yes | <input 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 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?  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. N/A

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 stormwater management program was informally reviewed while preparing for this annual report. There were no other formal or informal assessments due to pandemic-related office closures.  Yes  No

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

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>17</u>	# <u>0</u>	# <u>1</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Written notices	# <u>5</u>	# <u>0</u>	# <u>0</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>1</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>NA</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? Neglecting to complete weekly erosion control inspections; Failure to maintain site erosion controls.

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. LDA Engineering completed sampling activities for the City of Maryville between September 2020 and August 2021 as part of the City of Maryville Stormwater Sampling Plan to standardize sampling efforts. LDA Engineering calculated a dry weather baseline for 9 City monitoring stations, initiated wet weather sampling, obtained a Fecal Coliform and E. Coli geometric mean, and accomplished 13 sampling dates. The Results will be forwarded to TDEC after receipt by the City of Maryville.
- 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



**City of Maryville**  
**Municipal Separate Storm Sewer System (MS4) Annual Report**  
**Reporting Period: July 1, 2020 to June 30, 2021**

**List of Appendices**

<b>Appendix ID</b>	<b>Content</b>	<b>Annual Report Section Reference</b>
Appendix A	List of Impaired Waters	Section 2A
Appendix B	TMDL List	Section 2B
Appendix C	Public Information & Education (PIE) Plan Excerpt	Section 3B
Appendix D	Public Education/Engagement Activities	Section 3E





## Appendix B

### Established and Approved TMDLs Annual Report Section 2B

**Table 2: TMDL List**

TMDL Name	Date
TMDL for Siltation and Habitat Alteration Ft. Loudon Lake Watershed HUC 06010201	February 1, 2006
TMDL for E. Coli in the Ft. Loudon Lake Watershed HUC 06010201	January 12, 2017
TMDL for Pathogens in the Little River Subwatershed of the Ft. Loudon Lake Watershed HUC 06010201	November 21, 2005

## Appendix C

### City of Maryville Public Education & Information (PIE) Plan (excerpt) Annual Report Section 3B

**Table 3: PIE Plan Target for the City of Maryville TN, rev. 2012 (excerpt from SWMP):**

<b>Target Streams</b>	<b>Target Pollutants</b>	<b>Target Audience(s)</b>
- Brown Creek - Laurel Bank Branch - Pistol Creek - Springfield Branch	Nitrates + Nitrites e. Coli Siltation Habitat Loss Due to Flow Alteration Loss in Stream-Side or Littoral Cover	Land Developers Engineers Construction Workers General Public Municipal Employees

## Appendix D

### Public Education/Engagement Activities Annual Report Section 3E

The public education and engagement activities performed or supported during this permit year are provided on the following pages and includes record of collaboration with Keep Blount Beautiful (Tables 4 and 5), as well as Facebook Ad reports (Table 6) for social media platform services offered by the TN Stormwater Association (TNSA). The City supports Keep Blount Beautiful, TNSA, and other groups with initiatives aligned with stormwater education and awareness. This support is provided either directly or in-kind through advertising, meeting space, staff, equipment, or municipal services as contribution.

### KBB Stormwater Outreach & Education Events

**Table 4: KBB Maryville-Specific Education Programs 2020-2021**

Date	Event	Length	Program Type	Age Group	Youth	Adults
8-Oct	Porter Friends Environmental Bingo	1	Littering/Watershed	Elementary	10	2
25-Nov	Porter Friends	1	Earth Activity	Elementary	15	2
25-Nov	Porter Friends	1	Earth Activity	Elementary	15	2
1-Mar	Coulter Grove Earth Club recycling lesson	1	3 R's	Elementary	15	2
12-Mar	Porter Elementary Recycling Lesson	1	3R's	Elementary	15	1
12-Mar	Porter Elementary Recycling Lesson	1	3R's	Elementary	15	1
17-Mar	Porter Friends	1	Litter Lesson	Elementary	12	2
17-Mar	Porter Friends	1	Litter Lesson	Elementary	9	1
22-Apr	Clayton Bradley K Fred the Fish	1	Fred the Fish adn Watershed	Elementary	24	2
4-Jun	Stream School with LRWA	1	Water quality and stormwater	Elementary/Middle	14	2
5-Jun	Stream School with LRWA	1	Water quality and stormwater	Elementary/Middle	8	2
<b>TOTAL</b>					<b>157</b>	

**Table 5: KBB Maryville-Specific Cleanup Information 2020-2021**

Date	Event	Length of Event	Volunteers	Volunteer Hours	Value (\$24.52)	Location	Bags of Trash	lbs of Trash	Other
10/17/2020	Allevia Technology AAM	2.5	25	62.5	\$1,532.50	E Broadway Ave	20	300	
10/23/2020	BHEA AAM	2	11	22	\$539.44	S Everett High Rd	15	225	
10/24/2020	Pistol Creek Cleanup (PM)	2	11	22	\$539.44	Browns Creek (Hwy 321)	43	800	2 tires, chair, sink, mobile cart, comforter float, cat lower cushion, pallet
10/24/2020	Kim Starling AAM	4	1	4	\$98.08	Church St	3	45	
11/7/2020	Tennessee Mtn Realty Group AAM	3.5	5	17.5	\$429.10	Washington Ave/Hwy 321	7	105	
12/12/2021	Blackberry Farm Brewery AAM	4	2	8	\$196.16	Broadway Ave	6	90	
2/5/2021	BHEA AAM	1	10	10	\$245.20	S Everett High Rd	10	150	
2/20/2021	Carpenters Grade Rd. Cleanup	2	32	64	\$1,569.28	Carpenters Grade Rd	60	900	
2/27/2021	Faith Promise Serve Day	1.5	6	9	\$220.68	Maryville Little League Park/Sevierville Ave	11	165	
3/6/2021	Allevia Technology AAM	2	32	64	\$1,569.28	E Broadway Ave	24	360	
4/5/2021	Epic Nine AAM	2	8	16	\$392.32	Ellis Ave/ Broadway	3	45	
4/10/2021	DASH for TRASH	1	15	15	\$367.80	Vienna- Downtown Maryville	9	135	
4/15/2021	BCPL Crg Pickup	1	3	3	\$73.56	BCPL	1	15	
5/8/2021	Browns Creek Cleanup	2	6	12	\$294.24	Public Parking and Greenway	15	225	
5/29/2021	Blackberry Farm Brewery AAM	2	6	12	\$294.24	Broadway Ave	6	90	
6/16/2021	Blount Community Church Cleanup	2	10	20	\$490.40	Browns Creek (Hwy 321)	16	300	Shopping cart
6/17/2021	TN Mountains Realty AAM	2.5	5	12.5	\$306.50	Washington Ave/Hwy 321	7	105	
6/29/2021	BHEA AAM	1.5	7	10.5	\$257.46	S Everett High Rd	7	105	
6/27/2021	The Wood Family AAM	1.5	5	7.5	\$183.90	Robert C Jackson Dr	2	30	
<b>Totals</b>			<b>40</b>	<b>200</b>	<b>391.5</b>	<b>\$9,599.58</b>		<b>265</b>	<b>4190</b>

**Table 6: Exerpt from 20-page TNSA Social Media Ads Report**

TN Stormwater Association June 2021 Facebook Ads Report							
		Impressions	Post Interactions*	Link Clicks	Total Clicks**		
July	Use less fertilizer on your lawn! It will grow just as green, but you'll reduce toxic runoff that pollutes waterways.	217,088	4	183	312		
July Instagram	Use less fertilizer on your lawn! It will grow just as green, but you'll reduce toxic runoff that pollutes waterways.	170,321	24	228	254		
July	Are you composting yard waste and vegetable scraps? You should be. Grow a great garden while protecting aquatic life.	189,531	2	124	221		
July Instagram	Are you composting yard waste and vegetable scraps? You should be. Grow a great garden while protecting aquatic life.	212,601	8	262	304		
August	Dealing with old cleaning supplies, paint and used oil can be a hassle. They cannot be thrown in the trash or washed down the drain. Check out where hazardous waste is collected in your area. The wildlife in our lakes and rivers will thank you!	92,644	6	52	153		