



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)

Municipal Separate Storm Sewer System (MS4) Annual Report

1. MS4 INFORMATION

Sevier County Stormwater Management TNS075655

Name of MS4 MS4 Permit Number

Larry Waters, Mayor lwaters@seviercountyttn.org

Name of Contact Person Email Address

(865) 453-6136

Telephone (including area code)

125 Court Avenue

Mailing Address

Sevierville TN 37862

City State ZIP code

City of Pigeon Forge TNS075655

Name of MS4 MS4 Permit Number

David Wear dwear@cityofpigeonforge.com

Name of Contact Person Email Address

(865) 453-9061

Telephone (including area code)

225 Pine Mountain Rd/PO Box 1350

Mailing Address

Pigeon Forge TN 37862

City State ZIP code

City of Gatlinburg TNS075655

Name of MS4 MS4 Permit Number

Mike Werner, Mayor mwerner@gatlinburgtn.gov

Name of Contact Person Email Address

(865)436-1400

Telephone (including area code)

1230 East Parkway

Mailing Address

Gatlinburg TN 37738

City State ZIP code

Municipal Separate Storm Sewer System (MS4) Annual Report

City of Sevierville TNS075655

Name of MS4 MS4 Permit Number

Bryan Atchley, Mayor mayoratch@seviervilletn.org

Name of Contact Person Email Address

(865) 453-5504

Telephone (including area code)

120 Gary Wade Blvd.

Mailing Address

Sevierville TN 37862

City State ZIP code

What is the current population of your MS4? **95,110**

What is the reporting period for this annual report? From: October 1, 2014 to: September 30, 2015

2. WATER QUALITY PRIORITIES (SECTION 3.1) A. Does your MS4 discharge into waters listed as impaired on TN's most current 303(d) list and/or according to the on-line GIS mapping tool?

SC Yes No

PF Yes No

GT Yes No

SV Yes No

Municipal Separate Storm Sewer System (MS4) Annual Report

B. If yes, please attach a list all impaired waters within your jurisdictional area

Waterbody I.D. #	Cause/TMDL Priority	Approved TMDL
TN06010107010-0100 Gnatty Branch	e-coli/ septic tanks	<input type="checkbox"/> <i>Yes</i> <input checked="" type="checkbox"/> <i>No</i>
TN06010107010-0300 Beech Branch	e-coli/ septic tanks	<input type="checkbox"/> <i>Yes</i> <input checked="" type="checkbox"/> <i>No</i>
TN06010107010-1910 Cove Creek	e-coli/ septic tanks	<input type="checkbox"/> <i>Yes</i> <input checked="" type="checkbox"/> <i>No</i>
TN06010107010-1950 Waldens Creek	Loss of biological integrity due to sediment/ land development	<input checked="" type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
TN06010107038-1000 Dumplin Creek	Loss of biological integrity due to sediment/ land development	<input checked="" type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
TN06010107007-1650 Middle Creek	Chlorine e-coli/ discharges from MS4	<input type="checkbox"/> <i>Yes</i> <input checked="" type="checkbox"/> <i>No</i>
TN06010107007-2000 Little Pigeon River	e-coli/ septic tanks collection system failure	<input type="checkbox"/> <i>Yes</i> <input checked="" type="checkbox"/> <i>No</i>
TN060100107010-0400 Dudley Creek	e-coli/ discharges from MS4	<input type="checkbox"/> <i>Yes</i> <input checked="" type="checkbox"/> <i>No</i>
TN06010107010-0600 Baskins Creek	e-coli/ collection system failure	<input type="checkbox"/> <i>Yes</i> <input checked="" type="checkbox"/> <i>No</i>
TN06010107010-1000, TN06010107010-2000, TN06010107010-3000, TN06010107010-4000 West Prong Little Pigeon River	e-coli, loss of biological integrity due to siltation, total phosphorus,	<input checked="" type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>
TN06010170010-1800 Mill Creek	Habitat alteration, e-coli, discharge MS4, channelization	<input checked="" type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>

Municipal Separate Storm Sewer System (MS4) Annual Report

- C. Does your MS4's jurisdictional area contain any waterbodies where a TMDL has been approved for parameters other than pathogens, siltation and habitat alterations? If yes, please attach a list. **See Above List**
- D. Does your MS4 discharge to any Exceptional TN Waters (ETWs) or Outstanding National Resource Waters (ONRWs)? If yes, please attach a list.
- | | | |
|----|---|--|
| SC | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| PF | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| GT | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| SV | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |

Exceptional Tennessee Waters and Outstanding Natural Resource Waters

French Broad River
 Leconte Creek
 Noisy Creek
 Norton Creek
 Redwine Creek
 Roaring Fork Creek
 Seng Branch
 Soak Ash Creek
 Texas Creek
 Timothy Creek
 Tuckahoe Creek
 Wilhite Creek
 Flat Creek
 West Prong Little Pigeon River
 Little Pigeon River including Middle Prong - **ONRW**

- E. Are you implementing additional specific provisions to ensure the continued integrity of ETWs or ONRWS located within your jurisdiction?
- | | | |
|----|---|-----------------------------|
| SC | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| PF | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| GT | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| SV | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

3. PROTECTION OF STATE OR FEDERALLY LISTED SPECIES (SECTION 3.2.1 General Permit for Phase II MS4s)

- A. Are there any state or federally listed species within the MS4's jurisdiction?
- | | | |
|----|------------------------------|--|
| SC | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| PF | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| GT | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| SV | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
- B. Are any of the MS4 discharges or discharge-related activities likely to jeopardize any state or federally listed species?
- | | | |
|----|------------------------------|--|
| SC | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| PF | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| GT | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| SV | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
- C. Please attach any authorizations or determinations by U.S. Fish & Wildlife Service on the effect of the MS4 discharges on state or federally listed species. **N/A**

Municipal Separate Storm Sewer System (MS4) Annual Report

4. PUBLIC EDUCATION AND PUBLIC PARTICIPATION (SECTION 4.2.1 AND 4.2.2)

- A. Have you developed a Public Information and Education plan (PIE)?
- SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No
- B. Is your public education program targeting specific pollutants and sources of those pollutants, such as Hot Spots?
- SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No

C. If yes, what are the specific causes, sources and/or pollutants addressed by your public education program?

Oil and petroleum, solvents, grease, nitrates, herbicides and pesticides, sediment

D. Note specific successful outcome(s) (NOT tasks, events, publications) fully or partially attributable to your public education program during this reporting period.

Tree plantings- 100 trees in 2 events, 5838 students received stormwater, waste reduction and recycling, litter prevention programs. 873 volunteers participated in cleanup efforts removing 20,425lbs of litter roadside ditches in Roads and Rivers days. The Hazardous Waste collection event collected an additional 9,568 lbs of waste for proper disposal. Sevier County Intensive Public Service program (Litter Patrol) also collected 354,760 lbs of trash covering 2,239 miles of roadside ditches and storm sewer system. Two Project Restore events were held and one tire dump was cleaned up.

- E. Do you have an advisory committee or other body comprised of the public and other stakeholders that provides regular input on your stormwater program?
- SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No

F. How do you facilitate, advertise, and publicize public involvement and participation opportunities?

Newspaper of regular circulation and web page advertisement

- G. Do you have a webpage dedicated to your stormwater program?
- SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No
- If so, what is the link/URL:
- <http://www.seviercountyttn.gov/images/stories/docs/Revised Storm Water Resolution 070108.pdf>
- www.cityofpigeonforge.com
- <http://www.ci.gatlinburg.tn.us/generalpdf/2011municipalcodes.pdf>
- <http://www.seviervilletn.org/index.php/business/stormwater.html>

Municipal Separate Storm Sewer System (MS4) Annual Report

- H. Are you tracking and maintaining records of public education, outreach, involvement and participation activities? Please attach a summary of these activities.
- SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No

1. Stormwater participated in both Roads and Rivers cleanup days,
2. Presented education program at Earth Day in Gatlinburg,
3. Assisted in funding water quality education for all 6th, 4th and 2nd grade students,
4. Distributed education pamphlets targeting the restaurant industry and others,
5. Conducted inspections and made educational presentations to municipal employees about spill prevention and street department employees in reference to storm sewer cleanup and its part in improving water quality,
6. Held a Public Hearing for review of the annual report,
7. Participated in 2 separate trash dump cleanups using Keep Sevier Beautiful volunteers and MS4 personnel,
8. Distributed quarterly education materials to municipal employees,
9. An education presentation was conducted at the Development Symposium in Knoxville, Tn.
10. Stormwater participated for the 4th year in Farm Days – over 1000 students were presented a stormwater runoff education demonstration.

5. ILLICIT DISCHARGE DETECTION AND ELIMINATION (SECTION 4.2.3)

- A. Have you completed a map of all outfalls and receiving waters of your storm sewer system?
- SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No
- B. Have you completed a map of all storm drain pipes of storm sewer system?
- SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No
- C. How many outfalls have you identified in your system? SC: 968 PF: 364 GT:740 SV:636
- D. Have any of these outfalls been screened for dry weather discharges?
- SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No
- F. What is your frequency for screening outfalls for illicit discharges? **10% annually**
- G. Do you have an ordinance that effectively prohibits illicit discharges?
- SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No

Municipal Separate Storm Sewer System (MS4) Annual Report

- H. During this reporting period, how many illicit discharges/illegal connections have you discovered (or been reported to you)? **SC: 20 PF: 6 GT: 3 SV: 3**
- I. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated? **SC: 16 PF: 5 GT: 3 SV: 3**

6. CONSTRUCTION SITE STORMWATER RUNOFF (SECTION 4.2.4)

A. Do you have an ordinance or adopted policies stipulating:

Erosion and sediment control requirements?

SC Yes No

PF Yes No

GT Yes No

SV Yes No

Other construction waste control requirements?

SC Yes No

PF Yes No

GT Yes No

SV Yes No

Requirement to submit construction plans for review?

SC Yes No

PF Yes No

GT Yes No

SV Yes No

MS4 enforcement authority?

SC Yes No

PF Yes No

GT Yes No

SV Yes No

B. How many active construction sites disturbing at least one acre were there in your jurisdiction this reporting period? **SC:94 PF: 18 GT: 7 SV:10**

C. How many of these active sites did you inspect this reporting period? **SC:85 PF: 11 GT: 7 SV: 10**

D. On average, how many times each, or with what frequency, were these sites inspected (e.g., weekly, monthly, etc.)? **SC: Monthly for priority sites and bimonthly for others**
PF: monthly for priority sites GT: Weekly SV: Monthly

E. Do you prioritize certain construction sites for more frequent inspections?

SC Yes No

PF Yes No

GT Yes No

SV Yes No

If Yes, based on what criteria? **based on location adjacent to or immediately upstream of Impaired or High quality waters**

Municipal Separate Storm Sewer System (MS4) Annual Report

7. PERMANENT STORMWATER CONTROLS (SECTION 4.2.5)

A. Do you have an ordinance or other mechanism to require:

Site plan reviews of all new and re-development projects?

SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No

Maintenance of stormwater management controls?

SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No

Retrofitting of existing BMPs with green infrastructure BMPs?

SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No

B. What is the threshold for new/redevelopment stormwater plan review? (e.g., all projects, projects disturbing greater than one acre, etc.) **All Projects**

C. Have you implemented and enforced performance standards for permanent stormwater controls?

SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No

D. Do these performance standards go beyond the requirements found in Section 4.2.5.2 and require that pre-development hydrology be met for:

Flow volumes

SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No

Peak discharge rates

SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No

Discharge frequency

SC Yes No
 PF Yes No
 GT Yes No
 SV Yes No

Flow duration

SC Yes No
 PF Yes No
 GT Yes No
 SC Yes No

Municipal Separate Storm Sewer System (MS4) Annual Report

- E. Please provide the URL/reference where all permanent stormwater management standards can be found.
http://www.seviercountyttn.org/files/Revised_Stormwater_Ordinance_102014.pdf
www.cityofpigeonforge.com
<http://www.ci.gatlinburg.tn.us/generalpdf/2011municipalcodes.pdf>
www.sevierville.tn.org/index.php/planning-development/stormwater/209-stormwater-ordinance-1/file.htm
- F. How many development and redevelopment project plans were reviewed for this reporting period?
SC: 18 PF: 13 GT: 7 SV: 25
- G. How many development and redevelopment project plans were approved?
SC: 15 PF: 13 GT: 7 SV: 25
- H. How many permanent stormwater management practices/facilities were inspected?
SC: 28 PF: 29 GT: 7 SV: 27
- I. How many were found to have inadequate maintenance?
SC: 17 PF: 4 GT: 0 SV: 2
- J. Of those, how many were notified and remedied within 30 days? (If window is different than 30 days, please specify) SC: 8 PF: 4 GT: 0 SV: 2
- K. How many enforcement actions were taken that address inadequate maintenance?
SC: 0 PF: 0 GT: 1 SV: 0
- L. Do you use an electronic tool (e.g., GIS, database, spreadsheet) to track post-construction BMPs, inspections and maintenance? SC Yes No
PF Yes No
GT Yes No
SV Yes No
- M. Do all municipal departments and/or staff (as relevant) have access to this tracking system? SC Yes No
PF Yes No
GT Yes No
SV Yes No
- N. Has the MS4 developed a program to allow for incentive standards for redeveloped sites? SC Yes No
PF Yes No
GT Yes No
SV Yes No
- O. How many maintenance agreements has the MS4 approved during the reporting period?
SC: 1 PF: 7 GT: 0 SV: 10

8. CODES AND ORDINANCES REVIEW AND UPDATE (SECTION 4.2.5.3)

Municipal Separate Storm Sewer System (MS4) Annual Report

E. On average, how frequently are catch basins and other inline treatment systems inspected?

SC: Monthly PF: Monthly GT: Weekly SV: Weekly

F. On average, how frequently are catch basins and other inline treatment systems cleaned out/maintained?

SC: As Needed PF: As Needed GT: As Needed SV: As Needed

G. Do municipal employees in all relevant positions and departments receive comprehensive training on stormwater management? SC Yes No
PF Yes No

GT Yes No

SV Yes No

H. If yes, do you also provide regular updates and refreshers? SC Yes No

PF Yes No

GT Yes No

SV Yes No

If so, how frequently and/or under what circumstances? **quarterly**

10. STORMWATER MANAGEMENT PROGRAM UPDATE (SECTION 4.4)

A. Describe any changes to the MS4 program during the reporting period including but not limited to:

Changes adding (but not subtracting or replacing) components, controls or other requirements (Section 4.4.2.a).

No

Changes to replace an ineffective or unfeasible BMP (Section 4.4.2.b). **Sevier County adopted an Urbanized area where Run Off Reduction would be implemented based on the “proposed” zoning. R-2 (high density residential), C-1, C-2, I-1, etc. The intent is to implement runoff reduction based on the higher potential for increased runoff and higher potential for polluted runoff.**

Information (e.g. additional acreage, outfalls, BMPs) on program area expansion based on annexation or newly urbanized areas. **None**

Changes to the program as required by the division (Section 4.4.3). **None**

11. EVALUATING/MEASURING PROGRESS

A. What indicators do you use to evaluate the overall effectiveness of your Stormwater Management Program, how long have you been tracking them, and at what frequency? Note that these are not measurable goals for individual BMPs or tasks, but large-scale or long-term metrics for the overall program, such as in-stream macro invertebrate community indices, measures of effective impervious cover in the watershed, indicators of in-stream hydrologic stability, etc.

Indicator	Began Tracking (year)	Frequency	Number of Locations
<i>Example: E. coli</i>	2003	<i>Weekly April–September</i>	20
No new impaired streams for sediment since 2005	2005		
Proposed delisting of Gnatty Branch from the 303d	2012-16		

Municipal Separate Storm Sewer System (MS4) Annual Report

B. Provide a summary of data (e.g., water quality information, performance data, modeling) collected in order to evaluate the performance of permanent stormwater controls installed throughout the system. This evaluation may include a comparison of current and past permanent stormwater control practices. **None**

12. ENFORCEMENT (SECTION 4.5)

A. Identify which of the following types of enforcement actions you used during the reporting period, indicate the number of actions, the minimum measure (e.g., construction, illicit discharge, permanent stormwater control) or note those for which you do not have authority:

Action	Construction	Permanent Stormwater Controls	Illicit Discharge	Authority?	
Notice of violation	SC# <u>1</u>	# <u>0</u>	# <u>0</u>	SC <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	PF# <u>1</u>	# <u>0</u>	# <u>0</u>	PF <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	GT# <u>0</u>	# <u>0</u>	# <u>0</u>	GT <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	SV# <u>2</u>	# <u>0</u>	# <u>3</u>	SV <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Administrative fines	SC# <u>0</u>	# <u>0</u>	# <u>0</u>	SC <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	PF# <u>0</u>	# <u>0</u>	# <u>0</u>	PF <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	GT# <u>0</u>	# <u>0</u>	# <u>0</u>	GT <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	SV# <u>0</u>	# <u>0</u>	# <u>0</u>	SV <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Stop Work Orders	SC# <u>0</u>	# <u>0</u>	# <u>0</u>	SC <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	PF# <u>0</u>	# <u>0</u>	# <u>0</u>	PF <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	GT# <u>1</u>	# <u>0</u>	# <u>0</u>	GT <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	SV# <u>2</u>	# <u>0</u>	# <u>0</u>	SV <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Civil penalties	SC# <u>3</u>	# <u>0</u>	# <u>0</u>	SC <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	PF# <u>1</u>	# <u>0</u>	# <u>0</u>	PF <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	GT# <u>0</u>	# <u>0</u>	# <u>0</u>	GT <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	SV# <u>0</u>	# <u>0</u>	# <u>0</u>	SV <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Criminal actions	SC# <u>0</u>	# <u>0</u>	# <u>0</u>	SC <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	PF# <u>0</u>	# <u>0</u>	# <u>0</u>	PF <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	GT# <u>0</u>	# <u>0</u>	# <u>0</u>	GT <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	SV# <u>0</u>	# <u>0</u>	# <u>0</u>	SV <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Municipal Separate Storm Sewer System (MS4) Annual Report

14. CERTIFICATION - 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 by me, or under my direction or supervision. The submitted information 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.”

Larry Waters, Mayor		
Printed Name and Title	Signature	Date
David Wear, Mayor		
Printed Name and Title	Signature	Date
Mike Werner, Mayor		
Printed Name and Title	Signature	Date
Brian Atchley, Mayor		
Printed Name and Title	Signature	Date

Annual reports must be submitted in accordance with the requirements of Section 5.4. (Reporting) of the permit. Annual reports must be submitted to the appropriate Environmental Field Office (EFO) by September 30 of each calendar year, as shown in the table below:

EFO	Street Address	City	Zip Code	Telephone
Chattanooga	540 McCallie Avenue STE 550	Chattanooga	37402	(423) 634-5745
Columbia	1421 Hampshire Pike	Columbia	38401	(931) 380-3371
Cookeville	1221 South Willow Ave.	Cookeville	38506	(931) 432-4015
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