



Tennessee Department of Environment and Conservation
 Division of Water Pollution Control
 Enforcement and Compliance Section
 L&C Annex, 6th Floor, 401 Church Street
 Nashville, TN 37243
 (615) 532-0625

Small Municipal Separate Storm Sewer System (MS4) Annual Report

1. MS4 INFORMATION

City of Goodlettsville TNS075345

Name of MS4

Warren Garrett Stormwater Coordinator

Name of Contact Person

(615) 859-2740

Telephone (including area code)

215 Cartwright Street

Mailing Address

Goodlettsville TN 37072

City State ZIP code

What is the current population of your MS4? 15,921 (as of 2010 census)

What is the reporting period for this annual report? From July 1, 2015 to June 30, 2016

2. PROTECTION OF STATE OR FEDERALLY LISTED SPECIES

A. Are any of the MS4 discharges or discharge-related activities likely to jeopardize any state or federally listed species (**Part 3, Special Conditions, General Permit for Phase II MS4s**) Yes No

B. Please attach the determination of the effect of the MS4 discharges on state or federally listed species per sub-part **3.2.1 Criteria B and response from TWRA**

3. WATER QUALITY PRIORITIES

A. Does your MS4 discharge to waters listed as impaired on the state 303(d) list? Yes No

B. If yes, identify each impaired water, the impairment cause(s), whether a TMDL has been approved by EPA for each, and whether the TMDL identifies your MS4 as a source of the impairment.

Waterbody I.D. #	Cause/TMDL Priority	Approved TMDL		MS4 Assigned to WLA	
		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
TN05130202027-2000 Dry Creek	Habitat alterations / H	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
TN05130202220-0100 Lumsley Fork	E. coli / n/a	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
TN05130202220-0400 Madison Creek	Siltation / H	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
TN05130202220-1000 Mansker Creek	Siltation/H	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
TN05130202220-2000 Mansker Creek	Siltation / H	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

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TN05130202220-1000 Mansker Creek	E. coli / n/a	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
TN05130202220-2000 Mansker Creek	E. coli / n/a	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
TN05130202220-0300 Slater's Creek	E. coli / n/a	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
TN05130202220-0300 Slater's Creek	Siltation / H	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

C. What specific sources of these pollutants of concern are you targeting?

Construction sites, sewer leakage and overflow, homeowner activities

D. Do you have discharges to any Exceptional TN Waters (ETWs) or Outstanding National Resource Waters (ONRWS)? Yes No

E. Are you implementing additional specific provisions to ensure the continued integrity of ETWs or ONRWS located within your jurisdiction? Yes No

4. PUBLIC EDUCATION AND PUBLIC PARTICIPATION

A. Is your public education program targeting specific pollutants and sources of those pollutants? Yes No

B. If yes, what are the specific causes, sources and/or pollutants addressed by your public education program?
Construction, redevelopment, illicit discharge, homeowner's habits.

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

We continue to have an increase in participation at our workshops and outreach events where we have taught those how to incorporate environmental, stormwater, and water quality education into the classroom and home.

We continue to have successful participation with stream clean-ups within each creek within the City that involve the community and have successfully removed thousands of pounds of trash, debris, and pollutants from our local streams. We conduct clean-up events throughout the City in conjunction with beautification groups, Stream Watch, and volunteers.

The Stream Watch program (a citizen volunteer committee) continues to grow and expand its reach within the community by increasing awareness of water quality issues, hosting clean-ups, tree planting events in riparian buffers, working with Western Kentucky University and Volunteer State Community College students to monitor creeks. Volunteer State Community College completed an outfall inventory on all City streams. Western Kentucky University completed macroinvertebrate sampling.

We host several events and public meetings throughout the year which give the public opportunity to learn more about stormwater and water quality issues and how to help improve it.

Coordination and facilitation of meetings on a routine basis open to the public to discuss stormwater goals, objectives, activities, etc. The city has launched a new Facebook page for Mid-Tennessee Stormwater Group to help educational outreach and participation through advertisements.

Students exhibit at national events with poster sessions outlining work and co-op opportunities completed within the City.

City's website has a dedicated stormwater education section targeting all ages. There is also an online survey citizens may complete. The survey provides feedback to City staff to judge the effectiveness of the existing stormwater program. City has launched "My Goodlettsville" which gives citizens opportunities to Adopt streets, greenspaces, and streams; The city has joined with Vol-State community college for Stream Watch volunteers via the states new community service credits required for free tuition.

City has available for loan "Teacher Tubs" containing numerous environmental education/water quality based materials. In-service and teacher outreach workshops conducted. City is part of Tennessee Healthy Watershed Initiative.

Stream Watch received stream clean-up grants from TWRA.

We have received an increase in phone calls from residents and developers asking what they can and cannot do in and around streams.

We have noticed less metal in the streams. We recycle metal pulled from streams and this year we have had a significant decrease.

D. Do you have an advisory committee or other body comprised of the public and other stakeholders that provides regular input on your stormwater program? Yes No

E. Provide a summary of all public meetings required by the permit.

See attached list for stormwater-related events and meetings. We advertise via booths at various outreach events within the community, Strawberry Festival, Earth Day, etc.), on local cable access channels, through PSAs on radio, the City's website, etc.

5. CODES AND ORDINANCES REVIEW AND UPDATE

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- A. Is a completed copy of the EPA Water Quality Scorecard submitted with this report? Yes No
The EPA WQS was submitted with the 2012 report.
- B. Include status of implementation of code, ordinance and/or policy revisions associated with permanent stormwater management.
The City reviewed codes, ordinances and/or policies based on review of the EPA's Water Quality Scorecard. Based on various reviews, changes to codes, ordinances and/or policies are being conducted with the goal of review and passage during current permit cycle. The City adopted an updated stormwater ordinance in 2015.

6. CONSTRUCTION

- A. Do you have an ordinance or adopted policies stipulating:
- | | | |
|--|---|-----------------------------|
| Erosion and sediment control requirements? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Other construction waste control requirements? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Requirement to submit construction plans for review? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| MS4 enforcement authority? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
- B. How many active construction sites disturbing at least one acre were there in your jurisdiction this reporting period? *11*
- C. How many of these active sites did you inspect this reporting period? *11*
- D. On average, how many times each, or with what frequency, were these sites inspected (e.g., weekly, monthly, etc.)?
All sites are inspected weekly
- E. Do you prioritize certain construction sites for more frequent inspections? Yes No
If Yes, based on what criteria?
If the construction site is within 1,000 feet of a stream, it is considered a high-priority construction site and these sites are inspected more frequently than the minimum weekly requirement.

7. ILLICIT DISCHARGE ELIMINATION

- A. Have you completed a map of all outfalls and receiving waters of your storm sewer system? Yes No
- B. Have you completed a map of all storm drain pipes of storm sewer system? Yes No
- C. How many outfalls have you identified in your system? *131*
- D. How many of these outfalls have been screened for dry weather discharges? *131*
- E. How many of these have been screened more than once?
All have been screened at least twice.
- F. What is your frequency for screening outfalls for illicit discharges?
At least once within each permit cycle or as requested
- G. Do you have an ordinance that effectively prohibits illicit discharges? Yes No
- H. During this reporting period, how many illicit discharges/illegal connections have you discovered (or been reported to you)? *3*
- I. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated? *3*

8. STORMWATER MANAGEMENT FOR MUNICIPAL OPERATIONS

- A. Have stormwater pollution prevention plans (or an equivalent plan) been developed for:
- | | | |
|---|---|-----------------------------|
| All parks, ball fields and other recreational facilities | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal turf grass/landscape management activities | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal vehicle fueling, operation and maintenance activities | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal maintenance yards | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal waste handling and disposal areas | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
- B. Are stormwater inspections conducted at these facilities? Yes No

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1. If Yes, at what frequency are inspections conducted? **Monthly**

- C. Have standard operating procedures or BMPs been developed for all MS4 field activities? (e.g., road repairs, catch basin cleaning, landscape management, etc.) Yes No
- D. Do you have a prioritization system for storm sewer system and permanent BMP inspections? Yes No
- E. On average, how frequently are catch basins and other inline treatment systems inspected? **monthly**
- F. On average, how frequently are catch basins and other inline treatment systems cleaned out/maintained? **Monthly or more frequently as needed and staff availability permits**
- G. Do municipal employees in all relevant positions and departments receive comprehensive training on stormwater management? Yes No
- H. If yes, do you also provide regular updates and refreshers? Yes No

If so, how frequently and/or under what circumstances? **Annually and as needed.**

9 PERMANENT STORMWATER CONTROLS

- A. Do you have an ordinance or other mechanism to require:
- Site plan reviews of all new and re-development projects? Yes No
- Maintenance of stormwater management controls? Yes No
- Long-Term Inspection & Maintenance Agreement**
- Retrofitting of existing BMPs with green infrastructure BMPs? Yes No
- It is allowed as an option with the City's Planning and Zoning ordinance and Subdivision Regulations, but not a requirement 100% of the time.**
- B. What is the threshold for new/redevelopment stormwater plan review? (e.g., all projects, projects disturbing greater than one acre, etc.)
- Projects disturbing more than one acre or requiring a land disturbance permit based on criteria set forth within the City's stormwater ordinance.**
- C. Have you implemented and enforced performance standards for permanent stormwater controls? Yes No
- D. Do these performance standards go beyond the requirements found in paragraph 4.2.5.2 and require that pre-development hydrology be met for:
- Flow volumes Yes No
- Peak discharge rates Yes No
- Discharge frequency Yes No
- Flow duration Yes No
- E. Please provide the URL/reference where all permanent stormwater management standards can be found.
- <http://www.goodlettsville.gov/index.aspx?NID=195>**
- F. How many development and redevelopment project plans were reviewed for this reporting period? **26**
- G. How many development and redevelopment project plans were approved? **25**
- H. How many permanent stormwater management practices/facilities were inspected?
- 1 (City's unit)**
- I. How many were found to have inadequate maintenance?
- 0**

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- J. Of those, how many were notified and remedied within 30 days? (If window is different than 30 days, please specify) **0**
- K. How many enforcement actions were taken that address inadequate maintenance? **0**
- L. Do you use an electronic tool (e.g., GIS, database, spreadsheet) to track post-construction BMPs, inspections and maintenance? Yes No
- M. Do all municipal departments and/or staff (as relevant) have access to this tracking system? Yes No
- N. Has the MS4 developed a program to allow for incentive standards for redeveloped sites? [Stormwater Credit Application](#) Yes No
- O. How many maintenance agreements has the MS4 approved during the reporting period? **(5)** [Cobblestone Addition, Towne Place Suites, Hampton Inn, Holiday Inn, Candlewood Suites](#)

10. ENFORCEMENT

- 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	#14	#0	#2	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Administrative fines	#0	#0	#0	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Stop Work Orders	#2	#0	#0	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Civil penalties	#0	#0	#0	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Criminal actions	#0	#0	#0	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Administrative orders	#0	#0	#0	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Other (correspondence)	#0	#5	#0	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

B. Do you use an electronic tool (e.g., GIS, data base, [spreadsheet](#)) to track the locations, inspection results, and enforcement actions in your jurisdiction? Yes No

- C. What are the 3 most common types of violations documented during this reporting period?
[BMP maintenance, offsite tracking, and inconsistent developer self-inspections](#)

11. PROGRAM RESOURCES

- A. What was your annual expenditure to implement the requirements of your MS4 NPDES permit and SWMP this past reporting period?
[\\$662,264 \(capital projects, annual State fee, personnel, supplies, testing, ordinance updates, equipment, project implementation, maintenance and improvements to infrastructure\)](#)
- B. What is next year's budget for implementing the requirements of your MS4 NPDES permit and SWMP?
[\\$1.2 Million](#)
- C. Do you have an independent financing mechanism for your stormwater program? Yes No
- D. If so, what is it/are they (e.g., stormwater fees), and what is the annual revenue derived from this mechanism?
 Source: [stormwater utility](#) Amount \$ [662,264](#)
 Source: [n/a](#) Amount \$[n/a](#)
- E. How many full time employees does your municipality devote to the stormwater program (specifically for implementing the stormwater program vs. municipal employees with other primary responsibilities that dovetail with stormwater issues)?
[As of 11/2015 \(1\) full-time employee assigned to stormwater program management. We have two employees that devote a portion of their time to this program on a regular basis, utilizing external and departmental crews to perform maintenance and implement the assistance of volunteers, interns, colleges, and universities.](#)

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F. Do you share program implementation responsibilities with any other entities? Yes No

Entity	Activity/Task/Responsibility	Your Oversight/Accountability Mechanism
n/a	n/a	n/a

12. 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 macroinvertebrate 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
Siltation	WKU has been completing stream assessments for all impaired streams in city limits for siltation etc. Began tracking: 2013	One time within current permit cycle.	10 (all previously areas sampled by TDEC plus new locations)
e. Coli	Began tracking: 2011	WKU currently conducting Bio assessment of Lumsley Fork, Mansker Creek, Slaters Creek	9

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.

TDEC protocols were followed during collection of macroinvertebrates and e. Coli. Data collection (visual assessments, physical and chemical monitoring) continues in order to establish modeling results. It is the City's goal to have a modeling report within the next annual report submission. The City also has a post-construction inspection and maintenance agreement in place with each new development/redevelopment as part of the land disturbance process.

The City continues to work alongside Western Kentucky University faculty and students to develop a multi-year, continuous sampling program. This program collects flow data, e. Coli monitoring, macroinvertebrate sampling, chemical and physical perimeters, outfall inventory, visual stream assessments and more. Program kicked off in 2015.

e. Coli data submitted in this 2015 report. Macroinvertebrate sampling data submitted with the 2016-17 report.

13. STORMWATER MANAGEMENT PROGRAM UPDATE

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 per paragraph 4.4.2.a of the permit. n/a

Changes to replace an ineffective or unfeasible BMP per paragraph 4.4.2.b of the permit. n/a

Information (e.g. additional acreage, outfalls, BMPs) on program area expansion based on annexation or newly urbanized areas. n/a

Changes to the program as required by the division. n/a

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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 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.”

Tim Ellis, City Manager

Printed Name and Title

Signature

June 30, 2016

Date

Annual reports must be submitted in accordance with the requirements of subpart 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