



CITY OF ELIZABETHTON

**136 S. SYCAMORE ST.
ELIZABETHTON, TN 37643-3328**

Phone: 423-547-6240

Fax: 423-547-6350

Storm Water Coordinator

423-528-6997 Fax: 423-547-6240

September 26, 2017

Mr. Brown B. Patton, Jr.
Johnson City Environmental Field Office
2305 Silverdale Drive
Johnson City, TN 37601

**RE: MS4 NPDES Report
Tracking No. TNSO75281**

Dear Mr. Patton:

Herewith the above report for the 2016-2017 report year. Please direct all enquiries to me.

My contact information is as follows:

Email: jbarnett@cityofelizabethton.org

Phone: (423)547 6240

Cell: (423)528 6997

Fax: (423)547 6350

Sincerely,

A handwritten signature in cursive script that reads "Joseph Barnett".

Joseph Barnett
Stormwater Coordinator

Copy to

Jerome Kitchens City Manager

Johann Coetzee General Manager Water Resources/ Engineering Department



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 ELIZABETHTON		MS4 Permit Number: TNSO75281	
Contact Person: Joseph Barnett, Stormwater Coordinator		Email Address: jbarnett@cityofelizabethton.org	
Telephone: (423) 547-6240		MS4 Program Web Address: http://www.elizabethton.org/departments/utilities/stormwater_quality_program.php	
Mailing Address: 136 South Sycamore Street			
City: Elizabethton	State: TN	ZIP code: 37643	

What is the current population of your MS4? 14,176

What is the reporting period for this annual report? July1 2016 to June 30 2017

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/wrws-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: See Attachment ☒ 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: Sediment, bacteria, hydrocarbons and litter. ☒ Yes ☐ No
- C. Do you have a webpage dedicated to your stormwater program? If yes, provide a link/URL: http://www.elizabethton.org/departments/utilities/stormwater_quality_program.php ☒ Yes ☐ No
- D. Summarize how you advertise and publicize your public education, outreach, involvement and participation opportunities: Website participation in Boone Watershed Partnership, Inc.

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- E. Summarize the public education, outreach, involvement and participation activities you completed during this reporting period: Maintained an active membership in Boone Watershed Partnership, Inc (BWP). The City contributes staff time in the form of participation on the Board of BWP (six Board meetings per year). The City provides input and planning for general meetings, and offers facility space and services (Awards Program, Cleanups, etc.) The City also participates in the collaboration between the Tennessee Association of Broadcasters (TAB) and the Tennessee Stormwater Association for the production and distribution of radio announcements which address stormwater pollution.
- 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: The BWP holds bi-monthly general meetings, which often feature speakers and programs. The BWP held or participated in 7 events in the reporting period, resulting in hundreds of impressions made about water resources in the community. These events include: Brush Creek Cleanup (10/16/16, 3/18/17, and 4/22/17); booth at the Tennessee Environmental Conference (3/14/17-3/15/17); presentation of Envirothon at an area Highschool (April 2017); sponsorship of Wild & Scenic Film Festival at ETSU (4/3/17); BWP's Ice Cream Social and Aquatic Stewardship Awards (8/26/16). BWP and local MS4s also executed drain marking activities in downtown areas and on college campuses. In addition, BWP is involved with several on-going and proposed "in-the-ground" projects, each of which have a public education element incorporated by nature of their funding sources. Projects include TAB aired 51 radio announcements specifically in the Tri-Cities area, which has bandwidth in Elizabethton. Participating radio stations include: WGOC, WJCW, WKOS, WQUT, WXSM. It should be noted that many residents travel to other areas of the state and may be exposed to the announcements as they travel. The TAB program aired 16, 147 times across the state during the reporting period.

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? 102
- 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: The City uses a City-specific document entitled IDDE Standard Operating Procedures (IDDE SOP) to guide MS4 outfall screening and documentation. The City's Stormwater Coordinator is responsible for performing and documenting IDDE outfall screening, respond to reports of suspected illicit discharges, and document handling of illicit discharges. ☒ 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? 4

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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? 1
- F. How many active priority and non-priority construction sites were inspected this reporting period? 9
- G. How many construction related complaints were received this reporting period? 0

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 18, Chapter 604 requires use of the Water Quality BMP 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.)? Projects that will disturb 1 acre or more undergo a plan review process as provided in ordinance. Perimeter control and entry/exit for construction is addressed on a less formal basis for smaller sites (10,000 square feet to 0.9 acre).
- D. How many development and redevelopment project plans were reviewed for this reporting period? 14
- E. How many development and redevelopment project plans were approved? 10
- 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

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- 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

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 occurred during the reporting period.

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. 0

- 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. An overall assessment of the stormwater management program was performed as part of the preparation of the Notice of Intent (NOI) for the 2016 Small MS4 Permit in January 2017. During such time, the City determined it is adequately meeting permit conditions, as well as executing measures which effectively incorporate management of stormwater from various activities which occur within the MS4 jurisdiction. ☒ Yes ☐ No

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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>0</u>	# <u>0</u>	# <u>4</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Written notices	# <u>0</u>	# <u>0</u>	# <u>0</u>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Citations with administrative penalties	# <u>0</u>	# <u>0</u>	# <u>0</u>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Stop work orders	# <u>0</u>	# <u>0</u>	# <u>0</u>	<input 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 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?
Suspected Illicit Discharges

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. Bacteriological monitoring was performed in Gap Creek during the reporting period. Field data and samples were collected in 2 locations. Samples were analyzed in a lab. The monitoring records were delivered digitally to the Johnson City environmental field office.
- B. Summarize any non-analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. Visual stream assessment was performed in Gap Creek and Davis Branch. The monitoring records were delivered digitally to the Johnson City environmental field office.
- C. If applicable, are monitoring records for activities performed during this reporting period submitted with this report. ☒ Yes ☐ No

11. Certification

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

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."

Jerome Kitchens

Printed Name and Title

Jerome Kitchens

Signature

9/26/17

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

City Of Elizabethton, TN



Attachments to the 2017 Annual Stormwater Report

City of Elizabethton

MS4 Permit Annual Report

TNS075281

July 1, 2016 to June 30, 2017

Additional Information for Section 2A:

List of Impaired Waters within the City's jurisdiction based on TDEC's Final 2014 303(d) list, (Approved May 2016)¹
http://www.tn.gov/assets/entities/environment/attachments/wr_wq_303d-2014-final.pdf.

Table 1. Impaired Waters Within the City of Elizabethton

Waterbody Name/ID	Miles Impaired	Cause	Pollutant Source	Comments
WATAUGA RIVER TN06010103008 - 2000	4.4	Temperature Alterations	Upstream Impoundment Note: MS4 Discharges not listed as a source.	Stream is Category 5. (One or more uses impaired.)
BUFFALO CREEK TN06010103011 - 1000	6.08	Nitrate+Nitrite Escherichia coli	Pasture Grazing Note: MS4 Discharges not listed as a source.	Stream is Category 5. (One or more uses impaired.)
DAVIS BRANCH TN06010103008 - 0400	5.9	Habitat loss due to stream flow alteration Alteration in stream-side or littoral vegetative cover Escherichia coli	Discharges from MS4 area Upstream Impoundment Pasture Grazing	Stream is Category 4a. EPA approved a habitat/siltation TMDL that addresses the known pollutants.
GAP CREEK TN06010103008 - 0800	15.93	Nitrate+Nitrite Loss of biological integrity due to siltation Alteration in stream-side or littoral vegetative cover Escherichia coli	Discharges from MS4 area Streambank Modification Septic Tanks Pasture Grazing	Category 5. EPA approved a habitat/siltation TMDL that addresses some of the known pollutants.

Additional Information for Section 2B:

¹ 2016 Proposed Final 303(d) List was published May 2017.

List of Established and Approved TOTAL MAXIMUM DAILY LOADS (TMDLs)

1. TMDL for Siltation and/or Habitat Alteration In The Watauga River Watershed (HUC 06010103) Carter, Johnson, Sullivan, Unicoi, and Washington Counties – March 17, 2006

Additional Information for Sections 2C and 2D:

2C. Do you have discharges to any Exceptional TN Waters (ETWs) or Outstanding National Resource Waters (ORNWs)?
Answer: Yes.

Support Information

Source of information is the list entitled "The Known Exceptional Tennessee Waters and Outstanding National Resource Waters", found at the following web-link: http://environment-online.tn.gov:8080/pls/enf_reports/f?p=9034:34304:10206242072862

Table 4. Exceptional TMDL Waters and Outstanding Resource Waters

HUC	Watershed Name	Waterbody	County	Description	Basis for Inclusion	From Lat	To Lat	From Long	To Long
06010103	Watauga	Watauga River including unnamed tributaries	Carter	Portion in Sycamore Shoals State Natural Area from River Mile 23.2 to 23.6 including unnamed tributaries within the park.	Sycamore Shoals SNA	36.3465	36.3405	-82.2557	-82.2573
06010103	Watauga	Watauga River Unnamed Tributary	Carter	From Watauga River at River Mile 23.5 through Sycamore Shoals State Natural Area to park boundary.	Sycamore Shoals SNA	36.3442	36.3423	-82.2557	-82.2525
06010103	Watauga	Doe River including	Carter	From Watauga River to	State threatened	36.3556	36.1461	-82.2126	-82.144

		tributaries		headwaters including tributaries.	Longhead Darter in segment between Watauga River and George Creek. Headwaters are in the Cherokee NF, flows through Roan Mountain SP. Exceptional biological diversity. WPC ecoregion reference stream for 66d. Naturally reproducing rainbow and brown trout stream. State endangered Canada Burnet and Tufted Club Rush. State threatened Linear-leaved Willow-Herb and Crested Shield-Fern.					

2D. Are you implementing additional specific provisions to ensure the continued integrity of ETWs or ONRWS located within your jurisdiction?

Answer: Yes.

Support Information

The City of Elizabethton implements best management practices as outlined in the City's Notice of Intent and this Annual Report for compliance with the small MS4 permit city-wide. Therefore, relevant stormwater management activities, which include but are not limited to construction site runoff management and the requirements and policies for permanent stormwater management, are implemented in areas that discharge to the ETWs or ONRWS. 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 TNR1000000 "Stormwater Discharges from Construction Activities", including section 5.4 entitled "Discharges into Impaired or Exceptional Tennessee Waters".