



**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 11, 2019

Mr. Stephen Huber  
Johnson City Environmental Field Office  
2305 Silverdale Drive  
Johnson City, TN 37601

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

Dear Mr. Huber:

Herewith the above report for the 2018-2019 report year. Please direct all enquiries to me.

My contact information is as follows:

**Email:** [jbarnett@cityofelizabethton.org](mailto:jbarnett@cityofelizabethton.org)  
**Phone:** (423)547 6240  
**Cell:** (423)528 6997  
**Fax:** (423)547 6350

Sincerely,

Joseph Barnett  
Stormwater Coordinator

Copy to  
Daniel Estes            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: TNSO7581
Contact Person: Joseph Barnett		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? 13,854

What is the reporting period for this annual report? July1 2018 to June 30 2019

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/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](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 and participation in Boone Watershed Partnership, Inc.

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

- E. Summarize the public education, outreach, involvement and participation activities you completed during this reporting period: The City contributes a staff member to serve on the Board of Directors for the Boone Watershed Partnership, Inc. (BWP), a 501 (c)(3) organization formed to address water quality issues in the region. The organization offers opportunities for the public to participate in water quality efforts. As a Board member, City staff attends Board meetings and general membership meetings (advertised and open to the public) throughout the year. General meetings often feature guest speakers who present information on water quality issues in the area. The City participates in, co-sponsors, or provides in-kind services for various cleanup activities that occur within its boundary. Finally, the City attends and interacts during the Tennessee Environmental Conference, which offers exposure and exchange of information amongst various interests involved in water quality and stormwater.
- 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 City participated in most of the 6 board meetings and 6 general meetings, cleanups, and special events held by BWP. The City partners with Tennessee Stormwater Association members to participate in a state-wide Facebook social media campaign. Please see the Attachment for a summary of web activity during the reporting period. The City attended and participated in the operation of a booth at the TN Environmental Conference in March 2018, where several hundred were in attendance.

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? 120
- 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, response 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? 3
- G. How many illicit discharge investigations were performed this reporting period? 3
- H. Of those investigations performed, how many resulted in valid illicit discharges that were addressed and/or eliminated? 0

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

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

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? 5

F. How many active priority and non-priority construction sites were inspected this reporting period? 5

G. How many construction related complaints were received this reporting period? 1

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 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 are 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? 5

E. How many development and redevelopment project plans were approved? 5

F. How many permanent stormwater related complaints were received this reporting period? 1

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?	<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 type="checkbox"/> Yes	<input checked="" 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. The Tennessee Association of Broadcasters (TAB) program has been replaced with the Facebook social media campaign.

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. After review of permit compliance program elements following audit by TDEC, the following statements indicate changes to be made to the City's Stormwater Management Plan and associated stormwater management program in the 2019-2020 permit year.

1. Permit Parts 4.2.1 and 4.2.2 - After review of the PIE plan and the activities contained therein, the City has determined the plan is out of date with current City BMPs, changes to TNSA-related public education BMPs, and in comparison with other Tennessee permittees. (For example, the following change must be reflected: The public education, participation and involvement activities have been changed to reflect changes to the Tennessee Stormwater Association approach to assist MS4s with this minimum control measure. Beginning July 1, 2018, the City has, along with other member MS4s in the state, participated in a social media campaign throughout the year to communicate messages about stormwater quality.) The PIE plan will be updated by November 2019. The revised plan will include revision of the PIE BMPs, schedule for implementation, and measurable goals. The revised PIE plan will be implemented in keeping with the schedule provided in the revised plan.
2. Permit Part 4.2.4 – The City's Pre-Construction procedure and related documentation are being updated to explicitly document meeting attendees and subjects discussed. The update will follow the explicit requirements of Part 4.2.4 of the NPDES small MS4 permit. The new procedure/documentation sheet will be implemented by November 2019.
3. Permit Part 5 – After review of current published TMDLs and the 2018 Tennessee 303(d) list, the City determined update of its current monitoring program is needed to ensure all required analytical and non-analytical monitoring is performed as required. Map reviews and field visits are currently underway to finalize City understanding of monitoring needs. The updated monitoring plan will be completed November 2019. Plan implementation will be in keeping with the monitoring schedule included in the updated plan.

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>1</u>	# <u>0</u>	# <u>0</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Written notices	# <u>0</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>0</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>N/A</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. \_\_\_\_\_
- B. Summarize any non-analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. \_\_\_\_\_
- 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."*

Daniel Estes, City Manager  
Printed Name and Title

  
Signature

9/27/19  
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 2019 Annual Stormwater Report

**City of Elizabethton**  
**MS4 Permit Annual Report**  
**TNSO75281**  
**July 1, 2018 to June 30, 2019**

**Additional Information for Section 2A:**

List of Impaired Waters within the City's jurisdiction based on TDEC's Final 2018 303(d) list, (Approved July 2018)  
[https://www.tn.gov/content/dam/tn/environment/water/planning-and-standards/wr\\_wq\\_303d\\_2018-final.xlsx](https://www.tn.gov/content/dam/tn/environment/water/planning-and-standards/wr_wq_303d_2018-final.xlsx)

**Table 1. Impaired Waters Within the City of Elizabethton**

<b>Waterbody Name/ID</b>	<b>Miles Impaired</b>	<b>Cause Name</b>	<b>Source Name</b>
WATAUGA RIVER TN06010103008 – 2000	4.4	Temperature Alterations	Upstream Impoundment
		Unknown Cause	Municipal (Urbanized High Density Area)
BUFFALO CREEK TN06010103011 – 1000	6.08	Escherichia coli	Pasture Grazing
DAVIS BRANCH TN06010103008 – 0400	5.9	Alteration in streamside or littoral vegetative cover	Municipal (Urbanized High Density Area)
		Low flow alterations	Upstream Impoundment
		Escherichia coli	Grazing in riparian or shoreline zones
GAP CREEK TN06010103008 – 0800	15.93	Alteration in stream-side or littoral vegetative cover	Streambank Modification
		Alteration in stream-side or littoral vegetative cover	Municipal (Urbanized High Density Area)

		Sediment Siltation	Municipal (Urbanized High Density Area)
		Nitrate+Nitrite	Municipal (Urbanized High Density Area)
		Escherichia coli	On-site treatment systems (Septic systems)
		Escherichia coli	Municipal (Urbanized High Density Area)
		Escherichia coli	Grazing in riparian or shoreline zones
POWDER BRANCH TN06010103011 – 0100	6.2	Alteration in stream-side or littoral vegetative cover	Grazing in riparian or shoreline zones
		Sediment Siltation	Grazing in riparian or shoreline zones
		Nitrate+Nitrite	Grazing in riparian or shoreline zones
		Escherichia coli	Grazing in riparian or shoreline zones
TOLL BRANCH TN06010103011 – 0200		Escherichia coli	Grazing in riparian or shoreline zones

**Additional Information for Section 2B:**

2B. List of established and approved TOTAL MAXIMUM DAILY LOADS (TMDLs) with Wasteload Allocations (WLA):

1. TMDL For Chlordane And Polychlorinated Biphenyls (PCBs) In Boone Reservoir South Fork Holston River Watershed (HUC 06010102) And Watauga River Watershed (HUC 06010103) – June 26, 2007
2. TMDL For Siltation and/or Habitat Alteration In The Watauga River Watershed (HUC 06010103) Carter, Johnson, Sullivan, Unicoi, and Washington Counties – March 17, 2006
3. TMDL for E. Coli in the Watauga River Watershed (HUC 06010103) Carter, Johnson, Sullivan, Unicoi and Washington Counties, Approved July 16, 2015

**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://tdec.tn.gov:8080/pls/enf\\_reports/f?p=9034:34304:0:](http://tdec.tn.gov:8080/pls/enf_reports/f?p=9034:34304:0:)

**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	Sycamore Shoals SNA	36.3442	36.3423	-82.2557	-82.2525

				Natural Area to park boundary.					
06010103	Watauga	Doe River including tributaries	Carter	From Watauga River to headwaters including tributaries.	State threatened 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-Leafed Willow-Herb and Crested Shield-Fern.	36.3556	36.1461	-82.2126	-82.144

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 TNR100000 “Stormwater Discharges from Construction Activities”, including section 5.4 entitled “Discharges into Impaired or Exceptional Tennessee Waters”.*

**Additional Information for Section 3F:**

Our ads reached about 4.2 million people and received 9,351 clicks.

Highlights include:

- Middle total reach: 1.4 million
- West & North West total reach: 814, 8977
- East and North East total reach: 808,223
- South East total reach: 342,141