

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

2.

Name of MS4: CITY OF ELIZABETHTON		MS4 Permit Number: TNSO7581			
Contact Person: Joseph Barnett	Contact Person: Joseph Barnett		cityofelizabe	ethton.org	
Telephone: (423) 547-6240		MS4 Program Web Address: http://www.elizababethton.org/departments/utilities/stor mwater_quality_program.php			
Mailing Address: 136 SouthSycamo	re Street				
City: Elizabethton	State: TN	ZIP co	ode: 37643		
What is the current population of your	MS4? <u>14,015 (</u>	source: census.gov 2021 e	estimate)		
What is the reporting period for this ar	nual report?	July1 <u>2021</u> to June 30 <u>2022</u>	2		
Discharges to Waterbodies with Unav	ailable Parameters o	or Exceptional Tennessee V	Waters (Sect	ion 3.1)	
A. Does your MS4 discharge into wa to as impaired) for pathogens, nul stormwater runoff from urbanized and/or according to the on-line sta attach a list.	iters with unavailabl trients, siltation or of areas as listed on T	e parameters (previously re her parameters related to N's most current 303(d) lis	eferred	⊠ Yes	🗌 No
 B. Are there established and approve ws-tennessees-total-maximum-da MS4 discharges in your jurisdiction 	aily-load-tmdl-progra	m) with waste load allocati		🛛 Yes	🗌 No
C. Does your MS4 discharge to any <u>http://environment-online.tn.gov:8080</u> attach a list.			P If yes,	⊠ Yes	🗌 No
D. Are you implementing specific Be discharges to waterbodies with ur specific practices: <u>The City of Eliz</u> <u>Notice of Intent and this Annual R</u> wide. Therefore, relevant stormwa limited to, construction site runoff permanent stormwater managem <u>ETWs or ONRWs. For example, t</u> requires and oversees that applic <u>Tennessee General Permit Numb</u> <u>Construction Activities," including</u> <u>Exceptional Tennessee Waters."</u>	navailable paramete abethton implement aport for compliance ater management ac management and th ent, are implemente he City's Construction able land developmente or TNR100000 "Sto	rs or ETWs? If yes, descrit ts BMPs as outlined in the e with the small MS4 permi- ctivities, which include but a ne requirements and policie d in areas that discharge to on Site Management Progreents comply with the State rmwater Discharges from	be the <u>City's</u> <u>t city-</u> <u>are not</u> <u>es for</u> <u>o the</u> <u>am</u> <u>of</u>	⊠ Yes	□ No
Public Education/Outreach and Involv	ement/Participation	(Sections 4.2.1 and 4.2.2)			
A. Have you developed a Public Info	rmation and Educat	ion plan (PIE)?		🛛 Yes	🗌 No

3.

В.	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	🛛 Yes	🗌 No
	education program: Sediment, bacteria, hydrocarbons, and litter.		
C.	Do you have a webpage dedicated to your stormwater program? If yes, provide a	🛛 Yes	🗌 No

D. Summarize how you advertise and publicize your public education, outreach, involvement and participation opportunities: <u>City of Elizabethton website and participation in Boone Watershed Partnership.</u>

link/URL: htt://www.elizabethton.org/department/utilities/stormwater guality

- E. Summarize the public education, outreach, involvement and participation activities you completed during this reporting period: <u>The City of Elizabethton participated in most of the Boone Watershed Partnership (BWP)</u> board meetings, and continues to participate in BWP educational outreach efforts through in-kind labor and providing grant funds. The City is a member of the Tennessee Stormwater Association (TNSA) and attends member meetings, as well as participating in the TNSA Social Media Campaigns. TNSA releases educational posts 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. Additionally, the City has activity books and educational pamphlets for both children and adults at the City library (pictured in the attachment).
- 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: <u>New signage was installed at Gap Branch as part of a project on the corner of Mary Patton Highway and G. Street using grant funds through the BWP. The signage provides information on restoration efforts and the importance of such efforts on the health of the stream (pictured in the attachment). The City also participated in the Ice Cream Social event with in conjunction with BWP, which recognized businesses and members of the community with Aquatic Stewardship awards (additional information on this event in the attachment). Lastly, through the TNSA Social Media Campaign for this reporting year, an average of 306,043 impressions (instances of content on screen) were made on the community through social media posts on Facebook and Instagram. The full report is located in the attachment.</u>

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? <u>120</u>		
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: <u>The City uses a City-specific document entitled IDDE Standard</u> Operating Procedures (IDDE SOP) to guide MS4 outfall screening and documentation. <u>The City's Stormwater Coordinator is responsible for performing and documenting IDDE</u> <u>outfall screening, response to reports of suspected illicit discharges and document</u> <u>handleing of illicit discharges.</u>	⊠ 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? <u>3 addressed and eliminated</u>
- 5. Construction Site Stormwater Runoff Pollutant Control (Section 4.2.4)

and inspect priority construction sites at least monthly?

- Α. Do you have an ordinance or other regulatory mechanism requiring: Construction site operators to implement appropriate erosion prevention and sediment 🖾 Yes 🗌 No control BMPs consistent with those described in the TDEC EPSC Handbook? Construction site operators to control wastes such as discarded building materials, 🖾 Yes □ No concrete truck washout, chemicals, litter, and sanitary waste? Design storm and special conditions for unavailable parameters waters or Exceptional ⊠ Yes □ No Tennessee Waters consistent with those of the current Tennessee Construction General Permit (TNR100000)? B. Do you have specific procedures for construction site plan (including erosion prevention X Yes 🗌 No and sediment BMPs) review and approval? C. Do you have sanctions to enforce compliance? X Yes 🗌 No D. Do you hold pre-construction meetings with operators of priority construction activities 🖾 Yes □ No
- E. How many construction sites disturbing at least one acre or greater were active in your jurisdiction this reporting period? 2
- F. How many active priority and non-priority construction sites were inspected this reporting period? 2
- 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)

Α.	Do you have a regulatory mechanism (e.g. ordinance) requiring permanent stormwater		
	pollutant removal for development and redevelopment projects? If no, have you	🛛 Yes	🗌 No
	submitted an Implementation Plan to the Division?	🛛 Yes	🗌 No
В.	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: <u>Title 18, Chapter</u> 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 disturb 1 acre or more are subject to the permanent stormwater requirements of the City's stormwater ordinance and Water Quality BMP Manual. They undergo an administrative plan review process as established in the ordinance. Plans that do not meet ordinance requirements are not approved.
- D. How many development and redevelopment project plans were reviewed for this reporting period? 8
- E. How many development and redevelopment project plans were approved? 7

- 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? □ No
 I. Does your program include an off-site stormwater mitigation or payment into public □ Yes □ No

7. Stormwater Management for Municipal Operations (Section 4.2.6)

stormwater fund? If yes, specify.

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
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. <u>Reviewing and Updating Stormwater Management Programs (Section 4.4)</u>

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. <u>none</u> Changes to the program as required by the division to satisfy permit requirements. <u>none</u> Information (e.g. additional acreage, outfalls, BMPs) on newly annexed areas and any resulting updates to your program. <u>none</u>

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. <u>The stormwater management program was reviewed while preparing for this annual report.</u>

Β.

🗌 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:

Action	<u>Construction</u>	<u>Permanent</u> <u>Stormwater</u>	<u>Illicit</u> <u>Discharge</u>	<u>In Your El</u>	RP?
Verbal warnings	# <u>0</u>	# <u>0</u>	# <u>0</u>	🛛 Yes	🗌 No
Written notices	# <u>0</u>	# <u>0</u>	# <u>0</u>	🛛 Yes	🗌 No
Citations with administrative penalties	# <u>0</u>	# <u>0</u>	# <u>0</u>	🛛 Yes	🗌 No
Stop work orders	# <u>0</u>	# <u>0</u>	# <u>0</u>	🛛 Yes	🗌 No
Withholding of plan approvals or other authorizations	# <u>0</u>	# <u>0</u>	# <u>0</u>	🛛 Yes	🗌 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?

D. What were the most common types of non-compliance instances documented during this reporting period? <u>Suspected illicit discharges</u>

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. <u>No activities performed</u>
- B. Summarize any non-analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. <u>No activities performed</u>
- C. If applicable, are monitoring records for activities performed during this reporting period submitted with this report.

11. 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."

Daniel Estes, City Manager		
Printed Name and Title	Signature	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 MS4 Permit Annual Report TNSO75281 July 1, 2021 to June 30, 2022 Additional Information

2.A. 303(d) List Information

List of waters with unavailable parameters related to stormwater runoff from urbanized areas into which the Elizabethton small MS4 discharges, based on TDEC's Final 2022 303(d) list, (Approved April 2022) https://www.tn.gov/content/dam/tn/environment/water/planning-and-standards/wr_wq_303d-2020-final.xlsx

Waterbody Name/ID	Miles Impaired	Cause Name	Source Name
WATAUGA RIVER TN06010103008 – 2000	9.3	Unknown cause	Municipal (Urbanized High Density Area)
DAVIS BRANCH TN06010103008 – 0400	5.9	Alteration in streamside or littoral vegetative covers	Municipal (Urbanized High Density Area)
DOE RIVER TN06010103013 – 1000	17.8	Escherichia coli	Municipal (Urbanized High Density Area)
CATBIRD CREEK TN06010100346 – 0100	F 7	Sedimentation/Siltation	Municipal (Urbanized High Density Area)
	5.7	Alteration in stream-side or littoral vegetative covers	Municipal (Urbanized High Density Area)
GAP CREEK TN06010103008 – 0800	15.93	Alteration in stream-side or littoral vegetative covers	Municipal (Urbanized High Density Area)
	15.93	Sedimentation/Siltation Nitrate+Nitrite	Municipal (Urbanized High Density Area) Municipal (Urbanized High Density Area)

2.B. TMDL Information

List of established and approved TOTAL MAXIMUM DAILY LOADS (TMDLs) with Wasteload Allocations (WLA) for MS4 discharges:

- 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
- 2. TMDL for E. Coli in the Watauga River Watershed (HUC 06010103) Carter, Johnson, Sullivan, Unicoi and Washington Counties, Approved July 16, 2015

Support Information

Source of information found at TDEC website TMDL search and document viewer: <u>https://tdec.tn.gov/document-viewer/#/search/tmdl</u>

2.C. Exceptional Tennessee Waters 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:

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 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

<u>3E. Public Education Outreach and Involvement Activities</u>

Activity book and pamphlets in the City Library





3F. Public Education Outreach and Involvement Outcomes

Newly installed sign for the Gap Branch Clean Water Project



City of Elizabethton MS4 Annual Report July 1st, 2021 to June 30th, 2022

3F. Public Education Outreach and Involvement Outcomes (continued)

Information from the Ice Cream Social and Aquatic Stewardship Awards Ceremony

Steele Creek Park Nature Center Tennessee Department of Environment and Conservation Tom Worley, Farmer Virginia Department of Environmental Quality Wal-Mart, Elizabethton Previous recipients of Water Quality Awards: Appalachian RC&D Council Artie Roberts Betty Davis, University School Bill Beazell, Trout Unimited Boone Lake Association Carter County Pollution Solutions Team Ken & Ellen Bronner Chris Mathes, Sherriff of Carter County City of Bristol City of Bristol City of Dinsent City 2000 and 2007 Counties Dary Crumbey Farms, Inc. Elizabethion Star Environmental Health Science Laboratory, ETSU First Tennessee Development District 2011–Deborah Wilkinson, and Rick Wimberly, Johnson City Press, Bris-tol Wal-Mart, Bill Gatton Honda, Bill Francisco, Bristol VA Public Works, Dwight and Zella Hunigan 2012—Metin Eryasa (Riverview Back-hoe and Excavating Service, Eliza-betriton), Wal-Mart Store #2809, Sam's Club Inc. #5518, Lowe's Store #0456, Gary Barrigar ETSU First Tennessee Development District Gary Barrigar, Elizabethton High School General Shale Genald & Robin Harrell, Farmers 2013-Marvin Cornett, ETSU Department of Sustainability, Dr. Aimee Govett, Jeff Keeling, Beth Bartchy-Smith, Russ Harrison Gerald & Robin Harnell, Farmers Green Valley Poulty Farm Hands-on Museum, Johnson City, TN Holston River Soil and Water Conserva-tion District Ingrid Luffman, ETSU John Brown, Farmer John Little, Farmer Ken & Ellen Bronner King Dairy 2014—Joy Stewart, Scott Thomas, City of Bristol, TN, Washington County Soil Conservation District Youth Board, SecureStor (Cheryl Tupper and Charles LaPorte) John Little, Farmer Ken & Ellen Bronner King Dairy Lisa Gatlagher, ETSU Juli Bucs, ETSU Mark Odon, TVA Mary Ann Kinch, Winged Deer Park, JC Mary Cain, Holston Middle School Mike Edmonds, Boones Creek Middle School Natural Resources Conservation Service North American Corp./Carter County Clean Streams Northeast Tennessee Regional Storm-water Planning Group Phil Gentry, Tennessee High School Phil-Tenn Developers, LLC Ron Seigfried Russell Kinser, Natural Resources Con-servation Service 2015—Charles Earhart, ETSU Geosci-ences Club, Connie Deegan (Johnson City Parks and Recrea-tion) 2016-Jason Foster (LDA Engineering), Overmountain Chapter Trout Unlim-ited, TNWRA, TVA, TDEC 2017– Melanie Kelly, Mel and Gwen Ash, Dr. Judith Hammond (ETSU), TN Department of Corrections Carter County work camp 2018-Essyx Design and Fabrication Inc., City of Johnson City, Annie Grant 2019-Prosim Engineering, Shannon O'Quinn, Grandview Christian Church 456 Club

30% recycled fiber 💦



686 square miles lying in Sullivan, Washington, and Carter Counties of Tennessee and Washington County of Virginia.

"To enhance the quality of life within Boone Watershed by improving water quality'

	EVENTS
1:00 p.m.	Welcome and Introductions Jana Archer, BWP President
1:10 p.m.	Ice Cream Social
1:30 p.m.	Projects Update
1:45 p.m.	Award Presentations

BOONE WATERSHED PARTNERSHIP AQUATIC STEWARDSHIP AWARD 2021 RECIPIENTS

Industry/Business Doug Hoilman, Hoilman Construction Company (nominated by Bill Francisco)

Civic Volunteer David Rock (nominated by Bili Francisco)

Lifetime Deborah Wilkinson (nominated by Ingrid Luffman)

City of Elizabethton **MS4** Annual Report July 1st, 2021 to June 30th, 2022

3F. Public Education Outreach and Involvement Outcomes (continued)

Exerpt from 11-page TNSA Social Media Ads Report

TN	TNSA 2021-2022 Social Media Campagn Final Numbers							
		Impressions	Post Interactions*	Link Clicks	Total Clicks**			
May Ad 1	Green grass is healthy grass. When using fertilizer to beautify your lawn, use it sparingly to keep excess fertilizer out of storm drains.	25,088	15,072	25,600	8,752	74,512	98%	
May Ad 2	Compostable, biodegradable products offer an eco-friendly alternative to traditional single- use plastics as they can disintegrate into non-toxic, natural elements. These products are great options to help reduce litter and protect our waterways.	19,267	11,122	22,628	7,153	60,170	98%	
June Ad 1	Many enjoy washing their car in the driveaway on a nice summer day, but did you know that car washes have specialized drainage systems that prevent chemicals from reaching our waterways? If given the option, choose a car wash.	21,360	16,464	23,360	8,096	69,280	98%	
June Ad 2	Did you know the things we do around the house every day can affect our rivers and streams? Many cleaning products found in homes shouldn't be flushed down the drain. Environmentally- friendly products that are free of chlorine or phosphate can be better alternatives to help protect our waterways.	20,272	13,184	20,128	6,832	60,416	98%	
	Total	306,043	198,768	311,401	102,429	918,641		