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? 13,509 (census.gov)

What is the reporting period for this annual report? July1 2019 to June 30 2020

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/wr-ws-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: The City of Elizabethton implements BMPs 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". ☒ 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, fertilizers, automotive fluids, pet waste, household and landscape chemicals, household hazardous waste, 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.

E. Summarize the public education, outreach, involvement and participation activities you completed during this reporting period: A City staff member serves on the Boone Watershed Partnership, Inc (BWP) Board of Directors. BWP is a nonprofit organization that addresses water quality issues in the region, offering opportunities for the public to participate in water quality efforts. Each year, the City employee attends Board meetings and general membership meetings, participates in various cleanup activities through co-sponsorships or in-kind services, and participates in the Tennessee Environmental Conference, which provides exposure and educational opportunities regarding water quality and stormwater management (NOTE: The Tennessee Environmental Conference was rescheduled due to COVID-19).

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 (see attachment item 3.F. for additional information). The City also updated/revised the PIE Plan to better encompass educational efforts within the Stormwater Management Program (see attachment item 8.A.).

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 "IDDE Standard Operating Procedures (IDDE SOP)" is a City-specific document used to guide MS4 outfall screening/documentation. IDDE outfall screening/documenting, response protocols, and documentation of illicit discharge are all performed by the City's Stormwater Coordinator. ☒ 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; 3 investigations led to the determination that the 3 complaints were not illicit discharges

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? 2

F. How many active priority and non-priority construction sites were inspected this reporting period? 4; two construction sites were under an acre

G. How many construction related complaints were received this reporting period? 2

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 for permanent stormwater management BMPs as provided in ordinance.

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? 4

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

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. A hot spot brochure was developed and adopted for use as an educational tool to address hot spot areas (see attachment 8.A.). The PIE Plan was revised and improved (see attachment 8.A.). Macroinvertabrate sampling/monitoring program was implemented (detailed in Section 10).

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. Annual reporting provides a a formal opportunity to make an overall program assessment. In conjunction with informal, ongoing program assessments performed throughout the permit year, plus the audit performed by TDEC in March 2019, outcomes yielded revisions/improvements to the PIE Plan, revised protocols for the Stormwater Requirements for the Developer Project Preconstruction Meetings (additional information 8.B. in attachment), and updates to the monitoring program (information in Section 10). ☒ 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:

Action	Construction	Permanent Stormwater	Illicit Discharge	In Your ERP?	
Verbal warnings	#2	#0	#0	☒ Yes	☐ No
Written notices	#0	#0	#0	☒ Yes	☐ No
Citations with administrative penalties	#0	#0	#0	☒ Yes	☐ No
Stop work orders	#0	#0	#0	☒ Yes	☐ No
Withholding of plan approvals or other authorizations	#0	#0	#0	☒ Yes	☐ No
Additional Measures	#0	#0	#0	Describe: N/A	

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. SQSH kick sampling and water quality measurements (pH, conductivity, temperature, dissolved oxygen, ORP and flow characteristic descriptions) were completed in June of 2020 by Resource & Environmental Services LLC at 5 stations on Davis Branch, Watauga River, Gap Creek, Powder Branch, and Catbird Creek. Attachment item 10.C. shows results.

B. Summarize any non-analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. Field photos both upstream and downstream from each sampling station mentioned above in 10.A. were completed along with QSSOP Habitat Assessment forms and stream survey field sheets that note canopy cover, debris/sediment levels, turbidity, land use, substrate descriptions, and erosion.

C. If applicable, are monitoring records for activities performed during this reporting period submitted with this report. ☒ Yes ☐ No

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."

Dave Estes, City Manager — Printed Name and Title

Signature

9/22/2020 — 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, 2019 to June 30, 2020

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 2020 303(d) list, (Approved April 2020)
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	4.4	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	5.7	Sedimentation/Siltation	Municipal (Urbanized High Density Area)
		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)
		Sedimentation/Siltation	Municipal (Urbanized High Density Area)
		Nitrate+Nitrite	Municipal (Urbanized High Density Area)
		Escherichia coli	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: https://tdec.tn.gov/document-viewer/#/search/tmdl

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

3.F. Public Education and Participation Outcomes

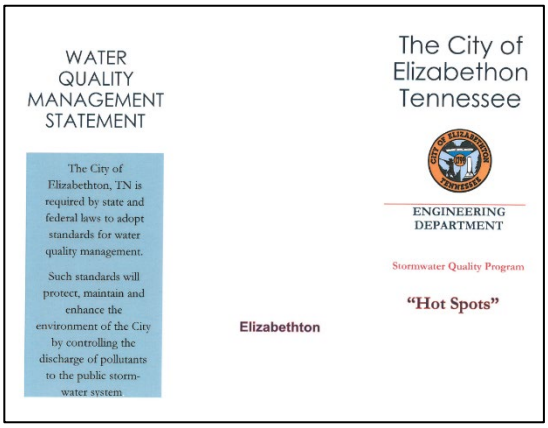
According to the TNSA 2019-2020 Facebook Ads Report, our ads reached about 2.7 million people and received 6,114 clicks.

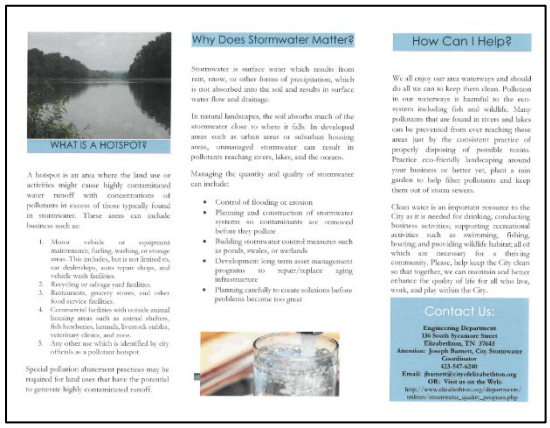
Highlights include:

- Middle total reach: 646,641 people
- West & North West total reach: 537,293 people
- East and North East total reach: 356,728 people
- South East total reach: 182,953 people

8.A. and 8.B. Reviewing and Updating Stormwater Management Programs

Educational brochures (three images):





PIE Plan (five images):

NPDES-MS4 Permit
Public Information & Education Plan
Public Involvement Plan

City of Elizabethton, TN
Public Information & Education (PIE) Plan

In fulfillment of the requirements of the Public Education and Outreach minimum control measure, Parts 4.2.1 and 4.2.2 of the Tennessee NPDES General Permit for Discharges from Small Municipal Separate Storm Sewer Systems, Permit Tracking No. TNS075281

Version: June 2020

Prepared by: Wood Environment & Infrastructure Americas

1. Background

This Public Involvement and Education (PIE) Plan presents a framework for the City of Elizabethton's stormwater public education, outreach, and involvement program. The PIE plan is required by the State of Tennessee Small Municipal Separate Storm Sewer (MS4) General NPDES (henceforth referred to as "the small MS4 permit"). As an operator of a small MS4, the City of Elizabethton (City) is a permittee subject to the permit's requirements.

Part 4.2.1 of the small MS4 permit (the Public Education and Outreach minimum control measure) requires the development and implementation of a PIE Plan. Additionally, Part 4.2.2 of the permit (the Public Involvement and Participation minimum control measure) requires the development and implementation of a public involvement plan. The City chose to integrate its compliance with these requirements, addressing public information, education, participation, and involvement under this single PIE plan. The permit requirements relevant to this plan are described in the paragraphs that follow.

Part 4.2.1 of the small MS4 permit requires, at a minimum, the permittee to target educational campaigns to address the following issues.

a. General public awareness on the impacts on water quality from general housekeeping maintenance/activities
b. Homeowner associations and other operators of permanent BMPs awareness of the importance of maintenance activities
c. Local engineering and development community awareness of the stormwater ordinance, regulations, and guidance materials related to long-term water quality impacts
d. General public and professional chemical applicator awareness of the proper storage, use, and disposal of pesticides, herbicides, and fertilizers
e. General public and related commercial and professional stakeholder awareness of the proper storage, use, and disposal of oil and other automotive-related fluids
f. General public and municipal employees on the awareness of identifying and reporting procedures for illicit connections/discharges, sanitary sewer seepage, spills, etc.
g. Local engineering, development, and construction community awareness of stormwater ordinances, regulations and guidance materials related to construction phase water quality impacts
h. Municipal employee/contractor awareness of water quality impacts from daily operations

Part 4.2.2 of the small MS4 permit requires permittees to publicize public involvement and participation opportunities by methods designed to reach the intended audience.

2. Activities and Goals

Table 1 presents the public information and education activities implemented by the City to meet the requirements of Parts 4.2.1 and 4.2.2 of small MS4 permit. The table provides the educational or involvement goal for each activity and the local audiences and pollutants targeted. It also identifies the specific permit requirement(s) directly relevant to each activity.

The table was developed to comply with permit requirements using resources that are already available to the City or can be easily accessed by the City (e.g., the distribution of educational brochures offered at an extremely low cost by the Tennessee Stormwater Association). Each activity is associated with one or more message delivery methods or activity types.

3. Activity Implementation and Metrics

Table 2 outlines the supporting documentation and corresponding metric(s) for each PIE activity. Activity documentation is required for compliance tracking and reporting purposes. Metrics allow the City to evaluate the extent and (in some cases) effectiveness of its efforts, as is required by Section 4.4.1 of the permit. By observing these metrics from year to year, the City can also evaluate the appropriateness of its allocation of resources to each activity. However, it is important to understand that, for the types of activities included in this plan, metrics are sometimes obtained in terms of the number of "impressions" on a target audience. The term "impressions" is defined as the number of times the City can reasonably say a member of the public has successfully accessed the intended educational content for an activity. It is not intended to convey the impact that the educational content has made on a member of the public, as this such impacts are subjective, highly variable, and therefore not easily measured.

Part 5.4 of the small MS4 permit requires the City document compliance with permit requirements in an Annual Report. For the activities described in this PIE Plan, the City will accomplish this requirement by tracking appropriate metrics for each activity and reporting these metrics in the Annual Report (in the manner required per the TDEC's Annual Report template.

Table 1. PIE Plan Activities, Goals and Targets Information

#	Description	Goal(s)	Target Groups	Target Topic(s) or Pollutant(s)	Permit Part(s)
1	The City's Stormwater Website	Awareness and education on: - water quality impacts from general housekeeping & maintenance practices; - identification and reporting of suspected illicit discharges; - public meetings on stormwater quality issues or activities.	General Public	General stormwater and water quality concepts	4.2.1.a, d, e, f, g, h
		Awareness and education on the short-term and long-term impacts of land development and construction practices, the requirements of City ordinances and policies, and where to access guidance materials on relevant impact mitigation practices.	Land developers, construction contractors & subcontractors	Construction sediment, pollution caused by increased stormwater flow rates and volume	4.2.1.c, g
		Reduce or eliminate the improper storage, use and disposal of pesticides, herbicides, fertilizers (i.e., PHFs) and automotive fluids.	Landscaper companies, chemical applicators, Automotive repair and supply shops	PHFs, used oil & automotive fluids	4.2.1.d, e
2	Public Service Announcements	Awareness and understanding of the storm sewer system and how behaviors contribute to water quality.	General Public	General stormwater and water quality concepts	4.2.1.a, d, e, f
3	Informational Brochures	*Discover the Waters of Tennessee* - Awareness and understanding of Tennessee watersheds and waters, their history, their importance to wildlife, flooding, and pollution	General Public	Watersheds, general stormwater and water quality concepts	4.2.1.a
		A Guide to Traveling Tennessee's Watersheds - Awareness and understanding watersheds, where they are located, and why they are important	General Public		
		There's No Place Like Home - Awareness and understanding of pet waste issues, litter, illegal dumping, illicit discharge, and proper storage, application, and disposal of chemicals	General Public	Pet waste, litter, household and landscape chemicals	4.2.1 a, d, e, f
		TN Construction Guide to Cleaner Water - Awareness and understanding of pet waste issues, litter, illegal dumping, illicit discharge, and proper storage, application, and disposal of chemicals	Homeowners, homebuilders, land developers, construction contractors & subcontractors	Construction sediment	4.2.1.a, c, g
4	Municipal Employee Training	Education and awareness on: - water quality impacts from municipal operations; - municipal good housekeeping & pollution prevention practices; - identification and reporting of suspected illicit discharges; - improper practices for erosion prevention & sediment control and appropriate mitigation measures	Municipal Staff	PHFs, used oil & automotive fluids, construction sediment, landscape waste, municipal and landscape chemicals	4.2.1.a, f, g, h

#	Description	Goal(s)	Target Groups	Target Topic(s) or Pollutant(s)	Permit Part(s)
5	Mill Race Signage & Outdoor Classroom (Watauga River)	Awareness and understanding of natural area preservation and stewardship and its positive impacts on water quality.	General Public	General stormwater and water quality concepts	4.2.1
6	Construction Site Operator Information	To provide a vehicle for the development and construction community to access information on the long-term impacts of development	Developers, Engineers, Construction Workers	Construction sediment, pollution caused by increased stormwater flow rate and volume	4.2.1.b, c, g
7	Watershed Groups	Support groups which educate, encourage, or involve citizens to take ownership of their water resources.	General Public	Non-specific – depends on group activities	4.2.2
8	Hazardous Waste Collection Event Advertisements	Education on improper disposal of household hazardous wastes (HHWs) and involvement in proper disposal of HHWs.	General Public	Household Hazardous Wastes	4.2.2

Table 2. Public Information, Education, and Involvement Implementation and Metrics

#	Description	Supporting Documentation	Evaluation Metric
1	The City's Stormwater Website	Printed copies of webpages, record of updates, and/or the webpage address	Number of web hits annually
2	Public Service Announcements (PSAs)	Record showing spot(s) aired on public access channel for the given time period (annual)	Number of PSA airings annually
3	Informational Brochures	Copy of brochure	Estimate of number of brochures distributed (or re-stocked) annually
4	Municipal Employee Training	Sign-in sheets with name, date and topic, copies of training content provided, or names of professional produced videos shown	Number of municipal staff trained per training event
5	Mill Race Signage & Outdoor Classroom (drains to Watauga River)	Photographs of signage and classroom	None
6	Construction Site Operator Information	Link to TNEPSC or equivalent for site operators to receive information on training opportunities	Maintain the Link
7	Watershed Groups	Record of membership (dues receipts, etc., as appropriate) or proof of support activities provided, when appropriate	Staff Attendance at Bi-monthly Meetings
8	Hazardous Waste Collection Event Advertisements	Posted at the library at City Hall	Actual event activity and reported collection metrics

8.B. Stormwater Requirements for Developer Projects Preconstruction Meetings:

Elizabethton Developer Project Preconstruction Meetings

Stormwater Requirements

A Preconstruction Meeting is a required component of the City's MS4 or stormwater quality program. This document details the minimum requirements for covering, during a preconstruction meeting, the requirements of the City's stormwater ordinances as they pertain to the construction process.

1. The Stormwater Coordinator must circulate a signup sheet and collect names/contact information of attendees. Signatures are required to verify attendance.
2. The Stormwater Coordinator will remind the developer of the requirement for them to implement appropriate erosion prevention and sediment control (EPSC) best management practices (BMPs) that are consistent with those described in the Tennessee Department of Environment & Conservation (TDEC) EPSC Handbook.
3. If the project discharges to a waterbody with unavailable parameters or an exceptional Tennessee water, the Stormwater Coordinator will review the special EPSC requirements as well as discuss items such as buffer width and magnitude of design storm. There will be a check-off section on the signup sheet to verify this.
4. The Stormwater Coordinator will remind the developer that waste must be controlled in such a manner that avoids adverse impacts to water quality.
5. The Stormwater Coordinator will review EPSC Inspection requirements with the developer as well as ensure they have a qualified person to conduct the inspections.
6. For Priority Construction Sites, the Stormwater Coordinator will inform the developer that the City will conduct inspections at the site at least once per month.
7. The Stormwater Coordinator will remind the developer to post copies of applicable permits in a publicly visible location as required by the permit(s) themselves.
8. The Stormwater Coordinator will review selected items from the developer's approved WATER QUALITY MANAGEMENT PLAN CHECKLIST (Refer to Appendix C of the Northeast Tennessee Water Quality BMP Manual). The selected items will target the following and there will be a check-off section on the signup sheet to verify this:
    a. Non-typical site issues and design features, if any.
    b. Reminder of any outstanding documents submittals (for example Covenants). The City will not issue a Certificate of Occupancy until either the submittals are in place, or a Bond was submitted.
9. A reminder that the City will not issue a Certificate of Occupancy until a written statement was received from the project engineer certifying that the Stormwater Works were constructed according to the Engineer's design as approved by the Planning Commission. There will be a check-off section on the signup sheet to verify this.

10.C. Monitoring Records

Resource & Environmental Services LLC — **Elizabethton Macro-invertebrate Sampling**
Project # 2020-026

Table 1

Sample Station Drainage Area Description & Sample Date	Sample Location Description & Lat/Long	Water Quality Readings YSI Multi-Pro	Habitat Assessment Score	TMI Score
DAVIS000.9CT Davis Branch Drainage 1.6mi 6/4/2020	100 feet downstream of D. Lewis Rd (@ armory) Lat 36.3659/Long-82.1853	pH 8.32 Cond. 239 Temp °C 24.2 D.O. 8.03.8 Visual - turbid	118 – Below *(Target = 133)	20 – Below **(Target = 32)
WATAU026.9CT *Renamed - WATAU026.0CT after sample sent* Watauga River Drainage >550mi 6/04/2020	100 feet upstream of Gilbert Peters Bridge Lat 36.3560/Long-82.2235	pH 8.4 Cond. 94 Temp °C 17.5 D.O. 6.6 Visual - Clear	147 – Above *(Target = 131)	30 – Below **(Target = 32)
GAP000.3CT Gap Creek 10.5mi 6/04/202020	200 feet downstream of Tweetsie Trail crossing *between Tweetsie Trail and Mary Patton Hwy Lat 36.3318/Long-82.2647	pH 8.10 Cond. 379 Temp °C 16.0 D.O. 6.82 Visual - Clear	97 – Below *(Target = 131)	30 – Below **(Target = 32)
POWDE000.4CT Powder Branch 4.83mi 6/04/2020	200 feet downstream of farm bridge crossing *648 Powder Branch Road Lat 36.3150/Long-82.2763	pH 8.04 Cond. 440 Temp °C 17.3 D.O. 7.41 Visual – slight haze	114 – Below *(Target = 131)	18 – Below **(Target = 32)
CATBI000.2WN Catbird Creek 2.0mi 6/04/2020	100 feet upstream of Milligan Hwy crossing Lat 36.0552/Long-82.3210 *Headwater	pH 7.76 Cond. 383 Temp °C 16.3 D.O. 7.65 Visual - Clear	153 – Above *(Target = 133)	18 – Below **(Target = 32)

*Habitat Assessment Eco Reg. 67F January - June (QSSOP 2017)
**TMI Eco Reg. 67F January - June (QSSOP 2017)