



TDEC Small MS4 Annual Report Year Three (3)



EAST TENNESSEE STATE UNIVERSITY

from
July 1st, 2018 through June 30th, 2019
Report Due September 30th, 2019

Permit Tracking No. TNS075370



**City of
Johnson City, TN**

**Municipal and Safety Building
601 East Main Street
P.O. Box 2150
Johnson City, TN 37605-2150
Phone: 423-434-5784**



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 Johnson City		MS4 Permit Number: TNS075370
Contact Person: Jeremy Jones		Email Address: jjones@johnsoncitytn.org
Telephone: (423) 434-5758		MS4 Program Web Address: https://www.johnsoncitytn.org/residents/public_works/stormwater/index.php
Mailing Address: P.O. Box 2150		
City: Johnson City	State: TN	ZIP code: 37605-2150

What is the current population of your MS4? 66,667

What is the reporting period for this annual report? July 1 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/)? 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: Water Quality regulations and EPSC regulations 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: Sedimentation, Hotspots, Yard debris, Chemicals, oil Yes No
- C. Do you have a webpage dedicated to your stormwater program? If yes, provide a link/URL: https://www.johnsoncitytn.org/residents/public_works/stormwater/index.php
http://healthsafety.etsu.edu/static/stormwater Yes No
- D. Summarize how you advertise and publicize your public education, outreach, involvement and participation opportunities: Website, Social Media Campaign, University Relations

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: Social Media Campaign Ads, Public Conference, Stream Clean ups, School literature, flyers, door hangers
- 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: Increased the number of Stream Clean up participants, Increased outreach to ETSU Student body, large scale tire removal from area waterways in partnership with Boone Watershed

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? 527
- 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: dry weather screening of outfalls at least 1/5 of system per year 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? 3

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

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

- E. How many construction sites disturbing at least one acre or greater were active in your jurisdiction this reporting period? 39
- F. How many active priority and non-priority construction sites were inspected this reporting period? 53
- 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: 25 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 disturbing greater than one acre
- D. How many development and redevelopment project plans were reviewed for this reporting period? 19
- E. How many development and redevelopment project plans were approved? 16
- F. How many permanent stormwater related complaints were received this reporting period? 2
- G. How many enforcement actions were taken to address improper installation or maintenance? 2
- 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

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

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. N/A
 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. no annexations, no outfalls or road miles resulting in program updates.
- 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. currently implementing new software system for recording of inspections and ERP actions 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>#8</u>	<u>#2</u>	<u>#3</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Written notices	<u>#11</u>	<u>#0</u>	<u>#3</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>#2</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: _____	

- 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?
EPSC measures that needed to be maintained

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

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. Evaluated result from previous years Stream Sampling and determined additional sites for future sampling.
- B. Summarize any non-analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. Dry Weather stream inspections and review of methods and outcomes
- 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."

Phil Ruzicka Public Works Director Phil Ruzicka 9/30/19
 Printed Name and Title Signature Date

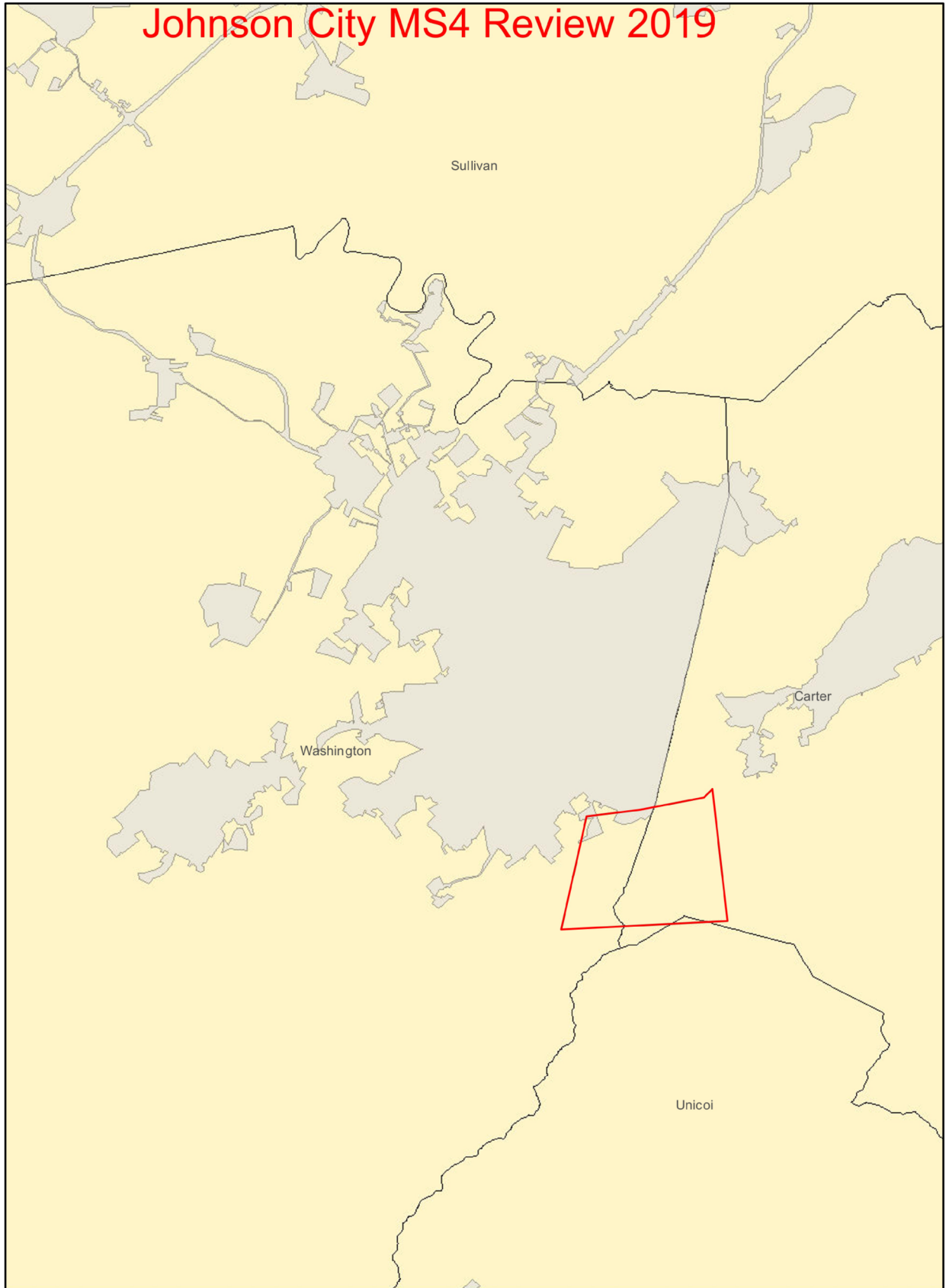
Mark Jee
DIRECTOR: ENVIR. HEALTH Mark Jee 09.30.19
 Printed Name and Title Signature Date

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

ID305B	WATER_NAME	LOCATION	WATER_TYPE	WATER_SIZE	CAUSE_NAME	TMDL_PRIORITY	SOURCE_NAME
TN06010102006_1000	Boone Reservoir	WASHINGTON CO	FRESHWATER RESERVOIR	1968	Chlordane	NA	Contaminated Sediments
TN06010102006_1000	Boone Reservoir	SULLIVAN CO	FRESHWATER RESERVOIR	1968	Chlordane	NA	Contaminated Sediments
TN06010102006_1000	Boone Reservoir	WASHINGTON CO	FRESHWATER RESERVOIR	1968	Polychlorinated biphenyls	NA	Contaminated Sediments
TN06010102006_1000	Boone Reservoir	SULLIVAN CO	FRESHWATER RESERVOIR	1968	Polychlorinated biphenyls	NA	Contaminated Sediments
TN06010102047_0100	Ford Creek	WASHINGTON CO	RIVER	5.5	Sedimentation/Siltation	L	Grazing in Riparian or Shoreline Zones
TN06010102047_0100	Ford Creek	WASHINGTON CO	RIVER	5.5	Sedimentation/Siltation	L	Municipal (Urbanized High Density Area)
TN06010102047_0100	Ford Creek	WASHINGTON CO	RIVER	5.5	Escherichia coli	NA	Municipal (Urbanized High Density Area)
TN06010102047_0100	Ford Creek	WASHINGTON CO	RIVER	5.5	Escherichia coli	NA	Grazing in Riparian or Shoreline Zones
TN06010102702_1000	Cedar Creek	WASHINGTON CO	RIVER	10.1	Nitrate/Nitrite (Nitrite + Nitrate as N)	L	Municipal (Urbanized High Density Area)
TN06010102702_1000	Cedar Creek	WASHINGTON CO	RIVER	10.1	Nitrate/Nitrite (Nitrite + Nitrate as N)	L	Grazing in Riparian or Shoreline Zones
TN06010102702_1000	Cedar Creek	WASHINGTON CO	RIVER	10.1	Alteration in stream-side or littoral vegetative covers	L	Municipal (Urbanized High Density Area)
TN06010102702_1000	Cedar Creek	WASHINGTON CO	RIVER	10.1	Alteration in stream-side or littoral vegetative covers	L	Grazing in Riparian or Shoreline Zones
TN06010102702_1000	Cedar Creek	WASHINGTON CO	RIVER	10.1	Sedimentation/Siltation	L	Municipal (Urbanized High Density Area)
TN06010102702_1000	Cedar Creek	WASHINGTON CO	RIVER	10.1	Sedimentation/Siltation	L	Grazing in Riparian or Shoreline Zones
TN06010102702_1000	Cedar Creek	WASHINGTON CO	RIVER	10.1	Escherichia coli	NA	Grazing in Riparian or Shoreline Zones
TN06010102702_1000	Cedar Creek	WASHINGTON CO	RIVER	10.1	Escherichia coli	NA	Municipal (Urbanized High Density Area)
TN06010103006_1000	Boones Creek	WASHINGTON CO	RIVER	19.31	Nitrate/Nitrite (Nitrite + Nitrate as N)	L	Grazing in Riparian or Shoreline Zones
TN06010103006_1000	Boones Creek	WASHINGTON CO	RIVER	19.31	Alteration in stream-side or littoral vegetative covers	NA	Grazing in Riparian or Shoreline Zones
TN06010103006_1000	Boones Creek	WASHINGTON CO	RIVER	19.31	Sedimentation/Siltation	NA	Municipal (Urbanized High Density Area)
TN06010103006_1000	Boones Creek	WASHINGTON CO	RIVER	19.31	Sedimentation/Siltation	NA	Grazing in Riparian or Shoreline Zones
TN06010103006_1000	Boones Creek	WASHINGTON CO	RIVER	19.31	Sedimentation/Siltation	NA	Site Clearance (Land Development or Redevelopment)
TN06010103006_1000	Boones Creek	WASHINGTON CO	RIVER	19.31	Escherichia coli	NA	Grazing in Riparian or Shoreline Zones
TN06010103006_0100	Carroll Creek	WASHINGTON CO	RIVER	4.3	Sedimentation/Siltation	NA	Municipal (Urbanized High Density Area)
TN06010103006_0100	Carroll Creek	WASHINGTON CO	RIVER	4.3	Sedimentation/Siltation	NA	Grazing in Riparian or Shoreline Zones
TN06010103006_0100	Carroll Creek	WASHINGTON CO	RIVER	4.3	Nitrate/Nitrite (Nitrite + Nitrate as N)	L	Grazing in Riparian or Shoreline Zones
TN06010103006_0100	Carroll Creek	WASHINGTON CO	RIVER	4.3	Nitrate/Nitrite (Nitrite + Nitrate as N)	L	Municipal (Urbanized High Density Area)
TN06010103006_0100	Carroll Creek	WASHINGTON CO	RIVER	4.3	Alteration in stream-side or littoral vegetative covers	NA	Municipal (Urbanized High Density Area)
TN06010103006_0100	Carroll Creek	WASHINGTON CO	RIVER	4.3	Alteration in stream-side or littoral vegetative covers	NA	Grazing in Riparian or Shoreline Zones
TN06010103006_0100	Carroll Creek	WASHINGTON CO	RIVER	4.3	Escherichia coli	NA	Grazing in Riparian or Shoreline Zones
TN06010103009_1000	Brush Creek	WASHINGTON CO	RIVER	20.3	Nitrate/Nitrite (Nitrite + Nitrate as N)	L	Municipal (Urbanized High Density Area)
TN06010103009_1000	Brush Creek	WASHINGTON CO	RIVER	20.3	Other anthropogenic substrate alterations	NA	Municipal (Urbanized High Density Area)
TN06010103009_1000	Brush Creek	WASHINGTON CO	RIVER	20.3	Sedimentation/Siltation	NA	Municipal (Urbanized High Density Area)
TN06010103009_1000	Brush Creek	WASHINGTON CO	RIVER	20.3	Escherichia coli	NA	Municipal (Urbanized High Density Area)
TN06010103046_0100	Catbird Creek	CARTER CO	RIVER	5.7	Sedimentation/Siltation	L	Municipal (Urbanized High Density Area)
TN06010103046_0100	Catbird Creek	WASHINGTON CO	RIVER	5.7	Sedimentation/Siltation	L	Municipal (Urbanized High Density Area)
TN06010103046_1000	Sinking Creek	CARTER CO	RIVER	10	Escherichia coli	NA	Municipal (Urbanized High Density Area)
TN06010103046_1000	Sinking Creek	CARTER CO	RIVER	10	Escherichia coli	NA	Grazing in Riparian or Shoreline Zones
TN06010103046_1000	Sinking Creek	WASHINGTON CO	RIVER	10	Escherichia coli	NA	Municipal (Urbanized High Density Area)
TN06010103046_1000	Sinking Creek	WASHINGTON CO	RIVER	10	Escherichia coli	NA	Grazing in Riparian or Shoreline Zones
TN06010103061_1000	Reedy Creek	WASHINGTON CO	RIVER	10.7	Escherichia coli	NA	Municipal (Urbanized High Density Area)
TN06010103061_1000	Reedy Creek	WASHINGTON CO	RIVER	10.7	Escherichia coli	NA	Grazing in Riparian or Shoreline Zones
TN06010103635_0100	Cash Hollow Creek	WASHINGTON CO	RIVER	3.48	Alteration in stream-side or littoral vegetative covers	NA	Municipal (Urbanized High Density Area)
TN06010103635_0100	Cash Hollow Creek	WASHINGTON CO	RIVER	3.48	Escherichia coli	NA	Municipal (Urbanized High Density Area)
TN06010103635_0200	Cobb Creek	WASHINGTON CO	RIVER	4.5	Alteration in stream-side or littoral vegetative covers	NA	Municipal (Urbanized High Density Area)
TN06010103635_0200	Cobb Creek	WASHINGTON CO	RIVER	4.5	Sedimentation/Siltation	NA	Municipal (Urbanized High Density Area)
TN06010103635_0200	Cobb Creek	WASHINGTON CO	RIVER	4.5	Escherichia coli	NA	Municipal (Urbanized High Density Area)
TN06010103635_1000	Knob Creek	WASHINGTON CO	RIVER	12.3	Nitrate/Nitrite (Nitrite + Nitrate as N)	L	Municipal (Urbanized High Density Area)
TN06010103635_1000	Knob Creek	WASHINGTON CO	RIVER	12.3	Nitrate/Nitrite (Nitrite + Nitrate as N)	L	Grazing in Riparian or Shoreline Zones
TN06010103635_1000	Knob Creek	WASHINGTON CO	RIVER	12.3	Sedimentation/Siltation	NA	Municipal (Urbanized High Density Area)
TN06010103635_1000	Knob Creek	WASHINGTON CO	RIVER	12.3	Sedimentation/Siltation	NA	Grazing in Riparian or Shoreline Zones
TN06010103635_1000	Knob Creek	WASHINGTON CO	RIVER	12.3	Alteration in stream-side or littoral vegetative covers	NA	Municipal (Urbanized High Density Area)
TN06010103635_1000	Knob Creek	WASHINGTON CO	RIVER	12.3	Alteration in stream-side or littoral vegetative covers	NA	Grazing in Riparian or Shoreline Zones
TN06010103635_1000	Knob Creek	WASHINGTON CO	RIVER	12.3	Escherichia coli	NA	Grazing in Riparian or Shoreline Zones
TN06010103635_1000	Knob Creek	WASHINGTON CO	RIVER	12.3	Escherichia coli	NA	Municipal (Urbanized High Density Area)

Johnson City MS4 Review 2019





U.S. Fish & Wildlife Service

Threatened and Endangered Species

Small Whorled Pogonia

Isotria medeoloides



States where the small whorled pogonia, an orchid, is found.



Photos by USFWS; Sarena Selbo (right) and Susi vonOettingen (left)

The small whorled pogonia is a threatened species. Threatened species are animals and plants that are likely to become endangered in the foreseeable future. Endangered species are animals and plants that are in danger of becoming extinct. Identifying, protecting, and restoring endangered and threatened species is the primary objective of the U.S. Fish and Wildlife Service's endangered species program.

What is the small whorled pogonia?

Appearance - The small whorled pogonia is a member of the orchid family. It usually has a single grayish-green stem that grows about 10 inches tall when in flower and about 14 inches when bearing fruit. The plant is named for the whorl of five or six leaves near the top of the stem and beneath the flower. The leaves are grayish-green, somewhat oblong and 1 to 3.5 inches long. The single or paired greenish-yellow flowers are about 0.5 to 1 inch long and appear in May or June. The fruit, an upright ellipsoid capsule, appears later in the year.

Range - Although widely distributed, the small whorled pogonia is rare. It is found in 17 eastern states and Ontario, Canada. Populations are typically small with less than 20 plants. It has been extirpated from Missouri, New York, Vermont, and Maryland.

Habitat - This orchid grows in older hardwood stands of beech, birch, maple, oak, and hickory that have an open understory. Sometimes it grows in stands of softwoods such as hemlock. It prefers acidic soils with a thick layer of dead leaves, often on slopes near small streams.

What is the small whorled pogonia? (continued)

Reproduction - This pogonia flowers from mid-May to mid-June, with the flowers lasting only a few days to a week. It may not flower every year but when it does flower, one or two flowers are produced per plant. If pollinated, a capsule forms that contains several thousand minute seeds. The pogonia appears to self-pollinate by mechanical processes. The flower lacks both nectar guides and fragrance and insect pollination has not been observed.

Why is the small whorled pogonia threatened?

Habitat Loss and Degradation - The primary threat to the small whorled pogonia is the past and continuing loss of populations when their habitat is developed for urban expansion. Some forestry practices eliminate habitat. Also, habitat may be degraded or individual plants lost because of recreational activities and trampling.

Collection - As with all rare orchids, the small whorled pogonia is vulnerable to collecting for commercial or personal use.

What is being done to prevent extinction of the small whorled pogonia?

Listing - The small whorled pogonia was added to the U.S. List of Endangered and Threatened Wildlife and Plants in 1982 as an endangered species. In 1994 it was reclassified to threatened.

Recovery Plan - The U.S. Fish and Wildlife Service prepared a recovery plan and revised that plan in 1992. The Recovery Plan describes and prioritizes actions needed to help recover the species.

Research - Many small whorled pogonia populations are being monitored to determine long-term population trends. Habitat management techniques, such as reducing shade through selected tree removal are being investigated.

Habitat Protection - A variety of government and private conservation agencies are working to preserve the small whorled pogonia and its habitat. Voluntary protection agreements have also been made with some private landowners.

What can I do to help prevent extinction of species?

Learn - Learn more about the small whorled pogonia and other endangered and threatened species. Understand how the destruction of habitat leads to loss of endangered and threatened species and our nation's plant and animal diversity.

Volunteer - Volunteer at your local zoo, wildlife refuge or nature center. Work with their staff or other community members to maintain and restore local habitat.

Protect - Protect native plants by cleaning your shoes after hiking to avoid spreading invasive plants seeds and staying on trails if you are hiking in an area with rare plants in the the understory.

Grow Natives - Grow native plants in your lawn and garden but obtain the plants from local nurseries, do not dig up native plants from natural areas. Avoid using invasive, non-native plants in landscaping, such as purple loosestrife, bush honeysuckles and burning bush.

City of Johnson City, TN
East Tennessee State University (Co-Permittee)
Public Information & Education (PIE) Plan

In fulfillment of Minimum Control Measure 1, BMP 1B
TN Small MS4 General NPDES Permit No. TNS075370

December 2011

Prepared by:
AMEC Environment & Infrastructure, Inc.

Table of Contents

1. Introduction.....	3
2. Diagnosing Potential Stormwater Problems to Identify Targets.....	4
3. Public Information and Education Activities and Goals.....	5
4. Public Information and Education Implementation and Metrics	7

1. Introduction

This Public Information and Education (PIE) Plan presents a framework for the City of Johnson City's stormwater public education and outreach 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"). The City, along with its co-permittee, East Tennessee State University, is authorized to use the permit under Permit Tracking No. TNS075370. The requirements of the PIE plan are listed in section 4.2.1 of the small MS4 permit, and must provide for the following actions:

- Detail specific goals and public information events/activities that will occur over the remainder of the permit cycle;
- Incorporate components from outreach campaigns and one-on-one communications;
- Incorporate a mode to evaluate the plan's effectiveness so adjustments can be made (if necessary); and,
- Include targeted educational campaigns addressing the following issues:
 - a. general public awareness on the impacts on water quality from general housekeeping maintenance/activities;
 - b. home owner 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 applicators awareness on the proper storage, use, and disposal of pesticides, herbicides and fertilizers use;
 - e. General public and professional chemical applicators awareness on 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; and,
 - h. Municipal employee/contractor awareness of water quality impacts from daily operations.

The objective of this PIE Plan is to document the City's plan for compliance with these requirements.

The PIE Plan shows that the City's PIE program provides both general information on impacts of stormwater discharges to water bodies and the steps that the public can take to reduce pollutants in stormwater runoff, and more targeted information for specific water resources, audiences, and/or pollutants located within the MS4. In other parts of the Small MS4 Permit, the City, as the MS4 operator, is required to serve as regulator or maintenance provider. The public education requirement engages the City in the more subtle role of educator, and invokes the use of marketing strategies, rather than citations, inspections or physical maintenance activities. The public education requirement is predicated on the idea that awareness of positive and negative behaviors can empower residents within an MS4 to have a positive impact on stormwater quality in their daily activities. Thus, if the MS4 can demonstrate it is promoting awareness, in tandem with its other responsibilities, then it has positioned itself to implement its

stormwater management program to the maximum extent practicable standard, as required by law. In addition to meeting the legal requirement, implementing a stormwater information and education program pays credence to the adage, “an ounce of prevention is worth a pound of cure”. Though results can be difficult to measure, implementing an education program is generally considered more cost-effective than enforcement and/or physical corrective actions..

Most of the public information and education measures documented in this PIE Plan are already in place as part of the City’s on-going Small MS4 Permit compliance program. The PIE Plan incorporates these existing activities and provides for new measures that address targeted geographic areas, people, or pollutants to meet the requirements of the current effective Small MS4 Permit. The plan provides a mode for evaluating effectiveness by establishing a method to record metrics for each educational activity, keeping in mind that the goal is to impress upon, or “touch” people and/or groups. By observing the number of impressions made from year to year, the City can evaluate the extent of its effort and decide whether it is properly allocating its resources, or if changes are needed. The metrics are also useful for the reporting requirement for the small MS4 permit.

2. Diagnosing Potential Stormwater Problems to Identify Targets

One way to identify specific streams and/or pollutants is to use information prepared by the State of Tennessee in the published 303(d) List of impaired streams. It is important to understand that the 303(d) List is prepared for watershed planning purposes, and small MS4s represent one of many watershed stakeholders in the overall process of addressing water quality issues. The City may choose to supplement information gathered from the 303(d) list with information it collected on its own, including, but not limited to visual observations in the field, information obtained from complaints, enforcement activities, or highly effective programs. Through examination of the 303(d) list, the City can determine which local water resources are exhibiting negative impacts, in the form of pollutants, which may be attributed to stormwater runoff from the small MS4. Additionally, the City may tailor its program to include or exclude listed streams in a context-sensitive way to emphasize education efforts for those streams which are substantially impacted by the City’s MS4, i.e. streams with outfalls within the City’s corporate limits. The next step is to consider the individuals or groups whose behaviors may affect the introduction of those pollutants to the MS4, thus identifying the target audience(s). Information and education on how their activities can have an impact on water quality can then be provided by the MS4, with the intent that the target audience will be inclined to change their approach to those activities. Target audiences are selected through a process of determining whose behaviors have the most potential to contribute pollutants to streams. This PIE Plan outlines activities that will be directed toward these targets. This PIE Plan outlines activities that will be directed toward these targets, which are identified in Table 1 below.

Table 1. PIE Plan Targets for the City of Bristol TN

Target Streams	Target Pollutants	Target Audience(s)
<ul style="list-style-type: none"> - Boone Reservoir - Boones Creek - Brush Creek - Knob Creek - Cash Hollow Creek - Cedar Creek - Cobb Creek - Sinking Creek - Catbird Creek - Carroll Creek - Reedy Creek 	<ul style="list-style-type: none"> - Nitrate + Nitrite - Escherichia Coli - Physical Substrate Habitat Alterations - Habitat Loss Due to Alteration in Stream-Side or Littoral Vegetative Cover - Loss of biological integrity due to siltation -Other Anthropogenic Habitat Alterations 	<ul style="list-style-type: none"> - Land Developers - Engineers - Construction Workers - General Public - Municipal Employees - TBD by MS4 based on information collected in the field.

In addition to targeted information, broad-spectrum information provided to the general public has a place in stormwater information and education programs because it offers opportunities to introduce the concept of stormwater systems and their impacts on receiving waters. People can relate to places where they derive drinking water or recreate. More importantly, they can see the value in protecting those resources, which could result in positive behavioral changes. An advantage of incorporating general information for a general audience is that materials are typically already developed and available, relieving the City of the burden to develop new ones. Partnerships are often formed for the purpose of delivering stormwater messages to the general public, which also effectively leverages the city’s resources. For these reasons, the City has chosen to implement a number of activities that address general information to the general public.

3. Public Information and Education Activities and Goals

A number of public information and education activities are currently being implemented by the City as a result of permit requirements under the 2003 Small MS4 Permit. New educational activities were added as a result of the issuance of the 2010 Small MS4 Permit. The total of these activities comprise the PIE Plan, which is presented in Table 2. The activities and goals are set to meet targets or provide general information with the resources that are available to the City. Each activity is associated with one or more message delivery methods or activity types. The chosen activities correspond with permit requirements.

Table 2. PIE Plan Activities and Goals

#	Description	Goal(s)	Type	Target Groups	Target Pollutants	Target Streams	2010 Permit Citation(s)
1	Website	-To promote awareness on the water quality impacts from general housekeeping and maintenance practices. -To provide information on how to identify and report suspected illicit discharges. -Provides notice to the public for meetings. -To make development and construction community aware of long-term impacts of development and ordinances, policies and guidance materials related to daily activities. *Includes outreach to professional chemical applicators, (see #8 below).	Internet	Public	All	All	4.2.1.a, d-h 4.2.2
2	TNSA Social Media Campaign	To broaden the public understanding of the storm sewer system and how behaviors contribute to water quality.	Internet	Public	All	All	4.2.1.a, d, e, f
3	Public School Outreach	To engage youth by empowering students to make or influence informed choices on behaviors that affect stormwater.	Events, Printed Materials	School Children, Public	All	All	4.2.1
4	Watershed Groups	To provide support to groups which encourage citizens to take ownership of their water resources.	Group Planned Events	Public	Solid Waste/Litter	All	4.2.2
5	Public Notices	To comply with applicable state and local laws governing this activity.	Publications, Internet	Public	N/A	N/A	4.2.2
6	Hazardous Waste Collection Event Advertisements	To promote awareness that the improper disposal of these items has an impact on water quality,	Internet	Public	Household Hazardous Waste	All	4.2.1
7	Municipal Employee Training	To make municipal employees aware of water quality impacts from daily operations, and to education staff on how to identify and report illicit discharges.	Training Event	Municipal Staff	All	All	4.2.1.h
8	Construction Site Operator Information	To provide a vehicle for the development and construction community to access information on the long-term impacts of development	Internet	Developers, Engineers, Construction Workers	Siltation	All	4.2.1.b, c, g
9	Outreach to Professional Chemical Applicators**	To limit the improper storage, use and disposal of pesticides, herbicides fertilizer, and automotive fluids.	Internet	Landscapers, Automotive	PHFs, Automotive Waste	All	4.2.1.b

***Indicates new activity to be added to existing program. ** Approached through the City's website and TNSA Social Media Campaign**

4. Public Information and Education Implementation and Metrics

Under section 4.2.1 of the Small MS4 Permit, the PIE Plan must include a mode for evaluating effectiveness. The City must also track, maintain records and report education and outreach activities in the annual report for the small MS4 permit. The City will accomplish these requirements by providing a specific implementation schedule, with interim goals, and a way to record metrics for activities as they are performed. The annual entry of results verifies that the intended audience is being reached according to the plan. If any results are insufficient, reduced or missing, the City can seek adjustments to properly address inadequacies. Table 3 below outlines the implementation schedule and corresponding metric(s) for each PIE Activity, along with a place to enter results annually.

Table 3. Public Information and Education implementation and Metrics

Activity	Supporting Documentation	Metric	Permit Year	Results
1. Website	Printed copies of webpages, record of updates, and/or url/	Number of web hits	3	Unavailable due to technical difficulties related to new website (COJC) 637 FB, 381 Twitter (ETSU)
2. TNSA Social Media Campaign	Bi-annual DMA Regional reports provided by TNSA	Total Number of People Reached within the East / North East DMA Region	3	721,995
3. Public School Outreach	Age/grade appropriate information distributed at schools	Est. Number of Materials Distributed	3	Approx. 2000 Door Hangers – (college students) 8 Posters – (K-12 school) 350 Brochures (college student orgs.)
4. Support/Participate in Watershed Groups	Record of membership, (dues receipts, etc., as appropriate)	Staff Attends Bi-monthly Meetings	3	Staff attends all local meetings
5. Public Notices	Web hit counter, newspaper circulation information, number of posted notices and list of locations where they are placed	Number of Notices/Number of People in Attendance at Hearings and/or Comments Received	3	Bi-monthly-records on file
6. Hazardous Waste Collection Event Advertisements	Web hit counter	Number of Web Hits	3	Unavailable due to technical difficulties related to new website

City of Johnson City
 Public Information & Education Plan
 December 2011

7. Municipal Staff Training	Sign-in sheets with name, date and topic	Number of Staff Trained	3	38 (COJC) 30 (ETSU)
8. Construction Site Operator Information	Link to TNEPSC or equivalent for site operators to receive information on training opportunities	Maintain the Link	3	Linked
9. Outreach to Professional Chemical Applicators	This item addressed on the City's website, see item #1.	See Item #1	3	N/A



MISCELLANEOUS DISPOSAL

- [Brush, Leaf & Grass Collection](#)
- [Dumpster Service](#)
- [Garbage Collection](#)
- [Great American Cleanup 2020 - TBD](#)
- [Miscellaneous Disposal](#)
- [Recycling](#)
- [Washington County Convenience Centers](#)
- [FAQ](#)

SOLID WASTE

 [423-975-2792](tel:423-975-2792)

 [Amy Alley, Office Manager](mailto:amy.alley@johnsoncitytn.org)

 [91 New Street
Johnson City, TN 37601](https://www.johnsoncitytn.org/91-New-Street)

[Back](#)

HOUSEHOLD HAZARDOUS WASTE & GREAT AMERICAN CLEANUP

Washington County hosts a household hazardous waste collection day each spring. Items that are accepted include household chemicals, paint thinners, cleaners, pesticides, pool chemicals, flammables, fertilizers, and insecticides. Visit the Washington County Solid Waste website or call 423-753-1652 for more information.

Great American Cleanup 2020 has not been scheduled yet.

FURNITURE AND APPLIANCES (Available to city residents only)

Residents may arrange for furniture and appliances to be collected curbside by calling the Solid Waste Division at 423-975-2792. There is no additional charge for this service, but residents must call to have the items placed on the pick-up schedule. When placing a freezer or refrigerator at the street for collection, it is recommended that the appliance be placed on its lid or door.

TIRES

The City of Johnson City does not collect tires due to state law prohibiting the disposal of tires in sanitary landfills. By law, the county is responsible for the disposal or recycling of all tires from its jurisdiction. Tires are therefore accepted at Washington County Tire Center, 190 Lancaster Road, Kingsport, TN 37663. Visit the [Washington County Tire Center](#) for more information.

BATTERIES

Household batteries, both rechargeable and non-rechargeable, are accepted for recycling in curbside bins and in person at the Solid Waste Services Complex at 91 New St., Monday through Friday from 7 a.m. until 4:30 p.m. Both battery terminals must be taped securely. Batteries must be placed in a plastic sandwich/storage bag with a zipper seal. If depositing batteries via curbside bins, please place baggies on top of other recyclables in the bin.

BUILDING MATERIALS AND CARPET

The City does not pick up building material or carpet. It is the property owner's responsibility to dispose of these items. Call Iris Glen Environmental Center at 423-926-8375 for rules and rates regarding disposal of these items.

COOKING OIL

Used cooking oil is accepted for recycling via curbside bins. Residents are asked to strain food particles from the oil and place the oil in a clear gallon container with a screw-on lid. Lard, shortening, and tallow are not accepted. While used motor oils (NO kerosene, gasoline, brake or transmission fluids, paint thinner, etc.) are also accepted for recycling, they should not be mixed with cooking oils.

FLUORESCENT BULBS

Fluorescent tubes and compact fluorescent bulbs (CFLs) are accepted for recycling in person only at the Solid Waste Services Complex at 91 New St., Monday through Friday from 7 a.m. until 4:30 p.m. Tubes and bulbs should be placed in original packaging or wrapped in newspaper. Only four tubes will be accepted per visit; there is no limit on CFLs. Tubes longer than 4 feet will not be accepted.

MEDICATIONS

A drop box for unused medications is located in the lobby of the Johnson City Police Department, 601 E. Main St.

PAINT

Unused paint should be left to dry in can, adding dirt or sand if needed. After placing the lid back on the can, the can may be placed in the garbage cart for collection.



[BACK TO TOP](#) 



Not Rain? No Drain!



For more information on storm water management at ETSU, please contact the

Environmental Health and Safety Office at 439-6028 or visit our website at

<http://healthsafety.etsu.edu/static/stormwater>.

When there's heavy rain, the runoff goes down the storm drain and directly into our rivers, lakes, creeks, and other local water bodies. That includes pollutants on the ground plus those people may unfortunately allow to flow down storm drains like oil, paint, grass clippings, and trash. Rain is the only thing that belongs in a storm drain.

If you don't want it in your water, keep it out of the storm drain!

If you don't want it in your water, keep it out of the storm drain!

When there's heavy rain, the runoff goes down the storm drain and directly into our rivers, lakes, creeks and other local water bodies - unfiltered!

Trash, grass clippings, paint and pollutants do not belong in a storm drain.

Help keep our water safe!

Not Rain? No Drain!

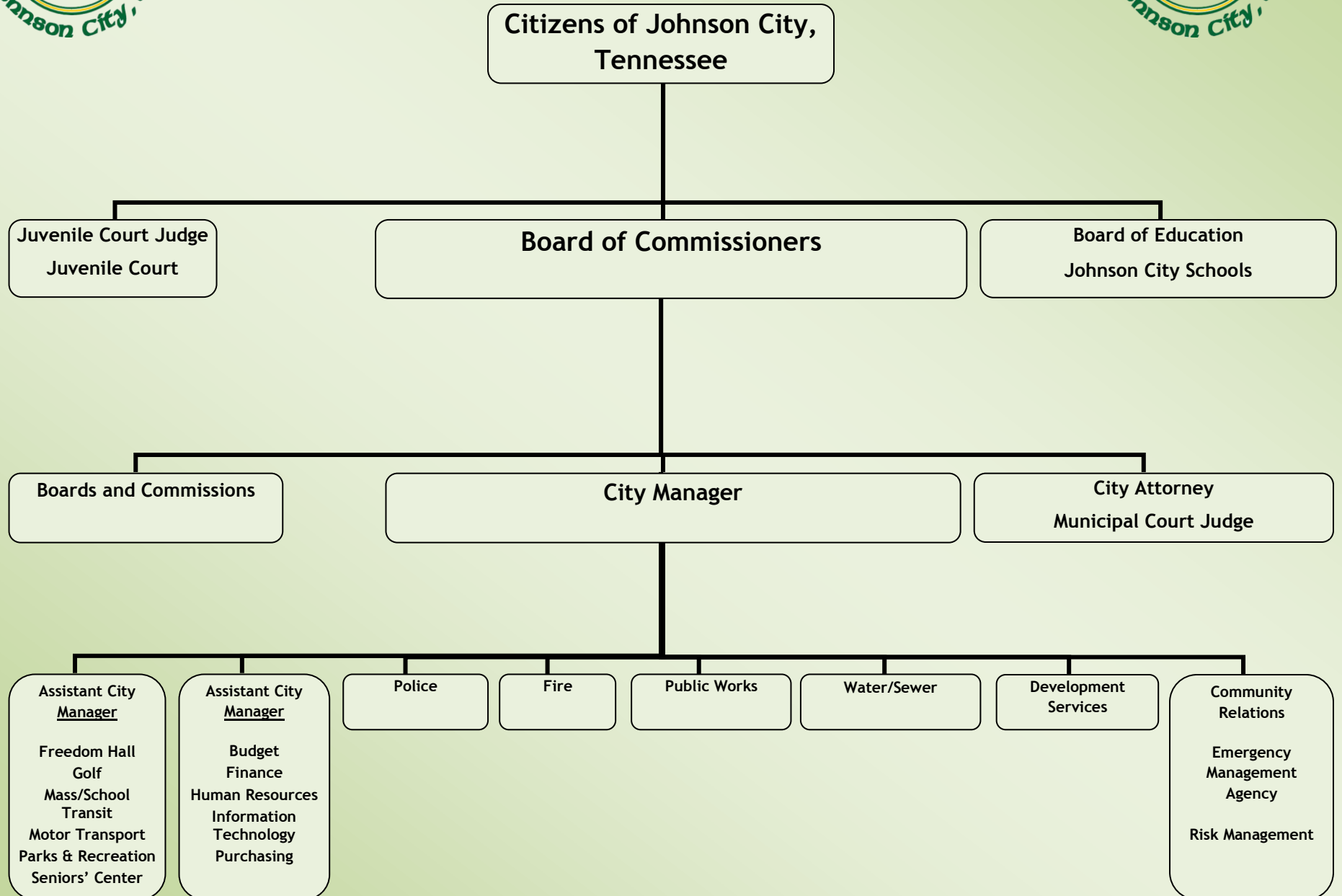


When there's heavy rain, the runoff goes down the storm drain and directly into our rivers, lakes, creeks, and other local water bodies. That includes pollutants on the ground plus those people may unfortunately allow to flow down storm drains like oil, paint, grass clippings, and trash. Rain is the only thing that belongs in a storm drain.

If you don't want it in your water, keep it out of the storm drain!



CITY OF JOHNSON CITY GOVERNMENT STRUCTURE



Public Works Department

Phil Pindzola - Public Works Director
Nancy Campbell - Administrative Coordinator

Engineering
Allan Cantrell, P.E. - City Engineer

10

Engineering / Design
Brandon Pachol, P.E. - Civil Engineer III
Lawrence Perry, P.E. - Civil Engineer III
Brandon Shaw - Engineering Technician II

Engineering / Inspection
Paul Easlic - Construction Inspector
Tim Seaton - Construction Inspection
Vacant - Construction Inspection

Engineering / Surveying
Daryl Perdue, RLS - Surveyor Supervisor
Mike Fairburn - Surveyor
Rob Biller - Survey Technician

1
MSW (0.6) Jim Culbert
Environmental Specialist
WS (0.4)

52
Solid Waste
Kathy Harsh - Solid Waste Manager

Cheyenne Kumbhare - Analyst

Recycling
Josh Miller - SEO
Cody Turbyfield - SEO
Brandon DeSalle - SEO
Scotty Parlier - SEO
Josh Hodges - SEO
Steve Waycaster - SEO II
Alex Lyons - SEO
Gerald Braasch - SEO

Administration
Amy Alley - Office Manager
Spencer Baumgardner - Customer Service Clerk
Nicki Hellis - Customer Service Clerk
Gina Baumgardner - Customer Service Clerk
Johnny Isaacs - Health & Safety Trainer
Brent DeJoseph - General Supervisor
Lynn Richardson - Crew Supervisor

Phillip Davis - Assistant Solid Waste Manager

City Residential
Jason Price - SEO
Roy Roberts - SEO
Doug Ramsey - SEO
Josh Hughes - SEO
Anthony Greene - SEO II
Chris Mitchell - SEO II
Randall Miller - SEO
David Moore - SEO
Paul Wade - SEO
Calvin Lester - SEO

Commercial
Micheal Dupree - SEO
Robert Cochran - SEO
Steve Broyles - SEO II
Justin Johnson - SEO
William Casey - SEO
Andy Bennett - SEO

Regional Collection
Nick Hughes - Auto Tech
Dewey Johnson - Auto Tech
Jorge Rivero - SEO
Teddy Tipton - SEO
Ethan Franklin - SEO
Curtis Hicks - SEO II
Eugene Arrowood - SEO
Vacant - SEO
Walter Duke - SEO II
Malcom Smith - SEO
Jon Potter - SEO III

Industrial
Vacant - SEO
Ernie Berry - SEO
Jerry Harwood - SEO
David Pedersen - SEO
Anthony Cross - SEO
Jerry Hodges - SEO
Vacant - SEO

Tyler Morris - Civil Engineer II

Traffic
Anthony Todd - Traffic Manager

12

Signal Maintenance
Mark Stidham - Systems Specialist
David Young - Traffic Signal Technician
Anthony Miller - Traffic Signal Technician

Signs and Markings
Richard King - Traffic Signs & Markings Specialist
Mike Mould - Traffic signs & Markings Specialist
Christ Stout - Traffic Signs & Markings Specialist
John Hilton - Traffic Signs and Markings Technician
Nick Estep - Traffic Signs and Markings Technician
Mark Carrico - Traffic Signs and Markings Technician
Koty White - Traffic Signal Technician

84

Street
Andy Best, P.E. - Assistant Public Works Director

Jeremy Jones - Operations Manager

Street Division Administration
Pat Kidd - Office Manager
Linda Fair - Administrative Coordinator
Ginger Whitson - Administrative Coordinator

Rick Kilgore - Design & Construction Technician
Vacant - Design & Construction Technician

Stormwater
David Rock - Stormwater Inspector
Jeff Kirshberg - GIS Database Specialist
Temporary Employees
Terry Whitmore

Drainage / Construction / Stormwater
David Hurt - General Supervisor

Jerry Ludrosky - Crew Supervisor
Tracy McKinney - Crew Supervisor
Patrick Woodfin - MEO III
Ronald Dunn - MEO II
Samuel Rankin - MEO II
Troy Scalf - MEO II

Scott Higgins - Crew Supervisor
Robert Tinker - MEO III
William Medley - MEO II
Keith Greene - MEO II
Travis Malone - MEO II
Brian McGee - MEO II
Kenneth Alexander - MEO II
Ron Bishop - MEO III

Sidewalk Construction
Donnie Campbell - General Supervisor

Mike Doyle - Crew Supervisor
Chuck Hill - Facilities Maintenance Mechanic
Richard Hassett - Facilities Maintenance Mechanic
Tyler Everhart - Facilities Maintenance Mechanic
Carl Bowman - Facilities Maintenance Mechanic
Mark Reeves - Facilities Maintenance Mechanic
David Hirt - Facilities Maintenance Mechanic
Vacant - Facilities Maintenance Mechanic
Andy Schaff - MEO III
Temp Employees
Stephen Taylor
Jackie Myers
Vacant
Vacant

Pavement Maintenance
Keith Swift - General Supervisor

Aaron Waite - MEO II
Billy J Hickman - MEO III
Brian Harrison - MEO II
Mike Wilson - MEO II
Manuel Chavarria - MEO II
Mel Ramsey - MEO II
Steve Barnett - MEO II
Ray Combs - MEO II
Vacant - MEO II
Cody Mitchell - MEO II
Ryan Millhorn - MEO III

Urban Forestry
Patrick Waulding - City Forester
Jeremy Jones - Crew Supervisor
Gordon Presnell - Tree Trimmer II
Vacant - Tree Trimmer I
Harold Keller - Tree Trimmer I
Greg Chapman - Tree Trimmer I
Derek Kolich - Landscape Supervisor
Steve Gross - Land Worker
Allen Markland - Land Technician
Vacant - MEO II
Temporary Employees
Daniel Honaker
Vacant

Yard Waste / ROW Maintenance
Dean Minier - General Supervisor

Litter Collection
Brandon Haynie - MEO II

Shop
Paul Robinson - Facility Maintenance Mechanic

Mowing
Josh Lancaster - MEO III
Danny Franklin - MEO II
Michael Martha - MEO II
Cody Shoemaker - MEO II
Sweeping
Tony Haynes - MEO II
Craig Cloyd - MEO II

Yard Waste Collection
Anthony Hill - Crew Supervisor
Danyel Glymph - MEO II
Steven Honk - MEO II
James Hughes - MEO II
Barbara Williams - MEO II
Joe Gilbert - MEO II

Yard Waste Disposal
Nathan Johnson - MEO III

Downtown
Greg Stout - MEO II

Downtown Temp
Vacant
Vacant

Temp Employees
Hubert Godsey
Daniel Craun



Services

Government

Residents

Business

How Do I

Johnson City 150

Go All Out



60° Clouds



Translate



Accessibility

[Back](#)

The City of Johnson City will hold a public comment period for the City's Municipal Separate Storm Sewer System (MS4) Permit Annual Report (Stormwater Program) from 5-6 p.m. Thursday, Sept. 26 at the City Services Complex, 209 Water St., in the Street Division Building (building with the glass foyer).

CONTACT: *Jeremy Jones, operations manager*
Public Works
423.434.5784

###



BACK TO TOP



Date: 9/30/2019

City Service - 209 Water Street, Johnson City TN

**MS4 Annual Report Public Meeting
and Comments- Sign-in Sheet**

NAME	Organization	Address	Telephone and Email Address
<u>No Attendees</u>			