

August 12th, 2021

Valerie McFall
Tennessee Department of Environment and Conservation
Knoxville Environmental Field Office
3711 Middlebrook Pike
Knoxville, TN 37921

Dear Ms. McFall,

On behalf of the University of Tennessee, I am pleased to submit the enclosed eighth annual report for the NPDES Permit issued February 8, 2017. Below is a summary of information and accomplishments for the University of Tennessee Stormwater Management Program for the 2021 Fiscal Year.

1.0 Executive Summary

This annual report documents The University of Tennessee's compliance with the Stormwater management program requirements as detailed in the Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) permit number TNS076121. This annual report contains program information and accomplishments from July 1, 2020 to June 30, 2021.

1.1 Program Highlights

Program highlights and milestones during the reporting period consist of the following:

- Completed the first-round assessment of 64,081 feet of shoreline. 12,601 feet of shoreline need some level of stabilization.
- Conducted dry weather screening on all 74 Outfalls.
- Completed a full MS4 program audit with TDEC
- Conducted 68 Stormwater Compliance Inspections on active construction projects.
- Hosted 12 Adopt-A-Stream cleanups.
- Hosted "Paddle-Off" event with the Water Quality Forum that raised funds and awareness for water quality in Knoxville.
- Hosted a rain barrel auction at UT gardens with the Water Quality Forum that raised funds and awareness for water quality in Knoxville.
- Converted approximately 30,000 square feet of impervious surface to drain to green infrastructure.
- completed rehabilitation of a segment of 2nd Creek following a significant slope failure into the stream channel.

1.2 Program Modifications

Program modifications that occurred during the reporting period consist of the following:

- Added a Plans Review Checklist to be filed during our review of submitted drawings
- Added a Designers statement of projects Stormwater Compliance form to our document review process

1.3 Program Advising

The previously established Stormwater Advisory Committee meets quarterly to review Stormwater Management recommendations to be presented to the Vice Chancellor for Finance and Administration. The charge of this committee is to serve as oversight for the development and implementation of the University's Stormwater Master Plan.

2.0 Municipal Separate Storm System Information

2.1 Population Served

Due to the seasonal nature of the University of Tennessee, the population densities vary considerably throughout the year. Special events, contractors, vendors, and normal traffic further contribute to our temporary populations. Based on recent enrollment records, the annual student population is 30,559. The total University staff consists of over 8,959 full time and part time employees.

2.2 Service Area

The University maintains and operates only those portions of the storm sewer system located within the University property boundaries of Main Campus and the Institute of Agriculture Campus and the University of Tennessee Space Institute in Tullahoma. The University of Tennessee properties specifically addressed in this permit cover an area of approximately 890 acres.

Remote University facilities such as properties located on the Holston River and Tennessee River are primarily rural with less defined Stormwater conveyances. Stormwater runoff at these sites is managed in compliance with pertinent requirements for those locations. These sites are not included in the NPDES MS4 Stormwater Permit.

Many discharges from University outfalls include run-on contributions from the City of Knoxville storm sewer system, but the primary drainage at the outfalls is conveyed from the University.

2.3 MS4 Conveyance System

The storm sewer system, for the main University of Tennessee Campus in Knoxville, conveys water from approximately 1 square mile of University owned land into several watersheds

including Second Creek, Third Creek, East Fork Third Creek, and the Tennessee River. Throughout campus, Stormwater runoff is collected in various BMP devices, curb inlets, area drains, and similar drainage structures that lead to the storm sewer system. The runoff is conveyed primarily through underground piping which eventually discharges into open stream channels before leaving University property.

2.4 Land Use Composition Estimates

The following are estimated land use activities within the University's jurisdictional area.

Approximate Areas:	
Total Campus Area	38,783,246 sq. ft (890 Acres)
Drains to Green Infrastructure	680,321 sq. ft (15.6 Acres)
Paved	7,917,260 sq. ft (181 Acres)
Roof Surface	6,009,108 sq. ft (138 Acres)
Pervious	24,181,557 sq. ft (555 Acres)

2.5 Receiving Streams

The University of Tennessee contributes runoff into Second Creek, Third Creek, East Fork Third Creek and the Tennessee River/Fort Loudoun Lake. The University of Tennessee Space Institute contributes stormwater runoff into Woods Reservoir. Table 1 below summarizes information provided by the Tennessee Department of Environment and Conservation on the various receiving waters of the State.

Table 1: Receiving Stream Summary

Water Body ID	Water Body Name	Segment/Length	303d Cause	TMDL
TN06010201 087-1000	Second Creek	From Cumberland Avenue to the Tennessee River/ 0.3 Miles	Other Anthropogenic Habitat Alterations, Nitrate, Nitrite, Loss of Biological integrity due to siltation, Escherichia coli	Fecal Coliform Bacteria: April 4, 2003 Siltation/Habitat Alteration: February 1, 2006
TN06010201 067-0100	East Fork Third Creek	From Sutherland Avenue extending 0.12 miles to the South / 0.12 miles	Loss of biological integrity due to siltation, Other Anthropogenic Habitat Alterations, Escherichia coli	

Water Body ID	Water Body Name	Segment/Length	303d Cause	TMDL
TN06010201 067-1000	Third Creek	From Cumberland Avenue to the Tennessee River/ 1.08 miles	Nitrates, Nitrite, Loss of biological integrity due to siltation, Other Anthropogenic Habitat Alterations, Escherichia coli	Fecal Coliform Bacteria: April 4, 2002 Siltation/Habitat Alteration: February 1, 2006
TN06010201	Fort Loudoun Reservoir	From 0.06 miles upstream of Second Creek to 0.16 miles downstream of Alcoa Highway/ 2.25 miles	Mercury, PCBs	PCB's March 3, 2010
TN06030003 036_1000	Woods Reservoir	Approximately 3.22 Miles of shoreline south of the Robert W Hamm Rd Crossing.	PCBs	PCBs November 13, 2007

3.0 Public Education and Outreach

An integral part of the Stormwater Management program involves the education of the campus community and others about water resources, how we affect water quality, and what we can do to minimize pollution and lessen our impact on the environment. To facilitate this, the University has developed a Public Information and Education (PIE) plan that outlines target pollutants, target groups, programs/events and measurable goals to provide information to the campus community. The campus community (excluding athletic events) includes over 39,000 students, faculty, staff, contractors, vendors and visitors. The Public Education and Outreach program metrics are summarized in Table 2 below.

Table 2: Public Education and Outreach summary

Fiscal Year 2021 Metrics	Quantity	Target Audience	
		Campus Population	Faculty, Staff, Contracted Employees
Stormwater Awareness Info Graphics posted	0	X	X
Stormwater Awareness Training sessions	4		X
Stormwater Awareness memorabilia distributed	85	X	X

Fiscal Year 2021 Metrics	Quantity	Target Audience	
		Campus Population	Faculty, Staff, Contracted Employees
Stormwater Webpage	1	X	X
Public Meetings held	1	X	X
Stormwater Awareness Presentations	0	X	X

4.0 Public Participation and Involvement

4.1 Public Participation Program

The University provides opportunities for stakeholders and the public to participate in the Stormwater Management Program development and implantation through:

- The Stormwater Advisory Committee, which is a group comprised of University stakeholders who oversee the development and implementation of the permitted Stormwater Management Program.
- The Water Quality Forum, which is comprised of local MS4s that work towards a common goal of increasing water quality in our shared watershed.
- The Tennessee Stormwater Association (TNSA), which is comprised of a statewide MS4s, Consultants and State Regulators that work to help each other build consistent Stormwater management programs and ultimately increase water quality.
- The Environmental Compliance Team which is comprised of various University department representatives who ensure the campus stays within compliance of all environmental programs.
- The Adopt a Stream program, which provides an opportunity for our faculty, staff and students to take ownership in stream segments that run through campus. These groups focus on invasive vegetation removal and trash pickup.
- Student project assistance and advising, which provides information and project consulting to students working on projects related to Stormwater Management. These student projects range anywhere from Engineering, to Landscape Architecture to Advertising.
- The Invasive Removal Events are an event where student volunteers from ESS220 Waters and Civilizations, the L&N Stem Academy, Farmhouse Fraternity, and the Food Science Club aided the Stormwater Coordinator and student assistant with removing invasive plant species from the Second Creek streambank.

Table 3: Public Participation and Involvement Program summary

Fiscal Year 2021 Metrics	Quantity
Stormwater Advisory Committee Meetings	4
Water Quality Forum Meetings	3
TNSA Meetings	3

Fiscal Year 2021 Metrics	Quantity
Environmental Compliance Team Meetings	1
River Rescue Sites	2
Adopt a Stream Sites	5
Student Projects	1
Invasive Removal Events	3

4.2 Public Reporting Program

The University provides an opportunity for the public to participate in the Stormwater Management Program development and implementation through reporting of environmental concerns and illicit discharges. Information on reporting Stormwater related problems have been publicized on the Stormwater awareness info graphics, Stormwater awareness stickers, and the Stormwater display in the University Center and on the Stormwater webpage, which has a feature that allows users to submit an electronic form that is sent to the Stormwater Management Coordinator.

Table 4: Public Reporting Program summary

Fiscal Year 2021 Metrics	Quantity
Reported Environmental Concerns	1
Reported Illicit Discharges	3

5.0 Illicit Discharge Detection and Elimination

5.1 Storm Sewer System Inventory

Previously, a consultant was hired by the university to map all of the underground utilities for the UTK campus. The completed mapping is now being field verified and updated. Additionally, the Stormwater Coordinator and Student Assistant dry-weather screen all outfalls twice a year. The program has transitioned from paper forms to electronic forms thus increasing efficiency for completing this task.

5.2 Illicit Discharge Program

A standard operating procedure (SOP) for illicit discharge detection and elimination has been developed and is in place. Illicit discharges are identified either in person, or via submittal of the electronic form located on the website, or via telephone calls of concern placed by the public. There is currently a substantial amount of construction on the Campus, which increases the

likelihood that construction related illicit discharges may occur. An Illicit Discharge Policy prohibiting this type of activity, and the associated Enforcement Response Plan have been implemented.

In addition to the SOP and Policy, Outfall Inventory and Dry Weather Screening events are conducted on a semi-annual basis in our 4 receiving streams. A standardized Outfall Inventory data sheet is utilized for collecting all necessary information in the field and documenting illicit discharge inspections at outfall locations. 92 outfalls (74 at the University of Tennessee Knoxville and 18 at the University of Tennessee Space Institute at Tullahoma) have been identified and investigated as part of this process and an Outfall inventory and dry weather screening report has been prepared.

Table 5: Illicit Discharge Program summary

Fiscal Year 2021 Metrics	Quantity
Electronic forms received	0
Phone calls received	0
Illicit Discharges detected	3
Illicit Discharges resolved	2
Outfalls Inspected	74

6.0 Construction Site Runoff Control

The University of Tennessee is a state agency and is subject to the State erosion and sediment control regulations as specified in the State of Tennessee general NPDES permit for discharges of Stormwater associated with construction activities. For projects disturbing greater than or equal to 1.0 acres, a Stormwater Pollution Prevention Plan (SWPPP) and associated Erosion and Sediment Control Plan are submitted to the University Stormwater Management Coordinator for review and then submitted to TDEC for review and issuance of a Notice of Coverage prior to commencement of land disturbing activities. For projects disturbing 0.1 to 0.99 acres, the erosion and sediment control plans are submitted to the University Stormwater Management Coordinator for review and approval prior to commencement of land disturbing activities as outlined in the Stormwater Management Standard Operating Procedures.

All projects at the University that have a land disturbance component are required to follow the regulations outlined in the NPDES permit and are subject to enforcement procedures outlined in the Enforcement Response Plan. Unlike other permitted MS4s, the University is typically the owner, developer, and project manager for on-campus projects. Construction requirements and penalties are outlined in the project contract, and typical enforcement is tied to payment and final project acceptance. All approved projects on campus are inspected by the University Stormwater Management staff on at least a monthly basis. All inspections are performed using the TDEC Erosion and Sediment Control Handbook as guidance.

The Construction Site Runoff Control Program is performance based and is quantifiable through the number of plan reviews/approvals, inspections performed, complaints received and enforcement actions issued. These measureable goals are summarized in Table 6 below.

Table 6: Construction Site Runoff Control Program summary

Fiscal Year 2021 Metrics	Quantity
TDEC CGP Permits	4
University Plan Review/Approval	2
Projects Receiving NOVs	1
University Erosion and Sediment Control Inspections	68
Publicly Reported Construction Site Issues	0

7.0 Post Construction Runoff Control

The University has developed and implemented a Runoff Reduction policy. This policy provides guidelines to ensure site design standards for all new and redevelopment projects disturbing greater than 1 acre, require management measures that are designed, built and maintained to infiltrate, evapotranspire, harvest and/or reuse at minimum the first inch of every rainfall event preceded by 72 hours of no measurable precipitation. In addition to this policy the University's post construction Stormwater control program includes post construction runoff inspections, a Best Management Practice Inventory and Maintenance Program, and a Best Management Practices Manual- A Stormwater Planning and Design Manual for Stormwater Management Practices.

8.0 Pollution Prevention and Good Housekeeping

The University's pollution prevention and good housekeeping operations span a collection of multiple individual programs;

1. Stream Monitoring Program
2. NPDES-Regulated Industrial Facilities
3. Stormwater Collection System Operations and Maintenance
4. Permanent Stormwater BMP Operations
5. Landscape Services Operations and Maintenance
6. Snow Removal and Control
7. Recycling and Solid Waste Management
8. Hazardous Waste Management
9. Vehicle Cleaning

These nine programs are described in more detail below.

8.1 Stream Monitoring Program

Stream monitoring of impaired water bodies is required as a component of the MS4 permit to assess the effectiveness of the BMPs in achieving contaminant load allocations. Both analytical monitoring and non-analytical monitoring are required in stream segments listed as impaired. A sampling plan has been developed to satisfy the requirements of the MS4 permit for all 303d listed streams that have the pollutant source identified as discharges from MS4 areas.

Implementation of this plan will be used to evaluate the effectiveness of the University's Stormwater Management Program. At minimum these stream segments will be sampled on a 5 year rotation as required. Additional sampling may be conducted as needed. A summary of samples collected as part of the 2017 stream monitoring program are summarized in table 7 below.

Table 7: 2017 Stream monitoring summary

Stream Segment	Samples to be conducted				
	Macro Invertebrate Stream Survey	E. Coli	Total Suspended Solids	Nitrate /Nitrite	Visual Habitat Assessment
East Fork Third Creek	1	2	2	0	2
Third Creek	2	2	2	2	2
Second Creek	2	2	2	2	2
Total Samples to be Collected	5	6	6	4	6

A Benthic Study was completed in cooperation with a representative from TDEC. This study looked at 5 total locations (2 Third Creek, 2 Second Creek, 1 East Fork Third Creek) in water bodies influenced by campus operations. The Stormwater Management Program used Dinkins Biological Consulting to collect and process the red samples. Following internal review that data was shared with the local TDEC Environmental Field Office.

8.2 NPDES regulated Industrial Facilities

The University's Steam Plant located on Lake Loudon Boulevard maintains a Tennessee Multi Sector General Permit (TMSP) for Stormwater discharges associated with industrial activity. This Facility is permitted as a steam electric power generating operation. Historically this facility has been fueled by combustion of coal. The use of coal as a fuel source was discontinued in March 2015, and Natural Gas will be used going forward.

Table 8: NPDES Regulated Industrial Facilities summary

Fiscal Year 2021 Metrics	Quantity
NPDES Stormwater Regulated Industrial Facilities	1
Compliance Audits Performed	0
Audited Facility Not in Compliance	0

8.3 Stormwater Collection System Operations and Maintenance

The Stormwater collection system operations and maintenance is performed both by our in house utilities division and outsourced through task managed contracts. The operations and maintenance work performed consists of storm drain cleaning, removal of blockage, cleaning of catch basins and area drains, the inspection and pump out of proprietary water quality treatment devices. Collected material removed from the Stormwater collection system is hauled off site and disposed of properly.

Table 9: MS4 Operations and Maintenance summary

Fiscal year 2021 Metrics	Quantity
Catch Basins/ Inlets Cleaned	25
Water quality units inspected	24
Water quality units pumped out	4

8.4 Permanent Stormwater BMP Operations

The University owns and operates various permanent Stormwater Best Management Practices on Campus. See Table 10 below for a breakdown of BMP type.

Table 10: Stormwater BMP summary

Type of BMP	Total Devices	Quantity	Unit
Stormwater Harvesting and Reuse	10	121800	Gallons
Water Quality Unit	24	24	Units
Rain Garden	6	18,509	Square Feet
Permeable Pavement System	4	25108	Square Feet
Dry Detention	3	3	Locations
Green Roof	7	26,646	Square Feet
Silva Cell Bioretention	12 locations	118	Trees
Grassed Swale	4	895	Linear Feet
Vegetated Filter Strip	3	7,670	Linear Feet

Routine monthly BMP inspections, rainfall event triggered inspections (following events exceeding 0.5 inches of rainfall in a 24 hour period), and maintenance are performed under the supervision of staff qualified in Stormwater inspection, as well as operations and maintenance.

Standardized maintenance tasks are outlined in the UT BMP Manual and are specific to each type of applicable BMP.

A Stormwater Master Plan and Vision document was developed to reflect the evolution of our Stormwater Management Program, and progress the campus has made in Stormwater Management.

8.5 Landscape Services Operations and Maintenance

Landscape Services is responsible for the maintenance and improvement of the campus grounds on the Main and Agricultural campuses. This includes mowing, raking, mulching, fertilizing, weeding, edging, litter pick-up, street sweeping, grading, excavating, trenching, demolition, hauling, asphalt preparation, landscape design, planting, transplanting, pruning, and tree removal.

Two vacuum trailers are dedicated to perform leaf collection during the 3 month long leaf season. Collected leaves are transported to our compost facility to be incorporated into the campus composting operation

Table 11: Landscape Services Operations and Maintenance summary

Fiscal year 2021 Metrics	Quantity
Landscaped Area Maintained (acres)	284 (estimated)
Leaves /Woodchips / Brush Composted (Tons)	521.87 tons

8.6 Snow and Ice Removal and Control

Landscape Services provides ice and snow removal services for the Main and Agricultural campuses. These services are provided on a priority basis, with safety of the greatest number of individuals being used to determine the order of service. The universities salt and de-icing supply is stored in an enclosed area to prevent Stormwater contact.

Table 12: Snow and Ice Removal and Control summary

Fiscal year 2021 Metrics	Quantity
Salt Applied	0 lbs
Alternative De-icing Product Applied	1,250 lbs

The Alternative De-icing Product is 80% Salt and 20% CaCl (Calcium-Chloride).

8.7 Recycling and Solid Waste Management

The University maintains a comprehensive recycling and solid waste reduction program including contract dumpsters with plugs and lids, 34 compost stations, and one public drop off location. All waste collection areas are picked up 1-5 times per week depending on location and need.

Table 13: Recycling and Solid Waste Management Program summary

Fiscal year 2021 Metrics	Quantity
Compost/Food	217.15 tons
Construction and Demolition (non-landfill/recycled)	8,375.78 tons
Batteries	3.61 tons
Used Motor Oil	3.45 tons
Cooking Oil	13.34 tons
Light bulbs/Ballasts	12.61 tons
Dumpsters Repaired	6
Dumpsters Replaced	3

8.8 Hazardous Waste Management

The University's Environmental Health and Safety department provides a collection service for all Hazardous and Acutely Hazardous Waste substances. This service is provided to the University labs, shops and storage facilities that generate these types of waste as well as other types of waste materials that require special disposal or handling procedures such as mercury lamps. Incident response agreements are continuously maintained with the City of Knoxville Fire Department.

8.9 Vehicle Cleaning

Fleet Management has an engineered wash bay facility on campus for washing vehicles. This facility discharges to the sanitary sewer system. There is no vehicle washing that could cause impacts to the storm sewer system permitted outside of the facility constructed for this purpose.

Please see the attached Small MS4 Annual Report Form CN-1291.

Please call me at (865) 805-4007 if you have any questions concerning this report.

Sincerely,



Garrett Ferry, CPESC

Stormwater Management Coordinator

Facilities Services Department

University of Tennessee



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

1. MS4 Information

Name of MS4: The University of Tennessee, Knoxville		MS4 Permit Number: TNS076121
Contact Person: Garrett Ferry		Email Address: gferry@utk.edu
Telephone: (865) 805-4007		MS4 Program Web Address: stormwater.utk.edu
Mailing Address: 2040 Sutherland Avenue		
City: Knoxville	State: TN	ZIP code: 37921 (Physical) 37996 (mailing)

What is the current population of your MS4? 39,518

What is the reporting period for this annual report? July 1 2020 to June 30 2021

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/dwrr/)? 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: Requiring design of EPSC measures to meet or exceed a 5 Year storm event. 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: Any and all pollutants that have the potential to impact stormwater quality. Yes No
- C. Do you have a webpage dedicated to your stormwater program? If yes, provide a link/URL: stormwater.utk.edu Yes No
- D. Summarize how you advertise and publicize your public education, outreach, involvement and participation opportunities: Stormwater stickers, stormwater apparel, flyers in dorms and educational buildings, website, and working with lecturers to communicate with students about public events and volunteer opportunities.

- E. Summarize the public education, outreach, involvement and participation activities you completed during this reporting period: Held 4 stormwater Advisory Committee Meetings, Attended 3 Water Quality Forum Meetings, Attended 3 TNSA Meetings, Hosted 3 Environmental Compliance Team Meetings, Hosted 2 Tennessee River Rescue Sites, Maintained 5 Adopt a Stream Sites, Facilitated 1 stormwater student projects, held 3 Invasive Removal Events.
- 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: 12 Adopt-A-Stream cleanups held on UT campus, hosting a total of 105 volunteers, collecting approximately 110 bags of trash and an assortment of large pieces of trash like tires or pallets. Total number of individuals outreached during rainbarrell auction, paddle off, cleanups, and education tours totaled at 296 citizens served.

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? 92
- 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: Illicit Discharge Detection and Elimination System, Bi-annual Dry Weather Screening. Yes No
- F. How many illicit discharge related complaints were received this reporting period? 2
- G. How many illicit discharge investigations were performed this reporting period? 2
- H. Of those investigations performed, how many resulted in valid illicit discharges that were addressed and/or eliminated? 2

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

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

- 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? 4
- F. How many active priority and non-priority construction sites were inspected this reporting period? 7
- G. How many construction related complaints were received this reporting period? 0

6. Permanent Stormwater Management at New Development and Redevelopment Projects (Section 4.2.5)

- A. Do you have a regulatory mechanism (e.g. ordinance) requiring permanent stormwater pollutant removal for development and redevelopment projects? If no, have you submitted an Implementation Plan to the Division? Yes No
 Yes No
- B. Do you have an ordinance or other regulatory mechanism requiring:
Site plan review and approval of new and re-development projects? Yes No
A process to ensure stormwater control measures (SCMs) are properly installed and maintained? Yes No
Permanent water quality riparian buffers? If yes, specify requirements: Since all receiving streams are waters with unavailable parameters, we use a 60 ft. water quality riparian buffer on all projects adjacent to streams. 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.)? All Projects.
- D. How many development and redevelopment project plans were reviewed for this reporting period? 3
- E. How many development and redevelopment project plans were approved? 3
- 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? 19
- 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. We have developed a Stormwater Mitigation banking system. 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

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

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. None.

Changes to the program as required by the division to satisfy permit requirements. None.

Information (e.g. additional acreage, outfalls, BMPs) on newly annexed areas and any resulting updates to your program. Added 2 water quality units to our BMP Inventory.

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. See attached letter. 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>24</u>	# <u>1</u>	# <u>3</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Written notices	# <u>21</u>	# <u>0</u>	# <u>0</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Citations with administrative penalties	# <u>0</u>	# <u>0</u>	# <u>0</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Stop work orders	# <u>0</u>	# <u>0</u>	# <u>0</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Withholding of plan approvals or other authorizations	# <u>0</u>	# <u>0</u>	# <u>0</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Additional Measures	# <u>0</u>	# <u>0</u>	# <u>0</u>	Describe: <u>N/A</u>	

- C. Do you track instances of non-compliance and related enforcement documentation? Yes No
- D. What were the most common types of non-compliance instances documented during this reporting period?
Sediment leaving construction site boundaries.

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. 3 Total Recoverable Iron samples were collected at the outfall receiving discharge from steam plant effluent
- B. Summarize any non-analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. Perform dry weather screening at all 74 outfall locations twice annually.
- C. If applicable, are monitoring records for activities performed during this reporting period submitted with this report. Yes No

11. Certification

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

This report must be signed by a ranking elected official or by a duly authorized representative of that person. See signatory requirements in sub-part 6.7.2 of the permit.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Terry Ledford
Interim Associate Vice
Chancellor

Printed Name and Title



Signature

8/12/21

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