



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: Town of Smyrna		MS4 Permit Number: TNS075779
Contact Person: Greg Upham		Email Address: greg.upham@townofsmymrna.org
Telephone: (615) 355-5701		MS4 Program Web Address: See section 3.C
Mailing Address: 315 S. Lowry Street		
City: Smyrna	State: TN	ZIP code: 37167

What is the current population of your MS4? 53,070 as per 2020 census

What is the reporting period for this annual report? July 1, 2021 to June 30, 2022

2. Discharges to Waterbodies with Unavailable Parameters or Exceptional Tennessee Waters (Section 3.1)

- A. Does your MS4 discharge into waters with unavailable parameters (previously referred to as impaired) for pathogens, nutrients, siltation or other parameters related to stormwater runoff from urbanized areas as listed on TN's most current 303(d) list and/or according to the on-line state GIS mapping tool ([tdeconline.tn.gov/dwr/](http://tdeconline.tn.gov/dwr/))? If yes, attach a list. x  **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**    x  **No**
- C. Does your MS4 discharge to any Exceptional Tennessee Waters (ETWs - [http://environment-online.tn.gov:8080/pls/enf\\_reports/f?p=9034:34304:4880790061142](http://environment-online.tn.gov:8080/pls/enf_reports/f?p=9034:34304:4880790061142))? If yes, attach a list.  **Yes**    x  **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: EPSC measures at **construction sites** include: silt fences/eels; storm drain protection; check dams; construction entrances meeting most recent TDEC specifications, plus rolling them; daily street cleaning; fabric underlain rock aprons at all pond inlets/outlets; rock rings at pond outlet structures; fabric underlain rocked pond overflow spillways; PLUS chemical storage / spill cleanup and litter control statements on plans; cement mixer cleanouts; SWPPP boxes, and porto-lets; In addition: MS4 staff facilitates quarterly freestanding grease receptacle inspections; annual detention pond inspections for erosion et al; monthly street sweeping; storm drain inspections and cleanout; no pesticide / fertilizer application in buffer zones; restricted applications near zones; and proper chemical storage / spill cleanup procedures at all **Town facilities** as per June 2022 MPPP assessment survey of five departments. Finally, **public involvement** includes the following: Adopt-A-Stream cleanup events by five schools every fall; Adopt-A-Highway and Adopt-A-Roadway events throughout the year by local business and church / civic groups; and spring / fall stream cleanup events by businesses and church / civic groups. Cameras are mounted along less traveled roads to discourage dumping, while our **Smyrna Police Department** is taking a more aggressive role in anti-litter enforcement of garbage collection vehicles. x  **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)? x  **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: Smyrna, along with the other four Rutherford County (R.C.) MS4 programs, funds / supports the year-round Project WET program, which targets specific pollutant sources. At all outreach events the Town's standard Envir. Education Packet (23 brochures addressing water quality issues) is offered to all participants; this packet also includes the Stones River map, created by the R.C. MS4 programs in conjunction with the Cumberland River Compact in an effort to target known pollutant sources found in the individual subwatersheds.

Here are the 2021/2022 Project WET Contract achievements in Smyrna schools: x  **Yes**     **No**

1. Smyrna's SOAC director is now a Project WET facilitator, which means she can teach students in the Town of Smyrna and elsewhere about water quality
2. Many contact hours were recorded with at least 6 Smyrna teachers
3. Many contact hours were spent with 242 Smyrna students learning about water
4. Some 455 Smyrna students received backpacks / water bottles at waterfests
5. Some 664 Smyrna students participated in 'water festivals'
6. At least 12 Smyrna students received activity booklets, while being taught about the importance of keeping our water resources clean

Project WET is also a stalwart exhibitor at Smyrna' annual Boat Day - WaterFest as well as the Rutherford County annual WaterFest held each spring.

C. Do you have a webpage dedicated to your stormwater program? If yes, provide a link/URL: <https://www.townofsmyrna.org/departments/public-works/storm-water> x  **Yes**     **No**

D. Summarize how you advertise and publicize your public education, outreach, involvement and participation opportunities: All school principals were canvassed by letters to join the Adopt-A-Stream effort. Five schools are active in this effort and are emailed every year regarding fall participation. The Rotary Club interacts with one high school on our behalf; the Town's Facebook and Twitter sites broadcast coming events such as Boat Day, while the HR Department produces a poster for Boat Day; three electric signs are placed on main highways by Street Department, and 32 portable signs are posted in ROWs to announce Boat Day; Adopt-A-Highway and Roadway efforts are posted on the program's website and Facebook throughout the year; Adopt-A-Stream schools are presented with their updated participation trophy in front of the Storm Water Advisory Committee.

E. Summarize the public education, outreach, involvement and participation activities you completed during this reporting period: Smyrna remains a participant in the TNSA facilitated Facebook announcements (see attached 2021-2022 Social Media Campaign Final Numbers table). Smyrna has held stream cleanups every year since November 2005, where citizens voluntarily remove litter from areas close to, but not in streams. Before each event, we thank them for their participation and explain why their efforts are so important to water quality and the health of our stream's biota. We make every effort to distribute the aforementioned Env. Educ. Packet to every volunteer before the cleaning begins. **Here are the events held in '21/'22 permit year.**

- 10-9-21; 21 STEM students/teacher of Stewarts Cr. M.S. removed 9 bags of litter, close to Rocky Fork Br.
- 11-6-21; 19 biology students/teacher of Smyrna H.S. removed 16 bags of litter, from the Davis Park wet w.c.
- 11-20-21; 12 students/teacher of Stewarts Cr. H.S. removed 21 bags of litter held by our I-24 outlet culvert berm.
- 11-20-21; 21 students/teacher of Rock Springs M.S. Beta Club removed 12 bags of litter from Rock Springs Br.
- 4-2-22; 9 adult Methodist Church members removed 10 bags of litter from the Justice Center drainage ditch.
- 4-2-22; 9 adult Methodist Church members removed 25 bags of litter from Enon Springs Rd., near Stewart Cr.
- 4-9-22; 14 children/adults removed 15 bags of litter from Harts Br., Davis Park. wwc, and Nolan Dr. sinkhole.
- 4-22-22; 1 mom + 2 children removed 4 bags of litter, large timber, and a heavy pipe from Rock Springs Br.
- Early spring, '22; LaVergne H.S. removed many bags of litter during its semi-annual Adopt-A-Roadway event.
- '21/'22 permit year; 18 Env. Educ. packets distributed; 99 volunteers; 9 events, removed >112 bags of litter.**
- Nov..'05 >>May, '22; 981 Env. Educ. packets distributed; 1,777 volunteers; 71 events; 2,238 bags of litter.**
- 6/18/22; 14th Annual Boat Day-16th Annual WaterFest; Project WET + 3 other exhibits. 386 participants (#2)
- '21/'22 4 Storm Water Advisory Committee (SWAC) meetings were held, where 7 citizens participated.
- '21/'22 136 (7/SWAC+99/cleanups+30/Boat Day) certificates of appreciation were signed by Mayor Reed.

May, 2022; Smyrna Detention Ponds and You; wrote and assembled 8-fold brochure; text/photographs then mailed to 112 pond owners, plus 4 locally active property management firms.

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: Smyrna United Methodist Church adopted a roadway, while Adopt-A-Stream participation continues to stay at a high level.

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? x  **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? x  **Yes**       No
- C. How many outfalls have you identified in your storm sewer system? 453
- D. Do you have an ordinance, or other regulatory mechanism, that prohibits non-stormwater discharges into your storm sewer system? x  **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: Permit-required 5-year Outfall Assessment and if needed, cleanups. x  **Yes**       No

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- F. How many illicit discharge related complaints were received this reporting period? 5
- 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? 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? x  **Yes**  No
  - Construction site operators to control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste? x  **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)? x  **Yes**  No
- B. Do you have specific procedures for construction site plan (including erosion prevention and sediment BMPs) review and approval? x  **Yes**  No
- C. Do you have sanctions to enforce compliance? x  **Yes**  No
- D. Do you hold pre-construction meetings with operators of priority construction activities and inspect priority construction sites at least monthly? x  **Yes**  No
- E. How many construction sites disturbing at least one acre or greater were active in your jurisdiction this reporting period? 31 - 35 (the Town issues grading permits to sites less than one acre), so this figure is low
- F. How many active priority and non-priority construction sites were inspected this reporting period? see line E
- G. How many construction related complaints were received this reporting period? 7

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? x  **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? x  **Yes**  No
  - A process to ensure stormwater control measures (SCMs) are properly installed and maintained? x  **Yes**  No
  - Permanent water quality riparian buffers? If yes, specify requirements: **As per TDEC** x  **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 < 1 acre projects are reviewed by Public Works director, who decides if a permit is needed. All < 1 acre project plans have Town's standard abbreviated SWPPP added to plans. These smaller projects still receive the same meticulous oversight as one that is 1 acre and greater.

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- D. How many development and redevelopment project plans were reviewed for this reporting period? 54
- E. How many development and redevelopment project plans were approved/issued permits? 52
- F. How many permanent stormwater related complaints were received this reporting period? None Known
- G. How many enforcement actions were taken to address improper installation or maintenance? 10 (written/SWO)
- 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 a 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. N/A  
 Changes to the program as required by TDEC (program audit 2020) to satisfy permit requirements:  
 1. Cleansers are not used during high-pressure water washing of all Street Department equipment / vehicles.  
 2. Required fuel tank safety measures, including alarms at fuel tanks were installed as per Robbie Karesh, TDEC.  
 3. Crafted/distributed 8-fold detention pond brochure to 100+ pond owners and 4 property management firms as per same audit by Karesh (7/2020).  
 Information (e.g. additional acreage, outfalls, BMPs) on newly annexed areas and any resulting updates to your program. 160.18 ac. / annexed - 4.13 ac. / de-annexed = 156.05 ac. net gain / annexed. Plus, 1,640 linear ft. of Rocky Fork - Almaville Road frontage annexed. Gained annexed area is either not developed or will be soon.
- 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. \_\_\_\_\_  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>100+</u>	# <u>1</u>	# <u>0</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Written notices	# <u>6</u>	# <u>5</u>	# <u>2</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>4</u>	# <u>0</u>	# <u>0</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Withholding of plan approvals or other authorizations *	# <u>100+</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: * Many minor errors found every day *

- 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?  
Improper construction entrance maintenance; infrequent street sweeping; poor maintenance of storm drain fabric.

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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. The Town's permit-required 5-year water quality monitoring, contracted with MTSU, Biology Department (Dr. Frank Bailey) was not completed during the previous permit year due to COVID-related delays, but it was completed during the fall of 2021 (bacterial, physical, chemical, and macroinvertebrate assessments). The resulting report was received by the Town and will be shared upon request.
- B. Summarize any non-analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. The non-analytical and analytical portions of the VSA / USGS were performed during the previous permit year, '20/'21.
- 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."*

\_\_\_\_\_  
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