



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 Franklin		MS4 Permit Number: TNS075311
Contact Person: Jeff Willoughby		Email Address: jeff.willoughby@franklin.tn.gov
Telephone: (615) 791-3218		MS4 Program Web Address: http://www.franklin.tn.gov/government/engineering/stormwater
Mailing Address: 109 3 rd Ave S		
City: Franklin	State: Tn	ZIP code: 37064

What is the current population of your MS4? 80,914 from 2018 US Census Bureau

What is the reporting period for this annual report? July 1 2019 to June 30 2020

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

- A. Does your MS4 discharge into waters with unavailable parameters (previously referred to as impaired) for pathogens, nutrients, siltation or other parameters related to stormwater runoff from urbanized areas as listed on TN's most current 303(d) list and/or according to the on-line state GIS mapping tool (tdeconline.tn.gov/dwr/)? If yes, attach a list. Yes No
- B. Are there established and approved TMDLs (<http://www.tn.gov/environment/article/wr-ws-tennessees-total-maximum-daily-load-tmdl-program>) with waste load allocations for MS4 discharges in your jurisdiction? If yes, attach a list. Yes No
- C. Does your MS4 discharge to any Exceptional Tennessee Waters (ETWs - http://environment-online.tn.gov:8080/pls/enf_reports/f?p=9034:34304:4880790061142)? If yes, attach a list. Yes No
- D. Are you implementing specific Best Management Practices (BMPs) to control pollutant discharges to waterbodies with unavailable parameters or ETWs? If yes, describe the specific practices: Green Infrastructure in new development, public educational campaigns outreach and involvement, riparian buffers, detention facilities Yes No

3. Public Education/Outreach and Involvement/Participation (Sections 4.2.1 and 4.2.2)

- A. Have you developed a Public Information and Education plan (PIE)? Yes No
- B. Is your public education program targeting specific pollutants and sources, such as Hot Spots? If yes, describe the specific pollutants and/or sources targeted by your public education program: Sediment, fertilizers, pesticides, detergents, litter, pet waste, automotive oils, riparian disturbance, stormwater runoff & treatment, fats, oils, and greases, chlorinated pool drainage, proper retention pond herbicide application Yes No
- C. Do you have a webpage dedicated to your stormwater program? If yes, provide a link/URL: http://www.franklin.tn.gov/government/engineering/stormwater Yes No

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- D. Summarize how you advertise and publicize your public education, outreach, involvement and participation opportunities: The City has signed a partnership agreement with the Cumberland River Compact (CRC) to further the City's environmental stewardship efforts to its citizens. The partnership with CRC will help focus the City's message to our community that the City of Franklin is an environmentally responsible community and is committed to establishing relationships with its local citizens and business to engage in improving water quality of the Harpeth River and its tributaries. CRC will help promote and engage in the City's public education and involvement, IDDE, and visual stream assessment portions of our Stormwater Program. In addition City Staff continues to advertise and publicize its own efforts through Facebook, newspaper, flyers, BOMA meetings, stream buffer signs, water quality signs with contact info, City website, GreenTeam newsletter, and email listserv to residents.
- E. Summarize the public education, outreach, involvement and participation activities you completed during this reporting period: See attached
- 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: See attached

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? 828
- 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: Every year we conduct field screening of 20% of our watersheds for illicit connections and dumping. This equals 100% of watersheds surveyed during a permit cycle. This year we screened 136 outfalls. We also have a FOG program which inspects all restaurants grease traps for illicit discharges annually. Yes No
- F. How many illicit discharge related complaints were received this reporting period? 30
- G. How many illicit discharge investigations were performed this reporting period? 30
- H. Of those investigations performed, how many resulted in valid illicit discharges that were addressed and/or eliminated? 30

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

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- Design storm and special conditions for unavailable parameters waters or Exceptional Tennessee Waters consistent with those of the current Tennessee Construction General Permit (TNR100000)? Yes No
- B. Do you have specific procedures for construction site plan (including erosion prevention and sediment BMPs) review and approval? Yes No
- C. Do you have sanctions to enforce compliance? Yes No
- D. Do you hold pre-construction meetings with operators of priority construction activities and inspect priority construction sites at least monthly? Yes No
- E. How many construction sites disturbing at least one acre or greater were active in your jurisdiction this reporting period? The City requires full CGP compliance and stormwater/grading permits on anything over 5,000sqft of impervious area or 10,000sqft of land disturbance. This brings our active site numbers to 196 for this fiscal year.
- F. How many active priority and non-priority construction sites were inspected this reporting period? All sites are listed as priority sites. All 196 were inspected on a monthly basis
- G. How many construction related complaints were received this reporting period? 10
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: 60' riparian buffers on all new developments over 5,000sqft impervious area or 10,000sqft of land disturbance. For slopes between 15-25% an 80' riparian buffer is required and for slopes greater than 25% a 110' buffer is required. 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.)? 5,000sqft of impervious area or 10,000sqft land disturbance
- D. How many development and redevelopment project plans were reviewed for this reporting period? 120
- E. How many development and redevelopment project plans were approved? 90
- F. How many permanent stormwater related complaints were received this reporting period? 0
- G. How many enforcement actions were taken to address improper installation or maintenance? 0
- H. Do you have a system to inventory and track the status of all public and private SCMs installed on development and redevelopment projects? Yes No
- I. Does your program include an off-site stormwater mitigation or payment into public stormwater fund? If yes, specify. _____ Yes No

7. Stormwater Management for Municipal Operations (Section 4.2.6)

- A. As applicable, have stormwater related operation and maintenance plans that include information related to maintenance activities, schedules and the proper disposal of waste from structural and non-structural stormwater controls been developed and implemented at the following municipal operations:
- | | | |
|--|---|-----------------------------|
| Streets, roads, highways? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Municipal parking lots? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Maintenance and storage yards? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Fleet or maintenance shops with outdoor storage areas? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Salt and storage locations? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Snow disposal areas? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Waste disposal, storage, and transfer stations? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> 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. Updated program document to include the definition of priority construction activity as well as updating the program to include pre-construction meetings, monthly inspections and documentation for priority construction activity. See attached.
- Information (e.g. additional acreage, outfalls, BMPs) on newly annexed areas and any resulting updates to your program. Any new annexed areas are a result of new development and the new outfalls and bmps are recorded when asbuilts are submitted or features are inspected
- 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. As the Stormwater Program Manager for the City I hold quartley meetings with my staff to review our current NOI related milestones. I ensure staff is on track each quarter to complete the yearly milestone. It is at this time we evaluate the program effectivieness, and whether our milestones should be replaced or modified to achieve overall program goals for the year. The City of Franklin is committed to achieving full permit compliance on all minimum measures. The City has an overall impactful additude regarding it's environmental stewardship and quality of life for it's citizens. At this time the City has no planned modifications or improvements scheduled for it's program. 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>1</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Written notices	# <u>29</u>	# _____	# <u>9</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Citations with administrative penalties	# <u>18</u>	# _____	# _____	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Stop work orders	# _____	# _____	# _____	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Withholding of plan approvals or other authorizations	# _____	# _____	# _____	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Additional Measures	# _____	# <u>6</u>	# _____	Describe: <u>6 SCM notices of non compliance</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? Track out, failure to maintain EPSC measures, sediment discharges

10. Monitoring, Recordkeeping and reporting (Section 5)

- A. Summarize any analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. Yearly macroinvertebrate sampling of all City watersheds
- B. Summarize any non-analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. none
- C. If applicable, are monitoring records for activities performed during this reporting period submitted with this report. Yes No

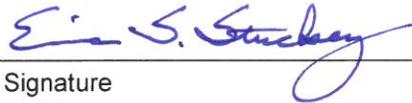
11. Certification

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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."

Eric Stuckey City
Adminisrator



9/29/2020

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:

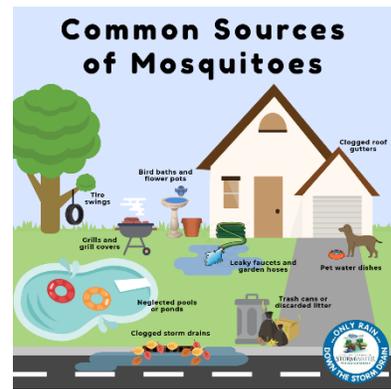
EFO	Street Address	City	Zip Code	Telephone
Chattanooga	1301 Riverfront Pkwy, Suite 206	Chattanooga	37402	(423) 634-5745
Columbia	1421 Hampshire Pike	Columbia	38401	(931) 380-3371
Cookeville	1221 South Willow Ave.	Cookeville	38506	(931) 520-6688
Jackson	1625 Hollywood Drive	Jackson	38305	(731) 512-1300
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

303d list from 2020 303d list publication							
ID305B	WATER_NAME	LOCATION	WATER_TYPE	WATER_SIZE	CAUSE_NAME	TMDL_PRIORITY	SOURCE_NAME
TN05130204013 0100	Hatcher Spring Creek	Williamson County	RIVER	6.5	ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	Low	GRAZING IN RIPARIAN OR SHORELINE ZONES
TN05130204013 0100	Hatcher Spring Creek	Williamson County	RIVER	6.5	SEDIMENTATION/SILTATION	Low	SITE CLEARANCE (LAND DEVELOPMENT OR REDEVELOPMENT)
TN05130204013 0100	Hatcher Spring Creek	Williamson County	RIVER	6.5	SEDIMENTATION/SILTATION	Low	GRAZING IN RIPARIAN OR SHORELINE ZONES
TN05130204016 0100	Lynnwood Creek	Williamson County	RIVER	5.4	ESCHERICHIA COLI (E. COLI)	High	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 0200	Spencer Creek	Williamson County	RIVER	13.98	ESCHERICHIA COLI (E. COLI)	High	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 0200	Spencer Creek	Williamson County	RIVER	13.98	ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 0200	Spencer Creek	Williamson County	RIVER	13.98	SEDIMENTATION/SILTATION	NA	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 0210	South Prong Spencer Creek	Williamson County	RIVER	5.76	SEDIMENTATION/SILTATION	NA	SITE CLEARANCE (LAND DEVELOPMENT OR REDEVELOPMENT)
TN05130204016 0210	South Prong Spencer Creek	Williamson County	RIVER	5.76	ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	NA	SITE CLEARANCE (LAND DEVELOPMENT OR REDEVELOPMENT)
TN05130204016 0300	Liberty Creek	Williamson County	RIVER	0.54	ESCHERICHIA COLI (E. COLI)	High	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 0300	Liberty Creek	Williamson County	RIVER	0.54	ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 0300	Liberty Creek	Williamson County	RIVER	0.54	SEDIMENTATION/SILTATION	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 0350	Liberty Creek	Williamson County	RIVER	1.31	ESCHERICHIA COLI (E. COLI)	High	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 0350	Liberty Creek	Williamson County	RIVER	1.31	ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 0350	Liberty Creek	Williamson County	RIVER	1.31	SEDIMENTATION/SILTATION	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 0400	Unnamed Trib to Harpeth River	Williamson County	RIVER	2.94	ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 0400	Unnamed Trib to Harpeth River	Williamson County	RIVER	2.94	SEDIMENTATION/SILTATION	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 0500	Watson Branch	Williamson County	RIVER	6.8	SEDIMENTATION/SILTATION	NA	SITE CLEARANCE (LAND DEVELOPMENT OR REDEVELOPMENT)
TN05130204016 1000	Harpeth River	Williamson County	RIVER	6.8	PHOSPHORUS, TOTAL	High	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 1000	Harpeth River	Williamson County	RIVER	6.8	PHOSPHORUS, TOTAL	High	MUNICIPAL POINT SOURCE DISCHARGES
TN05130204016 1000	Harpeth River	Williamson County	RIVER	6.8	SEDIMENTATION/SILTATION	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 1000	Harpeth River	Williamson County	RIVER	6.8	DISSOLVED OXYGEN	NA	MUNICIPAL POINT SOURCE DISCHARGES
TN05130204016 1000	Harpeth River	Williamson County	RIVER	6.8	DISSOLVED OXYGEN	NA	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 1300	Fivemile Creek	Williamson County	RIVER	5.75	ESCHERICHIA COLI (E. COLI)	NA	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 1300	Fivemile Creek	Williamson County	RIVER	5.75	SEDIMENTATION/SILTATION	NA	SITE CLEARANCE (LAND DEVELOPMENT OR REDEVELOPMENT)
TN05130204016 1350	Fivemile Creek	Williamson County	RIVER	8.56	SEDIMENTATION/SILTATION	Low	SITE CLEARANCE (LAND DEVELOPMENT OR REDEVELOPMENT)
TN05130204016 1350	Fivemile Creek	Williamson County	RIVER	8.56	ESCHERICHIA COLI (E. COLI)	NA	GRAZING IN RIPARIAN OR SHORELINE ZONES
TN05130204016 1400	Donelson Creek	Williamson County	RIVER	3.4	ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 1400	Donelson Creek	Williamson County	RIVER	3.4	SEDIMENTATION/SILTATION	NA	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 1500	Sawmill Creek	Williamson County	RIVER	4	SEDIMENTATION/SILTATION	Low	SITE CLEARANCE (LAND DEVELOPMENT OR REDEVELOPMENT)
TN05130204016 1500	Sawmill Creek	Williamson County	RIVER	4	ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	Low	SITE CLEARANCE (LAND DEVELOPMENT OR REDEVELOPMENT)
TN05130204016 1600	Sharps Branch	Williamson County	RIVER	4.9	SEDIMENTATION/SILTATION	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 1600	Sharps Branch	Williamson County	RIVER	4.9	ALTERATION IN STREAM-SIDE OR LITTORAL VEGETATIVE COVERS	Low	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 2000	Harpeth River	Williamson County	RIVER	3.9	PHOSPHORUS, TOTAL	High	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 2000	Harpeth River	Williamson County	RIVER	3.9	DISSOLVED OXYGEN	NA	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 2000	Harpeth River	Williamson County	RIVER	3.9	SEDIMENTATION/SILTATION	NA	MUNICIPAL (URBANIZED HIGH DENSITY AREA)
TN05130204016 3000	Harpeth River	Williamson County	RIVER	9	SEDIMENTATION/SILTATION	NA	GRAZING IN RIPARIAN OR SHORELINE ZONES
TN05130204016 3000	Harpeth River	Williamson County	RIVER	9	DISSOLVED OXYGEN	NA	GRAZING IN RIPARIAN OR SHORELINE ZONES

Exceptional Tn Waters											
HUC	Watershed Name	Waterbody	County	Description	Basis for Inclusion	From Lat	To Lat	From Long	To Long	Inclusion Date	Revision Date
5130204	Harpeth	Franklin Battlefield Wetland (Harpeth River Trib)	Williamson	Riverine Wetland, tributary to Harpeth near cofederate cemetery in Franklin.	Wetland assessment score 81.5 out of 100. Significant amphibian breeding habitat. Due to size, location and water quality it is an important component of the Harpeth River Watershed.	35.904	35.9112	-86.8567	-87.0561	NOV-22-2006	

#WaterWednesday Posts

Stormwater Management has created several #WaterWednesday posts that were shared on the City's social media websites. These posts focus on local water quality issues, native wildlife, invasive plants, volunteer events, reporting illicit discharges, and fun facts about the Harpeth River Watershed.



Public Education in Schools

Franklin High – Presentation to Ecology Class

Stormwater Staff presented to three Ecology classes (75-80 students total) at Franklin High to juniors and senior students with an early background in aquatic biomes. They were currently studying water usage, water pollution, and water biomes, and requested a presentation about stormwater management activities and their effect on the environment and water resources.

WHAT IS STORMWATER?

Rainfall that flows over the ground's surface. It is created when rain falls on roads, driveways, parking lots, rooftops, or other impervious surfaces.



WHAT DOES STORMWATER POLLUTION LOOK LIKE?



Public Education/Outreach Events

Dry Branch Restoration Projects

Stream Cleanup – November 16th

The City partnered with Keep Williamson Beautiful and organized a stream cleanup of Dry Branch and its connecting wetland. 14 volunteers spent 2 hours removed trash and other debris, removing 580lbs! A side group of volunteers also removed invasive vegetation along the wetland.



Brentwood High School Invasive Removal – January 21st, 22nd, and 25th

Over the course of three days, 97 students from Brentwood High School volunteered their time to remove invasive vegetation, as part of their Weed Wrangle, from Dry Branch Wetland. This is the second year in a row that BHS Environmental Science students have volunteer for this effort, clearing more than 500 linear feet of invasive vegetation.





Family Day

City Stormwater Staff attended City of Franklin's Family Day and hosted a booth, teaching kids about the importance of rain gardens, offering educational pamphlets, and giving away native wildflower seed packets. This year, Stormwater Management had a pollution prevention cornhole game, called Stormwater Sling!



Girl Scout Project – Tree Planting

A Girl Scout Troop spent their afternoon at Pinkerton Park learning about the Harpeth River to earn their “It’s Your Planet – Love It” badge. Stormwater staff explained what stormwater is and why polluted stormwater runoff is a problem for local water resources, discussed various sources of pollution and how the scouts can identify common everyday pollutants within their community. The event ended with the scouts planting 100 native tree seedlings along the Harpeth River to strengthen its stream buffer. Species that were planted: southern red oak, loblolly pine, silky dogwood, and buttonbush.



Water Treatment Plant – Tree Planting

COF Parks, Stormwater, and Keep Williamson Beautiful organized a wonderful tree planting at the Water Treatment Plant as a second phase of Park’s reforestation project. There were 46 volunteers to plant 200 native tree seedlings. Thanks to everyone for helping us have such a successful day!



Presentations

Franklin High School – Career Fair

COF Engineering and Stormwater manned a booth for Franklin High’s career fair. City staff discussed educational background, the day-to-day activities of staff members, and potential career opportunities.



Master Gardener’s Association

Franklin Stormwater was invited to present to the Master Gardener’s Association first meeting for 2020. Stormwater staff set up a booth with educational information, giveaways, and then presented about stormwater, water quality, and Franklin’s Stormwater program. There were about 100 people in attendance.



Tennessee Stormwater Association – Annual Conference

Brittani Perez and Bristol Snider presented at the TNSA Conference, “The COF Approach to Conducting Visual Stream Surveys and Outfall Screenings”.

Franklin's Approach to Conducting Field Screenings and Stream Surveys

Brittiani Perez & Bristol Snider
City of Franklin – Stormwater Management



Field Screening Overview

The City's objective is permit compliance and to assess, document, and utilize information to:

- Update City's storm sewer map
- Detect, identify, eliminate illicit connections
- Address/report failing infrastructure
- Identify opportunities for public education/involvement



Inspections

- iPad or other tablet
 - Survey123 for ArcGIS
 - Custom inspection report
- Trimble Geo7x
 - Handheld data collector
 - GPS location



What are our results?

- Long Lane Watershed, Bishop Branch**
 - Pipe outfall
 - Sediment-laden water discharging
 - Source-tracked to nearby sediment basin
- Five Mile Watershed, Five Mile Creek**
 - Erosion site
 - Live staking project completed
- Ralston Branch Watershed, Huffine Spring Branch**
 - Source of pollution identified
 - Public education opportunity



Toolbox Tuesday

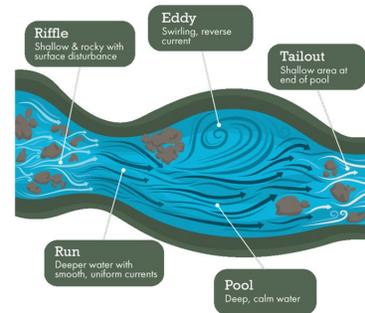
Stormwater Management staff gave a presentation at the Building and Neighborhood Services Toolbox Tuesday meeting on how the City conducts macroinvertebrate sampling in streams and what those bugs can mean for local water quality. City staff brought sampling equipment and live macroinvertebrate collected that morning from Spencer Creek!



Picking your sample location

Choosing your riffle:

- Cobble vs gravel
- Layered vs non-layered
- Bedrock
- Leaf litter/debris
- Snags
- Niche space



Stormwater Community Awareness

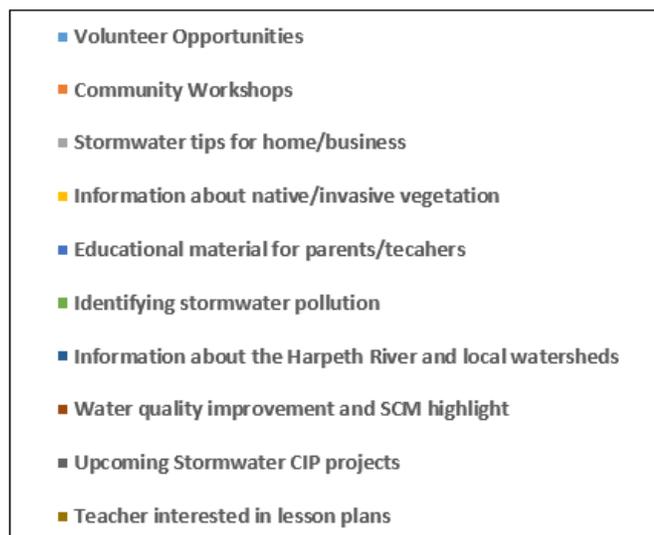
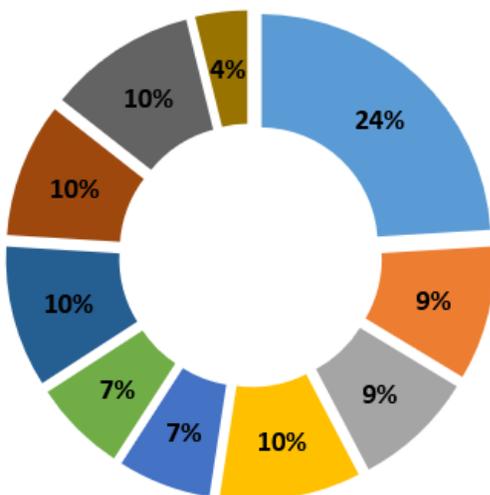
Green Team Signup

Stormwater Management created a Green Team signup, which is a group of individuals in Franklin that are either interested in learning about stormwater and water quality or participating in City volunteering events. Stormwater Management uses this information to send Green Team contacts information about

volunteer opportunities or to send out our quarterly newsletters. To date, over 80 people have signed up! Events where the Green Team sign up has been collected or an email distributed has been catalogued.

Event	Date	Recruitment/Signup	Email Distribution
250K Tree Day	2/24/18	X	
Water Wednesday Post	3/14/18	X	
KWB Tree Planting	3/24/18	X	
Mallory Branch Cleanup volunteer event	4/20/18	X	X
FSSD Benefits Fair	8/1/18	X	
DB Wetland Cleanup volunteer event	10/27/18	X	X
Invasive removal volunteer event	11/15/19	X	X
DB Wetland Invasive Removal	11/17/18	X	
Water Wednesday Post	11/28/2018	X	
Winter 2018 Newsletter	12/5/2018	X	X
Water Wednesday Post	2/13/2018	X	
Spring 2019 Newsletter	3/6/2019	X	X
250K Tree Day volunteer event	3/23/2019	X	X
Kids Art Festival	3/30/2019	X	
Water Wednesday Post	4/3/2019	X	
2019 Arbor Day	4/20/2019	X	
Native replanting volunteer event	5/2/2019	X	X
DB Wetland Replanting	5/11/2019	X	
Parks Department volunteer event	5/30/2019	X	X
Summer 2019 Newsletter	6/5/2019	X	X
Fall 2019 Newsletter	9/9/2019	X	X
Stream cleanup volunteer event	11/5/2019	X	X
Stream Cleanup/Invasive Removal	11/16/2019	X	
Facebook post	11/20/2019	X	
Winter 2019 Newsletter	11/25/2019	X	X
Presentation to MGA	1/13/2020	X	
FHS Career Fair	2/19/2020	X	
Spring 2020 Newsletter	3/4/2020	X	X
FrankTalks Presentation	3/9/2020	X	

What are you interested in?



Quarterly Newsletters

Stormwater Management started sending quarterly newsletters about stormwater-related topics. This newsletter is sent to members of the community that have signed up for Stormwater's Green Team. The newsletter is quarterly and is sent out each December (Winter Issue), March (Spring Issue), June (Summer Issue), and September (Fall Issue).



Stormwater runoff is one of the leading causes of water pollution in the United States. As rain falls on roofs, streets, or parking lots the water cannot soak into the ground like it does in a natural environment. This runoff can carry trash, bacteria, chemicals, nutrients, or other pollutants into nearby streams. When incorporated into urban planning, green infrastructure offers a solution to bring cleaner air, cleaner water, flood protection, and wildlife habitat to developed areas.

G.I.P. SPOTLIGHT!

G.I.P. stands for Green Infrastructure Practice. What's green infrastructure? It's a stormwater practice that collects rainwater and stormwater runoff at its source to promote infiltration, plant uptake, pollutant removal, and other elements to reclaim these lost natural processes in an urban environment.

Pervious pavement is a type of developed surface that allows stormwater runoff to infiltrate.

Two forms of pervious pavement found in Franklin are pavers and concrete. These practices are commonly used for parking areas.

Stormwater is temporarily stored in a stone layer underneath and then allowed to either infiltrate further down into the native soils or conveyed away through an underdrain system.



see stormwater pollution? click [HERE](#) to report!

SEED BALLS

Making seed balls at home is a fun activity that both adults and children will enjoy. They are easily made with some clay, soil, seeds, and a little bit of water. Once formed, they can either be thrown or directly planted in a pot, flowerbed, or any unused patch of land you wish to germinate. The hard outer shell will protect the seeds from being eaten by birds until they're ready to sprout!



RECIPE AND INSTRUCTIONS

You will need:

- Native seeds of your choice
- Potting soil
- Powdered clay (local craft store)
- Water
- Mixing bowl

How to make your seed balls:

- Mix together 1 cup of powdered clay and 2-1/2 cups of potting soil
- Pour small amounts of water into the mixture until you have a smooth consistency and everything sticks together
- Sprinkle in your native seeds
- Grab a handful and roll it into a small ball
- Once rolled, let them dry in the sun until the outside is hard
- Throw or plant the seed bombs into your garden!

Alternative: instead of powdered clay, use paper mache to form your ball!



SPRING 2020

STREAM BUFFERS

Have you seen one of these blue signs? If you have, congratulations! You found a buffer!

A riparian buffer, sometimes called a stream buffer, is an undisturbed area of land that borders water resources such as a river, stream, wetland, or lake. Buffers are an important tool for water quality because they help to filter out pollutants in stormwater runoff, protect banks from erosion, reduce flood damage, and provide a home for wildlife.

Stormwater Management has implemented a set of requirements to establish, protect, and maintain permanent stream buffers for all new and re-developments that contain or border Franklin's water resources.

Water quality benefits can start with just 10 feet of undisturbed vegetation from top of bank, and improves with even more. **The bigger the buffer, the bigger the benefits!**

Benefits of healthy stream buffers:

- Protects streambanks from erosion
- Filters pollutants from stormwater runoff
- Reduces flood damage
- Creates wildlife habitat
- Provides shade to streams
- Improves aesthetic value of landscapes



Photo: BlueState Creative



SPRING 2020

STORMWATER HIGHLIGHTS!

weed wrangle™ NASHVILLE

This past January over 100 AP Environmental Science students from Brentwood High School volunteered to come back a second time to Dry Branch Wetland to remove invasive vegetation such as bush honeysuckle and Chinese privet. Invasive plants are a rapidly growing threat to Tennessee's ecosystems because of their aggressive tendency to displace native plants, reduce native species biodiversity, and impact water quality.

Keep Williamson Beautiful and Stormwater Management have partnered on several volunteer events such as this Weed Wrangle to help restore Dry Branch and Dry Branch Wetland. To date, over 700 linear feet of this park has been a part of continued volunteer efforts, with even more events and segments planned for the future! Thank you to all of our volunteers that has helped in this effort!

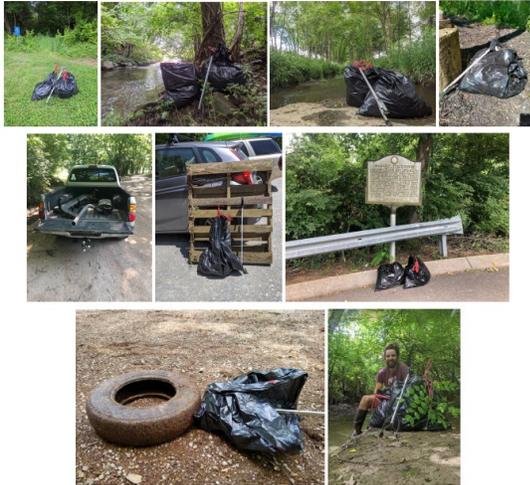
To learn more about Weed Wangle Nashville, click [HERE](#) !
To learn more about Dry Branch Wetland, click [HERE](#) !



SPRING 2020

Watershed Partnership with Cumberland River Compact

On May 14th, 2019 the City of Franklin finalized a partnership contract with Cumberland River Compact, in the spirit of conservancy and stewardship, to work with the City and citizen volunteers of the City to improve elements of our natural and build environments through various projects and activities. This first year CRC will accomplish the following projects: 2 stream adoptions, stream stewardship events, attend 3 events and festivals, bring water education to 2 local schools, have 2 River Friendly Farms events, and implement 1 event based on the City's stream and outfall inspections.



In Q4, Compact staff spent 15 hours completing 10 solo cleanups (all but one cleanup pictured above), removing 20.5 bags of trash from Franklin waterways

Summary Statistics

Since July 1, 2019:

- ❑ Number Educated: 488
 - ❑ + 1,155 iCreek views of Harpeth Watershed in iCreek
- ❑ Total Volunteers Engaged: 41
- ❑ Total Stream Adopters: 3
- ❑ Total New Adopters: 1
- ❑ Total Cleanups: 12 (2 group cleanups and 10 solo cleanups)
- ❑ Total Volunteer Hours: 115
- ❑ Total Bags of Trash Removed: 64.5
- ❑ Total Bags of Recycling Removed: 4 bags



"My students enjoy having you in class, and you've achieved "is she coming back" status, so congrats. I just wanted to give a sincere thanks." - Derek DeSantis, Centennial HS



HISTORIC
FRANKLIN
TENNESSEE

August 19, 2019

Tom Buchanan
TDEC-DWR
711 R.S. Gass Blvd.
Nashville, TN 37243

RE: Compliance Evaluation Inspection Corrective Actions
City of Franklin MS4, Permit Number TNS075311

Mr. Buchanan,

The City of Franklin (City) received your inspection letter, dated August 9, 2019, detailing the results of the compliance evaluation inspection of the City's construction site stormwater runoff control program. Your findings required the City provide corrective actions for the following:

- Updating the program documents to include, at a minimum, the definition of priority construction activity.
- Updating the program to include pre-construction meetings, monthly inspections and documentation for priority construction activity.

It should be noted, at the time of the inspection, the City considered all construction sites that triggered the Stormwater Ordinance to be priority construction activity. Pre-construction meetings are held for all priority construction activity sites and sites are inspected at least once per month. Pre-construction meetings and inspections are both documented via the City's inspection application.

The City has updated the Stormwater Inspection Manual (SWIM) to address the requested corrective actions:

- Added to definition section: **“Priority Construction Activity” Any site that triggers the requirements of the Stormwater Management Ordinance and requires a Stormwater/Grading permit shall be treated as a priority construction activity.**
- Added to Expectations section: **All sites within the City, that require a Stormwater/Grading permit, shall be considered priority construction activity. Priority construction activity requires pre-construction meetings, inspections of the site at least once per month, and documentation of related meetings and inspections.**



HISTORIC
FRANKLIN
TENNESSEE

The City's SWIM is currently undergoing a revision and the abovementioned information has been included in the revision. The revision shall be finalized and approved by the City Engineer no later than December 31, 2019.

If you have any questions, please contact me by email at Doug.Noonan@FranklinTN.gov or by phone at 615-791-3218.

Sincerely,

Doug Noonan

Doug Noonan
Water Quality Specialist

ec: Jeff Willoughby, Stormwater Coordinator, jeff.willoughby@franklintn.gov
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