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 Collierville		MS4 Permit Number: TNS075230
Contact Person: Robert Hanks		Email Address: rhanks@colliervilletn.gov
Telephone: (901) 457-2346		MS4 Program Web Address: http://collierville.com/departments/development/engineering/stormwater
Mailing Address: 500 Poplar View Parkway		
City: Collierville	State: TN	ZIP code: 38017

What is the current population of your MS4? 52,600 (estimated)

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

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

A. Does your MS4 discharge into waters with unavailable parameters (previously referred to as impaired) for pathogens, nutrients, siltation or other parameters related to stormwater runoff from urbanized areas as listed on TN's most current 303(d) list and/or according to the on-line state GIS mapping tool (tdeconline.tn.gov/dwr/)? If yes, attach a list. ☒ Yes ☐ No

B. Are there established and approved TMDLs (http://www.tn.gov/environment/article/wr-ws-tennessees-total-maximum-daily-load-tmdl-program) with waste load allocations for MS4 discharges in your jurisdiction? If yes, attach a list. ☒ Yes ☐ No

C. Does your MS4 discharge to any Exceptional Tennessee Waters (ETWs - http://environment-online.tn.gov:8080/pls/enf_reports/f?p=9034:34304:4880790061142)? If yes, attach a list. ☐ Yes ☒ No

D. Are you implementing specific Best Management Practices (BMPs) to control pollutant discharges to waterbodies with unavailable parameters or ETWs? If yes, describe the specific practices: NA ☐ 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: See attachment. ☒ Yes ☐ No

C. Do you have a webpage dedicated to your stormwater program? If yes, provide a link/URL: http://collierville.com/departments/development/engineering/stormwater ☒ Yes ☐ No

D. Summarize how you advertise and publicize your public education, outreach, involvement and participation opportunities: Town website, social media

E. Summarize the public education, outreach, involvement and participation activities you completed during this reporting period: See attachment.

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 attachment.

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? Approximately 300

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: See attachment. ☒ Yes ☐ No

F. How many illicit discharge related complaints were received this reporting period? 7

G. How many illicit discharge investigations were performed this reporting period? 7

H. Of those investigations performed, how many resulted in valid illicit discharges that were addressed and/or eliminated? 7

5. Construction Site Stormwater Runoff Pollutant Control (Section 4.2.4)

A. Do you have an ordinance or other regulatory mechanism requiring:

Construction site operators to implement appropriate erosion prevention and sediment control BMPs consistent with those described in the TDEC EPSC Handbook? ☒ Yes ☐ No

Construction site operators to control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste? ☒ Yes ☐ No

Design storm and special conditions for unavailable parameters waters or Exceptional Tennessee Waters consistent with those of the current Tennessee Construction General Permit (TNR100000)? ☒ Yes ☐ No

B. Do you have specific procedures for construction site plan (including erosion prevention and sediment BMPs) review and approval? ☒ Yes ☐ No

C. Do you have sanctions to enforce compliance? ☒ Yes ☐ No

D. Do you hold pre-construction meetings with operators of priority construction activities and inspect priority construction sites at least monthly? ☒ Yes ☐ No

E. How many construction sites disturbing at least one acre or greater were active in your jurisdiction this reporting period? 211

F. How many active priority and non-priority construction sites were inspected this reporting period? 211

G. How many construction related complaints were received this reporting period? 3

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: See attached: Collierville Town Ordinance: 152.206 Water Quality Buffers ☒ 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 greater than one acre or part of a larger development.

D. How many development and redevelopment project plans were reviewed for this reporting period? 137

E. How many development and redevelopment project plans were approved? 49

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? NA

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. See attached: Collierville Town Ordinance: 152.207 Runoff Reduction ☒ 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. NA

Changes to the program as required by the division to satisfy permit requirements. Option 2 Monitoring Program

Information (e.g. additional acreage, outfalls, BMPs) on newly annexed areas and any resulting updates to your program. NA

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. The Stormwater Coordinator reviews what the MS4 has done in the year in review to meet the requirements for the Phase II permit. The program appears to be meeting all permit requirements. ☒ 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. NA ☒ Yes ☐ No

B. As applicable, identify which of the following types of enforcement actions (or their equivalent) were used during this reporting period; indicate the number of actions, the minimum measure (e.g., construction, illicit discharge, permanent stormwater management), and note those for which you do not have authority:

Action	Construction	Permanent Stormwater	Illicit Discharge	In Your ERP?	
Verbal warnings	#1	#_____	#1	☒ Yes	☐ No
Written notices	#6	#_____	#9	☒ Yes	☐ No
Citations with administrative penalties	#1	#_____	#_____	☒ Yes	☐ No
Stop work orders	#1	#_____	#1	☒ Yes	☐ No
Withholding of plan approvals or other authorizations	#_____	#_____	#_____	☒ Yes	☐ No
Additional Measures	#_____	#_____	#_____	Describe: _____	

C. Do you track instances of non-compliance and related enforcement documentation? ☒ Yes ☐ No

D. What were the most common types of non-compliance instances documented during this reporting period? EPSC devices not installed, maintained, and functioning correctly. Ingress/egress points not functioning correctly. Illicit discharge.

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. See Attachment

B. Summarize any non-analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period. NA

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."

Stan Joyner, Mayor _____ _____

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

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2A. Does your MS4 discharge into water 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.

Waterbody ID	Impacted Waterbody	County	Miles/Acres Impaired	CAUSE / TMDL Priority	Pollutant Source	COMMENTS
TN0801021100720 – 0300	UNNAMED TRIB TO NONCONNAH CREEK	Shelby	3.09	Total Phosphorus - M Loss of biological integrity due to siltation - L	Specialty Crop Production	Category 5. (One or more uses impaired.) TMDLs needed.
TN0801021100720 – 0400	UNNAMED TRIB TO NONCONNAH CREEK	Shelby	10.07	Total Phosphorus - L Loss of biological integrity due to siltation - L Escherichia coli - NA	Sources Outside State Borders	Category 5. (One or more uses impaired.) TMDLs needed. EPA approved a pathogen TMDL that addresses some of the known pollutants on 6/17/2011.
TN0801021100720 – 2000	NONCONNAH CREEK	Shelby	6.2	Total Phosphorus - L Low Dissolved Oxygen – L Loss of biological integrity due to siltation - L Physical Substrate Habitat Alterations - L Escherichia coli - NA	Discharges from MS4 area Land Development Channelization	Category 5. (One or more uses impaired.) TMDLs needed. EPA approved a pathogen TMDL that addresses some of the known pollutants on 6/17/2011.
TN0801021100720 – 3000	NONCONNAH CREEK	Shelby Fayette	6.5	Total Phosphorus – L Physical Substrate Habitat Alterations - L	Discharges from MS4 area Nonirrigated Crop Production Channelization	Category 5. (One or more uses impaired.) TMDLs needed.

2B. Are there established and approved TMDLs (http://www.tn.gov/environment/article/wr-ws-tennessee-total-daily-maximum-load-tmdl-program) with waste load allocations for MS4 discharges in your jurisdiction? If yes, attach a list.

- TN0801021100720-2000 Nonconnah Creek – Escherichia coli
- TN0801021100720-3000 Nonconnah Creek – Escherichia coli
- TN0801021100720-0300 Nonconnah Creek – Escherichia coli
- TN0801021100720-0400 Nonconnah Creek – Escherichia coli
- TN0801021100720-0410 Nonconnah Creek – Escherichia coli

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3B. Is your public education program targeting specific pollutants and source, such as Hot Spots? If yes, describe the specific pollutants and/or sources targeted by your public education program:

The Town of Collierville's Public Information and Education Plan (PIE) addresses specific pollutants by each source: residential, commercial, construction and municipal. The residential program focuses on educating adults and children on the effects of specific pollutants generated from their homes (pathogens, nutrients, and toxins) and how to prevent them from entering our waterways. Commercial sites are targeted if they are considered a "hot spot," such as automotive repair or restaurants. Educational brochures and posters are distributed to these facilities related to illicit discharges common from their type of business. Developers, contractors and municipal employees which oversee construction sites are trained on practices to prevent sediment from leaving the site. Municipal employees also receive general stormwater training pertinent to their type of work as well as general stormwater training.

3E. Summarize the public education, outreach, involvement and participation activities you completed during this reporting period:

TOWN OF COLLIERVILLE
FY 18-19 PUBLIC EDUCATION, OUTREACH, PARTICIPATION, AND INVOLVEMENT

TNSA Social Media Campaign			
Impressions		10,940,636	
Post Interactions		1,353	
Link Clicks		14,936	
Total Clicks		21,679	
LOCATION	MATERIAL	TOTAL DISTRIBUTED	TARGETED AUDIENCE
Suggs Dog Park	Pet Waste Poollutes (Poster)	1	Residential
Residential Mailer	Stormwater Pollution Prevention	2,833	Residential/Illicit Discharge
New Employee Training	Video	50	Municipal Good Housekeeping
Town Website	Stormwater Portion of Website	2,283 Views	Residential/Commercial
EVENT NAME	DATE	PARTICIPANTS	DESCIPTION
250k Tree Day	Cancelled due to Covid-19		Residential
Tennessee Smart Yards Workshop	Cancelled due to Covid-19		Annual workshop to educate residents the importance of integrating stormwater BMPs in their landscaping.
Fair on the Square	Cancelled due to Covid-19		CEC booth. Focus on Home Stormwater Strategies.

3F. 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:

Reporting sources of illicit discharge due to our education efforts by Town employees and residents has increased for another year. In many cases this has allowed the pollutant to be contained and cleaned-up before entering our waterways. (1) Residents reported instances of pools being discharged to the streets and storm drains, concrete washouts, and mobile car washes. The discharges were immediately stopped. Companies were issued verbal warnings and residents were educated on the correct way to drain pools. (2) Residents reported pool discharges, blocked stormwater inlets, and construction related issues. Contractors and residents were infromed of the issues and educated on how to prevent them in the future. Town employees addressed the blocked inlets.

4E. 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.

From Emergency Response Plan:

A. Illicit Discharge Detection and Elimination

The Town of Collierville has developed an Illicit Discharge Detection and Elimination Plan which will be used to detect, identify, and eliminate all non-stormwater discharges into the Town's storm sewer system. Also included are the identification of "hot spots" which are areas that generate highly contaminated runoff. The plan details the types of inspections, inspection schedules, educational outreach, and enforcement actions used in the detection and elimination of illicit discharge.

Detection of Illicit Discharge

Three types of inspections are used to detect illicit discharge; annual storm sewer system inspections, visual stream assessments, and public complaint. Storm sewer system inspections are conducted each year by Town staff on one-fifth of the Town's storm sewer system such that the entire system has been inspected in a five (5) year period. The inspections are conducted during dry conditions and include a visual inspection of storm sewer structures. Visual stream assessments are conducted once every five (5) years and are based on the Maryland Protocol. The inspections are conducted at each outfall including fifty (50) feet upstream and fifty (50) feet downstream of each outfall. Public complaint inspections are initiated by a phone call, email or through the Mayor's Action Center located on the Town's website. All public complaints are responded to within twenty-four (24) hours of receiving the complaint.

Areas of potential "hot spots" shall be identified through the Town's Geographic Information System (GIS). The following land uses and activities are deemed "hot spots", although that term is not limited to only these land uses:

(1) Vehicle salvage yards and recycling facilities;

(2) Vehicle service and maintenance facilities;

(3) Vehicle and equipment cleaning facilities;

(4) Fleet storage areas (bus, truck, etc.);

(5) Industrial sites (included on standard industrial classification code list);

(6) Marinas (service and maintenance);

(7) Public works storage areas;

(8) Facilities that generate or store hazardous waste materials;

(9) Commercial container nursery;

(10) Restaurants and food service facilities;

(11) Other land uses and activities as designated by the Town's Engineering/Development Department

Inspections will be conducted in these areas annually in conjunction with the yearly storm sewer system inspections. Additional inspections of these sites shall be conducted throughout the year if an illicit discharge is identified.

Elimination of Illicit Discharge

In the event an illicit discharge is identified either through one of the above mentioned inspection methods or through another source, an investigation will ensue to determine the source. The owner will be notified by either verbal warning or written Notice of Violation. A civil penalty may also be imposed. Specific details of the enforcement actions are located in Section D. Enforcement Responses, included in this document.

Another attempt the Town of Collierville has implemented to eliminate illicit discharge is through public education. Various brochures have been produced for residential, commercial and industrial facilities which address potential sources of illicit discharge specifically related to those sites. These brochures are distributed via municipal facilities, schools, businesses, public events, etc.

Inventory and Tracking

Areas identified as a source of an illicit discharge or "hot spots" will be identified in GIS. From this system, a map can be produced identifying areas with multiple "hot spots" allowing the Town to focus its inspection and education efforts to areas most in need. In addition to GIS, each inspection, correspondence, and enforcement action will be tracked using a database maintained by the Town's Engineering Division. Public complaints received through the Mayor's Action Center are also stored in a separate database dedicated to that service.

6B. Ordinance for permanent water quality riparian buffers.

From Collierville Town Ordinance 152.206 - Water Quality Buffers:

§ 152.206 WATER QUALITY BUFFERS.

(A) The goal of the water quality buffer is to preserve undisturbed vegetation that is native to the streamside habitat in the area of the project. Vegetated, preferably native, water quality buffers protect water bodies by providing structural integrity and canopy cover, as well as stormwater infiltration, filtration and evapotranspiration.

(B) The buffer width depends on the size of a drainage area. Streams or other waters with drainage areas less than one square mile will require buffer widths of 30 feet minimum. Streams or other waters with drainage areas greater than one square mile will require buffer widths of 60 feet minimum. The 30-feet criterion for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than 15 feet at any measured location. The 60-feet criterion for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than 30 feet at any measured location. The Town Engineer shall determine the circumstances under which the average will be available. A determination that standards cannot be met may not be based solely on the difficulty or cost associated with implementation. Every attempt should be made for development and redevelopment activities not to take place within the buffer zone.

(C) If water quality buffer width as defined above cannot be fully accomplished on-site, the Town Engineer shall determine the circumstances under which alternative buffer widths will be available. A determination that water quality buffer widths cannot be met on site may not be based solely on the difficulty or cost of associated with implementation, but must include multiple criteria, such as type of project, existing land use and physical conditions that preclude use of these practices.

(D) Buffer zones are not primary sediment control measures and should not be relied upon as such.

(E) Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, for improvement of its effectiveness of protection of the waters of the state.

(F) Water quality buffers shall be clearly marked on site development plans, grading permit applications, and/or concept plans.

(G) *Buffer zone requirements.*

(1) Construction applies to all streams adjacent to construction sites, with an exception for streams designated as impaired or exceptional Tennessee waters, as designated by the Tennessee Department of Environment and Conservation. A 30-foot natural riparian buffer zone adjacent to all streams at the construction site shall be preserved, to the maximum extent practicable, during construction activities at the site. The water quality buffer zone is required to protect waters of the state located within or immediately adjacent to the boundaries of the project, as identified using methodology from standard operating procedures for hydrologic determinations (see rules to implement a certification program for qualified hydrologic professionals, TN Rules Chapter 0400-40-17). The buffer zone requirement only applies to new construction sites. The riparian buffer zone should be preserved between the top of stream bank and the disturbed construction area. The 30-feet criterion for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than 15 feet at any measured location.

(2) *Buffer zone requirements for discharges into impaired or exceptional Tennessee waters.* A 60-foot natural riparian buffer zone adjacent to the receiving stream designated as impaired or high quality waters shall be preserved, to the maximum extent practicable, during construction activities at the site. The water quality buffer zone is required to protect waters of the state (e.g., perennial and intermittent streams, rivers, lakes, wetlands) located within or immediately adjacent to the boundaries of the project, as identified on a 7.5-minute USGS quadrangle map, or as determined by the director. Buffer zones are not sediment control measures and should not be relied upon as primary sediment control measures. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, for

improvement of its effectiveness of protection of the waters of the state. The buffer zone requirement only applies to new construction sites. The riparian buffer zone should be established between the top of stream bank and the disturbed construction area. The 60-feet criterion for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than 30 feet at any measured location.

(3) Permanent new development and significant redevelopment sites are required to preserve water quality buffers along streams within the MS4. Alternatives to installing new or expanding existing buffer zones may be considered on a case-by-case basis for redevelopment sites. Buffers shall be clearly marked on site development plans, grading permit applications, and/or concept plans. Buffer width depends on the size of a drainage area. Streams or other waters with drainage areas less than one square mile will require buffer widths of 30 feet minimum. The 30-feet criterion for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than 15 feet at any measured location. Streams or other waters with drainage areas greater than one square mile will require buffer widths of 60 feet minimum. The 60-feet criterion for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than 30 feet at any measured location.

(Ord. 2012-18, passed 11-12-12)

6I. Ordinance citing off-site stormwater mitigation or payment into public stormwater fund. From Collierville Town Ordinance 152.207 RUNOFF REDUCTION:

152.207 RUNOFF REDUCTION.

The State of Tennessee issues to the Town of Collierville an NPDES General Permit for Discharges from Small Municipal Separate Storm Sewer Systems, which requires permanent stormwater management. Site designs for all new and redevelopment projects approved after the State established implementation date shall require management measures that are designed, built and maintained to infiltrate, evapotranspire, harvest and/or use, at a minimum, the first inch of every rainfall event preceded by 72 hours of no measurable precipitation. This first inch of rainfall must be 100% managed with no discharge to surface waters, except as provided herein.

(A) Application of runoff reduction requirements may not be appropriate in all circumstances. Alternate treatment approaches may be approved where there is a potential for introducing pollutants into the groundwater, where pre-existing soil contamination is present in areas subject to contact with infiltrated runoff, or where there is the presence of sinkholes or other karst features.

(B) Pre-development infiltrative capacity of soils at the site must be taken into account in selection of runoff reduction management measures.

(C) For developments that cannot meet 100% of the runoff reduction requirement, the remainder of the stipulated amount of rainfall must be treated prior to discharge with a technology documented to remove 80% total suspended solids (TSS) unless an alternative provided under this ordinance is approved. The treatment technology must be designed, installed and maintained to continue to meet this performance standard.

(D) For developments that cannot meet 100% of the runoff reduction requirements, alternative runoff reduction measures may be implemented at another location, preferably within the same USGS 12-digit hydrologic unit code (HUC) as the original development. Off-site mitigation must be a minimum of 1.5 times the amount of water not managed on site. The off-site mitigation location (or alternative location outside the 12-digit HUC) and runoff reduction measures must be approved by the Town's

Engineering/Development Department. The Town's Engineering/Development Department shall aid in identifying priority areas within the watershed in which mitigation projects can be completed. The Town's Engineering/Development Department shall create an inventory of appropriate mitigation projects, and develop appropriate institutional standards and management systems to value, evaluate and track transactions. Mitigation can be used for retrofit or redevelopment projects, but should be avoided in areas of new development.

(E) For developments that cannot meet 100% of the runoff reduction and pollutant removal standards and cannot provide for off-site mitigation, the owner may make payment into a public stormwater project fund to be established by the Town. The payment into the fund by the owner shall be 1.5 times the estimated cost of on-site runoff reduction controls.

(1) Funds from the payment in lieu of runoff reduction and pollutant removal shall be used by the Town to construct and maintain detention and conveyance systems within the town.

(2) Acceptance of payment in lieu of runoff reduction and pollutant removal is not automatic and must be considered on a case-by-case basis.

(3) If payment in lieu of runoff reduction and pollutant removal is approved, the developer is still responsible for conveying and managing stormwater runoff from the development to the existing storm drainage system in accordance with the requirements of this section.

(F) Stormwater discharges to critical areas with sensitive resources (e.g., recharge areas, wetlands) may be subject to additional performance criteria as determined by the town's Engineering/Development Department, or may need to utilize or restrict certain stormwater management practices.

(G) Stormwater discharges from hot spots may require the application of specific structural BMP's and pollution prevention practices. Stormwater from a hot spot land use may not be infiltrated.

(H) Prior to or during the site design process, applicants shall consult with the town's Engineering/Development Department to determine if they are subject to additional stormwater requirements.

(Ord. 2012-18, passed 11-12-12; Am. Ord. 2015-03, passed 3-23-15)

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10B. Summarize any analytical monitoring activities (e.g., planning, collection, evaluation of results) performed during this reporting period.

Shelby Drive Bridge

Date	Time	Sampler	Results (MPN/100ml)
8/20/2019	927	R. Hanks	26
9/30/2019	1015	R. Hanks	93
12/5/2019	1011	R. Hanks	41
2/3/2020	1002	R. Hanks	78
4/22/2020	1252	R. Hanks	70

Holmes Road Bridge

Date	Time	Sampler	Results (MPN/100ml)
8/20/2019	938	R. Hanks	103
9/30/2019	1007	R. Hanks	No Flow
12/5/2019	950	R. Hanks	127
2/3/2020	1015	R. Hanks	115
4/22/2020	1302	R. Hanks	59