HAMILTON COUNTY WATER QUALITY PROGRAM

1250 Market Street, Suite 3050
Chattanooga, Tennessee 37402-2713
Tel: 423-209-7851 Fax: 423-209-7852
Hotline: 423-209-7888

Represented Jurisdictions:

Collegedale ♦ East Ridge ♦ Hamilton County ♦ Lakesite ♦ Lookout Mountain ♦ Red Bank ♦ Ridgeside ♦ Soddy-Daisy

September 30, 2013

Jennifer Innes, Environmental Program Manager
Tennessee Department of Environment and Conservation
Division of Water Resources
540 McCallie Avenue, Suite 550
Chattanooga, TN 37402

Re: 2012-2013 Annual Report
Hamilton County Water Quality Program – MS4 Permit No. TNS075566

Dear Ms. Innes,

Enclosed please find the 2012-2013 Annual Report for the Hamilton County Water Quality Program MS4, which represents Collegedale, East Ridge, Lakesite, Lookout Mountain, Red Bank, Ridgeside, Soddy Daisy, and the urbanized portion of unincorporated Hamilton County. The report will be submitted to your office in electronic format also.

Please feel free to contact me at (423) 209-7810 with any questions.

Best Regards,

John Agan

John Agan, P.E.
Director of Engineering

Attachment: 2012-2013 Annual Report

ecc: Robert Karesh, Statewide Stormwater Coordinator (Robert.Karesh@state.tn.us)
Todd Leamon, Water Quality Management Committee Chairman (toddl@hamiltontn.gov)
Angela Young, Jason Dees- TDEC DWR- Chattanooga Environmental Field Office

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)

Municipal Separate Storm Sewer System (MS4) Annual Report

1. MS4 INFORMATION

Hamilton County Water Quality Program	TNS075566
Name of MS4	MS4 Permit Number
John Agan	JohnA@hamiltontn.gov
Name of Contact Person	Email Address
423-209-7810	
Telephone (including area code)	
1250 Market Street, Suite 3050	
Mailing Address	

Chattanooga	TN	37402
City	State	ZIP code

What is the current population of your MS4? 152,350 (includes 2010 census data where available)

What is the reporting period for this annual report? From July 1, 2012 to June 30, 2013

2. WATER QUALITY PRIORITIES (SECTION 3.1)

A. Does your MS4 discharge into waters listed as impaired on TN's most current 303(d) list and/or according to the on-line GIS mapping tool? ☒ Yes ☐ No

B. If yes, please attach a list all impaired waters within your jurisdictional area. (See Attached List)

C. Does your MS4's jurisdictional area contain any water bodies where a TMDL has been approved for parameters other than pathogens, siltation and habitat alterations? If yes, please attach a list.

D. Does your MS4 discharge to any Exceptional TN Waters (ETWs) or Outstanding National Resource Waters (ONRWs)? If yes, please attach a list. ☒ Yes ☐ No

E. Are you implementing additional specific provisions to ensure the continued integrity of ETWs or ONRWS located within your jurisdiction? ☒ Yes ☐ No

3. PROTECTION OF STATE OR FEDERALLY LISTED SPECIES (SECTION 3.2.1 General Permit for Phase II MS4s)

A. Are there any state or federally listed species within the MS4's jurisdiction? ☒ Yes ☐ No

B. Are any of the MS4 discharges or discharge-related activities likely to jeopardize any state or federally listed species? ☐ Yes ☒ No

C. Please attach any authorizations or determinations by U.S. Fish & Wildlife Service on the effect of the MS4 discharges on state or federally listed species. (See attached statement)

4. PUBLIC EDUCATION AND PUBLIC PARTICIPATION (SECTION 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 of those pollutants, such as Hot Spots? ☒ Yes ☐ No

C. If yes, what are the specific causes, sources and/or pollutants addressed by your public education program? Non-point source pollution from urbanized and municipal areas; sediment discharge from construction activity;pathogens and household pollutants from illicit discharges;pollutants from municipal housekeeping.

D. Note specific successful outcome(s) (NOT tasks, events, publications) fully or partially attributable to your public education program during this reporting period.

E. Do you have an advisory committee or other body comprised of the public and other stakeholders that provides regular input on your stormwater program? ☒ Yes ☐ No

F. How do you facilitate, advertise, and publicize public involvement and participation opportunities? Newspaper and Program website

G. Do you have a webpage dedicated to your stormwater program? ☒ Yes ☐ No

If so, what is the link/URL: www.hamiltontn.gov/waterquality

H. Are you tracking and maintaining records of public education, outreach, involvement and participation activities? Please attach a summary of these activities. ☒ Yes ☐ No

5. Illicit Discharge Detection and Elimination (Section 4.2.3)

A. Have you completed a map of all outfalls and receiving waters of your storm sewer system? ☒ Yes ☐ No

B. Have you completed a map of all storm drain pipes of storm sewer system? ☐ Yes ☒ No

C. How many outfalls have you identified in your system? 2254 since the Program began

D. Have any of these outfalls been screened for dry weather discharges? ☒ Yes ☐ No

F. What is your frequency for screening outfalls for illicit discharges? Per 5-year permit cycle

G. Do you have an ordinance that effectively prohibits illicit discharges? ☒ Yes ☐ No

H. During this reporting period, how many illicit discharges/illegal connections have you discovered (or been reported to you)? 20

I. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated? 19

6. Construction Site Stormwater Runoff (Section 4.2.4)

A. Do you have an ordinance or adopted policies stipulating:

Erosion and sediment control requirements? ☒ Yes ☐ No

Other construction waste control requirements? ☒ Yes ☐ No

Requirement to submit construction plans for review? ☒ Yes ☐ No

MS4 enforcement authority? ☒ Yes ☐ No

B. How many active construction sites disturbing at least one acre were there in your jurisdiction this reporting period? 34

C. How many of these active sites did you inspect this reporting period? all

D. On average, how many times each, or with what frequency, were these sites inspected (e.g., weekly, monthly, etc.)? At least once monthly and after each significant rainfall event

E. Do you prioritize certain construction sites for more frequent inspections? ☒Yes ☐ No

If Yes, based on what criteria? Developer violation history and proximity to sediment impaired streams

7. PERMANENT STORMWATER CONTROLS (SECTION 4.2.5)

A. Do you have an ordinance or other mechanism to require:

Site plan reviews of all new and re-development projects?	☒ Yes	☐ No
Maintenance of stormwater management controls?	☒ Yes	☐ No
Retrofitting of existing BMPs with green infrastructure BMPs?	☐ Yes	☒ No

B What is the threshold for new/redevelopment stormwater plan review? (e.g., all projects, projects disturbing greater than one acre, etc.) Disturbance of one acre or more; disturbance of less than one acre if part of a larger common plan of development; risk to water quality or public health or environment; 2 violations of sediment and erosion control rules or sediment discharges.

C. Have you implemented and enforced performance standards for permanent stormwater controls? ☒ Yes ☐ No

D. Do these performance standards go beyond the requirements found in Section 4.2.5.2 and require that pre-development hydrology be met for:

Flow volumes	☐ Yes	☒ No
Peak discharge rates	☐ Yes	☒ No
Discharge frequency	☐ Yes	☒ No
Flow duration	☐ Yes	☒ No

E. Please provide the URL/reference where all permanent stormwater management standards can be found.

www.hamiltontn.gov/waterquality/BMP.aspx/

F. How many development and redevelopment project plans were reviewed for this reporting period? 36

G. How many development and redevelopment project plans were approved? 11

H. How many permanent stormwater management practices/facilities were inspected? 29

I. How many were found to have inadequate maintenance? 1

J. Of those, how many were notified and remedied within 30 days? (If window is different than 30 days, please specify) 1

K. How many enforcement actions were taken that address inadequate maintenance? 0

L. Do you use an electronic tool (e.g., GIS, database, spreadsheet) to track post-construction BMPs, inspections and maintenance?	☒ Yes	☐ No
M. Do all municipal departments and/or staff (as relevant) have access to this tracking system?	☐ Yes	☒ No
N. Has the MS4 developed a program to allow for incentive standards for redeveloped sites?	☐ Yes	☒ No

O. How many maintenance agreements has the MS4 approved during the reporting period? 10

8. CODES AND ORDINANCES REVIEW AND UPDATE (SECTION 4.2.5.3)

A. Is a completed copy of the EPA Water Quality Scorecard submitted with this report? ☐ Yes ☒ No

B. Include status of implementation of code, ordinance and/or policy revisions associated with permanent stormwater management. Changes are anticipated during the upcoming permit year to comply with Section 4.2.5 of MS4 Permit TNS075566.

9. STORMWATER MANAGEMENT FOR MUNICIPAL OPERATIONS (SECTION 4.2.6)

A. Have stormwater pollution prevention plans (or an equivalent plan) been developed for:

All parks, ball fields and other recreational facilities	☐ Yes	☒ No
All municipal turf grass/landscape management activities	☐ Yes	☒ No
All municipal vehicle fueling, operation and maintenance activities	☒ Yes	☐ No
All municipal maintenance yards	☒ Yes	☐ No
All municipal waste handling and disposal areas	☒ Yes	☐ No

B. Are stormwater inspections conducted at these facilities? ☒ Yes ☐ No

1. If Yes, at what frequency are inspections conducted? Spill response teams at each facilities are required to inspect the location and complete a report each quarter.

C. Have standard operating procedures or BMPs been developed for all MS4 field activities? (e.g., road repairs, catch basin cleaning, landscape management, etc.) ☐ Yes ☒ No

D. Do you have a prioritization system for storm sewer system and permanent BMP inspections? ☐ Yes ☒ No

E. On average, how frequently are catch basins and other inline treatment systems inspected? See next question.

F. On average, how frequently are catch basins and other inline treatment systems cleaned out/maintained? Most municipalities utilize maintenance schedules for the systems: Collegedale inspects and cleans during rain events; East Ridge visually checks drains/catch basins regularly and places crews on "Drain Patrol" when heavy rain events are forecast; Lakesite schedules inspections and cleanout annually; Red Bank divides the municipality into 6 sectors and inspects annually with cleaning as needed as well as visually checking catch basins in "problem" areas before heavy rain forecasts; Hamilton County Highway Dept maintains a schedule and also inspects and cleans in response to complaints; Soddy-Daisy visually inspects during fall season after leaf drop and cleans as needed in response to complaints.

G. Do municipal employees in all relevant positions and departments receive comprehensive training on stormwater management? ☒ Yes ☐ No

H. If yes, do you also provide regular updates and refreshers? ☒ Yes ☐ No

If so, how frequently and/or under what circumstances? During the reporting period, inspections included meetings with site Pollution Prevention teams and coordination of stormwater management training/pollution prevention training for new employees. For future years, training will include use of the video "Rain Check" (video focusing on municipal facility pollution prevention) and inspections involving designated Pollution Prevention teams.

10. STORMWATER MANAGEMENT PROGRAM UPDATE (SECTION 4.4)

A. Describe any changes to the MS4 program during the reporting period including but not limited to:

Changes adding (but not subtracting or replacing) components, controls or other requirements (Section 4.4.2.a).

_____

Changes to replace an ineffective or unfeasible BMP (Section 4.4.2.b). Changes will be made to the housekeeping training protocol in the upcoming permit cycle to streamline our training efforts for maximum efficiency. Cyclic training with key staff members will be performed, while introductory and refresher training will be setup for less key positions.

Information (e.g. additional acreage, outfalls, BMPs) on program area expansion based on annexation or newly urbanized areas. The Program follows the procedures as prescribed in the Program SOP for Program Area revisions. 845 acres were added to the Program boundary due to annexation by the City of Collegedale, however 938 acres were lost to the City of Chattanooga due to annexation, for a total of 93 acres less of program area.

Changes to the program as required by the division (Section 4.4.3). _____

11. Evaluating/Measuring Progress

A. What indicators do you use to evaluate the overall effectiveness of your Stormwater Management Program, how long have you been tracking them, and at what frequency? Note that these are not measurable goals for individual BMPs or tasks, but large-scale or long-term metrics for the overall program, such as in-stream macroinvertebrate community indices, measures of effective impervious cover in the watershed, indicators of in-stream hydrologic stability, etc.

Indicator	Began Tracking (year)	Frequency	Number of Locations
Example: E. coli	*2003*	*Weekly April–September*	*20*
Pathogens	2010	Per TMDL Plan	3

B. Provide a summary of data (e.g., water quality information, performance data, modeling) collected in order to evaluate the performance of permanent stormwater controls installed throughout the system. This evaluation may include a comparison of current and past permanent stormwater control practices. _____

12. Enforcement (Section 4.5)

A. Identify which of the following types of enforcement actions you used during the reporting period, indicate the number of actions, the minimum measure (e.g., construction, illicit discharge, permanent stormwater control) or note those for which you do not have authority:

Action	Construction	Permanent Stormwater Controls	Illicit Discharge	Authority?	
Notice of violation	#19	#_____	#20	☒ Yes	☐ No
Administrative fines	#_____	#_____	#_____	☒ Yes	☐ No
Stop Work Orders	#2	#_____	#_____	☒ Yes	☐ No
Civil penalties	#3	#_____	#_____	☒ Yes	☐ No
Criminal actions	#_____	#_____	#_____	☒ Yes	☐ No
Administrative orders	#_____	#_____	#_____	☒ Yes	☐ No
Other _____	#_____	#_____	#_____		

B. Do you use an electronic tool (e.g., GIS, data base, spreadsheet) to track the locations, inspection results, and enforcement actions in your jurisdiction? ☒ Yes ☐ No

C. What are the 3 most common types of violations documented during this reporting period? Stabilization, Track Out, and BMP Maintenance.

13. Program Resources (Optional)

A. What was your annual expenditure to implement the requirements of your MS4 NPDES permit and SWMP this past reporting period? $656,797.64

B. What is next year's budget for implementing the requirements of your MS4 NPDES permit and SWMP? $709,195.00

C. Do you have an independent financing mechanism for your stormwater program? ☒ Yes ☐ No

D. If so, what is it/are they (e.g., stormwater fees), and what is the annual revenue derived from this mechanism?

Source: Annual Stormwater Fees Amount $$622,692.00

Source: Misc. Permit Fees & Delinquent Fees Collected Amount $22,700.00

E. How many full time employees does your municipality devote to the stormwater program (specifically for implementing the stormwater program vs. municipal employees with other primary responsibilities that dovetail with stormwater issues)? 8

F. Do you share program implementation responsibilities with any other entities? ☒ Yes ☐ No

Entity	Activity/Task/Responsibility	Your Oversight/Accountability Mechanism
Partner Jurisdictions	Pollution Prevention/Housekeeping	Compliance Inspections & Training
County Trustee	Billing/Collection of Fees	Monthly Reports from accounting system

G. Please attach a copy of your Organizational Chart

14. 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 by me, or under my direction or supervision. The submitted information 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

JOHN AGAN, DIR. OF ENGR. — Printed Name and Title

John Agan — Signature

9/30/13 — Date

Annual reports must be submitted in accordance with the requirements of Section 5.4. (Reporting) of the permit. Annual reports must be submitted to the appropriate Environmental Field Office (EFO) by September 30 of each calendar year, as shown in the table below:

EFO	Street Address	City	Zip Code	Telephone
Chattanooga	540 McCallie Avenue STE 550	Chattanooga	37402	(423) 634-5745
Columbia	1421 Hampshire Pike	Columbia	38401	(931) 380-3371
Cookeville	1221 South Willow Ave.	Cookeville	38506	(931) 432-4015
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

2B. Attach a list all impaired waters within your jurisdictional area.

Note, the following list includes impaired waters within the Hamilton County Water Quality jurisdictional boundary that have MS4 discharges identified as a source of pollution. Any impaired waters that are polluted by sources other than MS4 discharges are not included.

2013 303d Streams (Hamilton County MS4 listed as source)		Approved TMDL	
Stream	Length (ft.)	Pathogen	Siltation/Habitat Alteration
Wolftever Creek	58,303	YES	NO
Rogers Branch (east of river)	50,506	YES	NO
Spring Creek	34,681	YES	NO
Wilkerson Branch	30,480	YES	NO
Stringers Branch	27,650	YES	YES
Chestnut Creek	22,484	NO	NO
South Chickamauga Creek	21,500	YES	YES
Little Wolftever Creek	11,525	YES	NO
Mackey Branch	10,940	YES	NO
Gillespie Springs Branch	3,016	YES	YES
Ninemile Branch	2,660	NO	YES
Rogers Branch (west of river)	1,524	NO	NO
Mountain Creek	1,478	YES	YES
Un-named Trib. (North Chickamauga Creek)	1,456	NO	YES

3C. Attach any authorizations or determinations by U.S. Fish & Wildlife Service on the effect of the MS4 discharges on state or federally listed species.

Evaluation Procedure

Criterion A: No state or federally listed species or critical habitat are in proximity to your MS4 or the point where authorized discharges reach the receiving water; or

Criterion B: The MS4 has evaluated the effects of its stormwater discharges, allowable non-stormwater discharges and discharge-related activities on state and federally listed species and critical habitat and do not have reason to believe the discharge and/or discharge-related activities will jeopardize the continued existence of any state or federally listed species or result in the adverse modification or destruction of critical habitat.

Criterion C. Stormwater discharges, allowable non-stormwater discharges and/or discharge-related activities from the MS4 were already addressed in another operator's certificate of eligibility included with the MS4's activities. By certifying eligibility, the MS4 agrees to comply with any measures or controls upon which the operator's certification was based.

Criteria A and C do not apply to the Hamilton County Water Quality Program. Therefore, Criterion B has been used as the evaluation procedure. The process is described below:

The Program utilizes information provided by the Natural Heritage Program (TNHP) of the Tennessee Department of Environment and Conservation in two formats as well as Notices of Coverage (NOC) issued by the Division.

The USGS 12-digit HUC watershed listing by County to annually review the presence of invertebrate and vertebrate animals in the Program Area sub watersheds;

The electronic data provided by the TNHP's Element Occurrence Records to determine potential impacts to rare species from construction projects. A Data Use Agreement is in place between the TNHP and the Program.
A review of each NOC's "likely presence" items for each NOC the Program reviews during the plans review process for issuing land disturbing permits.

The Program has begun to request that the submitting engineer/permit applicant provide information regarding the presence of threatened or endangered species in the receiving stream of the construction project for which a land disturbing permit is being requested.

The Program has begun to expand the process to include discussions with federal Fish and Wildlife agencies for an evaluation of the impacts that discharges may have on state or federally listed species or critical habitat.
A meeting was held December 1, 2011, with the Cookeville office of the U.S. Fish and Wildlife Service to begin closer coordination.

Based on the process using the data listed in Items a-d above, the Program has reason to believe that discharges and/or discharge-related activities will not jeopardize the continued existence of any state or federally listed species or result in adverse modifications or destruction of critical habitat.

4H. Are you tracking and maintaining records of public education, outreach, involvement and participation activities? Please attach a summary of these activities.

Date	Event/Activity	Partnering Group or Organization	Target Audience	No. of Participants
7/17/2012	Young Explorers	Hamilton County Parks & Recreation	4	20
7/19/2012	Young Explorers	Hamilton County Parks & Recreation	4	10
8/1/2012	ASCE Webcast-Stormwater BMPs: What Works, What Doesn't Work	n/a	5	11
8/23/2012	Homeschool Group at Audubon Acres	Audubon Acres	4	15
9/19/2012	Get the Dirt on Stormwater (CWP Webcast)	City of Chattanooga	5	20
9/20/2012	Normal Park Field Trip to Nature Center	Normal Park, Nature Center	4	30-50
9/21/2012	CGP Workshop	MTAS (facilitator)	5	61
10/6/2012	Tennessee River Rescue	Many	1	Numerous
10/23/2012	TN Yards & Neighborhoods Workshop	UT Ag. Extension, TWRRC, TVA	1	10
11/3/2012	Boy Scouts Merit Badge University-Environmental Track	Boy Scouts Troop 71	4	60+
11/12/2012	East TN Green Building Council-Panel Discussion	Green Spaces	1	50
12/12/2012	CWP Webcast-Customizing BMPs to Target Specific Pollutants		5	23

2/18/2013	UTC Class Presentation	UTC	5	28
2/19/2013	Permanent Stormwater Management in TN	AMEC	3	19
3/9/2013	SCCGA Riparian Tree Planting at Friar Branch	SCCGA	1	15
4/20/2013	SCCGA Spring Cleanup along South Chickamauga Creek	SCCGA	1	28
4/22/2013	Homeschool Group at Audubon Acres	Audubon Acres	4	16
4/26/2013	McKee Healthy Living Expo	McKee Bakery	1	500+
5/23/2013	Webcast-Street Sweeping		3	13
5/24/2013	SCCGA Wetland Tour at VW	SCCGA	1	
3/28/2019	SESWA Webcast- Infrastructure Asset Management	SESWA	5	Region-Wide
6/10-14-2013	Kids 4 Clean Water-Camp	TenneSEA	4	20
6/4-6/2013	Project WET	Chattanooga, Bradley & Cleveland, TN Aquarium	2	75
9/28-9/29/12	Hamilton County Fair	Hamilton County Parks & Recreation	1	750+
Continuous	Website Hits	www.hamiltontn.gov	1	55,501

Target Audience:

1. General Public
2. Educators
3. Municipal Employees
4. School Aged Children & their Families
5. Professionals (Engineers, Consultants, etc.)

Outreach Focus:

Pink- General Education Message
Green- Permanent Stormwater Management/ Low Impact Development
Orange- Public Involvement
Blue- Construction