

# MS4 Annual Report FY-2014

City of Oak Ridge, Tennessee



COPY

CITY OF  
OAK RIDGE



OFFICE OF THE CITY MANAGER

October 27, 2014  
POST OFFICE BOX 1 • OAK RIDGE, TENNESSEE 37831-0001

Mr. Jason Mann  
Biologist III  
TN Division of Water Resources  
3711 Middlebrook Pike  
Knoxville, TN 37921

**RE: CITY OF OAK RIDGE MS4 ANNUAL REPORT – TNS088366**

Dear Mr. Mann:

Enclosed is the City of Oak Ridge MS4 Annual Report for fiscal year July 1, 2013 to June 30, 2014.

The Tennessee Department of Environment and Conservation issued Notice of Coverage to the City of Oak Ridge on March 23, 2014. The enclosed first year Annual Report covers a period from March 23, 2014 to June 30, 2014 or approximately a three month period. As identified in the report, no funding was appropriated for the stormwater program during this reporting period with limited funds available for the current fiscal year of July 1, 2014 to June 30, 2015.

Without funding the City of Oak Ridge began work on several milestones identified in the Notice of Intent (NOI) during the reporting period and are listed below:

- Draft Stormwater Ordinance using the MTAS Model Stormwater Ordinance
- Reorganization of staff to provide stormwater program support
- Upgrade the existing City stormwater website for public education purposes
- Establish a citizen hot line phone number on the city website
- GIS mapping of the stormwater system

The stormwater team will continue to work toward meeting the yearly milestones and obtaining City funds to fully implement the program. The City is striving to develop a complete stormwater management program that will meet the needs of the citizens and create a cleaner environment that addresses water quality and quantity issues.

Thank you for your assistance working with us on the development of the program. Please contact Steve Byrd, City Engineer at 865-425-1807 or [sbyrd@oakridgetn.gov](mailto:sbyrd@oakridgetn.gov) with any questions concerning this submittal.

Sincerely,

A handwritten signature in cursive script that reads "Mark S. Watson".

Mark S. Watson  
City Manager

Enclosure: Annual Report

cc: Steve Byrd, City Engineer



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**

<b>City of Oak Ridge</b>	<b>TNS088366</b>
Name of MS4	MS4 Permit Number
<b>Steven R. Byrd, P.E.</b>	<b>sbyrd@oakridgetn.gov</b>
Name of Contact Person	Email Address
<b>(865) 425-1807</b>	

Telephone (including area code)

**P.O. Box 1**

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Mailing Address

<b>Oak Ridge</b>	<b>TN</b>	<b>37831-0001</b>
City	State	ZIP code

What is the current population of your MS4? **29,419**

What is the reporting period for this annual report? From **3/23/14** to **6/30/14**

**This annual report only covers a 3-month period due to the City's NOC starting on 3/23/14.**

**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 Attachment A**
- C. Does your MS4's jurisdictional area contain any waterbodies where a TMDL has been approved for parameters other than pathogens, siltation and habitat alterations? If yes, please attach a list.  
**See Attachment A**
- 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  
**Clinch River, Bear Creek**
- 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.  
**The Fish & Wildlife Service has been contacted.**

**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? \_\_\_\_\_

## Municipal Separate Storm Sewer System (MS4) Annual Report

- D. Note specific successful outcome(s) (NOT tasks, events, publications) fully or partially attributable to your public education program during this reporting period. \_\_\_\_\_ **Ongoing Stormwater Website**
- 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? City Website
- G. Do you have a webpage dedicated to your stormwater program?  Yes  No  
If so, what is the link/URL: \_\_\_\_\_ <http://stormwater.oakridgetn.gov/>
- 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? 0
- 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? None
- 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)? 0
- I. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated? 0

### 6. CONSTRUCTION SITE STORMWATER RUNOFF (SECTION 4.2.4)

- A. Do you have an ordinance or adopted policies stipulating:  
**Existing ordinance does not address stormwater quality.**  
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? 5
- C. How many of these active sites did you inspect this reporting period? 5
- D. On average, how many times each, or with what frequency, were these sites inspected (e.g., weekly, monthly, etc.)? Daily
- E. Do you prioritize certain construction sites for more frequent inspections?  Yes  No  
If Yes, based on what criteria? \_\_\_\_\_

### 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

## Municipal Separate Storm Sewer System (MS4) Annual Report

- 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.) All land disturbing activities.
- 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.  
None
- F. How many development and redevelopment project plans were reviewed for this reporting period? 5
- G. How many development and redevelopment project plans were approved? 5
- H. How many permanent stormwater management practices/facilities were inspected? 0
- I. How many were found to have inadequate maintenance? N/A
- J. Of those, how many were notified and remedied within 30 days? (If window is different than 30 days, please specify) N/A
- K. How many enforcement actions were taken that address inadequate maintenance? N/A
- 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? 0
- 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. **Preparing draft stormwater ordinance that addresses permanent stormwater management.**
- 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

## Municipal Separate Storm Sewer System (MS4) Annual Report

- 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? \_\_\_\_\_
- 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? After moderate rainfall events
- F. On average, how frequently are catch basins and other inline treatment systems cleaned out/maintained? As needed
- 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? \_\_\_\_\_

### 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). None
- Changes to replace an ineffective or unfeasible BMP (Section 4.4.2.b). None
- Information (e.g. additional acreage, outfalls, BMPs) on program area expansion based on annexation or newly urbanized areas. None
- Changes to the program as required by the division (Section 4.4.3). None

### 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. **The City has been in the MS4 Program for 3-months.**

Indicator	Began Tracking (year)	Frequency	Number of Locations
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- 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. No data collected

## Municipal Separate Storm Sewer System (MS4) Annual Report

### 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: **Limited authority in existing ordinance.**

Action	Construction	Permanent Stormwater Controls	Illicit Discharge	Authority?	
Notice of violation	# <u>0</u>	# _____	# _____	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Administrative fines	# <u>0</u>	# _____	# _____	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Stop Work Orders	# <u>0</u>	# _____	# _____	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Civil penalties	# <u>0</u>	# _____	# _____	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Criminal actions	# <u>0</u>	# _____	# _____	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Administrative orders	# <u>0</u>	# _____	# _____	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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? Silt fence failures

### 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? 0
- B. What is next year's budget for implementing the requirements of your MS4 NPDES permit and SWMP?  
\$150,000 for MS4 and routine maintenance
- 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: \_\_\_\_\_ Amount \$ \_\_\_\_\_  
Source: \_\_\_\_\_ Amount \$ \_\_\_\_\_
- 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)? Less than 1
- F. Do you share program implementation responsibilities with any other entities?  Yes  No

Entity	Activity/Task/Responsibility	Your Oversight/Accountability Mechanism

- G. Please attach a copy of your Organizational Chart

## Municipal Separate Storm Sewer System (MS4) Annual Report

### 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."*

**Mark S. Watson, City Manager**

Printed Name and Title

  
Signature

10/28/14  
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

Phase II Municipal Separate Storm Sewer Systems (MS4)

ITEM D  
IDENTIFYING IMPAIRED STREAMS AND OTHER WATER BODIES

Using the GIS mapping tool (<http://tnmap.tn.gov/wpc/>) along with the most current 303(d) list published on the division's web site: [http://www.tn.gov/environment/water/water-quality\\_publications.shtml](http://www.tn.gov/environment/water/water-quality_publications.shtml), identify whether stormwater discharges from any part of the MS4 contribute pollutants of concern to an impaired waterbody and list below: For any impairment, indicate the waterbody ID#, name of impacted waterbody, nature of pollution (cause), and the source. If you have additional streams to list, please include in a separate attachment.

WATERBODY ID# AND NAME OF IMPACTED WATERBODY	CAUSE OF IMPAIRMENT	SOURCE OF IMPAIRMENT
East Fork Poplar Creek (Roane Co), TN06010207026-1000	PCBs, Mercury, E. coli, NO2 + NO3, Total P, Siltation	US Dept of Energy Releases, Oak Ridge Area
East Fork Poplar Creek (Anderson & Roane Co), TN06010207026-2000	PCBs, Mercury, E. coli, NO2 + NO3, Total P, Siltation, Habitat Alterations	US Dept of Energy Releases, Oak Ridge Area
Ernies Creek, TN06010207006T-1100	E. coli	Municipal (Urbanized High Density Area)
Melton Hill Reservoir, TN06010207006-1000	PCBs, Chlordane	Contaminated Sediment Deposits
Scarboro Creek, TN6010207006T-0900	E. coli	Municipal (Urbanized High Density Area)
Poplar Creek, TN06010207020-1000	NO2 + NO3, Total P	Municipal (Urbanized High Density Area), and Sanitary Sewer Overflows
Poplar Creek Embayment, TN06010207001-0100	Mercury, PCBs	Contaminated Sediments (Mercury & PCBs), Industrial Point Source Discharge (Mercury)
Mitchell Branch, TN06010207020-1300	Hexavalent Chromium, Substrate Habitat Alteration, PCBs	CERCLA NPL Sites (Chromium, PCBs) Channelization (Substrate)
White Oak Creek, TN06010207247-1000	Cesium, Strontium	CERCLA NPL Sites

Comment: The DOE is covered under 3 separate permits and is a source of some of the known pollutants.

ITEM E  
HAS THE STATE OR EPA ISSUED A TMDL FOR ANY STREAMS DIRECTLY AFFECTED BY RUNOFF FROM YOUR MS4?

Determine whether or not a TMDL has been established and approved by EPA and identify by checking the appropriate box. A list of EPA-Approved TMDLs as well as EPA-Established TMDLs for Tennessee waters can be found on the division's web site: [http://www.tn.gov/environment/water/water-quality\\_total-daily-maximum-loads.shtml](http://www.tn.gov/environment/water/water-quality_total-daily-maximum-loads.shtml).

Yes  No  If yes, list the waterbody ID#, name of impacted waterbody and parameter(s) of concern:

WATERBODY ID# AND NAME OF IMPACTED WATERBODY	PARAMETERS OF CONCERN
Lower Clinch Watershed, HUC 06010207	Pathogens (2005), Siltation & Habitat Alteration (2006, 2007), PCBs & Chlordane (2010)
East Fork Poplar Creek, TN06010207026-1000 & 2000	Pathogens (2005), Siltation & Habitat Alteration (2006, 2007)
Melton Hill Reservoir, 06010207006-1000	Pathogens (2005), Siltation & Habitat Alterations (2006, 2007), PCBs & Chlordane (2010)
Watts Bar Reservoir, 06010207006-1000	Pathogens (2005), Siltation & Habitat Alteration (2006, 2007), PCBs & Chlordane (2010)

If you have additional streams to list, please include in a separate attachment.

Comment: The City's SWMP will address the requirements of the general permit for discharges to water quality impaired waters (Section 3.1), protection of state or federally listed species (Section 3.2), analytical & non-analytical monitoring of impaired streams (Section 5.1 & 5.2)

**OAK RIDGE STORMWATER ORGANIZATIONAL CHART  
APPENDIX "A"**

**OAK RIDGE CITY COUNCIL**

**OAK RIDGE CITY MANAGER**

**PUBLIC WORKS DIRECTOR**

**CITY ENGINEER  
STORMWATER COORDINATOR**

**FIRE  
DEPARTMENT  
TRAINING & GOOD  
HOUSEKEEPING**

**ELECTRIC  
DEPARTMENT  
TRAINING & GOOD  
HOUSEKEEPING**

**COMMUNITY  
DEVELOPMENT  
DEPARTMENT  
MAPPING AND CODE  
ENFORCEMENT**

**PUBLIC WORKS  
DEPARTMENT  
INSPECTION &  
ENFORCEMENT  
2 CIVIL PROJECT  
SPECIALISTS  
MAPPING  
1 SENIOR CIVIL PROJECT  
SPECIALIST**

**PARKS &  
RECREATION  
TRAINING & GOOD  
HOUSEKEEPING**

**INFORMATION  
SERVICES  
WEBSITE, MAPPING &  
PUBLIC  
ANNOUNCEMENTS**