Metropolitan Nashville and Davidson County

MS4 NPDES
Permit No. TNS068047

Annual Report
Permit Cycle 2, Year 7

November 2010

METRO WATER SERVICES STORMWATER

Pure Nashville ... right as rain.

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1.0 Introduction

Metropolitan Nashville Davidson County (Metro) was issued the second iteration of the Municipal Separate Storm Sewer System (MS4) permit in July of 2003. The permit extended for a term of 5 years, thus expiring in July of 2008. Since expiration of the permit, Metro initiated conversations with Tennessee Department of Environment and Conservation (TDEC) personnel to discuss reissuance of the MS4 permit and to determine what specific permit compliance activities should be undertaken during the expiration period. It was decided that Metro would continue to perform all of the permit items listed as ongoing or annual in the permit compliance schedule. In addition, it was discussed that Metro would at least initiate permit compliance activities such as field screening and industrial inspection, which had specific permit year completion dates.

For reporting purposes, the second year following permit expiration is referred to as Permit Year (PY) 7 in the following report. For purposes of this document, PY7 is the same timeframe as Fiscal Year (FY) 10.

Metro's Permit Compliance Approach

Each year there are numerous individuals and departments that work toward achieving overall MS4 Permit compliance. As a measure to ensure permit compliance within the various facets of Metro Nashville and Davidson County government, the National Pollutant Discharge Elimination System (NPDES) section was created to oversee all permit compliance activities. The NPDES section, within Metro Water Services (MWS) Stormwater Division, is responsible for not only performing specific permit requirements such as illicit discharge investigations, sampling, construction site inspections, etc., but is also responsible for coordinating with various other Metro departments to ensure permit compliance measures are being followed Metro-wide.

The following table is a list of individuals that contributed to specific permit compliance activities/information during PY7. For any questions regarding information represented in this report, all inquiries should be directed to the MWS NPDES Section at 1607 County Hospital Road, Nashville, Tennessee, 37218, Phone: 615-880-2420, Fax: 615-880-2425.

Table 1 - Contact List

Name	Agency	Position/Responsibility
Scott Potter	Metro Water Services	Director
John Kennedy	Metro Water Services	Assistant Director
Tom Palko	Metro Water Services	Assistant Director, Stormwater Division
Sonia Harvat	Metro Water Services	Public Information Officer
Julie Berbiglia	Metro Water Services	Public Education Specialist
Ricky Swift	Metro Water Services	Program Manager, Stormwater Remedial Maintenance Section
Roger Lindsey	Metro Water Services	Program Manager, Stormwater Development Review and Permitting
Angela Foster	Metro Water Services	Engineer, Stormwater Development Review and Permitting
Kimberly Hayes	Metro Water Services	Engineer, Stormwater Codes
Jennifer Hill	Metro Water Services	Administration Service Manager, Stormwater Maintenance Division
Michael Hunt	Metro Water Services	Program Manager, Stormwater NPDES Section
Bonnye Holt	Metro Water Services	Office Support Representative, Stormwater NPDES Section
Dale Binder	Metro Water Services	Construction Inspection Manager , Stormwater NPDES Section
Harold Bryant	Metro Water Services	Construction Site Inspector, Stormwater NPDES Section
Shawn Herman	Metro Water Services	Construction Site Inspector, Stormwater NPDES Section
Katherine O'Hara	Metro Water Services	Construction Site Inspector, Stormwater NPDES Section
Denice Johns	Metro Water Services	Construction Site Inspector, Stormwater NPDES Section
Dr. Steve Winesett	Metro Water Services	Watershed Manager, Stormwater NPDES Section
Megan Sitzler	Metro Water Services	Water Quality Inspector, Stormwater NPDES Section
Michelle Barbero	Metro Water Services	Water Quality Inspector, Stormwater NPDES Section
Rebecca Dohn	Metro Water Services	Water Quality Inspector, Stormwater NPDES Section
Josh Hayes	Metro Water Services	Water Quality Inspector, Stormwater NPDES Section
Sonya Erickson	Metro Water Services	Water Quality Inspector, Stormwater NPDES Section
Mary Garmon	Metro Water Services	Water Quality Inspector, Stormwater NPDES Section
Mark Macy	Department of Public Works	Assistant Director - Engineering Division
David Himes	Department of Public Works	Assistant Director - Operations Division
Donna Ryman	Department of Public Works	Solid Waste Division
Clayton Hand	Department of Public Works	Engineer, Solid Waste Division
Mike Ryman	Department of Public Works	Technician Specialist Hazardous Materials Spill Response
Sonny West	Codes Department	Zoning Administrator
Joey Hargis	Codes Department	Zoning Administrator
Anita McCaig	Metro Planning Department	Planner
Spencer Hissam	Metro Public Health Department	Septic System Oversight
Steve Crosier	Metro Public Health Department	Restaurant Inspection
Greg Ballard	Metro Water Services	Overflow Abatement Program Manager
Jim Paulus	Metro Water Services	System Services Overflow Response Program Manager
Bob Parrish	Metro Parks Department	Parks and Recreation Superintendent
Heidi Jordan	Mayor's Office of Emergency Management	Spill Response Coordinator
Bill Malcolm	Metro Office of Fleet Management	Fleet Services Manager
Hugh Garrison	Metro Water Services	Laboratory Superintendent
Anna Kuoppanmaki	Metro Water Services	GIS Analyst, Stormwater NPDES Office

The following list is a description of commonly used acronyms throughout the document:

BMP	Best Management Practice
DRP	Development Review & Permitting
EMC	Event Mean Concentration
EPA	Environmental Protection Agency
EPSC	Erosion Protection and Sediment Control
FOG	Fats, Oils, and Grease
GIS	Geographic Information System software
GP	Grading Permit
HHW	Household Hazardous Waste
LID	Low Impact Development
MEP	Maximum Extent Practicable
MDPW	Metro Department of Public Works
MHD	Metro Health Department
MNDC	Metro Nashville, Davidson County
MNPS	Metro Nashville Public Schools
MS4	Municipal Separate Storm Sewer System
MWS	Metro Water Services
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
OEM	Mayor's Office of Emergency Management
PIO	Public Information Officer
PY	Permit Year
ReM	Stormwater Remedial Maintenance Section
RoM	Stormwater Routine Maintenance Section
SSD	System Services Division
SWAC	Stormwater Advisory Committee
SWMP	Stormwater Management Plan
SWO	Stop Work Order
TDEC	Tennessee Department of Environment and Conservation
TMSP	Tennessee Multi Sector Permit for Industrial Stormwater Discharges
TWRA	Tennessee Wildlife Resource Agency
USACOE	U.S. Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
WMD	Waste Management Division

2.0 Stormwater Management Program Evaluation

2.1 Objective of the Program

The objective of the Stormwater Management Program is to implement specific pollution prevention programs designed to improve the quality of Metro Nashville, Davidson County's (MNDC) water resources and "Waters of the State of Tennessee" to the Maximum Extent Practicable (MEP). This leads to an overall goal of achieving water quality improvements in every MNDC stream reach included on TDEC's 303(d) list of impaired streams, whereby, each stream will be ultimately removed from this list. During the first two MS4 permit cycles, MNDC implemented major programs to target the various sources of Stormwater pollution (i.e. construction sites, industrial sites, commercial sites, residential sites, etc.). Overall, the implementation of these programs has worked to reduce and minimize pollutants from entering streams from the MS4 drainage system.

2.2 Major Findings

Each year the number of major discoveries of pollution to the MS4 drainage system has been dramatically reduced through long term implementation of the core pollution prevention programs described further in this document. Some of the more notable findings impacting water quality of MNDC streams during PY7 are described in the following paragraphs:

2.2.1 Cross-Connection of Sewage to Stormwater

While working on a tip from a local business involving storm drains with a sanitary sewer odor, MWS initiated a large-scale dye trace investigation of sanitary sewers within several buildings. The area of investigation involved a portion of the former Combined Sewer System (CSS) that was separated into dedicated stormwater and sanitary lines several years back. As a result of the investigation, MWS discovered that the sanitary sewer located in the basement of a large commercial building was unknowingly routing sewage to outside storm drains. (See Figure 2.2.1) The restrooms and showers in the basement of the facility were not in use at the time of CSS separation and were only recently put into service. Upon this discovery, an NOV was issued to the facility requiring them to perform "hard" plumbing corrective actions that resulted in the re-routing of pumped pit water into a designated sanitary sewer.

Figure 2.2.1 Photos of dye from basement restrooms routing to a sump pump pit (left) that was pumped outside to a stormwater manhole (right).

2.2.2 Illicit Discharge of Private Sewage into a Tributary of Dry Creek

While working on a normal service call, staff from the System Services Division (SSD) of MWS alerted NPDES of a possible leaking/broken sewage line discharging raw sewage into a tributary of Dry Creek. Upon

performing a dye trace investigation, NPDES confirmed that the lateral private service line that crosses underneath the tributary was leaking/discharging sewage into the creek (See Figure 2.2.2). NPDES issued a Notice of Violation (NOV) and civil penalty to the property owner and property management company. The sanitary sewer leak was causing increased bacteria loads to the creek and also resulting in a substantial amount of inflow and infiltration (I&I) into the sanitary sewer line. As a result of the enforcement, the broken service line was repaired and the illicit discharge of sewage to the creek was eliminated.

Figure 2.2.2 Photo of the Sewage Discharge to the Tributary

2.2.3 Industrial Illicit Discharge Found During Routine Industrial Inspections

In performing aerial photography review of Planning Commission appeal cases, NPDES staff noticed suspicious outside storage practices at a local recycling company. Subsequently, NPDES performed a detailed industrial inspection of the facility. While inspecting, NPDES observed poor stormwater management practices that was leading to an illicit discharge of gravel dust, paper inks and oils, etc. into a direct tributary of the Cumberland River. NPDES also determined that the site was not following provisions of the Tennessee Multi-Sector Permit (TMSP) for industrial stormwater runoff. NPDES sent a follow-up enforcement to the site and assisted in developing on-site Best Management Practices (BMPs) to prevent future contaminated stormwater runoff.

Figure 2.2.3 Photos of the Industrial Illicit Discharge Before and After Corrective Actions were Implemented

2.2.4 Construction Illicit Discharge Found During Routine Inspections

During one of NPDES' routine inspections of a grading permitted site after a rain event, an illicit discharge of sediment was discovered (See Figure 2.2.4). NPDES issued a Notice of Violation (NOV) with a monetary penalty to the owner of the permitted site. Site EPSC measures were subsequently repaired, which prevented further loss of sediment from the site. This is just one example of an illicit discharge of sediment found during one of NPDES many routine construction site inspections.

Figure 2.2.4 Photos of the Illicit Discharge from Grading Permit Site

2.2.5 Spill Response Investigation

In follow-up to calls received from the Tennessee Department of Environment and Conservation (TDEC) and a local industry, NPDES responded and provided guidance on proper containment and clean-up for a large milk spill. NPDES also issued an enforcement to the industrial facility for the illicit discharge of milk into community waters as a direct result of failing to have proper spill response procedures enacted to minimize the amount of product discharging to the creek (See Figure 2.2.5).

Figure 2.2.5 Photos of the Illicit Discharge from a Large Milk Spill

2.2.6 Private Sewer Line Discharge to Creek

In performing a follow-up investigation of sewage in a creek, MWS System Services Division (SSD) discovered a buried manhole associated with a private sewer service line from an apartment complex overflowing into a tributary of Sevenmile Creek. Since the issue was determined to be a private property matter, MWS SSD quickly notified NPDES personnel to perform a follow-up investigation/enforcement. NPDES issued a NOV with a monetary penalty to the property owner and provided guidance to the facility on unclogging the line and remediating the contaminated soil surrounding the site.

Figure 2.2.6 Photos of the Private Overflowing Manhole Before, During, and After the Repair

2.3 Major Stormwater Management Program Accomplishments

MWS has continued to facilitate major accomplishments in the continuing development of the overall Stormwater Management Program. Particular accomplishments performed in PY7 are listed below:

1. In the previous year, a dedicated funding source in the form of a stormwater user fee was passed by Metro Council, which became effective on July 1, 2009. In PY7, MWS Stormwater staff spent an extensive amount of time answering inquiries from the general public about the new stormwater user fee, generating and distributing the bills, and working through first-time billing discrepancies. The stormwater user fee was assessed on all residential and non-residential properties within Metro. The user fee revenue is dedicated to funding the operations of the MWS Stormwater Division, which will include certain stormwater maintenance activities, engineering activities, and water quality programs. The first year of performing stormwater user fee billing has been successful in generating a dedicated

secure funding source. More information on the stormwater fee can be found at the Clean Water Infrastructure Program Website: http://www.nashville.gov/water/cwip/stormwater_fee.asp

2. During PY7, MWS NPDES Watershed Group, under the direction of Dr. Steve Winesett, went live with a new laboratory to generate host-specific deoxyribonucleic acid (DNA) fingerprints using the polymerase chain reaction (PCR) amplification process. Through use of the PCR analysis, it is MWS' goal to determine the source inputs (animal or human) of bacteria so that targeted pollution prevention programs can be implemented on a watershed basis.

3. In the last two months of PY7, normal permit compliance duties were augmented to include flood response activities. On May 1st and 2nd, 2010, Nashville and the surrounding Middle Tennessee communities received record rainfall totaling 13.5 inches over two days. Many of the priorities of the last two months of PY7 shifted toward assessing the damage to stormwater/other public infrastructure, assessing impacts of hazardous waste, debris deposits, and sewage to local streams from the flood, and reviewing permit applications to rebuild flooded properties. As a result of the efforts, hundreds of stormwater infrastructure repair/cleaning projects were generated, hundreds of homes were identified for the Federal Emergency Management Agency (FEMA) home buyout program, and thousands of building permit applications were reviewed. NPDES canoed several large creeks and small rivers to identify locations of large debris piles and hazardous waste materials. Hazardous waste material found during the reconnaissance was turned into the EPA for retrieval. Figure 2.3.1 illustrates one of many debris sites located within area creeks that was deposited by the record flooding.

Figure 2.3.1 Photos of the Typical Debris that was Logged for Clean-up

4. Metro Nashville realizes the importance of trees, not only providing aesthetic value, but also in protecting the quality and quantity of stormwater runoff. In PY7, the "Metro Nashville Tree Canopy Assessment Project" was completed as a tool to serve as a benchmark in judging the future success of planning policies and urban forestry protection. The GIS-based canopy coverage will assist planners in identifying areas where tree canopy coverages, especially near streams and floodplains, are critically impaired. A description of the coverage can be found at: http://www.nashville.gov/beautification/docs/tree_canopy/tc-assessment.pdf

2.4 Enforcement Documentation

Enforcement documentation is an important component of the overall Stormwater Management Program. MWS Stormwater has a comprehensive enforcement program that includes the issuance of NOVs, Stop Work

Orders (SWOs), and administrative penalties. MWS Stormwater also reserves the right to take noncompliant sites to environmental court if NOVs and SWOs fail to bring a site into compliance or are not appropriate for a particular situation. During PY7, Metro issued 90 NOVs, 33 SWOs, and initiated 3 Environmental Court proceedings.

2.5 Overall Program Strengths

Understanding the program's strengths and weaknesses is necessary in maintaining a successful Stormwater Management Program. When strengths and weaknesses are identified, strong points can be featured as the program foundation and weaknesses can be addressed and improved upon each permit year.

One obvious strength of Metro's NPDES Program is the ongoing commitment from the Mayor and the MWS Director to not only meet the minimum requirements of the MS4 permit, but to also improve Metro waterways for future generations. This is demonstrated by MWS' efforts to make the NPDES program activities known throughout Metro and to deploy whatever resources are necessary to identify and eliminate sources of pollution to the community waters. This continues to result in cross-departmental cooperation in the protection and improvement of stormwater quality. Interdepartmental communication within Metro concerning stormwater issues has increased each year of the NPDES Program's existence.

2.6 Overall Program Weaknesses

MWS consistently prioritizes and examines how to best achieve both our permit objectives and community benefits. The stormwater quality program continues to make necessary changes and improvements to benefit Metro Nashville/Davidson County. However, in the current state of our program, some areas of weakness do exist. The NPDES Office has identified the following items as areas in which improvements can be made:

Currently, as described in the MS4 permit, Metro is required to inspect industrial facilities classified as: municipal landfills, hazardous waste treatment, storage and disposal facilities, industries under SARA Title III, Section 313, and facilities that MWS determines to be substantial loaders to the MS4. These categories only represent a fraction of the more than 150 Tennessee Multi-Sector Permitted (TMSP) industrial sites within Davidson County. NPDES has determined that many of the SARA Title III, Section 313 sites have "no-exposure certification" with virtually no potential for contaminated stormwater runoff, while other sites, not within the above-mentioned categories, actually pose a greater threat to discharging contaminated stormwater. NPDES is currently pursuing other avenues with TDEC for the next permit cycle that will allow NPDES to refine the industrial inspection program to focus more on sites with industrial processes and related pollutants being exposed to stormwater. This in turn would provide NPDES an enhanced ability to require inspected sites to perform compliance measures.

MWS Stormwater's long-term plan is to employ an inspector dedicated to inspecting and enforcing best management practices (BMPs) such as detention ponds, underground water quality units, etc. As it currently stands, MWS only has the resources necessary to inspect a percentage of the BMPs installed around the county. BMP inspections have been prioritized to look at the underground water quality structures first, as those have been determined to have the highest amount of maintenance issues. MWS Stormwater is also working to create a better system to map BMPs installed around the county and track their maintenance status. MWS is working to improve the BMP mapping/maintenance database so future pollutant loading estimates can factor in stormwater BMPs.

In addition to the lack of quality BMP data, the NPDES wet weather sampling program data has not proven to be particularly useful in calculating Event Mean Concentrations (EMC) for the pollutant loading estimates. NPDES will be working to change the wet weather sampling program to hopefully yield results that can be

statistically analyzed to determine EMC values for future loading estimates, which are representative of specific land use types.

2.7 Future Direction Of The Program

The MWS Stormwater NPDES Section continues to define its role in the governmental/regulatory community of Metro Nashville. Communication between governmental agencies has greatly improved and water quality partnerships have been established with other Metro Departments, such as Parks/Greenways and Metro Nashville Public Schools (MNPS). Open and direct communication is key to these partnerships and to the improvement of stormwater quality in the future. Metro envisions future oversight and educational programs being implemented that will further enhance the community's awareness (public and private) of Stormwater issues so that long-term behavioral changes will occur that benefit water quality in and around the Nashville community.

3.0 Overall Permit Compliance Summary

The following table lists the specific permit requirements, compliance schedule, and Metro's approach to achieving overall permit compliance. Much of the supporting information for each permit requirement can be found in Appendix A or Appendix B.

Table 2 - Overall Permit Compliance Summary Table

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
1. Structural Storm Water Controls and Collection Systems						
A	**Update storm water inventory Geographic Information System (GIS)**					
	For areas of new development	Ongoing – up to date by end of PY 4 (July 1, 2007)	MWS	Anna Kuoppamaki	MWS Stormwater staff enters MS4 changes/additions performed by development and significant redevelopment projects through the digitization of approved grading plans. MWS Stormwater hired a contractor to assist in performing updates of a backlog of grading permit plans. It is Stormwater's goal to, once the contractor project is completed, update GIS within 9 months of each project's completion.	In PY7, the consultant completed GIS updates to all of the backlogged 300 plus grading plans. All infrastructure changes from development are now being updated into GIS within the 9 month window of when the project is completed and signed off.
	For areas of significant redevelopment		MWS	Anna Kuoppamaki		
	For Metro construction projects		MWS & MDPW	Anna Kuoppamaki	Many large Metro Construction projects obtain Grading Permits, in which updates to the MS4 will be depicted on the Grading Plans. For other Metro Projects that alter MS4 infrastructure, NPDES continues to work on processes to ensure updates are properly submitted to the GIS database editor.	
	For newly created MS4 areas per Metro Water Services records on CSS separations		MWS	Anna Kuoppamaki	MWS hired a consultant to perform field collection of the areas surrounding the Combined Sewer System (CSS) for which the boundary has been refined since the MS4/CSS initial inventory was completed in 1997-2000.	In PY7, the consultant completed the GIS/GPS field collection of stormwater infrastructure surrounding the CSS. In doing so, there were several areas surrounding the CSS in which the ultimate drainage destination was unclear. MWS NPDES started visiting these sites in PY7 and performing dye trace investigations to determine ultimate drainage destination (i.e. MS4 or CSS). These investigations have continued into PY8. **Figure 1-A.1** (Field Mapped GIS Updates)

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
B	**Existing System Maintenance**					
	As identified by complaints	Ongoing	MWS	Jennifer Hill	MWS Stormwater RoM utilizes Cityworks as a service request/work order database to track all routine maintenance projects. All service request/invoice records are available upon request.	**Table 1-B.1** (Routine Maintenance PY7 Projects)
	As identified through NPDES MS4 activities		MWS	Michael Hunt	When MWS NPDES inspectors encounter areas that need critical maintenance, issues are forwarded to RoM.	
	Focused on public infrastructure and private infrastructure that directly and significantly impacts public infrastructure as determined by the MWS		MWS	Ricky Swift	MWS Stormwater ReM investigates, prioritizes, and eventually designs and oversees large drainage system rehabilitation projects that sometime involve work on private property.	During PY7, ReM completed 36 large-scale drainage maintenance/rehabilitation projects. ReM also completed 984 drainage complaint investigations and design work for 21 future large-scale maintenance projects. The anticipated schedule for future ReM project completions, however, was disrupted as a result of the historic May floods. Since the May floods, ReM's workload has dramatically increased to include not only all of the backlogged drainage complaint investigations, but to also include flood mitigation efforts to restore storm-damaged infrastructure.
C	**Inspections**					
	Dry Creek detention facility	1/quarter	MWS	Jennifer Hill	MWS RoM performs inspections and necessary maintenance. All inspection and maintenance work is documented in the Cityworks database.	**Table 1-C.1** (Dry Creek Inspection/Maintenance)
	Any other identified Metro-operated facilities		MWS	Jennifer Hill	MWS RoM performs inspections/ maintenance on the canal system and pump at Metro Center, which primarily functions as a flood control structure, but additionally functions as a wet detention pond.	All other inspection and maintenance records are available upon request.

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
D	**Training**					
	Key inspection and maintenance staff in MWS and other Metro departments	PY 2 and 4	MWS	Michael Hunt	MWS NPDES has given numerous presentations to key maintenance staff on water quality issues. NPDES has purchased a video produced by Excal Visual, titled: "Municipal Storm Water Pollution Prevention". The video is geared toward training municipal employees on maintenance issues and water quality.	In PY7 NPDES showed the pollution prevention video and gave specific brochures and public education materials to MDPW solid waste management staff, MDPW-contracted solid waste haulers, and street sweeping contractors. Metro inspectors and engineers attend various training classes, workshops, conferences, and seminars each year that relate to stormwater issues. For example, in PY7 NPDES inspection staff viewed webcast titled: Inspection Documentations, which was presented by EPA legal staff. All training records of key Metro staff can be made available upon request.
	Cross-train key inspection and maintenance staff in water quality issues		MWS	Michael Hunt		
	Train inspection / maintenance staff about changes in process and/or procedure		MWS	Michael Hunt		
E	**Maintenance Procedures**					
	Review for changes that will benefit water quality	PY 2 and 4	MWS	Michael Hunt	MWS NPDES works with other Metro departments on a routine basis to avoid/minimize water quality impacts from municipal maintenance activities.	In PY7, NPDES continued to work with other Metro departments such as MWS SSD and the MWS Stormwater RoM crews to ensure maintenance activities do not impact the quality of surface water runoff.
F	**Housekeeping Programs**					
	Solid waste disposal	Ongoing	MDPW	Donna Ryman	Metro Department of Public Works, Waste Management Division (MDPW-WMD) oversees all solid waste disposal activities in the county.	**Table 1-F.1** (Solid Waste Disposal Numbers)
	Litter control		MDPW	Donna Ryman	MDPW-WMD publishes educational materials explaining the impacts of illegal dumping and litter. MDPW-WMD actively inspects and enforces on illegal dump sites.	
	Leaf collection		MDPW	Donna Ryman	MDPW-WMD collects residential leaves/brush at certain times of the year. http://www.nashville.gov/Recycle/brush.asp	
F	Public Information (per PI&E element)		MDPW	Donna Ryman	MDPW-WMD distributes various public information materials regarding proper solid waste disposal. MWS NPDES also distributes public education materials that discuss illegal dumping and disposal.	Public information materials are available upon request. Also, refer to previous annual reports and the Metro Public Works website: http://www.nashville.gov/pw/

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
G	**Storm water detention / retention facilities**					
	Develop detailed electronic information using existing GIS-based databases	PY 2	MWS	Rebecca Dohn	MWS-NPDES tracks BMP inspections through an internal database and is in the process of transitioning toward the city-wide KIVA database and mapping all BMP locations via GIS.	**Table 1-G.1** (Summary of BMP Inspection Status)
	Develop system to update database on an ongoing basis given new development, inspections, or other available data		MWS	Rebecca Dohn	MWS-NPDES performs routine updates to the database, based on new development and redevelopment.	
	Evaluate the need and feasibility for long-term, post-construction, private detention/retention facility inspection to help ensure proper maintenance procedures		MWS	Rebecca Dohn	MWS-NPDES has deemed it necessary to continue inspections/enforcement of privately-owned BMPs. Long-term plans include employing a dedicated BMP inspector.	
	Public Information (per PI&E element)		MWS	Rebecca Dohn	MWS-NPDES sent out numerous educational flyers in the past and continues to educate individual sites during inspections and follow-up enforcement/ correspondence.	

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
2. New Development and Significant Redevelopment						
A	**Ordinances, Regulations and Guidance**					
	Enforce existing ordinances and regulations intended to limit long-term water quality impacts from new construction and significant redevelopment	Ongoing	MWS	Michael Hunt	Metro has comprehensive stormwater management ordinances in place. The MWS NPDES Section enforces on the majority of stormwater code violations.	**Table 2-A.1** (Program Enforcement Summary) **Table 2-A.2** (Monetary Penalty Assessments)
	Evaluate guidance materials to ensure that they are up-to-date with the current state of the technology and reflect local plan review and site inspection experiences	PY 2 and 5	MWS	Michael Hunt	MWS Stormwater has performed numerous revisions to the Stormwater Management Manual, which is updated periodically to reflect changing technology and regulations.	Latest stormwater regulations available at the following website: http://www.nashville.gov/stormwater/regs/index.asp
	Public Education (per PI&E element)	Ongoing	MWS	Michael Hunt	MWS NPDES and the Development Review and Permitting have conducted numerous meetings with stakeholder groups on stormwater regulations. MWS stormwater implemented the Stormwater Advisory Council (SWAC), which meets periodically with the development community to discuss stormwater issues.	There were two SWAC meetings held in PY7. One of the SWAC meetings was canceled due to the May flood. In an effort to promote Low Impact Development (LID), NPDES coordinated with the Planning Department to develop a GIS web interface that would allow users to view locations and specific examples of LID deployed around the county. Refer to the following link: http://maps.nashville.gov/LID_Sites/

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
B	**Best Management Practices (BMPs)**					
	Report any BMP monitoring data collected by/for Metro	Annually	MWS	Rebecca Dohn	MWS-NPDES has not performed any BMP monitoring in recent years. MWS continues to review BMP monitoring data submitted by manufacturers seeking approval for use of their proprietary stormwater quality units in Metro Nashville.	In PY7, Metro continued to pursue the redevelopment of the Green Hills Library grounds that includes retrofitting an existing water quantity basin into a water quality treatment basin that will also contain an educational component. The NPDES Section has also been working with the Cumberland River Compact to administer the Supplemental Environmental Program with goals of facilitating the planting of 10,000 trees and the installation of 300 rain gardens. In PY7, MWS hired a consultant to create a "Green Infrastructure Master Plan" for areas of the CSS. While the plan identifies 6 pilot projects located within the CSS, it is anticipated that the principles in design and construction applied in those projects could be utilized in future projects outside the CSS.
	Report regional facility considerations/activity by/for Metro		MWS	Michael Hunt	Metro has not identified any potential regional BMPs deemed feasible to install.	
	Report BMP retrofitting considerations/activity by/for Metro		MWS	Rebecca Dohn	MWS-NPDES promotes retro-fitting BMPs to other departments and has worked with other departments on potential retrofits.	
C	**Master Planning**					
	Water quality issues report to Planning Commission	PY 2	MWS	Michael Hunt	Nashville's Planning Department focuses on sustainable development as described in the Community Character Manual, encouraging sustainable development and preservation in the County's fourteen community plans that guide future land use and infrastructure decisions. A foundation of the Community Character Manual is the commitment to create sustainable communities through sustainable development. Key components of the Manual's Guiding Principles include actions to address site location, avoiding sensitive environmental features, which benefits the community by protecting water quality and reducing the impact of development on surrounding infrastructure and the community through the use of best practices in stormwater and wastewater management. In addition, the Community Character Manual includes objectives of the EPA and Metro Nashville's Stormwater Management Program, such as encouraging green infrastructure, minimizing and/or recovering floodplain loss, and retaining natural stream buffers.	In the recent community plan update for North Nashville, special land use policies have been included to address conservation of sensitive floodplain land and stormwater management, including Low Impact Development techniques and floodplain remediation of previously developed sites. The Planning Department has also worked with Metro Stormwater to develop the Rural Hill-Moss Road Detailed Design Plan, which incorporates Low Impact Development techniques that include a comprehensive open space network that provides recreation, transportation, and stormwater management for the community. Following the severe floods of May 1 and 2, Metro Planning Department and Metro Water Services were approached by the Tennessee Chapter of the World Wildlife Fund (WWF), which had received a small grant from the national WWF to be used for study related to flooding and water quality. Staff from Planning and Water Services worked with the WWF to create a small study of the Indian Creek sub basin (of the larger Mill Creek basin) to look at the implications for flooding on various "build out" scenarios. As of August 2010, this study is still underway.

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
C	Report water quality evaluations performed as part of new water quantity master planning efforts	PY 2	MWS	Michael Hunt	In 2006, MWS began to initiate watershed specific monitoring programs for the purpose of developing targeted pollution prevention strategies for each watershed. The goal of the program is to improve specific impaired reaches of streams to the point they could be considered for de-listing from the 303(d) list of impaired streams. Watershed-specific monitoring programs include such activities as thermograph investigations, stream walks, the TMDL sampling program, etc. The initial focus of the monitoring programs were on bacterial inputs to the streams. Future monitoring will take into account other impairments such as sediment, nutrients, etc. All data collected in the past couple of years will be analyzed and incorporated in future master planning efforts such as large sanitary sewer rehabilitation projects.	**Table 2-C.1** (Watershed Monitoring Programs)
	Report regional water quality practices evaluations performed in any master planning activities	PY 2 and 5	MWS	Steve Winesett		
	Report watershed prioritization changes	PY 2	MWS			
	Report water quality master planning performed per prioritized watersheds as fiscal resources allow		MWS			
D	**Training**					
	Educate "Grading Permit" plan reviewers and site inspectors on latest techniques and management practices to address long-term water quality, lessons learned, etc.	Annually	MWS	Michael Hunt/Roger Lindsey	All construction site inspectors within the stormwater group are required to attend the Level I Erosion Control Workshop sponsored by TDEC. MWS Stormwater plan review engineers also attend various training classes throughout the year that include the latest technologies in stormwater management.	Training records are available upon request

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
3. Roadways						
A	**Catch Basin Cleaning**					
	Develop program to prioritize catch basin cleaning activities	PY 1	MWS	Jennifer Hill	The MWS Stormwater RoM section performs catch basin cleaning prioritized by severity of complaint. RoM also have identified certain catch basins that frequently clog, which RoM cleans periodically.	**Table 1-B.1** (Routine Maintenance Numbers)
	Report and record location/area, number, and amount of material removed	Annually	MWS	Jennifer Hill	The MWS RoM section documents all catch basin cleaning work through the Cityworks work management program.	In mid-year FY08 (PY5), a change was implemented in the reporting mechanism for RoM projects. Reporting is now based on the number of projects performed. For example, one inlet maintenance project may include numerous inlets being cleaned on the same street. RoM is looking into options within the currently utilized Cityworks database to keep track of the number of catch basins cleaned and amount of material removed.
B	**Downtown Street Sweeping**					
	Urban Services District	Ongoing	MDPW/ReM	David Himes/Ricky Swift	All street sweeping services performed prior to July 1, 2009 were managed by the MDPW. As of July 1st, all contracted-out portions of street sweeping services were transferred to be managed by the MWS Stormwater ReM Section, while Public Works will continue to manage all internal street sweeping trucks. All material collected during the street sweeping activities is taken to landfills for proper disposal and quantities of material removed will be tracked.	**Table 3-B.1** (PY6 Street Sweeping)

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
C	**Deicing Chemicals**					
	Evaluate Metro application and storage practices	PY 1 and 3	MDPW	David Himes	MWS NPDES routinely monitors salt bin storage facilities and reports any stormwater runoff issues to MDPW. MDPW has implemented technology including automated pavement temperature recordings and spreader control systems that minimize the applied amounts of deicing chemicals.	**Table 3-C.1** (Deicing Practices)
	Report any modifications in practices		MDPW	David Himes	Any modifications are reported in the annual report.	No Modifications during PY7
D	**Herbicides, pesticides and fertilizers**					
	Evaluate Metro application and storage practices	PY 1 and 3	MWS	Michael Hunt	MWS-NPDES has coordinated with all pertinent maintenance departments on the proper application and storage of herbicides, pesticides, and fertilizers. NPDES has identified locations where Metro stores such chemicals and has inspected the sites. NPDES will continue to monitor the sites as needed, but is in the process of developing a county-wide Stormwater Management Plan (SWMP) which each maintenance facility would keep on-site with specific instructions on application/storage of such chemicals.	Refer to the Annual Report for PY5 for further explanation of past Metro property inspections.

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
	Spills					
E	Report Emergency Management Plan modifications	Annually	MWS/OEM/ MDPW	Michael Hunt	The Metro Office of Emergency Management (OEM) oversees all emergency response activities. Any changes in policy will be documented in annual reports.	The Metro-Wide Emergency Management Plan was last updated in 2008.
E	Report location of spills and any trend analyses		MWS/OEM/ MDPW	Michael Hunt	All roadway spills that involve potential runoff impacts are reported to NPDES by OEM. NPDES documents all spills rising to the level of notification and documents remediation responses and water quality impacts in the Cityworks database. The MDPW Hazmat crews respond to wrecks on local road right-of-way that involve clean-up of fluids or other potentially hazardous material.	**Table 3-E.1** (Summary of OEM Spill Calls in PY7) **Table 3-E.2** (Summary of Public Works Hazmat Response Spill Calls in PY7) **Table 3-E.3** (Summary of NPDES Spill Calls in PY7)
	Design and Construction					
F	Report modifications to standards and procedures that impact water quality	Each compliance report	MDPW/ MWS	Mark Macy	NPDES has coordinated with MDPW to promote use of Low Impact Design (LID) such as infiltration ditches, bottomless culverts, etc. NPDES will continue this practice and will report any future modifications in annual report submittals.	In PY7, the Green Infrastructure Master Plan was completed, which identified potential BMPs to be installed within the Combined Sewer System (CSS) basin for purposes of, among other things, filtering/absorbing runoff from public roadways. While the initial goal involves preventing rainfall from overwhelming existing CSS infrastructure, thus causing overflows, MWS remains hopeful that the green infrastructure BMPs such as green streets can also be applied in areas outside of the CSS. A major project that involved implementation of green street BMPs is of the Deaderick Streetscape Improvement Project, which was completed in PY7.

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
4. Landfills and Other Waste Treatment, Storage, or Disposal Facilities						
A	Monitor activities (report on water quality-related issues)	Ongoing	MDPW/MWS	Clayton Hand/Josh Hayes	There are two active landfills within the county, which are classified to receive only construction and demolition (C&D) waste. These two active landfills and other closed landfills are monitored by the MDPW-WMD and any water quality issues are documented in annual reports. NPDES has also worked with MDPW-WMD in the past to require all solid waste haulers to read stormwater informational materials and certify that their activities will not impact the quality of stormwater runoff.	**Table 4-A.1** (Public Works Landfill Monitoring Status) **Table 4-A.2** (Public Works Licensed Waste Haulers)
5. Pesticides, Herbicides, Fertilizers, Oils, and Other Toxic Materials						
A	Operate Household Hazardous Waste Facility	At least Once per quarter	MDPW	Sharon Smith	MDPW-WMD operates the Household Hazardous Waste (HHW) facility located at 941 Richard Adams Road. The HHW facility is open to all residents of Nashville and Davidson County 6 days a week.	**Table 1-F.1** (Solid Waste Disposal Numbers) Visit the following website for further details: http://www.nashville.gov/Recycle/hhw.asp
B	**Commercial Applicators**					
	Public Information (per PI&E element)	Ongoing	MWS	Sharon Smith	NPDES distributes public education materials through the local public access channel (Metro 3). In addition, MWS has been a contributor to the WaterWorks campaign, which airs television and radio advertisements within Metro's service area. NPDES also partners with the Metro Health Department (MHD) to distribute stormwater educational flyers to various food service establishments. When problem areas are identified, such as the occurrence of frequent illicit discharges, NPDES distributes brochures/door hangers discussing pollutant issues and, when applicable, stencil storm drains as "Drains to River".	An estimated 150 brochures were handed out to restaurants. Refer to Appendix A for example public education materials.

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
	Metro Facilities					
C	Evaluate management practices at Metro facilities (fleet operations, vehicle maintenance, etc.)	PY 2	MWS	Rebecca Dohn/Josh Hayes	MWS-NPDES has coordinated with all pertinent maintenance departments on minimizing potential water quality impacts from municipal maintenance activities. In the past, NPDES identified locations where Metro stores chemicals and has inspected the sites. NPDES will continue to monitor the sites as needed, but is in the process of developing a county-wide Stormwater Management Plan (SWMP) that will contain a section that each maintenance facility would keep on-site with specific instructions on application/storage of such chemicals.	Metro's Office of Fleet Management (OFM) has 2 maintenance facilities, both of which have been inspected by NPDES in the past for runoff issues. NPDES has also coordinated with OFM to deploy spill response kits at each of the 7 fueling locations. In PY7, NPDES coordinated with the contracted street sweepers and the contracted solid waste haulers to make sure all management activities were being implemented to minimize contaminated stormwater runoff.
6. Illicit Discharges and Improper Disposal						
	Ordinances and Enforcement Measures					
A	Refine/review procedures to enhance enforcement of existing ordinances, regulations, and policies as necessary	PY 1 and 3	MWS	Michael Hunt	NPDES continually reviews enforcement provisions to ensure enforcement activities are accomplishing set goals of the program.	NPDES is currently working with the Metro Legal Department to increase the amount of monetary penalties that can be assessed per day. MWS also finalized minor changes to the Stormwater Management Manual in PY7.

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
B	**Dry-weather Field Screening**					
	Update ¼ mile grid for current industrial and high-density commercial land use based on current zonings	PY 5	MWS	Sonya Erickson	NPDES is in the process of setting up the field screening database for the 3rd permit cycle (yet to be issued). NPDES will utilize the transition permit year(s) between the Cycle II and Cycle III permit periods to develop a more beneficial/effective field screening program that also incorporates public education as a component.	NPDES created a new field screening database in PY7 that can be edited in GIS. In doing so, NPDES obtained the latest land-use coverage from the Planning Department and updated the ¼ mile grids to be screened. The new database allows all data to be recorded electronically directly into GIS, thus eliminating paperwork.
	Prioritize areas of ¼ mile grids by previous field screening results, spills, complaints, etc.		MWS	Sonya Erickson	In developing the 3rd permit cycle field screening database, NPDES will prioritize screening based on various factors such as impaired watersheds, historical information, etc.	With the new field screening database complete, NPDES began screening outfalls within ¼ mile grids in areas where frequent calls of illicit discharges have been received.
	Update illicit discharge identification procedures		MWS	Sonya Erickson	NPDES utilizes the latest technology in detecting illicit discharges.	MWS Stormwater RoM continued in PY7 to pursue the purchase of a rover camera that can be used to assist in field screening investigations. NPDES continues to utilize the latest technology such as field test kits/instruments, analytical sampling, thermograph flights, etc. to identify illicit discharges.
	Implement program in ¼ mile grids in priority		MWS	Sonya Erickson	All outfalls within the field screening areas will be performed on a watershed-prioritized basis.	In the last two permit years after the creation of the new database, 213 ¼ mile grids were screened. Some of the grids did not contain any MS4 outfalls to screen, therefore, no data could be collected. Other grids, however, contained more than one outfall that was reviewed. In PY7, field screening data was collected on 153 separate outfalls.
	Identify potential discharges to MS4 or "Waters of the State"		MWS	Sonya Erickson	In performing dry weather field screening, NPDES will perform follow-up investigations on any identified un-permitted discharges.	Several illicit discharges were identified through field screening activities. The field screening has also proven beneficial by identifying culverted groundwater spring locations and collecting water quality characterization data on the springs.

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
C	**Illicit Discharge Investigations**					
	Identify illicit discharge sources	Ongoing	MWS	Josh Hayes/ Sonya Erickson	NPDES utilizes various tools to identify illicit discharges. Illicit discharge investigation techniques include performing citizen complaint follow-ups, dry-weather field screening, industrial inspections, construction inspections, aerial thermograph investigations, stream walk investigations, and routine field reconnaissance by NPDES staff in identified trouble areas.	**Table 6-C.1** (Illicit Discharge Investigations in PY7)
C	Educate responsible parties as appropriate		MWS	Josh Hayes/ Sonya Erickson	Once illicit discharges are identified, NPDES educates responsible parties through use of enforcement measures or by distributing public information materials.	**Table 6-C.2** (Targeted Public Educational Distribution)
	Implement enforcement measures as appropriate		MWS	Josh Hayes/ Sonya Erickson	NPDES employs various enforcement techniques to achieve the elimination of identified illicit discharges. Enforcement measures include issuing Notices of Violations (NOVs) with or without monetary penalties, issuing Stop Work Orders (SWOs) to construction sites, and, in some cases, citing the responsible parties in environmental court.	**Table 2-A.1** (Documented Enforcement Cases in PY7)
	Report significant illicit discharges and enforcement activities to TDEC		MWS	Josh Hayes/ Sonya Erickson	NPDES copies TDEC staff on all NOVs, SWOs, and monetary fines issued to sites for violations of Metro's illicit discharge ordinance.	All enforcements were submitted to TDEC via email.

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
	Residential / Commercial Areas					
D	Public information (per PI&E element)	Ongoing	MWS	Michael Hunt/Josh Hayes	NPDES distributes public education materials through the local public access channel (Metro 3). In addition, MWS has contributed to the WaterWorks campaign, which aired television and radio advertisements within Metro's service area. NPDES also partners with the Metro Health Department (MHD) to distribute stormwater educational flyers to various food service establishments. A key component of NPDES educational material includes information on illicit discharges. When problem areas are identified with the occurrence of frequent illicit discharges, NPDES distributes brochures/door hangers to nearby businesses/residences that explain pollutant issues. In addition, when applicable, storm drains are stenciled as "Drains to River".	**Appendix B** (Public Education Materials) NPDES performed two mass mailings in PY7 that were intended to educate specific residents or companies on reoccurring illicit discharges noted by NPDES. MWS Education Specialist (Julie Berbiglia) worked with the NPDES office to distribute approximately 2,600 mail-outs alerting the general public to a specific illicit discharge that occurs intermittently in the Murphy Branch sub-watershed to Richland Creek. The mail-out generated several calls and tips on where the discharge could be occurring and potentially notified the guilty party that the outfall was being monitored. In addition, Sonya Erickson, from the NPDES office, facilitated a meeting with drilling companies and TDEC. As a result of the discussion, NPDES distributed approximately 200 brochures to drillers depicting proper BMPS to utilize in preventing contaminated slurry discharges.
	Sanitary Sewer Seepage					
E	Reevaluate protocols for reporting potential sanitary sewer seepage into the MS4 or "Waters of the State"	PY 1 and 3	MWS	Michael Hunt	NPDES works closely with the MWS System Services Division (SSD) as a resource on sanitary sewer overflow response/clean-up, especially on the overflows that route to the MS4 or community waters. NPDES also responds to and enforces on any private service sanitary sewer overflows. In addition, NPDES has been working with MHD to identify the water quality impacts of failing septic systems. NPDES will be geo-locating failing septic systems for purposes of analyzing impacts on specific watersheds. The SSD Sewer Overflow Response Plan (SORP) contains specific provisions for the notification of NPDES and the MHD of private sanitary issues.	**Table 6-E.1** (NPDES' Responses to MWS Sanitary Sewer Overflows in PY7) **Table 6-E.2** (Septic System Failures in PY7) **Table 6-E.3** (Overall Sanitary Sewer Overflow Response in PY7) **Table 6-E.4** (Projects Performed to Reduce Overflows in PY7) In addition to controlling bacterial inputs from sanitary sewers and septic systems, the Parks Department has also worked to reduce the amount of bacterial runoff from park properties by providing dog waste bags at certain parks. In PY7 it was estimated that 48.06 tons of dog waste was disposed of instead of being left on park property exposed to stormwater runoff.

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
7. Industrial and High Risk Runoff *(reference Section IV)*						
	Data Management					
A	Update industrial site databases (for sites that meet permit criteria)	Annually	MWS	Josh Hayes	Each year, NPDES downloads the list of industrial sites meeting the criteria specified in the permit from the EPA Toxic Release Inventory (TRI) website and any EPA-recognized Treatment, Disposal, and Storage (TSD) facilities.	In PY7, NPDES obtained a list of Tennessee Multi-Sector Permits (TMSP) for Davidson County and updated the industrial inspection database to include all TMSP sites. The new database that will be used to track industrial inspections includes all TMSP, TRI, and TSD facilities.
	Inspections					
B	Refine procedures/criteria to prioritize sites to be inspected based on SIC code, SARA data, and other information	PY 1, 3, and 5	MWS	Josh Hayes	NPDES will base prioritization of industrial inspections during Cycle III on a combination of SIC code, previous knowledge of the site, and watershed location.	Prior to initiating an aggressive industrial inspection program in PY8. NPDES will develop a prioritization policy.
B	Train inspectors	PY 2 and 4	MWS	Josh Hayes	The main industrial inspector within the NPDES program has been through an industrial inspection workshop and has coordinated with TDEC staff to perform joint inspections, thus refining knowledge of what to look for at different sites.	In PY7, the NPDES inspector performed a joint inspection on a TMSP facility and Ready Mix Concrete facility.
	Inspect facilities that meet criteria	Once by PY 5	MWS	Josh Hayes	NPDES will inspect all qualifying facilities by the end of the 3rd permit cycle.	In PY7, NPDES performed detailed industrial inspections of 13 separate facilities. Some of the facilities were inspected multiple times. In addition to the detailed industrial inspections, NPDES also performed separate illicit discharge investigations at several industrial facilities, which were not counted in the overall industrial inspection numbers. NPDES intends to pursue a more aggressive industrial inspection schedule in PY8.
	Coordinate inspection and enforcement activities with TDEC staff as determined to be appropriate	Ongoing	MWS	Josh Hayes	NPDES copies TDEC on all follow-up industrial inspection correspondence. NPDES also coordinates with TDEC staff when Tennessee Multi-Sector Permit (TMSP) compliance issues are found at the site.	NPDES began pursuing coordination with TDEC in PY7 to better coordinate inspection and enforcement processes.

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
B	Report inspection locations	Annually	MWS	Josh Hayes		TDEC is notified via email.
C	**Restaurant Impacts**					
	Report activities aimed at reducing water quality impacts	Annually	MWS	Michael Hunt/ Hugh Garrison	NPDES works closely with the MWS Fats, Oils, & Grease (FOG) program as they perform inspections of food service establishments and document potential impacts to stormwater from failing grease interceptors, poorly maintained grease bins, etc. In addition, NPDES partners with the MHD to distribute public information brochures to food service establishments during their rigorous inspection program.	The Metro Health Department distributed an estimated 150 stormwater brochures to Nashville area restaurants. **Table 7-C.1** (FOG-related Stormwater Finds)

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
8. Construction Site Runoff *(reference Section IV)*						
A	**Ordinances, Regulations and Guidance**					
	Enforce existing ordinances and regulations intended to limit construction-phase water quality impacts from new construction and significant redevelopment	Ongoing	MWS	Dale Binder/ Kimberly Hayes	MWS Stormwater's Grading Permit requires sites to submit engineered plans that must be approved by MWS Stormwater engineers for construction phase Erosion, Prevention, and Sediment Control (EPSC) measures. NPDES Inspectors hold pre-construction meetings to discuss EPSC measures and require EPSC measures to be installed prior to issuing the Grading Permit. Once the grading permit is issued, NPDES inspects each site periodically to verify proper maintenance of EPSC measures. NPDES performs enforcement actions on those sites not compliant with the grading permit. For single family homes requiring grading permits, a Tier II Grading Permit is issued and inspected by the Development Review and Permitting Section. For larger single family homes not requiring grading permits, sites are still required to submit a site plan detailing EPSC measures and a signed stormwater checklist.	**Table 8-A.1** (Construction Site related Inspections in PY7) **Table 8-A.2** (Grading Permit Statistics) **Table 8-A-3** (NPDES Construction Complaints in PY7) **Table 8-A.4** (Stormwater Plans Reviewed) **Table 8-A.5** (Stormwater Oversight on Single Family Homes)
	Refine procedures to enhance enforcement of existing ordinances, regulations, and policies	PY 1 and 3	MWS	Dale Binder	MWS Stormwater routinely reviews stormwater ordinances and guidance manuals for necessary improvements.	In PY7 MWS NPDES continued to coordinate with the Metro Legal Department for purposes of increasing the amount of monetary fines that can be assessed. A provision to increase the maximum per day civil penalty for Stormwater Management Manual violations from $500 to $5,000 was brought before Metro Council. Council partially approved the language change, but did not approve the increase to a maximum of $5,000 per day. MWS plans to revisit the penalty increase in the future.

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
A	Evaluate the guidance materials to ensure that they are up-to-date with the current state of the technology and reflect local plan review and site inspection experiences	PY 1 and 3	MWS	Dale Binder	MWS Stormwater routinely reviews stormwater ordinances and guidance manuals for necessary improvements, including changes to reflect the latest technology.	NPDES continuously reviews guidance manuals for necessary revisions. MWS is currently implementing minor changes to the Stormwater Management Manual, which is expected to be finalized in PY7.
	Public Education (per PI&E element)	Ongoing	MWS	Michael Hunt	NPDES distributes public education materials through the local public access channel (Metro 3), which explains grading permit requirements. In addition, MWS has been a contributor to the WaterWorks campaign which aired television and radio advertisements within Metro's service area. MWS Stormwater also facilitates periodic SWAC meetings with the local development community.	There were 2 SWAC Meetings held in PY7
	Require applicants for grading permits, for projects of one acre or more, to give proof of coverage under the state's construction general permit – this requirement becomes void if the state implements procedures that recognize an operator's compliance with Metro's construction site runoff control program to be compliance with the state program	Ongoing	MWS	Dale Binder	The MWS Development Review and Permitting will not approve any grading plans for any site requiring coverage under TDEC's construction stormwater general permit, if they can not produce the proper TDEC Notice of Coverage.	Performed on every grading project over 1 acre in size.

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
B	**Training**					
	Educate "Grading Permit" plan reviewers and construction site inspectors on latest techniques and management practices to address construction-phase water quality, lessons learned, etc.	Annually	MWS	Roger Lindsey	MWS Stormwater staff attends various training classes, seminars, and conferences throughout the year, that include the latest technology in stormwater management.	Training records are available upon request.
C	**Records Management**					
	Maintain database for erosion prevention and sediment control (EP&SC) inspections and enforcement activities	Ongoing	MWS	Dale Binder	NPDES tracks all grading permit plan approvals and construction phase inspections through the city-wide permitting database called KIVA.	Metro used the KIVA database for all inspection documentation in PY7.
D	**Plan Review and Inspection Resources**					
	Provide resources for plan review such that they have adequate time to effectively review plans for pre and post-construction water quality considerations	Ongoing	MWS	Tom Palko	Stormwater Development Review & Permitting (DRP) maintains a staffing level of generally 5 engineers devoted to development review. In the past when DRP was overwhelmed with plan submittals, they have contracted out some plan review responsibility to ensure proper plan review takes place.	During PY 7, MWS Stormwater employed 5 engineers devoted to Stormwater Development and Review.
	Provide resources for construction site inspection staff such that they have adequate time to effectively inspect sites and enforce water quality related ordinances, regulations and policies		MWS	Michael Hunt	NPDES maintains a staffing level of generally 7 construction site inspectors, mostly dedicated to inspection of grading permitted sites or sites found to be grading without a permit.	Toward the end of PY6, NPDES lost two inspectors that were dedicated to inspecting construction sites. Due to budget constraints, only one of the lost inspector positions were replaced in PY7.

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
	Metro Activities					
E	Evaluate construction practices implemented by Metro Departments to limit erosion and sedimentation impacts (Metro projects, work on sanitary sewers, utility lines, etc.)	PY 2	MWS	Michael Hunt	NPDES educates various Metro departments on implementation of appropriate EPSC measures during Metro soil disturbing activities. Most Metro departments actually apply for grading permits for their larger projects and NPDES gives the same level of scrutiny to those sites as they would for privately-developed sites.	NPDES will be working to complete a SWMP in future permit years that will give specific guidance to Metro departments or contractors for ground disturbance activities that don't rise to the level of requiring a grading permit.

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
9. Habitat Improvement						
A	Report habitat improvement activities/projects	Annually	MWS	Josh Hayes	Any projects performed by Metro that improve aquatic habitat and riparian habitat are noted in the annual report.	The Metro Parks Department performs a variety of projects that provide recreational opportunity, while at the same time provide improved habitat. The following sentences describe some such projects: • Land Acquisition of 582 acres on five sites, primarily designated as permanently protected open space/passive recreation. • A countywide open space plan is currently underway. Scheduled for completion in late 2010. • Shelby Park Master Plan incorporates numerous water quality related recommendations, including pervious paving, naturalization of waterway, vegetation filtration, wetlands creation, stream bank buffer re-vegetation. • Centennial Park Master Plan is scheduled for completion Fall 2010. • A grant was received to construct a boardwalk to span the wetland at Shelby Bottoms, reducing wetland habitat damage by trail users. • A new rain garden is being planned at Shelby Bottoms Nature Center by the Cumberland River Compact. • Multiple tree planting projects undertaken by volunteers at various parks. • Ground was broken on LEED Silver McCabe Park Community Center, including green roof and rain gardens. • Ground was broken on 1-acre rain garden in St. Bernard Park. In Addition to the Parks Department, MWS Stormwater has also worked to improve habitat by purchasing and removing homes in the floodplain and allowing them to return to riparian buffered floodplain.. **Table 9-A.1** (Buffer Expanded Floodplain)

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
10. Public Information and Education (PI&E)						
A	(1A) Inform the public on the impacts on water quality from general housekeeping maintenance/activities	Ongoing – at least one activity per year	MWS	Michael Hunt/Sonia Harvat	NPDES distributes public education materials through the local public access channel (Metro 3), which details grading permit requirements, illicit discharges, pollution from poor housekeeping, etc.. In addition, MWS has been a contributor to the WaterWorks campaign which airs television and radio advertisements within Metro's service area. NPDES and the MWS PIO officer also performs various Public Education Events throughout the year. Also within Metro, the Parks Department and the Public Works Solid Waste Management perform various public education events that promote good housekeeping activities.	In PY7, the Education Specialist (Julie Berbiglia) worked with the NPDES office to distribute approximately 2,600 mail-outs alerting the general public to a specific illicit discharge that occurs intermittently in the Murphy Branch sub-watershed to Richland Creek. The mail-out generated several calls and tips on where the discharge could be occurring and potentially notified the guilty party that the outfall was being monitored. **Appendix B** (Public Education Materials) **Table 10-A.1** (Presentations given by the NPDES in PY7) **Table 10-A.2** (Presentations given by the MWS PIO in PY7)
	(1G) Inform home owner associations and other operators of detention/retention ponds of the importance of maintenance activities		MWS	Rebecca Dohn	NPDES performed mail-out educational campaigns in the past only to yield few responses. NPDES has since adopted an approach that involves educating sites individually through inspection and necessary enforcement/follow-up procedures.	**Table 1-G.1** (BMP Inspection/Owner Notification Program)
	(2A/D) Educate the local engineering and development community about the ordinances, regulations and guidance materials related to long-term water quality impacts		MWS	Michael Hunt	MWS Stormwater facilitates coordination with the local development community during any proposed changes to stormwater ordinances through holding stakeholder meetings, SWAC meetings, posting information on the website, etc.	During PY7, Metro Stormwater facilitated 2 SWAC meetings.
	(5B) Inform the public, sellers, distributors, application services, and selected users about proper pesticides, herbicides, and fertilizers use, storage, and disposal techniques		MWS	Michael Hunt	NPDES performs these activities through the above-mentioned Metro 3 broadcasts, website postings, WaterWorks program, and individual distribution of public information materials (flyers, brochures, door hangers, etc.)	**Appendix B** (Public Education Materials)

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
A	(5B) Inform the public, sellers, distributors, and selected users about proper oil and other automotive-related fluids use, storage, and disposal techniques	Ongoing – at least one activity per year	MWS	Michael Hunt	NPDES performs these activities through the above-mentioned Metro 3 broadcasts, website postings, WaterWorks program, and individual distribution of public information materials (flyers, brochures, door hangers, etc.)	**Appendix B** (Public Education Materials) Refer to: http://www.nashville.gov/stormwater/educational_documents.asp
	(6A) Inform the public about identifying and reporting procedures for illicit connections/discharges, sanitary sewer seepage, spills, etc.		MWS	Michael Hunt		
	(8A) Educate the local engineering, development, and construction community about the ordinances, regulations and guidance materials related to construction phase water quality impacts		MWS	Michael Hunt	MWS Stormwater facilitates coordination with the local development community during any proposed changes to stormwater ordinances through holding stakeholder meetings, SWAC meetings, posting information on the website, etc.	Also in the last few years, a new "Change Management Process" was implemented. The "Change Management Process" is intended to ensure that public notification is a major component of any major regulation/process change proposed by Metro. During PY6, Metro Stormwater facilitated 2 SWAC meetings.
	Other not yet identified opportunities.		NA	NA	MWS Public Information Officer initiated an "Adopt A Stream" program	Refer to: http://www.nashville.gov/water/adoptastream/adopt_a_stream.asp
B	**World Wide Web site**					
	Enhance Metro Public Works NPDES World Wide Web (Internet) site to include updated information about the NPDES MS4 program activities, inform the public about their impacts to water quality, educate the public on how they can limit water quality impacts, etc.	Ongoing	MWS	Michael Hunt, Anna Kuoppamaki/ Metro Web team	MWS' Stormwater manages its own website in which ample amount of public information is available.	**Appendix B** (Public Education Materials) Refer to the following website: http://www.nashville.gov/stormwater/

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
B	Provide mechanism that the public can use to report potential illicit discharges, spills, etc. via the internet	Ongoing	MWS	Michael Hunt/ Anna Kuoppamaki, Metro Web team	MWS' Stormwater website allows general public to submit complaint emails over the web or provides web users with the number to call to report illicit discharges.	In PY7, NPDES completed a mechanism for which the general public can enter information into a website and automatic emails will be generated and sent to NPDES to be disseminated to inspectors.
	Set up an area dedicated to promoting/recognizing those in the community that are found to have implemented exceptionally successful/resourceful/ innovative pollution prevention strategies	PY 4	MWS	Michael Hunt/Anna Kuoppamaki	MWS' main web page promotes the "Adopt a Stream" program, which details the type of stewardship work various companies have been performing in their respective adopted stream segments.	Refer to: http://www.nashville.gov/water/adoptastream/adopt_a_stream.asp
11. Reporting						
A	**Compliance Report**					
	Summary of program element activities and revisions	End of each PY (+ 6 months)	MWS	Josh Hayes	NPDES has submitted annual reports within 6 months from the end of each permit year. NPDES will continue to submit the annual reports even during the transition period between the Cycle II and Cycle III permits. NPDES is migrating toward a much more concise annual report that contains all of the necessary data. NPDES is also working to develop a more-official county-wide Stormwater Management Plan in which each pertinent Metro department will have a copy on-site and will be responsible for following their respective sections.	Annual Report Submitted
	Quantitative and qualitative controls assessment (as appropriate)		MWS	Steve Winesett	NPDES will continue to look for ways to improve program assessment measures. NPDES performs loading calculations at the end of each permit cycle. NPDES is looking for ways to improve the loading calculations to make them much more representative of local data and conditions.	**Table 11-A.1** (SWMP Quantitative Stats) **Table 11-A.2** (PY7 Budget Projections)

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
B	Propose Third Permit Cycle Activities	End of PY 4 (+ 6 months)	NA	NPDES Office	NPDES submitted proposed 3rd cycle activities in the Cycle 2, Permit Year 4 Annual Report and is eagerly awaiting TDEC's response and coordination for developing the 3rd cycle of the permit.	Submitted in PY4's Annual Report. In PY 7, MWS representatives met with TDEC permit writing staff several times to discuss the permit reissuance.
Monitoring Requirements						
Element	**Requirement**	**Schedule (1)**				
A	**Ambient**					
	Sample at eight or more in-stream locations	Bi-monthly	MWS	Steve Winesett	NPDES performs the bi-monthly sampling at 8 locations during ambient conditions.	**Table A-1** (Ambient Sampling Results in PY7)
	Sample at least six times per site to reflect seasonal trends	Annually	MWS	Steve Winesett	NPDES performs the ambient sampling at each site 6 times annually. All sampling results are documented in each annual report. NPDES wishes to change future ambient monitoring to a more watershed-impairment specific approach in the next permit cycle.	
B	**Wet-Weather**					
	Sample at three or more in-stream locations	Annually	MWS	Steve Winesett	Midway through the Cycle II permit, NPDES coordinated with TDEC to change two of the wet weather sampling locations to be located at MS4 major outfall points. The existing sampling locations include two MS4 outfalls points and one in-stream location. The NPDES division plans to submit an additional request to TDEC to further alter the wet weather sampling program. NPDES intends to alter wet weather sampling to better represent major land use categories, so the wet weather values can be used in the calculation of EMCs.	**Table B-1** (Wet Weather Sampling Results in PY7)
	Sample at least twice at each location to reflect seasonal trends		MWS	Steve Winesett	NPDES is performing seasonal wet weather sampling twice at each site.	

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
C	**Industrial**					
	Based on need as determined during inspections, etc.	Ongoing	MWS	Josh Hayes	In the past, the NPDES section has sampled unpermitted processed water from various industrial sites found during inspections. NPDES intends to perform future wet weather monitoring of specific industrial category sites in which runoff issues appear problematic.	No monitoring performed in PY7
	Report data	Annually	MWS	Josh Hayes	Any monitoring data is reported in annual reports.	
D	**Bioassessment**					
	Perform RBP III at the two designated bioassessment sites	Annually	MWS	Steve Winesett	NPDES performs the required Biological Assessments at designated sites twice a year to reflect seasonal changes.	**Table D-1** (Bioassessment Scoring Results)
	Perform RBP III at one or more reference sites	Annually	MWS	Steve Winesett	NPDES performs the required Biological Assessments at the Reference site twice a year to reflect seasonal changes.	
	Refine procedures for performing a "quick assessment" that can be performed in association with other program activities	PY 1	MWS	Steve Winesett	NPDES utilizes RBP III protocol for all bioassessments, therefore, did not refine procedures to develop a less detailed assessment.	
	Perform "quick assessments" as deemed necessary	Annually	MWS	Steve Winesett	In the past, additional quick assessments were not performed. In the future, NPDES plans to perform quick assessments (RBP II) on certain 303(d) listed streams.	

Element	Activities	Compliance Schedule	Responsible Department	Responsible Person(s)	Description of Permit Compliance Activities	Permit Year (PY) 7 Data/Activities
E	**Loadings Estimates**					
	Report changes in estimated Event Mean Concentrations (EMCs)	PY 5	MWS	Josh Hayes	In the 5th year of the 2nd permit cycle, NPDES had to utilize EMCs from a national average and from values calculated in the first permit cycle. Since wet weather sampling sites were changed mid-way through the cycle, there were not enough sampling results present to run statistical analysis. NPDES is developing a more detailed wet weather monitoring plan for the upcoming 3rd permit cycle that will focus sampling activities on specific land uses. NPDES believes that in the next permit cycle EMC values will be able to be derived from the revised 3rd cycle wet weather monitoring plan.	**Table E-1** (EMC Values for Loading Estimates)
	Report changes in estimated annual volume and loadings for the MS4		MWS	Josh Hayes	NPDES was unable to locate the original loading estimates performed in the 1st permit cycle. Additionally, NPDES used a different method to calculate the loading estimates in the 2nd permit cycle, which was based on the simple method. NPDES plans on improving the loading calculation by more accurately mapping/delineating all BMPs, altering wet weather sampling to better represent land use categories for EMC calculation, and improve the MS4 GIS database so potential modeling can be performed.	**Table E-2** (Impervious Areas per Watershed) **Table E-3** (Land Use Areas per Watershed) **Table E-4** (Annual Runoff Calculation) **Table E-5** (Pollutant Loading Calculations) **Table E-6** (BMP Loading Reduction Percentages) **Table E-7** (Summary of Pollutant Loading Estimates) Note: In this year's calculation, the only variables that changed were rainfall, annual runoff volume, and inclusion of an estimate of potential post-construction BMP pollutant reduction, as the available data for impervious areas and land-use did not change enough from previous years to warrant a recalculation. The calculations presented in tables E-2 through E-7 should not be taken as an exact calculation for stormwater loadings, as they are more of an estimate. In estimating the potential pollutant runoff reduction affects of the more than 1,000 post-construction BMPs installed around the county, some assumptions, as noted in the footnote of Table E-6, were made. NPDES is still working on improving mechanisms for calculating pollutant loadings.

Appendix A - Supporting Program Data

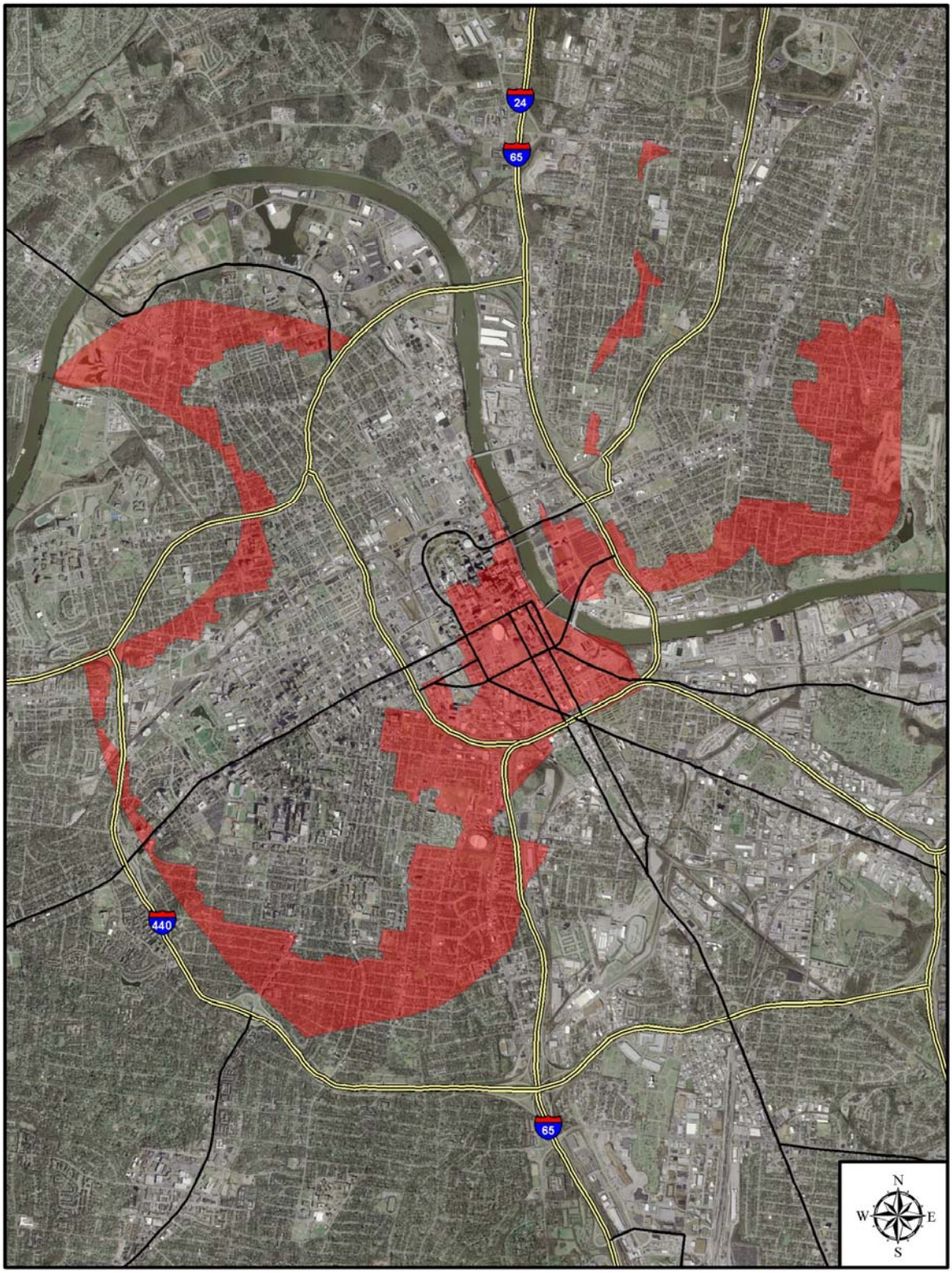


Figure 1-A.1 GIS MS4 Infrastructure Field Collection Project Completed in PY7

Table 1-B.1 Routine Maintenance Numbers

Maintenance Activity	Type	PY1 (FY04)	PY2 (FY05)	PY3 (FY06)	PY4 (FY07)	PY5 (FY08)	PY6 (FY09)	PY7 (FY10)
Ditch Maint.	Routine	84	66	14	3	83	0	0
	Complaint	557	374	403	445	474	396	485
	Class C	1	39	18	0	0	0	0
		642	***479***	***435***	***448***	***557***	***396***	***485***
Walls & HW	Routine	17	11	1	0	14	0	0
	Complaint	211	161	183	187	55	32	34
	Class C	0	0	1	0	0	0	0
		228	***172***	***185***	***187***	***69***	***32***	***34***
DW Pipes	Routine	106	48	5	816	45	0	0
	Complaint	249	279	286	165	94	89	137
	Class C	0	0	0	0	0	0	0
		355	***327***	***291***	***981***	***139***	***89***	***137***
Cross Drains	Routine	74	78	66	0	192	0	0
	Complaint	135	114	171	148	61	62	78
	Class C	0	10	8	0	0	0	0
		209	***202***	***245***	***148***	***253***	***62***	***78***
Flooding	Routine	4	10	4	0	0	0	0
	Complaint	14	15	1	0	19	58	180
	Class C	0	2	2	0	0	0	0
		18	***27***	***7***	***0***	***19***	***58***	***180***
Debris Removal	Routine	26	26	23	0	60	0	0
	Complaint	29	28	41	1	80	186	114
	Class C	1	1	0	0	0	0	0
		56	***55***	***64***	***1***	***140***	***186***	***114***
Erosion	Routine	2	1	1	0	1	0	0
	Complaint	7	6	1	0	10	20	18
	Class C	0	1	0	0	0	0	0
		9	***8***	***2***	***0***	***11***	***20***	***18***
Mud Removal	Routine	8	7	51	3	0	0	0
	Complaint	3	8	71	144	0	1	0
	Class C	0	0	0	0	0	0	0
		11	***15***	***122***	***147***	***0***	***1***	***0***
Misc	Routine	590	396	219	1,013	71	0	0
	Complaint	95	75	86	1,035	15	39	34
	Class C	0	3	1	0	0	0	0
		685	***474***	***306***	***2048***	***86***	***39***	***34***
Inlet Maint.	Routine	33,495	37,296	35,258	20,125	4,841	140	140
	Complaint	416	353	263	3,088	243	1880	400
	Class C	0	5	0	0	0	0	0
		33,911	***37,654***	***35,521***	***23,213***	***5084***	***2020***	***540***
Sinkhole	Routine	0	0	0	0	0	0	0
	Complaint	0	0	2	3	0	0	0
	Class C	0	0	0	0	0	0	0
		0	***0***	***2***	***3***	***0***	***0***	***0***

*Note- Inlet Maintenance numbers reflect a July 2008 change in the way work units are reported. Inlet reporting is now done at the work order level and not the work unit level. This does not reflect any change in the level of effort for this category of work. Routine Maintenance field activities were significantly reduced from September 17th through September 29th, 2008 due to the fuel conservation initiative.

Table 1-C.1 Summary of Maintenance Performed at the Dry Creek Regional Detention Basin

DATE	TASK NAME
07/27/09	Cleaned Debris
07/29/09	Cleaned debris and hauled away
08/12/09	Cleaned Debris
09/04/09	Cleaned Debris
09/11/09	Inspection or Investigation
10/13/09	Cleaned debris and hauled away
10/19/09	Add Crusher Run
10/20/09	Cleaned debris and hauled away
11/19/09	Inspection or Investigation
12/08/09	Cleaned Debris
12/09/09	Inspection or Investigation
12/10/09	Cleaned Debris
12/14/09	Inspection or Investigation
12/30/09	Add Crusher Run
01/04/10	Check Complaint
01/11/10	Check Complaint
01/12/10	Check Complaint
01/14/10	Inspection or Investigation
01/21/10	Cleaned debris and hauled away
02/08/10	Inspection or Investigation
03/02/10	Inspection or Investigation
03/11/10	Cleaned Debris
03/25/10	Inspection or Investigation
04/08/10	Inspection or Investigation
04/26/10	Cleaned debris and hauled away
05/07/10	Cleaned debris and hauled away
06/02/10	Cleaned Debris
06/11/10	Hauled Away

Table 1-F.1 Summary of Public Works Solid Waste Collection Numbers in PY7 (tons)

	July	August	September	October	November	December	January	February	March	April	May	June	Total
Recycling													
Curbside Recycling/Inhouse Recycling/Recycling Dumpsters													
Mixed Recyclables	1,004.70	1,151.54	957.74	1,059.99	1,077.45	1,012.73	1,178.45	973.49	980.13	1,119.49	1,265.29	1,069.12	12,850.12
Monthly Totals	**1,004.70**	**1,151.54**	**957.74**	**1,059.99**	**1,077.45**	**1,012.73**	**1,178.45**	**973.49**	**980.13**	**1,119.49**	**1,265.29**	**1,069.12**	**12,850.12**
Household Hazardous Waste Facility													
Oil	4	5.1	2.35	1.86	2.54	3.54	1.33	0.88	2.8	3.2	5.2	3.6	36.40
Anti Freeze	0	0	0	0	0	0	0	0	0	0	0	0	-
Electronics	3.47	15.64	26.25	13.85	0	0	32.44	1.38	23.93	9.26	33.42	28.11	187.75
Batteries	0.87	0.41	0.49	0	0	0	1.3	0	0	0	0	0	3.07
Tanks	0	0	0	0	0	0	0	0	0	0	0	0	-
Clean Harbors	0	0	0	14.91	0	0.76	3.13	0	0.99	0	9.53	0.34	29.66
Monthly Totals	**8.34**	**21.15**	**29.09**	**30.62**	**2.54**	**4.3**	**38.2**	**2.26**	**27.72**	**12.46**	**48.15**	**32.05**	**256.88**
Drop Off Recycling Centers & Convenience Centers													
Carpet/Carpet Pad	35.04	20.44	23.36	35.04	14.60	20.44	17.52	14.60	29.20	23.36	14.60	23.36	271.56
Aluminum & Tin	12.32	12.66	9.77	14.33	13.44	1.81	-	-	-	-	-	0.74	65.07
Glass	177.61	141.11	139.58	169.38	123.36	161.81	183.27	129.90	158.07	167.85	141.91	172.29	1,866.14
Mixed Paper	287.04	267.92	262.72	272.43	294.04	324.28	264.92	242.93	273.96	269.30	266.90	292.44	3,318.88
OCC	135.05	138.97	123.89	125.48	128.11	143.08	162.77	102.63	126.97	130.96	127.59	137.52	1,583.02
Plastic	34.37	32.30	34.20	32.72	33.76	45.27	60.08	41.52	49.04	46.75	44.23	46.70	500.94
Plastic Bottles & Metal Cans	4.56	4.73	5.63	6.94	5.68	4.34	4.05	3.16	4.40	5.45	3.04	5.11	57.09
Scrap Metal	37.45	33.98	38.81	36.05	27.06	31.53	25.62	18.77	53.62	60.75	27.45	45.17	436.25
Tires	0.00	601.35	409.33	624.00	0.00	725.79	764.69	365.52	537.15	977.23	351.60	1,695.46	7,052.12
Monthly Totals	**723.44**	**1,253.46**	**1,047.29**	**1,316.37**	**640.05**	**1,458.34**	**1,482.92**	**919.03**	**1,232.41**	**1,681.65**	**977.32**	**2,418.79**	**15,151.07**
Waste Collection													
Total Metro Public Works Trash Collection	4,616.53	3,800.93	4,399.54	4,189.47	3,648.05	4,252.22	3,577.26	3,308.03	4,200.69	4,190.61	4,269.12	4,530.30	48,982.75
Total Convenenience Center Trash	1,072.92	995.05	889.66	997.76	805.73	699.04	649.35	739.06	1,092.39	1,145.84	2,058.96	1,421.39	12,567.15
Contracted Residential	8,570.01	7,210.26	7,665.52	7,571.75	6,719.00	7,778.96	6,647.82	5,818.37	7,235.14	8,208.51	8,213.11	8,236.71	89,875.16
Monthly Totals	**14,259.46**	**12,006.24**	**12,954.72**	**12,758.98**	**11,172.78**	**12,730.22**	**10,874.43**	**9,865.46**	**12,528.22**	**13,544.96**	**14,541.19**	**14,188.40**	**151,425.06**
Brush Collection													
Unground -- Grapple Hook	590.92	225.08	978.49	1079.05	804.96	237.62	671.08	480.21	665.1	413.82	89.79	254.31	6490.43
Unground -- Dropped Off	3236.51	3978.6	1975.45	1611.31	840.81	1911.67	1333.81	853.01	1159.1	1587.69	1238.28	1132.39	20858.63
Unground -- Contractor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ground -- Dropped Off	107.06	49.3	29.1	47.4	37.52	31.1	120.07	16.71	39.26	37.19	70.22	67.63	652.56
Leaves -- Metro	35.95	14.74	0.83	11.36	20.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.10
Leaves -- Dropped Off	0.00	0.00	0.00	0.00	555.82	479.84	122.26	45.39	66.62	85.29	7.48	8.68	1371.38
Monthly Totals	**3,970.44**	**4,267.72**	**2,983.87**	**2,749.12**	**2,259.33**	**2,660.23**	**2,247.22**	**1,395.32**	**1,930.08**	**2,123.99**	**1,405.77**	**1,463.01**	**29,456.10**

Table 1-G.1 Summary of BMP Inspection Status

BMP Type	Number of BMPs as of June 30, 2010	Number Inspected in PY7
Detention Ponds	1614	19
Water Quality Units	483	72
Underground Detention	71	4
Swales	58	2
Bioretention	32	0
Sand Filter/Infiltration	14	2
Catch Basin Insert	86	2
Other	39	2

Note: These are the numbers of BMPs, not the number of sites with BMPs. Some sites have more than one BMP. The inspection numbers include the number of BMPs inspected by outside vendors to keep sites in compliance with Metro's post construction inspection and maintenance requirements. A total of eleven enforcement NOVs requiring BMP maintenance were sent to BMP owners in PY7.

Table 2-A.1 Summary of NPDES Enforcement Cases

	Notice of Violation (NOV)	Stop Work Order (SWO)	Env. Court Cases
Total FY02	11	1	0
Total FY03	47	23	0
Total FY04	132	96	0
Total FY05	151	46	5
Total FY06	219	64	9
Total FY07	140	50	1
Total FY08	284	58	12
Total FY09	150	38	9
Total FY10	90	33	3
Total	**1134**	**376**	**36**

Table 2-A.1 Summary of NPDES Monetary Penalty Assessments

Year	NOV	SWO	Monthly Total
PY 1 Total	$19,850	$17,950	$37,800
PY2 Total	$68,550	$50,600	$43,550
PY 3 Total	$39,250	$12,000	$51,250
PY4 Total	$27,000	$9,400	$36,400
PY5 Total	$36,150	$10,000	$46,150
PY6 Total	$24,120	$11,351	$35,471
PY7 Total	$12,152	$8,150	$20,302
Total	**$214,920**	**$111,301**	**$250,621**

Note: The penalty assessment estimates were retrieved from the Results Matters Yearly Summary spreadsheet.

Table 2-C.1 Summary of Watershed Monitoring Programs in PY7

TMDL and 303D Monitoring - programs combined																	
Stream Name	HUC-8	HUC-11	Number of Samples Taken	E. coli (geo) Summer '09 Jun-Aug	Number of Samples Taken	E. coli (geo) Fall '09 Sept-Nov	Number of Samples Taken	E. coli (geo) Winter '10 Dec-Feb	TSS avg Winter '10 Dec-Feb	Number of Samples Taken	E. coli (geo) Spring '10 Mar-May	Number of Samples Taken	TSS avg Spring '10 Mar-May	Number of Samples Taken	E. coli (geo) Summer '10 Jun	Number of Samples Taken	TSS avg Summer '10 Jun
Manskers 1	TN05130202	220-1000	5	232.74													
Manskers 2	TN05130202	220-2000	5	225.03													
Lumsley	TN05130202	220-0100	5	137.92													
Walkers	TN05130202	220-0200	5	91.15													
Dry Creek 1	TN05130202	027-1000	5	1361.51													
Pages Branch 1	TN05130202	202-1000	5	309.22													
Middle Fork Browns	TN05130202	023-0200	5	634.91													
Whites Creek	TN05130202	010-1000	5	20.20													
Drakes Branch	TN05130202	010-0200	5	331.77													
Browns 1	TN05130202	023-1000	5	224.30													
Browns 2	TN05130202	023-2000	5	278.20													
East Fork Browns	TN05130202	023-0100	5	305.40													
West Fork Browns	TN05130202	023-0300	5	178.40													
McCrory 1	TN05130203	001-0100	5	246.00													
McCrory 2	TN05130203	001-0150	5	167.80													
Stoners Creek	TN05130203	035-1000	5	406.10													
Gibson Creek	TN05130202	212-1000	5	26.20													
Neeleys Creek	TN05130202	212-0100	5	843.30													
Pages Branch 2	TN05130202	202-2000	5	181.90													
Cooper Creek	TN05130202	209-1000	5	441.4													
Little Harpeth	TN05130204	021-1000	5	221.1													
Sugartree Creek	TN05130202	314-0400	5	938.5													
Bosley Springs	TN05130202	314-0300	5	1417.5													
Finley	TN05130202	007-0300								5	133.43	5	2.28	5	541.57	5	23.16
Mill 1	TN05130202	007-1000								5	54.77	2	8.30	5	212.79	5	11.72
Mill 2	TN05130202	007-2000								5	44.99	5	1.98	5	382.43	5	6.28
Mill 3	TN05130202	007-3000								5	84.59	5	1.92	5	129.44	5	9.84
Pavillion	TN05130202	007-1500								5	157.31	5	0.60	5	347.00	5	1.96
Sims 1	TN05130202	007-0100								5	86.16	5	1.76	0	n/a	0	n/a
Sims 2	TN05130202	007-0150								5	128.58	5	2.80	5	329.70	5	4.48
Cathy Jo	TN05130202	007-1490								5	105.46	5	0.00				
Sevenmile 1	TN05130202	007-1400								5	182.77	5	1.40				
Sevenmile 2	TN05130202	007-1450								5	155.60	5	0.28				
Shasta	TN05130202	007-1410								5	424.42	5	1.04				
Sorghum	TN05130202	007-1300								5	228.94	5	0.40				
Whittemore	TN05130202	007-1200								5	242.37	5	2.00				

Note: Yellow highlighted cells represent geometrical means below 126 CFU's.
Fall '09 and Winter '10 all sampling was put on hold for redevelopment and organization enhancements to the Watershed Management program.

Table 2-C.2 Summary of Watershed-Specific Assessment Programs in PY7

Thermographs					
Watersheds Flown	**Anomalies Found**	**Anomalies Inspected**	**Anomalies of Concern**	**Anomalies Resolved**	**Anomalies Ongoing**
4	30	30	2	2	0
Stream Walks					
Stream Name	**Number of segments**		**Total Miles**		
Beech Creek	40		3.8		
Harpeth River	56		5.3		
Little Harpeth	8		0.8		
McCrory	50		4.7		
Newsom's Branch	16		1.5		
Stoners	18		1.7		
Trib to Mccrory	30		2.8		
Trib to Stoners	15		1.5		
Total	**233**		**22.1**		

Table 3-B.1 Summary of Stormwater Remedial Maintenance Contracted Street Sweeping Numbers in PY7

	July-09	August-09	September-09	October-09	November-09	December-09	January-10	February-10	March-10	April-10	May-10	June-10	Total
Debris Collected *(tons)*	231.59	282.56	284.51	399.84	474.15	417.00	241.56	306.64	470.81	422.51	458.48	469.64	**4,459.29**
Miles of Street Swept	1,422.66	1,706.65	1,706.65	1,706.65	1,687.56	1,725.73	1,706.65	1,707.36	1,706.46	1,707.36	1,472.62	1,870.57	**20,126.91**

Note: In previous years the street sweeping program was contracted out by the Metro Department of Public Works. During Permit Year 7, the street sweeping contract was transferred to MWS Remedial Maintenance Division.

Table 3-C.1 Summary of MDPW Deicing Application in PY7

	July	August	September	October	November	December	January	February	March	April	May	June	Total
Amount of Salt/brine applied to Roadways (tons)	0.00	0.00	0.00	0.00	0.00	0.00	5,062.84	248.00	0.00	0.00	0.00	0.00	**5,310.84**
Number of Brine Trucks Used	0.00	0.00	0.00	0.00	0.00	0.00	20.00	24.00	0.00	0.00	0.00	0.00	**N/A**
Number of Employees	0.00	0.00	0.00	0.00	0.00	0.00	22.00	54.00	0.00	0.00	0.00	0.00	**N/A**

Table 3-E.1 Summary of OEM Spill Calls in PY7

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE090701013485	4604 LEBANON PKE	PWHAZ	7/1/2009 10:06	PWRD
	4604 LEBANON PKE	PWHAZ		PW143
LOE090701013503	32 MOORE AV	HM1	7/1/2009 11:56	WATER
LOE090702013597	N 9TH ST&RAMSEY ST	HM1	7/2/2009 16:09	PW149
LOE090704013689	BRICK CHURCH PKE&W TRINITY LA	PWHAZ	7/4/2009 4:09	PWHAZ
LOE090704013719	1301 DEBOW ST	HM1	7/4/2009 16:21	OEM
LOE090704013721	I40 W&28TH AV N	HM2	7/4/2009 16:39	OEM
LOE090704013722	I40 W&28TH AV N	HM1	7/4/2009 16:52	OEM
LOE090705013806	MM 94 I65 S	HM2	7/5/2009 14:12	NES
	MM 94 I65 S	HM2		WATER
	MM 94 I65 S	HM2		OEM
	MM 94 I65 S	HM2		STATE
LOE090707013982	BRILEY PKWY&SAUNDERS AV	HM1	7/7/2009 19:39	PW144
LOE090708014018	605 S 12TH ST	HM1	7/8/2009 10:32	GAS
LOE090708014058	I65 N ENT RMP&W TRINITY LA	HM1	7/8/2009 22:27	STATE
LOE090709014062	SHARONDALE DR&HILLSBORO PKE	HM1	7/9/2009 4:16	GAS
LOE090709014063	EXIT 5 I440 E	HM1	7/9/2009 4:55	GAS
LOE090709014067	SHARONDALE DR&HILLSBORO PKE	HM1	7/9/2009 6:51	PW144
LOE090709014084	MASSMAN DR&ELM HILL PKE	HM1	7/9/2009 11:46	PW143
LOE090709014085	MASSMAN DR&ELM HILL PKE	HM1	7/9/2009 11:53	PWRD
LOE090709014088	2245 KLINE AV	HM1	7/9/2009 12:56	PW149
LOE090709014106	4700 HUMBER DR	HM1	7/9/2009 17:45	GAS
LOE090710014122	6952 SOMERSET FARMS CIR	HM1	7/10/2009 0:34	GAS
LOE090710014139	SHARONDALE DR&SHARONDALE CT	HM1	7/10/2009 11:39	PW149
LOE090710014150	SHUTE LA&OLD HICKORY BLVD	HM1	7/10/2009 14:45	GAS
LOE090710014181	MM 201 I40 E	HM1	7/10/2009 21:58	OEM
LOE090711014223	CENTRAL PKE&OLD HICKORY BLVD	HM1	7/11/2009 18:06	GAS
LOE090711014228	NOLENSVILLE PKE&HARDING PL	PWHAZ	7/11/2009 20:41	PWHAZ
LOE090712014242	OLD HICKORY BLVD W&E MARTHON	HM1	7/12/2009 9:36	PW
LOE090712014264	954 CALDWELL LA	HM1	7/12/2009 15:42	GAS
LOE090713014317	5805 OLD HICKORY BLVD	PWHAZ	7/13/2009 3:15	PW144
	5805 OLD HICKORY BLVD	PWHAZ		PW143
	5805 OLD HICKORY BLVD	PWHAZ		OEM
LOE090713014339	1120 FOSTER AV	HM1	7/13/2009 8:25	PWRD
	1120 FOSTER AV	HM1		PW147
	1120 FOSTER AV	HM1		WATER
LOE090713014343	3719 RICHLAND AV	HM1	7/13/2009 9:30	GAS
LOE090713014370	NOLENSVILLE PKE&ZOO RD	HM1	7/13/2009 15:11	PW147
LOE090713014371	NOLENSVILLE PKE&ZOO RD	HM1	7/13/2009 15:11	PW147
LOE090713014393	8136 WHITES CREEK PKE	HM1	7/13/2009 18:32	PWRD
	8136 WHITES CREEK PKE	HM1		PW147
LOE090714014412	505 PICCADILLY ROW	HM1	7/14/2009 2:21	GAS
LOE090714014413	I24 E&I440 W	HM1	7/14/2009 2:45	STATE
LOE090714014441	2709 BELMONT BLVD	HM1	7/14/2009 12:54	GAS
LOE090714014472	4816 JEFFERY DR	HM1	7/14/2009 18:38	GAS
LOE090715014521	HOBBS RD&ESTES RD	HM1	7/15/2009 11:13	PW144
	HOBBS RD&ESTES RD	HM1		PW147
LOE090716014615	2792 WINDCREST TRL	HM1	7/16/2009 11:52	PW143

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE090716014632	ANTIOCH PKE&HAYWOOD LA	HM1	7/16/2009 14:50	OEM
	ANTIOCH PKE&HAYWOOD LA	HM1		WATER
LOE090716014634	ANTIOCH PKE&HAYWOOD LA	HM1	7/16/2009 15:23	OEM
LOE090717014695	2504 SMITH SPRINGS RD	HM1	7/17/2009 10:08	OEM
LOE090717014706	EXIT 48 I24 E	HM1	7/17/2009 12:36	OEM
LOE090717014712	EXIT 48 I24 E	HM1	7/17/2009 13:05	OEM
LOE090717014714	EXIT 48 I24 E	HM1	7/17/2009 13:12	STATE
LOE090717014741	627 S GALLATIN PKE	HM1	7/17/2009 17:11	GAS
LOE090719014825	5106 ELKINS AV	HM1	7/19/2009 15:05	GAS
LOE090719014844	2823 MURFREESBORO PKE	PWHAZ	7/19/2009 23:23	PWHAZ
LOE090719014845	2823 MURFREESBORO PKE	HM1	7/19/2009 23:24	PWHAZ
LOE090721014915	2821 RADER RIDGE CT	HM1	7/21/2009 4:45	GAS
LOE090721014927	I40 E&WHITE BRIDGE PKE	HM1	7/21/2009 9:13	OEM
LOE090721014932	859 BRILEY PKWY	HM1	7/21/2009 10:01	GAS
LOE090721014938	RICHARD JONES RD&HILLSBORO PKE	HM1	7/21/2009 10:54	PW144
	RICHARD JONES RD&HILLSBORO PKE	HM1		OEM
	RICHARD JONES RD&HILLSBORO PKE	HM1		PW149
LOE090721014943	859 BRILEY PKWY	HM1	7/21/2009 12:37	OEM
LOE090721014947	700 AIRWAYS CIR	HM1	7/21/2009 13:43	PW149
	700 AIRWAYS CIR	HM1		PW147
	700 AIRWAYS CIR	HM1		PW144
	700 AIRWAYS CIR	HM1		PW143
	700 AIRWAYS CIR	HM1		WATER
LOE090722014986	I24 E&I40 E	HM1	7/22/2009 2:22	OEM
LOE090722014987	I24 E&I440 E	HM1	7/22/2009 2:27	OEM
LOE090722015005	5537 EDMONDSON PKE	HM1	7/22/2009 8:41	GAS
LOE090722015069	2615 FRANKLIN PKE	HM1	7/22/2009 18:19	OEM
LOE090722015074	1040 MURFREESBORO PKE	HM1	7/22/2009 18:48	OEM
LOE090723015137	5319 MT VIEW RD	HM1	7/23/2009 20:18	GAS
LOE090724015166	OLD HICKORY BLVD&I40 E	HM1	7/24/2009 12:40	PW143
LOE090724015181	ATHENS WY&GREAT CIRCLE RD	HM1	7/24/2009 17:08	PW147
LOE090724015186	2832 CALL HILL RD	HM1	7/24/2009 18:18	GAS
LOE090725015215	NOLENSVILLE PKE&OLD HICKORY BI	HM1	7/25/2009 13:47	OEM
	NOLENSVILLE PKE&OLD HICKORY BI	HM1		PWRD
LOE090726015248	1617 CHASE ST	HM1	7/26/2009 5:28	GAS
LOE090726015267	2100 MAYNARD CT	HM1	7/26/2009 13:33	OEM
LOE090726015270	113 SCOTT AV	HM1	7/26/2009 13:56	OEM
LOE090727015337	HARRISON ST&7TH AV N	HM1	7/27/2009 9:32	OEM
LOE090727015338	HARRISON ST&7TH AV N	HM1	7/27/2009 9:33	OEM
LOE090727015352	RICHLAND AV&CRAIGHEAD AV	HM1	7/27/2009 11:49	GAS
LOE090727015406	MURFREESBORO PKE&SPENCE LA	HM1	7/27/2009 22:04	OEM
LOE090728015424	815 MURFREESBORO PKE	HM1	7/28/2009 9:02	OEM
LOE090728015433	MM 211 0 I40 E	HM1	7/28/2009 11:13	OEM
	MM 211 0 I40 E	HM1		CAR5
	MM 211 0 I40 E	HM1		WATER
	MM 211 0 I40 E	HM1		CAR2
	MM 211 0 I40 E	HM1		CAR9
LOE090728015434	MM 211 0 I40 E	HM1	7/28/2009 11:14	OEM
LOE090728015443	2412 ALAMEDA ST	HM1	7/28/2009 13:56	GAS

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE090729015508	8175 HWY 100	HM1	7/29/2009 12:00	OEM
LOE090729015541	2809 HAZELWOOD DR	HM1	7/29/2009 20:08	GAS
LOE090729015545	LEBANON PKE&DONELSON PKE	HM1	7/29/2009 21:38	PWRD
	LEBANON PKE&DONELSON PKE	HM1		PW143
LOE090729015548	LEBANON PKE&DONELSON PKE	HM1	7/29/2009 22:02	PWRD
LOE090731015633	OLD HARDING PKE&COLICE JEANNE	HM1	7/31/2009 10:14	PW147
LOE090801015733	4098 NOLENSVILLE PKE	HM1	8/1/2009 19:47	GAS
LOE090803015791	190 PARK CIR	HM1	8/3/2009 9:19	OEM
LOE090803015792	190 PARK CIR	HM1	8/3/2009 9:20	OEM
LOE090804015855	3322 WEST END AV	HM1	8/4/2009 8:44	OEM
LOE090804015871	CUNNIFF PKWY&DICKERSON PKE S	HM1	8/4/2009 11:43	GAS
LOE090804015896	1244 RIVERWOOD DR	HM1	8/4/2009 15:44	PWRD
LOE090804015896	1244 RIVERWOOD DR	HM1	8/4/2009 15:44	PW147
LOE090805015993	CENTRAL PKE&DODSON CHAPEL RD	HM1	8/5/2009 9:35	GAS
LOE090805015995	CENTRAL PKE&DODSON CHAPEL RD	HM1	8/5/2009 9:42	OEM
	CENTRAL PKE&DODSON CHAPEL RD	HM1		GAS
LOE090805016007	LEBANON PKE&STEWARTS FERRY PK	HM1	8/5/2009 12:01	PWRD
LOE090806016117	4137 HIGHLANDER CT	HM1	8/6/2009 22:47	GAS
LOE090808016250	5319 MT VIEW RD	HM1	8/8/2009 21:12	OEM
LOE090809016259	2632 LISHWOOD DR	HM1	8/9/2009 7:29	OEM
LOE090810016329	308 E TRINITY	HM1	8/10/2009 13:45	GAS
LOE090810016366	1014 LINCOYA BAY DR	HM1	8/10/2009 22:30	GAS
LOE090810016370	7070 HWY 70 S	HM1	8/10/2009 23:37	OEM
LOE090812016445	627 S GALLATIN PKE	HM1	8/12/2009 6:10	OEM
LOE090812016449	1195 WEDGEWOOD AV	HM1	8/12/2009 7:47	OEM
LOE090812016452	1195 WEDGEWOOD AV	HM1	8/12/2009 8:11	OEM
LOE090813016540	MM 62 I24 E	HM1	8/13/2009 10:30	OEM
LOE090813016542	1431 VULTEE BLVD	HM1	8/13/2009 11:42	OEM
LOE090813016581	3207 WEST END CIR	HM1	8/13/2009 23:17	GAS
LOE090814016605	1540 N GALLATIN PKE	HM1	8/14/2009 11:08	PW147
LOE090814016607	5430 OLD HICKORY BLVD	HM1	8/14/2009 12:03	OEM
LOE090814016621	43RD AV N&ALBION ST	HM1	8/14/2009 14:23	GAS
LOE090814016646	3508 BELMONT BLVD	HM1	8/14/2009 18:21	GAS
LOE090815016698	BRIDGEWAY AV&NEWELL AV	HM1	8/15/2009 20:27	OEM
LOE090816016742	333 RIO VISTA DR	HM1	8/16/2009 15:19	OEM
LOE090818016906	HALCYON AV&SHERBOURNE AV	HM1	8/18/2009 19:38	OEM
LOE090819016934	1818 ALBION ST	HM1	8/19/2009 10:04	OEM
LOE090820017069	2804 WEST END AV	HM1	8/20/2009 17:47	OEM
LOE090823017269	3RD AV N&DEADERICK ST	PWHAZ	8/23/2009 23:01	PWHAZ
LOE090824017301	BOWLING AV&WOODLAWN DR	HM1	8/24/2009 11:02	GAS
LOE090824017303	442 BOWLING AV	HM1	8/24/2009 11:07	GAS
LOE090824017308	JASPERSON DR&CENTER ST	HM1	8/24/2009 11:46	GAS
LOE090824017312	130 W TRINITY LA	HM1	8/24/2009 12:27	OEM
LOE090824017314	130 W TRINITY LA	HM1	8/24/2009 12:45	OEM
LOE090824017331	125 37TH AV N	HM1	8/24/2009 15:51	OEM
LOE090827017511	NOLENSVILLE PKE&I440 E	HM1	8/27/2009 12:45	PW149
	NOLENSVILLE PKE&I440 E	HM1		PW143
	NOLENSVILLE PKE&I440 E	HM1		PW147
LOE090827017512	NOLENSVILLE PKE&I440 E	HM1	8/27/2009 12:46	PW144

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE090827017528	1301 BELL RD	HM1	8/27/2009 15:36	GAS
LOE090828017599	1433 12TH AV S	HM1	8/28/2009 17:10	OEM
LOE090828017607	1301 BELL RD	HM1	8/28/2009 18:56	GAS
LOE090901017833	906 RUSSELL ST	HM1	9/1/2009 16:41	OEM
LOE090901017834	ROSA L PARKS BLVD&MAINSTREAM	HM1	9/1/2009 16:53	PW147
LOE090901017835	ROSA L PARKS BLVD&MAINSTREAM	HM1	9/1/2009 16:54	PW147
LOE090901017836	906 RUSSELL ST	HM1	9/1/2009 16:56	PW149
LOE090901017847	6107 CENTENNIAL BLVD	HM1	9/1/2009 20:01	OEM
LOE090902017858	1119 STOCKELL ST	HM1	9/2/2009 6:51	GAS
LOE090902017868	ELLISTON PL&25TH AV N	HM1	9/2/2009 9:18	OEM
LOE090903017938	126 ABBEYWOOD DR	HM1	9/3/2009 9:45	GAS
LOE090904017987	1431 VULTEE BLVD	HM1	9/4/2009 0:57	NES
LOE090904018004	310 JEFFERSON ST	HM1	9/4/2009 9:01	GAS
	310 JEFFERSON ST	HM1		OEM
LOE090904018014	256 HICKORY TRACE DR	HM1	9/4/2009 11:54	OEM
LOE090904018036	4401 CHANDLER RD	HM1	9/4/2009 15:54	GAS
LOE090908018201	HOBSON PKE&MURFREESBORO PKE	HM1	9/8/2009 6:02	PWHAZ
	HOBSON PKE&MURFREESBORO PKE	HM1		STATE
LOE090908018264	SMITH SPRINGS PKWY&MT VIEW RD	HM1	9/8/2009 20:16	OEM
LOE090908018264	SMITH SPRINGS PKWY&MT VIEW RD	HM1	9/8/2009 20:16	PW
LOE090908018268	HWY 70 S&I40 E	HM1	9/8/2009 21:00	OEM
LOE090908018269	HWY 70 S&I40 E	HM1	9/8/2009 21:09	GAS
LOE090908018270	855 BELLEVUE RD	HM1	9/8/2009 22:25	OEM
	855 BELLEVUE RD	HM1		GAS
LOE090909018291	1100 DAVIDSON ST	HM1	9/9/2009 9:37	GAS
LOE090909018327	720 S 5TH ST	HM1	9/9/2009 18:31	PW147
LOE090910018366	174 3RD AV N	HM1	9/10/2009 15:35	GAS
LOE090912018487	420 STAR BLVD	HM1	9/12/2009 8:12	OEM
LOE090912018489	420 STAR BLVD	HM1	9/12/2009 8:24	OEM
LOE090912018490	420 STAR BLVD	HM1	9/12/2009 8:25	OEM
LOE090914018602	250 HILLCREST DR	HM1	9/14/2009 9:53	GAS
	250 HILLCREST DR	HM1		OEM
LOE090914018605	253 LANIER DR	HM1	9/14/2009 10:36	GAS
LOE090914018616	5159 ASHLEY DR	HM1	9/14/2009 14:23	GAS
LOE090917018813	I440 W&NOLENSVILLE PKE	HM1	9/17/2009 0:53	OEM
	I440 W&NOLENSVILLE PKE	HM1		WATER
LOE090917018868	317 CHAMBERLIN ST	HM1	9/17/2009 11:29	OEM
LOE090917018898	MM 6 I440 E	HM1	9/17/2009 17:22	THELP
LOE090920019070	MM 18 0 BRILEY W	HM1	9/20/2009 20:32	STATE
LOE090922019145	1315 8TH AV S	PWHAZ	9/22/2009 9:44	PWHAZ
LOE090922019186	1719 16TH AV N	HM1	9/22/2009 19:05	PW149
	1719 16TH AV N	HM1		PW147
LOE090922019188	748 S 7TH ST	HM1	9/22/2009 19:13	PW147
	748 S 7TH ST	HM1		PW149
LOE090924019299	623 UNION ST	HM1	9/24/2009 1:33	PWHAZ
	623 UNION ST	HM1		PW147
LOE090924019302	MM 220 I40 E	HM1	9/24/2009 6:24	GAS
LOE090924019303	I40 E&OLD HICKORY BLVD	HM1	9/24/2009 6:27	OEM
	I40 E&OLD HICKORY BLVD	HM1		STATE
	I40 E&OLD HICKORY BLVD	HM1		CAR9

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE090924019304	MM 220 I40 E	HM1	9/24/2009 6:40	OEM
LOE090925019398	1852 ANNALEE DR	HM1	9/25/2009 10:37	GAS
LOE090926019448	597 COLLINS PARK DR	HM1	9/26/2009 3:46	GAS
LOE090927019539	389 EDITH AV	HM1	9/27/2009 2:44	OEM
LOE090927019582	1905 10TH AV S	HM1	9/27/2009 18:23	GAS
LOE090927019583	73 FAIRFIELD AV	HM1	9/27/2009 19:32	GAS
LOE090927019587	BRILEY PKWY&CLARKSVILLE PKE	HM2	9/27/2009 20:33	OEM
	BRILEY PKWY&CLARKSVILLE PKE	HM2		STATE
LOE090930019733	4400 CSX DR	HM1	9/30/2009 6:37	OEM
LOE090930019735	4400 CSX DR	HM1	9/30/2009 7:02	RAIL
LOE090930019775	1124 SPARTA RD	HM1	9/30/2009 15:56	GAS
LOE091001019796	3700 SEABOARD DR	HM1	10/1/2009 1:25	OEM
LOE091001019797	HOGAN RD&REGENT DR	HM1	10/1/2009 2:08	OEM
LOE091001019812	11TH AV N&CHARLOTTE AV	HM1	10/1/2009 8:50	PW143
	11TH AV N&CHARLOTTE AV	HM1		PW144
LOE091001019821	I440 E&I24 E	HM1	10/1/2009 11:16	OEM
LOE091002019911	BOATNER DR&MOORMANS ARM RD	PWHAZ	10/2/2009 16:19	PWRD
	BOATNER DR&MOORMANS ARM RD	PWHAZ		PW149
	BOATNER DR&MOORMANS ARM RD	PWHAZ		PW144
LOE091002019928	137 ARCHWOOD PL	HM1	10/2/2009 19:49	GAS
LOE091003019999	1422 IRELAND ST	HM1	10/3/2009 22:41	OEM
LOE091005020063	124 PINEYWOOD ACRES DR	HM1	10/5/2009 12:48	GAS
LOE091006020156	2724 ELM HILL PKE	HM1	10/6/2009 20:09	GAS
LOE091007020169	N 16TH ST&EASTLAND AV	HM1	10/7/2009 6:32	GAS
LOE091008020269	3101 CLARKSVILLE PKE	HM1	10/8/2009 10:31	GAS
LOE091008020274	I40 E&4TH AV S	HM1	10/8/2009 11:08	OEM
LOE091008020286	5705 CHARLOTTE PKE	HM1	10/8/2009 13:45	PW149
LOE091008020302	SPEARS RD&RICHMOND HILL DR	HM1	10/8/2009 17:51	PW149
	SPEARS RD&RICHMOND HILL DR	HM1		PWRD
LOE091008020309	2ND AV N&BROADWAY	HM1	10/8/2009 20:40	PWHAZ
LOE091009020382	DOMINICAN DR&ROSA L PARKS BLVI	HM1	10/9/2009 16:27	PWRD
LOE091009020385	2115 YEAMAN PL	HM1	10/9/2009 17:16	PW149
LOE091009020391	LITTON AV&GALLATIN PKE	HM1	10/9/2009 18:15	GAS
LOE091010020420	5029 DOVECOTE DR	HM1	10/10/2009 8:08	GAS
LOE091010020445	N 14TH ST&EASTLAND AV	HM1	10/10/2009 15:58	GAS
LOE091011020469	I65 S&HARDING PL	HM1	10/11/2009 6:46	OEM
LOE091012020525	2027 28TH AV N	HM1	10/12/2009 5:58	OEM
LOE091012020531	1208 BELLSHIRE DR	HM1	10/12/2009 7:40	GAS
LOE091012020588	3719 RICHLAND AV	HM1	10/12/2009 18:50	OEM
LOE091013020622	4306 HARDING PKE	HM1	10/13/2009 10:38	OEM
LOE091013020648	MURFREESBORO PKE&RURAL HILL R	HM1	10/13/2009 14:37	PW149
LOE091013020680	SPRING ST&DICKERSON PKE	HM1	10/13/2009 21:14	PWRD
	SPRING ST&DICKERSON PKE	HM1		PW144
LOE091014020750	5300 HICKORY HOLLOW LA	HM1	10/14/2009 20:10	OEM
LOE091015020763	5219 WHITES CREEK PKE	HM1	10/15/2009 4:51	GAS
LOE091015020797	NOLENSVILLE PKE&TANKSLEY AV	HM1	10/15/2009 11:27	PW149
LOE091015020833	NOLENSVILLE PKE&HARDING PL	HM1	10/15/2009 19:34	OEM
LOE091020021094	841 BRILEY PKWY	HM1	10/20/2009 10:38	GAS

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE091020021096	841 BRILEY PKWY	HM1	10/20/2009 10:46	GAS
LOE091021021141	1203 CHESTER AV	HM1	10/21/2009 2:47	OEM
LOE091021021170	315 UNION ST	HM1	10/21/2009 10:20	GAS
LOE091022021250	8324 NUNAHI TRL	HM1	10/22/2009 14:13	PWRD
LOE091024021396	3409 GALLATIN PKE	HM1	10/24/2009 20:51	OEM
LOE091024021398	NOLENSVILLE PKE&ZOO RD	HM1	10/24/2009 21:50	OEM
LOE091025021409	NOCTURNE FOREST DR&W NOCTURN	HM1	10/25/2009 13:09	GAS
LOE091025021421	1024 44TH AV N	HM1	10/25/2009 19:25	OEM
LOE091025021426	1704 4TH AV N	HM1	10/25/2009 22:12	OEM
LOE091026021437	28TH AV N&CLIFTON AV	HM1	10/26/2009 4:51	OEM
	28TH AV N&CLIFTON AV	HM1		PW144
LOE091026021482	7095 HWY 70 S	HM1	10/26/2009 17:04	GAS
LOE091027021548	RECOVERY RD&WALLACE RD	HM1	10/27/2009 15:55	PW147
	RECOVERY RD&WALLACE RD	HM1		PWRD
	RECOVERY RD&WALLACE RD	HM1		PW149
LOE091028021606	I24 W&I440 E	HM1	10/28/2009 8:52	CAR9
	I24 W&I440 E	HM1		STATE
	I24 W&I440 E	HM1		WATER
LOE091028021645	2230 SCOTT AV	HM1	10/28/2009 16:18	GAS
LOE091029021675	3913 CHARLOTTE AV	HM1	10/29/2009 8:28	GAS
LOE091029021699	3708 HILLSBORO PKE	HM1	10/29/2009 15:04	PW149
LOE091030021763	73 CONCORD PRK W	HM1	10/30/2009 11:03	GAS
LOE091030021787	MM 205 I40 W	HM1	10/30/2009 13:47	GAS
LOE091030021815	6TH AV N&CHURCH ST	HM1	10/30/2009 17:49	GAS
LOE091101021936	3136 LARKSPUR DR	HM1	11/1/2009 20:21	OEM
LOE091102021958	601 VILLAGE CT	HM1	11/2/2009 9:39	GAS
LOE091102022006	515 FREDA VILLA	HM1	11/2/2009 20:52	GAS
LOE091103022021	ALABAMA AV&46TH AV N	HM1	11/3/2009 7:13	PW144
LOE091103022022	1117 DOUGLAS AV	HM1	11/3/2009 7:16	GAS
LOE091103022034	108 THOMPSON LA	HM1	11/3/2009 9:10	GAS
LOE091103022036	5TH AV N&CHURCH ST	HM1	11/3/2009 9:18	PW143
LOE091103022049	THOMPSON PL&MURFREESBORO PKE	HM1	11/3/2009 13:01	PW143
LOE091103022050	MM 42 8 I24 W	HM2	11/3/2009 13:00	CAR9
	MM 42 8 I24 W	HM2		PW144
LOE091103022083	MM 196 I40 W	HM1	11/3/2009 19:14	OEM
LOE091104022144	5787 NOLENSVILLE PKE	HM1	11/4/2009 15:40	GAS
LOE091105022184	MURFREESBORO PKE&OLD HICKORY	HM1	11/5/2009 9:38	PW143
LOE091105022185	MURFREESBORO PKE&OLD HICKORY	HM1	11/5/2009 9:41	PW143
LOE091105022186	MM 52 4 I24 W	HM1	11/5/2009 9:44	STATE
	MM 52 4 I24 W	HM1		PW143
	MM 52 4 I24 W	HM1		OEM
LOE091105022188	I24 W&I440 W ENT RAMP	HM1	11/5/2009 9:43	STATE
LOE091105022189	MM 52 4 I24 W	HM1	11/5/2009 10:06	PW143
LOE091105022214	550 METROPLEX DR	HM1	11/5/2009 15:03	OEM
	550 METROPLEX DR	HM1		PW149
LOE091105022235	3115 UNION HILL RD	HM1	11/5/2009 20:09	OEM
LOE091106022294	2948 NAUTILUS DR	HM1	11/6/2009 16:59	GAS
LOE091106022311	500 HICKORY HILLS BLVD	HM1	11/6/2009 22:19	OEM
LOE091107022335	405 COVENTRY DR	HM1	11/7/2009 11:41	OEM

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE091107022360	1012 CALDWELL LA	HM1	11/7/2009 21:49	GAS
LOE091108022399	108 THRIBLE SPRINGS CT	HM1	11/8/2009 15:32	GAS
	108 THRIBLE SPRINGS CT	HM1		OEM
LOE091109022462	1016 VIRGINIA AV	HM1	11/9/2009 13:18	GAS
LOE091109022474	1537 MEADOW BEND DR	HM1	11/9/2009 17:36	PW147
LOE091110022505	8030 HWY 100	HM1	11/10/2009 8:22	GAS
LOE091110022508	8030 HWY 100	HM1	11/10/2009 8:35	GAS
LOE091110022511	OLD HICKORY BLVD&SHUTE LA	HM1	11/10/2009 8:44	GAS
LOE091111022581	2ND AV N&COMMERCE ST	HM1	11/11/2009 14:35	PWCOM
LOE091111022583	160 2ND AVE NO	HM1	11/11/2009 14:47	PW147
LOE091111022606	408 BROADWAY	HM1	11/11/2009 20:02	PW149
LOE091112022636	575 JOYCE LA	HM1	11/12/2009 10:16	CAR9
	575 JOYCE LA	HM1		GAS
	575 JOYCE LA	HM1		PW144
	575 JOYCE LA	HM1		SCHSC
	575 JOYCE LA	HM1		WATER
LOE091112022637	575 JOYCE LA	HM1	11/12/2009 10:16	OEM
	575 JOYCE LA	HM1		GAS
LOE091112022638	575 JOYCE LA	HM1	11/12/2009 10:21	CAR9
	575 JOYCE LA	HM1		OEM
	575 JOYCE LA	HM1		SCHSC
LOE091112022643	575 JOYCE LA	HM1	11/12/2009 11:54	WATER
LOE091113022692	505 HEARTHSTONE CIR	HM1	11/13/2009 9:27	GAS
LOE091113022742	JEFFERSON DAVIS CT&SASSAFRAS P	HM1	11/13/2009 23:52	OEM
LOE091114022753	RIDGEWAY DR&CROSSFIELD DR	HM1	11/14/2009 8:49	PWRD
	RIDGEWAY DR&CROSSFIELD DR	HM1		PW149
LOE091114022789	150 2ND AV S	HM1	11/14/2009 16:59	GAS
LOE091114022792	OLD HICKORY BLVD&DODSON CHAP	HM1	11/14/2009 18:06	PWRD
	OLD HICKORY BLVD&DODSON CHAP	HM1		PW143
LOE091115022830	58 BROOKWOOD TER	HM1	11/15/2009 17:42	GAS
LOE091118022965	830 GLASTONBURY RD	HM1	11/18/2009 10:51	GAS
LOE091118022984	3200 CLARKSVILLE PKE	HM1	11/18/2009 16:09	OEM
LOE091118022986	3200 CLARKSVILLE PKE	HM1	11/18/2009 16:17	OEM
LOE091118022988	3200 CLARKSVILLE PKE	HM1	11/18/2009 16:29	OEM
LOE091119023022	EXIT 196 I40 W	HM1	11/19/2009 9:18	OEM
	EXIT 196 I40 W	HM1		THELP
LOE091119023056	HARDING PL&SIDCO DR	HM1	11/19/2009 17:40	GAS
LOE091119023061	121 COMMERCE ST	HM1	11/19/2009 18:33	GAS
LOE091120023078	3820 MURFREESBORO PKE	HM1	11/20/2009 8:52	GAS
LOE091121023133	5101 HARDING PL	HM1	11/21/2009 7:31	GAS
LOE091122023193	EXIT 96 I65 N	HM1	11/22/2009 10:52	STATE
LOE091123023246	32ND AV S&ORLEANS DR	HM1	11/23/2009 11:47	PW149
LOE091124023294	MM 42 I24 E	HM1	11/24/2009 8:19	OEM
LOE091125023371	N GALLATIN PKE&WILLIAMS AV	HM1	11/25/2009 14:29	PWRD
	N GALLATIN PKE&WILLIAMS AV	HM1		PW149
LOE091127023427	HAMILTON CROSSINGS&MURFREESB	HM1	11/27/2009 5:00	GAS
LOE091128023499	505 WESTCREST DR	HM1	11/28/2009 17:00	OEM
LOE091128023509	2400 MUSIC VALLEY DR	HM1	11/28/2009 20:31	OEM
LOE091129023517	GALLATIN PKE&BRILEY PKWY	PWHAZ	11/29/2009 1:33	PWHAZ

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE091129023521	1710 ARTHUR AV	HM1	11/29/2009 8:11	GAS
LOE091201023619	704 GLENVIEW DR	HM1	12/1/2009 0:12	OEM
LOE091201023648	350 FORREST VALLEY DR	HM1	12/1/2009 12:15	GAS
LOE091202023687	4040 NOLENSVILLE PKE	HM1	12/2/2009 0:48	PWHAZ
LOE091202023735	APOLLO DR&UNA ANTIOCH PKE	HM1	12/2/2009 18:51	PWRD
	APOLLO DR&UNA ANTIOCH PKE	HM1		PW149
LOE091204023845	5255 HICKORY HOLLOW PKWY	HM1	12/4/2009 14:15	GAS
LOE091205023886	178 TOWNES DR	HM1	12/5/2009 9:33	OEM
	178 TOWNES DR	HM1		GAS
LOE091205023914	6565 PREMIER DR	HM1	12/5/2009 20:25	OEM
	6565 PREMIER DR	HM1		GAS
LOE091205023916	1107 RIDGEVIEW DR	HM1	12/5/2009 21:37	OEM
LOE091206023922	1060 OLD HICKORY BLVD	HM1	12/6/2009 2:28	OEM
LOE091207023990	110 SHUTE LA	HM1	12/7/2009 12:43	GAS
LOE091209024134	5655 FRIST BLVD	HM1	12/9/2009 8:15	PWRD
LOE091210024262	HAYWOOD LA&I24 E	HM1	12/10/2009 2:23	OEM
LOE091210024263	HAYWOOD LA&I24 E	HM1	12/10/2009 2:31	PW
	HAYWOOD LA&I24 E	HM1		NES
LOE091210024310	4900 JOHN HAGAR RD	HM1	12/10/2009 13:20	GAS
LOE091212024464	7941 SAWYER BROWN RD	HM1	12/12/2009 12:41	GAS
LOE091212024465	7941 SAWYER BROWN RD	HM1	12/12/2009 12:43	GAS
LOE091213024491	907 STOCKELL ST	HM1	12/13/2009 0:30	OEM
LOE091213024528	5600 CHARLOTTE PKE	HM1	12/13/2009 17:45	OEM
LOE091214024558	2360 ANTIOCH PKE	HM1	12/14/2009 11:15	GAS
LOE091214024567	7615 HWY 70 S	HM1	12/14/2009 13:19	PWRD
LOE091214024581	3035 HAMILTON CHURCH RD	HM1	12/14/2009 17:28	PW
	3035 HAMILTON CHURCH RD	HM1		PW149
LOE091216024661	MOLLOY ST&1ST AV S	HM1	12/16/2009 8:28	GAS
LOE091216024702	DONELSON PKE&ROYAL PKWY	HM1	12/16/2009 15:52	PW149
LOE091217024731	SPRING ST&S 5TH ST	HM1	12/17/2009 7:37	PW144
LOE091217024745	3920 CLARKSVILLE PKE	HM1	12/17/2009 10:51	GAS
LOE091218024784	128 2ND AV N	PWHAZ	12/18/2009 2:58	PWHAZ
LOE091218024785	6940 CHARLOTTE PKE	HM1	12/18/2009 3:51	PW
LOE091218024791	NEELYS BEND RD&S GALLATIN PKE	HM1	12/18/2009 7:53	PWRD
	NEELYS BEND RD&S GALLATIN PKE	HM1		PW144
LOE091219024843	711 UNION ST	PWHAZ	12/19/2009 2:11	PWHAZ
LOE091219024844	711 UNION ST	PWHAZ	12/19/2009 2:16	PWHAZ
LOE091219024859	DAVIDSON DR&CHARLOTTE PKE	HM1	12/19/2009 9:38	GAS
LOE091219024870	7407 OLD CHARLOTTE PKE	HM1	12/19/2009 14:30	GAS
LOE091219024879	227 SHELBY AV	HM1	12/19/2009 19:47	OEM
LOE091219024880	227 SHELBY AV	HM1	12/19/2009 19:51	OEM
LOE091220024906	600 WHISPERING HILLS DR	HM1	12/20/2009 18:30	GAS
LOE091222025007	160 MCGAVOCK PKE	HM1	12/22/2009 10:33	GAS
LOE091223025073	4119 LEBANON PKE	HM1	12/23/2009 12:37	PW143
	4119 LEBANON PKE	HM1		PWRD
LOE091224025166	2712 NASHBORO BLVD	HM1	12/24/2009 17:36	OEM
LOE091226025283	3046 DICKERSON PKE	HM1	12/26/2009 9:13	OEM
LOE091227025353	3200 CLARKSVILLE PKE	HM1	12/27/2009 16:24	OEM
LOE091228025416	1250 SIOUX TER	HM1	12/28/2009 16:41	GAS

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE091229025444	I440 W&I65 N RMP	HM1	12/29/2009 9:16	THELP
LOE091229025454	200 4TH AV N	HM1	12/29/2009 12:30	GAS
LOE091229025456	200 4TH AV N	HM1	12/29/2009 12:37	GAS
LOE091229025482	3973 NOLENSVILLE PKE	HM1	12/29/2009 20:43	GAS
LOE091230025549	1213 DEERHAVEN CT	HM1	12/30/2009 23:41	GAS
LOE091231025568	141 NEESE DR	HM1	12/31/2009 11:05	PW143
	141 NEESE DR	HM1		WATER
LOE091231025593	BELL RD&BLUE HOLE RD	HM1	12/31/2009 15:33	GAS
LOE100101000035	BUENA VISTA PKE&TUCKER RD	HM1	1/1/2010 17:42	OEM
LOE100101000054	1101 BROADWAY	HM1	1/1/2010 23:13	OEM
LOE100102000064	OLD HICKORY BLVD&JUAREZ DR	HM1	1/2/2010 8:44	STATE
LOE100103000117	2101 8TH AV S	HM1	1/3/2010 0:56	GAS
LOE100103000134	CONFERENCE DR&VIETNAM VET BLV	HM1	1/3/2010 10:57	PWRD
LOE100105000281	NATCHEZ TRACE&BLAKEMORE AV	HM1	1/5/2010 9:19	PW144
	NATCHEZ TRACE&BLAKEMORE AV	HM1		PWRD
LOE100106000364	1710 ARTHUR AV	HM1	1/6/2010 4:33	OEM
LOE100106000446	1802 SWEETBRIAR AV	HM1	1/6/2010 19:04	GAS
LOE100106000466	615 CHARLES E DAVIS BLVD	PWHAZ	1/6/2010 22:14	PWW
	615 CHARLES E DAVIS BLVD	PWHAZ		PWHAZ
	615 CHARLES E DAVIS BLVD	PWHAZ		PW144
LOE100106000473	704 BERRY RD	HM1	1/6/2010 22:40	GAS
LOE100107000515	DICKERSON PKE&GATEWOOD AV	HM1	1/7/2010 10:00	PW144
LOE100107000680	1400 GOULD BLVD	HM1	1/7/2010 15:40	GAS
LOE100108001119	BELMONT BLVD&SHACKLEFORD RD	HM1	1/8/2010 22:35	OEM
LOE100108001121	1033 16TH AV N	HM1	1/8/2010 22:40	OEM
LOE100108001142	BELMONT BLVD&SHACKLEFORD RD	HM1	1/8/2010 23:11	GAS
	BELMONT BLVD&SHACKLEFORD RD	HM1		OEM
LOE100109001191	804 CLEVES ST	HM1	1/9/2010 2:48	OEM
LOE100109001302	585 STEWARTS FERRY PKE	HM1	1/9/2010 18:00	OEM
LOE100110001408	HOBSON PKE&PIN HOOK RD	HM1	1/10/2010 20:45	OEM
LOE100111001447	1041 TONYAWOOD DR	HM1	1/11/2010 7:59	GAS
LOE100111001493	23RD AV N&CLARKSVILLE PKE	HM1	1/11/2010 14:01	GAS
LOE100111001522	905 BIRCHMILL POINT S	HM1	1/11/2010 19:47	GAS
LOE100112001599	FIRESTONE PKWY&OLD HICKORY BL	HM1	1/12/2010 18:06	GAS
LOE100113001638	OLD HICKORY BLVD W&I65 S EXT R	HM1	1/13/2010 8:01	THELP
	OLD HICKORY BLVD W&I65 S EXT R	HM1		STATE
LOE100113001697	BUENA VISTA PKE&MATTIE ST	HM1	1/13/2010 22:45	GAS
LOE100114001710	3940 APACHE TRL	HM1	1/14/2010 3:04	PW
LOE100114001740	317 MYATT DR	HM1	1/14/2010 14:04	OEM
LOE100116001856	100 46TH AV N	HM1	1/16/2010 15:32	GAS
LOE100117001917	CENTENNIAL BLVD&BRILEY N ENT R	HM1	1/17/2010 15:15	PW147
	CENTENNIAL BLVD&BRILEY N ENT R	HM1		PW144
	CENTENNIAL BLVD&BRILEY N ENT R	HM1		OEM
LOE100118001960	2420 MUSIC VALLEY DR	HM1	1/18/2010 12:21	OEM
LOE100118001973	441 HARDING PL	HM1	1/18/2010 16:46	OEM
LOE100118001977	CLARKSVILLE PKE&KOLZ LA	HM1	1/18/2010 17:43	PWE
LOE100118001978	OLD HICKORY BLVD&NOLENSVILLE	HM1	1/18/2010 18:27	OEM
LOE100119002039	2734 MCCAMPBELL AV	HM1	1/19/2010 21:38	GAS
LOE100120002043	1320 ANTIOCH PKE	PWHAZ	1/20/2010 5:12	PW144
	1320 ANTIOCH PKE	PWHAZ		PWHAZ

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE100120002081	5978 EDMONDSON PKE	HM1	1/20/2010 14:44	GAS
LOE100121002153	2200 CHARLOTTE AV	HM1	1/21/2010 16:15	PW149
	2200 CHARLOTTE AV	HM1		OEM
LOE100121002171	2200 PIERCE AV	HM2	1/21/2010 21:24	OEM
LOE100122002208	807 MAIN ST	PWHAZ	1/22/2010 13:19	PWRD
	807 MAIN ST	PWHAZ		PW144
LOE100122002212	5400 CENTENNIAL BLVD	HM1	1/22/2010 14:40	OEM
LOE100124002301	3107 BELWOOD ST	HM1	1/24/2010 4:04	GAS
LOE100127002528	I24 W&HICKORY HOLLOW PKWY	HM1	1/27/2010 8:28	GAS
LOE100127002568	15 BURTON HILLS BLVD	HM1	1/27/2010 17:47	OEM
LOE100127002578	217 38TH AV N	HM1	1/27/2010 20:14	GAS
LOE100130003101	HARLIN DR&LOUISE DR	HM1	1/30/2010 21:09	GAS
LOE100130003105	5213 WHISPERING VALLEY DR	HM1	1/30/2010 21:29	GAS
LOE100131003323	1002 INDUSTRIAL DR	HM1	1/31/2010 14:55	GAS
LOE100131003391	MM 46 8 I24 W	HM1	1/31/2010 20:01	OEM
LOE100201003486	BELL RD&MURFREESBORO PKE	HM1	2/1/2010 8:43	GAS
LOE100201003503	2788 MURFREESBORO PKE	HM1	2/1/2010 9:23	GAS
LOE100201003559	MM 60 I24 W	HM1	2/1/2010 14:36	OEM
LOE100201003561	WEST END AV&31ST AV N	HM1	2/1/2010 15:02	PW147
LOE100201003597	4807 TENNESSEE AV	HM1	2/1/2010 17:52	GAS
LOE100201003614	806 MERIDIAN ST	HM1	2/1/2010 19:21	GAS
LOE100202003699	2315 CLIFTON AV	HM2	2/2/2010 15:16	OEM
LOE100203003792	KOREAN VETERANS BLVD&4TH AV S	HM1	2/3/2010 21:23	GAS
LOE100204003829	I24 E&HARDING PL	HM1	2/4/2010 15:00	OEM
LOE100204003837	800 THOMPSON AV	HM1	2/4/2010 15:24	OEM
LOE100205003914	3930 CLARKSVILLE PKE	HM1	2/5/2010 14:02	GAS
LOE100205003916	I440 E&WEST END AV	HM1	2/5/2010 14:57	OEM
LOE100205003942	724 2ND AV S	HM1	2/5/2010 19:30	OEM
LOE100205003943	724 2ND AV S	HM1	2/5/2010 19:53	GAS
LOE100206003984	701 DICKERSON PKE	HM1	2/6/2010 14:17	PW144
	701 DICKERSON PKE	HM1		PW149
	701 DICKERSON PKE	HM1		OEM
LOE100207004004	4880 PEPPERTREE DR	HM1	2/7/2010 3:10	GAS
LOE100207004035	3744 ANNEX AV	HM1	2/7/2010 16:12	WATER
LOE100207004035	3744 ANNEX AV	HM1	2/7/2010 16:12	OEM
LOE100207004036	3744 ANNEX AV	HM1	2/7/2010 16:24	WATER
LOE100209004193	I40 E&DONELSON PKE	HM2	2/9/2010 5:11	OEM
LOE100209004203	5007 INGLEWOOD CT	HM1	2/9/2010 8:29	GAS
LOE100209004207	5007 INGLEWOOD CT	HM1	2/9/2010 8:41	GAS
LOE100211004470	1000 AMBERWOOD CIR	HM1	2/11/2010 18:10	OEM
LOE100211004482	116 RIFLE RANGE RD	HM1	2/11/2010 21:52	GAS
LOE100214004662	1204 14TH AV S	HM1	2/14/2010 21:17	OEM
LOE100215004671	I65 N&W TRINITY LA	HM1	2/15/2010 2:24	OEM
LOE100215004672	I65 N&W TRINITY LA	HM1	2/15/2010 2:40	OEM
LOE100215004745	8141 HWY 100	HM1	2/15/2010 9:45	GAS
LOE100215004746	8141 HWY 100	HM1	2/15/2010 9:55	GAS
LOE100216004851	1524 GALLATIN AV	HM1	2/16/2010 23:25	GAS
LOE100216004852	1524 GALLATIN AV	HM1	2/16/2010 23:42	GAS
LOE100217004868	S 1ST ST&WOODLAND ST	PWHAZ	2/17/2010 9:20	PW144

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE100217004873	330 WALLACE RD	HM1	2/17/2010 10:32	GAS
LOE100218004930	5621 FRANKLIN PKE	HM1	2/18/2010 9:03	GAS
LOE100218004980	3200 CLARKSVILLE PKE	HM1	2/18/2010 17:25	GAS
LOE100218004995	1913 DELTA AV	HM1	2/18/2010 22:14	OEM
LOE100219004999	3976 DICKERSON PKE	HM1	2/19/2010 0:06	GAS
	3976 DICKERSON PKE	HM1		OEM
LOE100219005017	1008 PATRICIA DR	HM1	2/19/2010 8:56	GAS
LOE100219005026	5211 LINBAR DR	HM1	2/19/2010 12:53	GAS
LOE100219005042	N GRAYCROFT AV&NESBITT LA	HM1	2/19/2010 17:24	GAS
LOE100219005050	712 N GRAYCROFT AV	HM1	2/19/2010 18:43	
LOE100219005051	N GRAYCROFT AV&NESBITT LA	HM1	2/19/2010 19:16	
LOE100219005052	3838 SAM BONEY DR	HM1	2/19/2010 19:21	GAS
LOE100219005053	NOLENSVILLE PKE&ZOO RD	HM1	2/19/2010 19:58	GAS
LOE100219005054	909 RONNIE RD	HM1	2/19/2010 19:56	
LOE100219005055	643 DURRETT DR	HM1	2/19/2010 20:16	
LOE100219005056	NOLENSVILLE PKE&ZOO RD	HM1	2/19/2010 20:18	
LOE100219005057	NOLENSVILLE PKE&ELYSIAN FIELDS	HM1	2/19/2010 20:21	
LOE100219005058	MURFREESBORO PKE&ELM HILL PKE	HM1	2/19/2010 20:28	PWW
LOE100219005059	MURFREESBORO PKE&ELM HILL PKE	HM1	2/19/2010 21:48	STATE
LOE100220005093	VERNON AV&ROBERTSON AV	HM1	2/20/2010 16:58	GAS
LOE100221005127	2129 15TH AV N	HM1	2/21/2010 10:14	GAS
LOE100221005129	714 DUE WEST AV N	HM1	2/21/2010 10:59	OEM
LOE100224005299	2100 WATERFORD CIR	PWHAZ	2/24/2010 6:11	PWHAZ
LOE100224005314	N 1ST ST&MAIN ST	HM1	2/24/2010 12:05	GAS
LOE100224005339	ROBERTSON AV&VERNON AV	HM1	2/24/2010 18:34	OEM
LOE100225005356	1208 LISCHEY AV	HM1	2/25/2010 8:48	GAS
LOE100225005363	7029 ALLENS LA	HM1	2/25/2010 11:16	OEM
LOE100225005373	JAMES ROBERTSON PKWY&2ND AV N	HM1	2/25/2010 13:10	PW147
	JAMES ROBERTSON PKWY&2ND AV N	HM1		PWRD
LOE100225005409	CURREY RD&E THOMPSON LA	HM1	2/25/2010 21:00	GAS
LOE100226005437	PLYMOUTH AV&RIVERWOOD DR	HM1	2/26/2010 11:19	PW144
LOE100228005578	37TH AV N&SENTINEL DR	HM2	2/28/2010 16:35	OEM
LOE100301005650	108 KENAUM CT	HM1	3/1/2010 23:05	GAS
LOE100301005651	108 KENAUM CT	HM1	3/1/2010 23:13	
LOE100302005678	OLD HICKORY BLVD&VAUGHN RD	HM1	3/2/2010 13:14	OEM
LOE100305005828	1710 ARTHUR AV	HM1	3/5/2010 6:30	GAS
LOE100305005829	1710 ARTHUR AV	HM1	3/5/2010 6:55	
LOE100305005880	201 CARTWRIGHT ST	HM1	3/5/2010 17:49	OEM
LOE100307005941	MAIN ST&S 5TH ST	PWHAZ	3/7/2010 1:57	PWHAZ
LOE100308005986	1044 FIRESTONE PKWY	HM1	3/8/2010 0:44	OEM
LOE100308006003	1512 BEECHWOOD AV	HM1	3/8/2010 8:00	GAS
LOE100308006025	935 HERMAN ST	HM1	3/8/2010 14:08	OEM
LOE100312006279	I24 E&I40 W	HM1	3/12/2010 9:51	STATE
LOE100313006352	600 WHISPERING HILLS DR	HM1	3/13/2010 15:27	GAS
LOE100315006463	800 CRESCENT HILL RD	HM1	3/15/2010 15:35	GAS
LOE100316006524	3022 PENN MEADE WY	HM2	3/16/2010 19:35	OEM
LOE100318006607	46TH AV N&IDAHO AV	PWHAZ	3/18/2010 14:27	PWRD
	46TH AV N&IDAHO AV	PWHAZ		PW149

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE100319006663	JEFFERSON ST&I40 E	HM1	3/19/2010 12:36	
LOE100319006679	1015 FOXWOOD RD	HM1	3/19/2010 19:17	OEM
LOE100319006686	1101 BROADWAY	HM1	3/19/2010 21:51	OEM
LOE100320006691	433 OPRY MILLS DR	HM1	3/20/2010 2:11	OEM
LOE100320006706	LEBANON PKE&OLD HICKORY BLVD	HM1	3/20/2010 11:24	
LOE100321006729	3RD AV N&DEADERICK ST	HM1	3/21/2010 7:09	PW144
	3RD AV N&DEADERICK ST	HM1		OEM
LOE100321006745	MM 206 I40 W	HM1	3/21/2010 13:48	GAS
LOE100322006777	4116 NOLENSVILLE PKE	HM1	3/22/2010 6:53	GAS
LOE100323006852	STRATFORD AV&MCGAVOCK PKE	HM1	3/23/2010 9:46	PW144
LOE100323006875	1916 KINGSBURY DR	HM1	3/23/2010 16:38	GAS
LOE100324006950	7300 CENTENNIAL BLVD	HM1	3/24/2010 17:24	OEM
LOE100324006965	607 RIVER RIDGE CT	HM1	3/24/2010 21:43	OEM
LOE100325006986	THOMPSON LA&NOLENSVILLE PKE	HM1	3/25/2010 8:54	GAS
LOE100325007025	NOLENSVILLE PKE&THOMPSON LA	HM1	3/25/2010 17:01	GAS
LOE100325007045	1706 TURNER ST	HM1	3/25/2010 18:45	GAS
LOE100326007070	2131 ELM HILL PKE	HM1	3/26/2010 5:44	OEM
LOE100326007132	NOLENSVILLE PKE&THOMPSON LA	HM1	3/26/2010 19:56	OEM
LOE100326007138	315 GARDEN VIEW CT	HM1	3/26/2010 21:44	
LOE100329007276	608 HAMBLEN DR	PWHAZ	3/29/2010 9:29	PW144
LOE100329007279	1450 LEBANON PKE	HM1	3/29/2010 10:20	OEM
LOE100330007375	MURFREESBORO PKE&SPENCE LA	HM1	3/30/2010 18:31	
LOE100330007381	DONELSON PKE&I40 E	HM1	3/30/2010 19:19	OEM
LOE100331007413	TULIP GROVE RD&LEBANON PKE	HM1	3/31/2010 11:46	GAS
LOE100331007447	1618 LINDEN AV	HM1	3/31/2010 17:25	OEM
LOE100331007462	S DOUGLAS AV&10TH AV S	HM1	3/31/2010 19:39	GAS
LOE100401007519	581 MURFREESBORO PKE	HM1	4/1/2010 16:47	GAS
LOE100402007566	4989 LEBANON PKE	HM1	4/2/2010 11:06	PWRD
	4989 LEBANON PKE	HM1		OEM
LOE100402007579	501 BROADWAY	HM1	4/2/2010 14:27	PW149
LOE100402007583	701 BROADWAY	HM1	4/2/2010 16:05	PW149
LOE100402007599	HARDING PKE&HWY 100	HM1	4/2/2010 18:38	OEM
LOE100405007754	3677 CHESAPEAKE DR	HM1	4/5/2010 0:40	GAS
LOE100405007766	BELL RD&BLUE HOLE RD	HM1	4/5/2010 8:13	GAS
LOE100406007903	1310 CORELAND DR	HM1	4/6/2010 19:34	
LOE100406007904	I65 S&W TRINITY LA	HM1	4/6/2010 19:48	OEM
LOE100408007988	8TH AV S&DEMONBREUN ST	HM1	4/8/2010 6:10	GAS
LOE100409008067	2540 FOREST VIEW DR	HM1	4/9/2010 8:59	
LOE100409008081	MM 26 BRILEY S	HM1	4/9/2010 11:37	GAS
LOE100409008084	MM 56 I24 W	HM2	4/9/2010 12:04	CAR9
	MM 56 I24 W	HM2		THELP
	MM 56 I24 W	HM2		TEMA
	MM 56 I24 W	HM2		OEM
LOE100409008088	NOLENSVILLE PKE&MCMURRAY DR	HM2	4/9/2010 12:29	PW144
	NOLENSVILLE PKE&MCMURRAY DR	HM2		OEM
LOE100409008089	NOLENSVILLE PKE&MCMURRAY DR	HM2	4/9/2010 12:40	
LOE100409008115	6424 EDSEL DR	HM1	4/9/2010 20:38	GAS
LOE100411008196	HARDING PL&I65 S	HM1	4/11/2010 12:50	GAS
LOE100411008199	29TH AV N&WEST END AV	HM1	4/11/2010 14:40	OEM

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE100411008204	2829 WEST END AV	HM1	4/11/2010 15:39	OEM
LOE100411008217	OLD HICKORY BLVD W&I65 S	HM1	4/11/2010 20:06	OEM
LOE100412008242	2622 ESSEX PL	HM1	4/12/2010 10:55	GAS
LOE100412008243	2622 ESSEX PL	HM1	4/12/2010 11:05	GAS
LOE100412008266	300 MCCANN ST	HM1	4/12/2010 16:47	OEM
LOE100414008376	4108 TEA GARDEN WY	HM1	4/14/2010 12:47	GAS
LOE100414008393	100 CHEROKEE CT	HM1	4/14/2010 15:59	GAS
LOE100414008394	100 CHEROKEE HILLS DR	HM1	4/14/2010 16:18	
LOE100414008412	2200 BRICK CHURCH PKE	HM1	4/14/2010 20:03	OEM
LOE100414008420	UNION ST&CAPITOL BLVD	PWHAZ	4/14/2010 23:43	PWHAZ
	UNION ST&CAPITOL BLVD	PWHAZ		PW149
LOE100415008457	150 MCGAVOCK PKE	HM1	4/15/2010 14:09	OEM
LOE100415008469	1700 WEST END AV	HM1	4/15/2010 17:09	OEM
LOE100417008570	1121 CALVIN AV	HM1	4/17/2010 17:50	GAS
LOE100419008629	200 E WEBSTER ST	HM1	4/19/2010 7:36	OEM
LOE100421008752	15007 OLD HICKORY BLVD	HM1	4/21/2010 13:52	OEM
LOE100421008758	125 AMHERST WY	HM1	4/21/2010 15:38	GAS
LOE100421008763	804 ONEIDA AV	HM1	4/21/2010 16:18	GAS
LOE100421008772	1101 BROADWAY	HM1	4/21/2010 20:11	OEM
LOE100422008827	578 PARK HILL	HM1	4/22/2010 17:25	OEM
LOE100422008834	2001 BELMONT BLVD	HM1	4/22/2010 20:09	PW
LOE100422008836	4577 BULL RUN RD	HM1	4/22/2010 21:28	GAS
LOE100423008857	ROBERTSON AV&BRILEY PKWY	HM1	4/23/2010 11:25	PWRD
LOE100424009014	NOLENSVILLE PKE&TUSCULUM RD	HM1	4/24/2010 19:56	
LOE100426009134	2202 HERMOSA ST	HM1	4/26/2010 15:35	OEM
LOE100426009145	4920 THOROUGHBRED LA	HM1	4/26/2010 19:28	OEM
LOE100426009150	1909 HAYES ST	HM1	4/26/2010 23:42	GAS
LOE100428009232	1007 N 5TH ST	HM1	4/28/2010 11:27	GAS
LOE100428009244	WOODMONT BLVD&ESTES RD	HM1	4/28/2010 14:31	PW149
LOE100428009247	3518 GALLATIN PKE	HM1	4/28/2010 15:12	GAS
LOE100430009332	1825 12TH AV N	PWHAZ	4/30/2010 0:22	PWHAZ
LOE100501009667	4112 ROCKDALE AV	HM1	5/1/2010 15:43	GAS
LOE100501009675	317 RADNOR ST	HM1	5/1/2010 15:47	GAS
LOE100501009759	593 STEWARTS FERRY PKE	HM1	5/1/2010 17:12	GAS
LOE100501009795	511 CLUBHOUSE CT	HM1	5/1/2010 17:43	GAS
LOE100501009805	1226 MCGAVOCK PKE	HM1	5/1/2010 17:56	
LOE100501009843	429 KINGVIEW CT	HM1	5/1/2010 18:53	GAS
LOE100501009876	126 BLACKBURN AV	HM1	5/1/2010 19:45	GAS
LOE100501009951	BLACKMAN CT&BLACKMAN RD	HM1	5/1/2010 22:13	GAS
LOE100502010067	5TH AV N&UNION ST	HM1	5/2/2010 5:27	
LOE100502010114	2215 N GALLATIN PKE	HM1	5/2/2010 7:25	GAS
LOE100502010163	ANTIOCH PKE&BLUE HOLE RD	HM1	5/2/2010 7:52	GAS
LOE100502010216	2106 GRANTLAND AV	HM1	5/2/2010 8:10	GAS
LOE100502010312	2028 COOPER LA	HM1	5/2/2010 9:01	GAS
LOE100502010418	EBENWAY DR&WEST MEADE DR	PWHAZ	5/2/2010 10:10	
LOE100502010423	663 HARPETH BEND DR	HM1	5/2/2010 10:13	GAS
LOE100502010428	113 DELLWAY DR	HM1	5/2/2010 10:16	GAS
LOE100502010525	701 MURFREESBORO PKE	HM1	5/2/2010 11:25	GAS
LOE100502010562	102 LAUDERDALE RD	HM1	5/2/2010 11:49	GAS

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE100502010578	3903 MILFORD RD	HM1	5/2/2010 12:00	GAS
LOE100502010580	409 NORTHRIDGE CT	HM1	5/2/2010 11:59	GAS
LOE100502010591	URBANDALE AV&HEMSTEAD ST	HM1	5/2/2010 12:11	GAS
LOE100502010605	110 LUCILE ST	HM1	5/2/2010 12:16	
LOE100502010641	BRILEY PKWY&MCGAVOCK PKE	HM1	5/2/2010 12:42	GAS
LOE100502010645	110 LUCILE ST	HM1	5/2/2010 12:44	
LOE100502010650	1507 GOLF ST	HM1	5/2/2010 12:49	GAS
LOE100502010652	904 APEX ST	HM1	5/2/2010 12:51	GAS
LOE100502010671	909 WARREN ST	HM1	5/2/2010 13:06	GAS
LOE100502010677	JAMES AV&BRILEY PKWY	HM1	5/2/2010 13:15	GAS
LOE100502010687	1413 BRYAN ST	HM1	5/2/2010 13:19	GAS
LOE100502010707	1818 LOMBARDY AV	HM1	5/2/2010 13:28	GAS
LOE100502010717	810 RICHARDSON AV	HM1	5/2/2010 13:45	GAS
LOE100502010757	707 BOSCOBEL ST	HM1	5/2/2010 14:18	GAS
LOE100502010786	4963 TYNE RIDGE CT	HM1	5/2/2010 14:48	GAS
LOE100502010821	7872 HEATON WY	HM1	5/2/2010 15:26	GAS
LOE100502010830	MM 12 6 BRILEY N	HM1	5/2/2010 15:33	GAS
LOE100502010863	2361 MURFREESBORO PKE	HM1	5/2/2010 16:06	GAS
LOE100502010868	HITE ST&ROME AV	HM1	5/2/2010 16:14	GAS
LOE100502010910	8 LEWIS ST	HM1	5/2/2010 16:48	GAS
LOE100502010912	325 54TH AV N	HM1	5/2/2010 16:46	GAS
LOE100502010937	7004 COLLINSWOOD DR	HM1	5/2/2010 17:11	GAS
LOE100502010958	ROTHWOOD AV&IDLEWILD DR	HM1	5/2/2010 17:28	GAS
LOE100502010964	BUENA VISTA PKE&W HAMILTON AV	HM1	5/2/2010 17:33	GAS
LOE100502010974	DELRAY DR&MORROW RD	HM1	5/2/2010 17:45	GAS
LOE100502010979	810 RICHARDSON AV	HM1	5/2/2010 17:49	GAS
LOE100502010980	1004 DELRAY CT	HM1	5/2/2010 17:49	
LOE100502010984	900 MORROW RD	HM1	5/2/2010 17:55	
LOE100502010991	NOLENSVILLE PKE&MOORE AV	HM1	5/2/2010 18:02	GAS
LOE100502010998	906 TRAVELERS CT	HM1	5/2/2010 18:12	GAS
LOE100502011004	3234 TORBETT ST	HM1	5/2/2010 18:19	GAS
LOE100502011005	327 54TH AV N	HM1	5/2/2010 18:20	
LOE100502011007	1701 EVELYN AV	HM1	5/2/2010 18:28	WATER
LOE100502011014	906 TRAVELERS CT	HM1	5/2/2010 18:35	
LOE100502011021	1400 NEELYS BEND RD	HM1	5/2/2010 18:37	GAS
LOE100502011030	905 TRAVELERS CT	HM1	5/2/2010 18:49	
LOE100502011048	NOLENSVILLE PKE&4TH AV S	HM1	5/2/2010 19:24	
LOE100502011057	3903 MILFORD RD	HM1	5/2/2010 19:40	GAS
LOE100502011110	1809 STEWART PL	HM1	5/2/2010 20:45	GAS
LOE100502011116	1236 BERWICK TRL	HM1	5/2/2010 21:00	GAS
LOE100502011124	EZELL PKE&HARDING PL	HM1	5/2/2010 21:09	
LOE100502011128	847 BETH DR	HM1	5/2/2010 21:18	
LOE100502011129	BRILEY PKWY&URBANDALE AV	HM1	5/2/2010 21:15	GAS
LOE100502011144	BLACKWATER DR&HARPETH SPRING	HM1	5/2/2010 21:41	
LOE100502011150	1045 CAPITOL PT	HM1	5/2/2010 21:44	GAS
LOE100502011154	703 IDLEWILD DR	HM1	5/2/2010 21:52	GAS
LOE100502011156	CABIN HILL RD&MCGAVOCK PKE	HM2	5/2/2010 21:58	
LOE100502011160	515 BASSWOOD AV	HM1	5/2/2010 22:02	GAS
LOE100502011162	942 YOUNGS LA	HM1	5/2/2010 22:05	GAS

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE100502011164	NOLENSVILLE PKE&MOORE AV	HM1	5/2/2010 22:11	
LOE100502011167	2321 RIDGELAND DR	HM1	5/2/2010 22:13	GAS
LOE100502011183	689 DAVIDSON ST	HM1	5/2/2010 22:42	GAS
LOE100502011207	CANTON PASS&NEELYS BEND RD	HM1	5/2/2010 23:52	GAS
LOE100503011233	865 BELLEVUE RD	HM1	5/3/2010 0:57	GAS
LOE100503011236	2120 LEBANON PKE	HM1	5/3/2010 1:08	GAS
LOE100503011238	507 BELLE POINTE CT	HM1	5/3/2010 1:20	GAS
LOE100503011259	813 POWERS AV	HM1	5/3/2010 2:56	GAS
LOE100503011267	2ND AV N&VAN BUREN ST	HM1	5/3/2010 3:45	
LOE100503011268	301 COWAN ST	HM1	5/3/2010 3:45	
LOE100503011344	1000 GEN GEORGE PATTON RD	HM1	5/3/2010 8:03	GAS
LOE100503011403	2802 BARCLAY DR	HM1	5/3/2010 10:31	
LOE100503011406	215 BENNETT DR	HM1	5/3/2010 10:41	
LOE100503011455	CORNELIA FT AIRPORT	HM1	5/3/2010 12:24	
LOE100503011467	913 DENSON AV	HM1	5/3/2010 12:50	GAS
LOE100503011469	3745 WHITLAND AV	HM1	5/3/2010 12:49	
LOE100503011483	716 EVERGREEN TRL	HM2	5/3/2010 13:26	
LOE100503011495	306 DUE WEST AV W	HM1	5/3/2010 14:02	
LOE100503011497	SPACE PARK S DR&ANTIOCH PKE	HM1	5/3/2010 14:11	OEM
	SPACE PARK S DR&ANTIOCH PKE	HM1		GAS
LOE100503011517	2235 CABIN HILL RD	HM1	5/3/2010 15:17	GAS
LOE100503011552	3230 PANORAMA DR	HM1	5/3/2010 16:33	
LOE100503011625	2410 MUSIC VALLEY DR	HM1	5/3/2010 20:05	GAS
LOE100503011629	2410 MUSIC VALLEY DR	HM1	5/3/2010 20:21	
LOE100503011636	1653 HARPETH RUN DR	HM1	5/3/2010 20:50	GAS
LOE100503011641	CENTRAL PKE&LEBANON PKE	HM1	5/3/2010 21:01	
LOE100503011656	213 28TH ST	HM2	5/3/2010 22:00	
LOE100504011673	LYLE AV&DIVISION ST	HM1	5/4/2010 2:39	GAS
LOE100504011674	1501 FALL DR	HM1	5/4/2010 2:48	GAS
LOE100504011676	HERMITAGE AV&DRIFTWOOD ST	HM1	5/4/2010 3:04	
LOE100504011717	JAMES AV&VERNON AV	HM1	5/4/2010 9:06	GAS
LOE100504011731	RANSOM PL&MURFREESBORO PKE	HM1	5/4/2010 9:50	
LOE100504011754	63RD AV N&MORROW RD	HM1	5/4/2010 11:33	GAS
LOE100504011768	3114 W HAMILTON AV	HM1	5/4/2010 12:17	
LOE100504011770	3114 W HAMILTON AV	HM1	5/4/2010 12:29	
LOE100504011793	1519 LOCK RD	HM1	5/4/2010 14:57	GAS
LOE100504011795	3410 CLARKSVILLE PKE	HM2	5/4/2010 15:09	
LOE100504011819	904 CADILLAC AV	HM1	5/4/2010 16:47	GAS
LOE100504011855	GATEWAY BLVD	HM1	5/4/2010 19:35	GAS
LOE100504011860	CLARKSVILLE PKE&ROSA L PARKS B	HM1	5/4/2010 19:51	OEM
LOE100504011864	2608 COLBERT DR	HM1	5/4/2010 20:26	
LOE100504011868	5961 CLOVERLAND DR	HM1	5/4/2010 20:48	GAS
LOE100505011890	819 S GALLATIN PKE	HM1	5/5/2010 5:35	GAS
LOE100505011910	220 BERMUDA DR	HM1	5/5/2010 8:35	
LOE100505011919	LEAKE AV&HARDING PKE	HM1	5/5/2010 9:32	GAS
LOE100505011941	819 S GALLATIN PKE	HM1	5/5/2010 11:27	
LOE100505011953	TROUSDALE DR&HARDING PL	HM1	5/5/2010 13:13	
LOE100505012003	807 PARK TER	HM1	5/5/2010 18:56	GAS
LOE100505012033	6700 CABOT DR	HM1	5/5/2010 22:57	GAS

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE100506012037	408 CAPRI CT	HM1	5/6/2010 0:16	
LOE100506012051	VISCO DR&OMOHUNDRO PL	HM1	5/6/2010 6:19	
LOE100506012056	5TH AV N&CHARLOTTE AV	HM1	5/6/2010 7:20	PW144
LOE100506012067	5TH AV N&CHARLOTTE AV	HM1	5/6/2010 8:54	PW144
	5TH AV N&CHARLOTTE AV	HM1		PWRD
LOE100506012084	3636 BELL RD	HM1	5/6/2010 10:31	GAS
LOE100506012087	1736 RIVER HILLS DR	HM1	5/6/2010 10:48	GAS
LOE100506012103	CHESTNUT ST&WHARF AV	HM1	5/6/2010 12:32	PWRD
	CHESTNUT ST&WHARF AV	HM1		PW144
LOE100506012105	4TH AV N&JAMES ROBERTSON PKWY	HM1	5/6/2010 12:36	PW144
LOE100506012123	MM 221 I40 E	HM1	5/6/2010 15:43	
LOE100506012129	800 MONROE ST	HM1	5/6/2010 16:13	GAS
LOE100506012154	2201 CHARLOTTE AV	HM1	5/6/2010 20:18	
LOE100507012184	EDMONDSON PKE&BREWER DR	HM1	5/7/2010 8:24	PW144
LOE100507012210	MORROW RD&JAMES AV	HM1	5/7/2010 11:34	
LOE100507012266	700 MURFREESBORO PKE	HM1	5/7/2010 17:27	
LOE100508012341	928 BEECH BEND DR	HM1	5/8/2010 10:56	GAS
LOE100508012351	525 BASSWOOD AV	HM1	5/8/2010 11:48	
LOE100508012353	921 DELRAY DR	HM1	5/8/2010 12:10	GAS
LOE100508012391	5125 FRANKLIN PKE	HM1	5/8/2010 18:35	
LOE100509012430	2554 MIAMI AV	HM1	5/9/2010 9:56	GAS
LOE100509012473	240 BLACKMAN RD	HM1	5/9/2010 21:14	
LOE100510012539	2327 PENNINGTON BEND RD	HM1	5/10/2010 17:14	GAS
LOE100510012553	761 LEWIS ST	HM1	5/10/2010 22:49	GAS
LOE100511012555	ASHLAND CITY HWY&CLINTONDALE	PWHAZ	5/11/2010 1:54	PWHAZ
	ASHLAND CITY HWY&CLINTONDALE	PWHAZ		PW149
LOE100511012600	WOODLAND ST BRIDGE	HM1	5/11/2010 12:17	
LOE100511012606	5215 OLD HICKORY BLVD	HM1	5/11/2010 14:16	PW
LOE100511012614	401 COWAN ST	HM1	5/11/2010 16:02	
LOE100511012620	819 S GALLATIN PKE	HM1	5/11/2010 16:36	
LOE100511012643	MM 79 I65 N	HM1	5/11/2010 21:43	
LOE100512012649	13011 OLD HICKORY BLVD	HM1	5/12/2010 2:32	
LOE100512012666	DR D B TODD JR BLVD&JEFFERSON	HM1	5/12/2010 8:14	PWRD
	DR D B TODD JR BLVD&JEFFERSON	HM1		PW144
LOE100512012716	3149 GREGGWOOD DR	PWHAZ	5/12/2010 21:58	PWE
	3149 GREGGWOOD DR	PWHAZ		PW147
	3149 GREGGWOOD DR	PWHAZ		PW144
LOE100513012741	710 HITE ST	HM1	5/13/2010 10:05	
LOE100513012742	710 HITE ST	HM1	5/13/2010 10:25	PWRD
LOE100515012947	CENTRAL PKE&LEBANON PKE	HM1	5/15/2010 10:37	
LOE100515012950	103 THOMPSON LA	HM1	5/15/2010 10:57	
LOE100515012983	1100 17TH AV S	HM1	5/15/2010 16:13	
LOE100515013002	3716 WOODMONT LA	HM1	5/15/2010 20:50	GAS
LOE100515013003	3709 ESTES RD	HM1	5/15/2010 20:49	
LOE100516013014	3955 NOLENSVILLE PKE	PWHAZ	5/16/2010 0:35	PWHAZ
LOE100516013015	3955 NOLENSVILLE PKE	PWHAZ	5/16/2010 0:36	PWHAZ
LOE100516013026	5031 HILLSBORO PKE	HM1	5/16/2010 9:14	
LOE100517013083	1520 OLD HICKORY BLVD	PWHAZ	5/17/2010 6:15	PWHAZ
	1520 OLD HICKORY BLVD	PWHAZ		PW144

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE100517013085	407 CRAIGHEAD ST	HM1	5/17/2010 6:55	
LOE100517013115	5705 CHARLOTTE PKE	HM1	5/17/2010 11:21	
LOE100517013127	MT VIEW PKWY&CROSSINGS BLVD	HM1	5/17/2010 13:38	PWRD
LOE100517013165	DONELSON PKE&I40 E	HM1	5/17/2010 19:22	
LOE100518013210	2922 MCGAVOCK PKE	HM1	5/18/2010 12:43	GAS
LOE100518013211	2922 MCGAVOCK PKE	HM1	5/18/2010 13:08	
LOE100518013235	ROSA L PARKS AV&UNION ST	HM1	5/18/2010 17:39	PW149
LOE100519013311	401 MYATT DR	HM1	5/19/2010 17:26	GAS
LOE100519013318	PERCY PRIEST DR&STEWARTS FERRY	HM1	5/19/2010 18:30	
LOE100520013337	309 W TRINITY LA	HM1	5/20/2010 2:55	PW147
	309 W TRINITY LA	HM1		PW144
	309 W TRINITY LA	HM1		PWRD
LOE100520013343	3619 CENTRAL AV	HM1	5/20/2010 7:31	GAS
LOE100520013399	BAPTIST WORLD CTR DR&W TRINITY	HM1	5/20/2010 16:38	GAS
LOE100520013419	640 MASSMAN DR	HM1	5/20/2010 18:38	
LOE100521013512	3035 HAMILTON CHURCH RD	HM1	5/21/2010 18:37	
LOE100523013635	63 E THOMPSON LA	HM1	5/23/2010 9:54	GAS
LOE100523013636	S 4TH ST&SHELBY AV	HM1	5/23/2010 10:00	PW149
	S 4TH ST&SHELBY AV	HM1		PWHAZ
LOE100523013661	5711 OLD HICKORY BLVD	HM1	5/23/2010 15:07	GAS
LOE100524013723	PARK AV&37TH AV N	HM1	5/24/2010 11:08	PW149
LOE100524013765	830 FESSLERS PKWY	HM1	5/24/2010 17:41	
LOE100524013772	CAPITOL BLVD&UNION ST	HM2	5/24/2010 19:21	OEM
	CAPITOL BLVD&UNION ST	HM2		PW149
LOE100525013826	2819 BARCLAY DR	HM1	5/25/2010 10:01	WATER
LOE100525013832	4021 KEELEY DR	HM1	5/25/2010 12:22	GAS
LOE100525013833	4021 KEELEY DR	HM1	5/25/2010 12:32	
LOE100525013858	1404 N GALLATIN PKE	HM1	5/25/2010 16:59	
LOE100526013923	MM 35 I24 E	HM1	5/26/2010 13:48	OEM
LOE100526013991	GALLATIN PKE&NORVEL AV	HM1	5/26/2010 21:25	GAS
LOE100527014032	1012 W TRINITY LA	PWHAZ	5/27/2010 11:01	
LOE100527014055	KAREN DR&BRILEY PKWY	HM1	5/27/2010 15:47	PW149
LOE100527014078	3622 CENTRAL PKE	PWHAZ	5/27/2010 19:15	PW
LOE100528014161	211 EASTMORELAND ST	HM1	5/28/2010 18:29	OEM
LOE100529014188	3115 EDGEMONT DR	HM1	5/29/2010 7:19	GAS
LOE100530014246	800 APPLE VALLEY RD	HM1	5/30/2010 3:33	GAS
LOE100601014402	I440 W&I24 E	HM1	6/1/2010 17:48	OEM
LOE100602014431	5319 NOLENSVILLE PKE	HM1	6/2/2010 0:37	
LOE100602014455	100 CURTIS HOLLOW RD	HM1	6/2/2010 13:00	GAS
LOE100604014617	201 GRIZZARD AV	HM1	6/4/2010 5:14	GAS
LOE100604014638	CLARKSVILLE PKE&ASHTON AV	HM1	6/4/2010 10:49	PW144
LOE100604014639	I40 W&2ND AV S	HM1	6/4/2010 10:56	OEM
LOE100604014665	88 UNIVERSITY CT	HM1	6/4/2010 16:32	GAS
LOE100604014680	I24 E&BELL RD	HM1	6/4/2010 18:23	OEM
LOE100606014757	6628 NOLENSVILLE PKE	HM1	6/6/2010 11:57	OEM
LOE100606014780	2525 PERIMETER PLACE DR	HM1	6/6/2010 19:21	OEM
LOE100606014783	1101 BELL RD	HM1	6/6/2010 21:06	OEM
LOE100607014807	3791 MARYDALE DR	HM1	6/7/2010 8:45	GAS

Table 3-E.1 Summary of OEM Spill Calls in PY7 (Continued)

Event Number	Address	Incident Type Id	Create Time Incident	Unit Id
LOE100607014831	308 E TRINITY LA	HM1	6/7/2010 13:29	GAS
LOE100608014877	WEDGEWOOD AV&10TH AV S	PWHAZ	6/8/2010 5:40	PWHAZ
	WEDGEWOOD AV&10TH AV S	PWHAZ		PW144
LOE100609014952	HUNTINGTON PKWY&EDMONDSON P	PWHAZ	6/9/2010 2:58	PW144
	HUNTINGTON PKWY&EDMONDSON P	PWHAZ		PW149
	HUNTINGTON PKWY&EDMONDSON P	PWHAZ		PW147
	HUNTINGTON PKWY&EDMONDSON P	PWHAZ		PWHAZ
LOE100609015038	811 HAMILTON CROSSINGS	HM1	6/9/2010 15:20	GAS
LOE100609015054	811 HAMILTON CROSSINGS	HM1	6/9/2010 15:39	PW149
LOE100609015062	3332 HOSPITAL LA	HM1	6/9/2010 15:47	GAS
LOE100610015187	320 BROADWAY	HM1	6/10/2010 13:59	PW147
	320 BROADWAY	HM1		PWHAZ
LOE100610015188	3551 CENTRAL PKE	HM1	6/10/2010 14:02	
LOE100610015201	500 CHEYENNE BLVD	HM1	6/10/2010 16:49	GAS
LOE100611015254	5099 LINBAR DR	HM1	6/11/2010 9:51	GAS
LOE100613015409	1042 CHICAMAUGA AV	HM1	6/13/2010 14:39	GAS
LOE100613015411	1042 CHICAMAUGA AV	HM1	6/13/2010 14:51	
LOE100613015444	4001 ANDERSON RD	HM1	6/13/2010 18:48	GAS
LOE100613015449	700 SILLS CT	HM1	6/13/2010 19:17	GAS
LOE100614015496	DECATUR AV&HERMITAGE AV	HM1	6/14/2010 10:38	PW143
	DECATUR AV&HERMITAGE AV	HM1		GAS
LOE100614015511	851 HAMILTON CROSSINGS	HM1	6/14/2010 13:29	GAS
LOE100616015664	851 HAMILTON CROSSINGS	HM1	6/16/2010 9:26	GAS
LOE100616015677	3854 DICKERSON PKE	HM2	6/16/2010 10:48	OEM
LOE100616015721	2115 YEAMAN PL	HM1	6/16/2010 19:47	GAS
LOE100617015765	EXIT 1 I440 W	HM1	6/17/2010 11:05	OEM
LOE100619016015	2126 ABBOTT MARTIN RD	HM1	6/19/2010 19:00	OEM
LOE100621016140	407 GALLATIN AV	HM1	6/21/2010 16:19	PW149
LOE100621016166	2415 MCGAVOCK PKE	HM2	6/21/2010 19:12	OEM
LOE100622016258	1907 BERKSHIRE DR	HM1	6/22/2010 19:36	OEM
LOE100623016283	WOODLAWN DR&ESTES RD	HM1	6/23/2010 10:55	PWRD
	WOODLAWN DR&ESTES RD	HM1		PW149
LOE100623016324	270 TAMPA DR	HM1	6/23/2010 17:52	OEM
LOE100624016365	WEDGEWOOD AV&8TH AV S	HM1	6/24/2010 11:48	OEM
LOE100624016371	3636 BELL RD	HM1	6/24/2010 12:47	OEM
LOE100624016379	EXIT 19 BRILEY E	HM1	6/24/2010 14:05	GAS
LOE100624016393	21ST AV S&CHILDRENS WY	HM1	6/24/2010 16:29	
LOE100625016430	1511 SOUTHOAK DR	HM1	6/25/2010 0:47	GAS
LOE100625016458	I40 E ENT RAMP&BRILEY N EXIT R	HM1	6/25/2010 13:47	PW149
	I40 E ENT RAMP&BRILEY N EXIT R	HM1		STATE
LOE100625016459	I40 E ENT RAMP&BRILEY N EXIT R	HM1	6/25/2010 13:51	
LOE100626016514	504 DOUGLAS AV	HM1	6/26/2010 0:51	OEM
LOE100626016593	4677 TROUSDALE DR	HM1	6/26/2010 19:34	
LOE100627016811	2644 OLD MATTHEWS RD	HM1	6/27/2010 17:50	
LOE100629016986	BROADWAY&7TH AV S	HM1	6/29/2010 9:58	GAS
LOE100629017017	WHITE BRIDGE PKE&POST PL	HM1	6/29/2010 15:45	PWRD
	WHITE BRIDGE PKE&POST PL	HM1		PW144
LOE100629017024	655 WEDGEWOOD AV	HM1	6/29/2010 17:36	OEM
LOE100629017031	2021 FATHERLAND ST	HM1	6/29/2010 19:55	OEM
LOE100630017048	2415 MCGAVOCK PKE	HM1	6/30/2010 5:21	PWRD
	2415 MCGAVOCK PKE	HM1		OEM
LOE100630017049	2415 MCGAVOCK PKE	HM1	6/30/2010 5:24	OEM
LOE100630017056	650 OLD HICKORY BLVD	HM1	6/30/2010 7:36	GAS

Table 3-E.2 Summary of Public Works Hazmat Response Spill Calls in PY7

Date	Location	Situation	Actions	Agencies
07/03/2009	BELL RD @ BLUE HOLE RD	OIL SPILL	PUT DOWN 25 LBS SPILL GONE AND BROOMED	PW/PD
07/04/2009	BRICK CHURCH PK @ TRINITY LN	MVA-46 BLOOD CLEAN UP	PUT BLEACH AND 10 LBS SPILL GONE ON RAD AND PICKED UP	PD/PW
07/07/2009	BRILEY PKWY @ SAUNDERS AVE	OIL SPILL	COVERED WITH 50 LBS SPILL GONE	PW
07/10/2009	SHARONDALE DR. @ SHARONDALE CT.	OIL ON ROAD (APPROX 20 GALLONS)	PUT 50LBS SPILL GONE ON ROAD AND CLEANED UP	PW
07/12/2009	OHB @ MARATHONA DR.	OIL SPILL	PUT DOWN 50 LBS OF SPILL GONE	PD/PW
07/13/2009	1111 FOSTER AVE	MVA-WITH APPROX 10-15 GALS OF DIESEL ON ROADWAY	COVERED WITH SPILL GONE (150 LBS)	PW/PD/FD/METRO WATER
07/13/2009	NOLENSVILLE RD @ ZOO RD	APPROX 5-10 GALLONS OF GAS ON ROADWAY	COVERED WITH 300 LBS SPILL GONE	PW/PD/FD
07/13/2009	WHITES CREEK @ ELLIS	MVA OIL SPILL APPROX 5 GAL--300 FT LONG	COVERED WITH 300 LBS SPILL GONE	PW/PD/FD
07/15/2009	HOBBS RD @ ESTES RD	OIL ON ROAD	COVERED WITH 1200 LBS SPILL GONE	PW
07/15/2009	ST. RT. 45 @ LARKINS SPRINGS	OIL ON ROAD	COVERED WITH 75 LBS SPILL GONE	PW/PD
07/21/2009	AIRWAYS CIRCLE (SHEFFEILD HEIGHTS APTS)	20 -30 GAL OF HYDROLIC OIL ON PK LOT	COVERED WITH 300 LBS SPILL GONE AND CLEANED UP	PW
07/27/2009	1244 RIVERWOOD DR.	OIL SPILL	PUT DOWN 50 LBS SPILL GONE	PW
07/28/2009	51 ST AV N. @ MICHIGAN AV	REMOVAL OF A BARREL FULL OF OIL DUMPED IN AN ALLEY	PUT BARREL, OIL, AND FILTERS INTO A OVER PACK AND TOOK TO SPECIAL OPS	PW
07/28/2009	HARDING PL @ RECORVERY RD.	SLICK SUBSTANCE ON ROAD	COVERED WITH 150 LBS SPILL GONE	PW / PD
08/11/2009	GALLATIN PK @ HART LN	OIL SPILL	PUT DOWN 200 LBS SPILL GONE	PW
08/23/2009	3RD AVE. @ DEADRICK ST.	OIL SPILL 4-5 QTS OF OIL	COVERED WITH 100 LBS SPILL GONE	PW/PD
09/01/2009	540 MERRIT ST	50 GAL. DRUM OF OIL AT LOCATION	PICKED UP AND BROUGHT BACK TO WAREHOUSE FOR DISPOSAL	PW
09/09/2009	10th AV. SOUTH IN ALLEY	OIL SPILL	PUT DOWN 50 LBS SPILL-GONE AND BROOMED	PW
10/03/2009	130 1st Ave N @ Church	oil spill	put down 150lbs spill gone and called company on container	pw,pd
10/08/2009	465 HOGAN RD	HYDRAULIC SPILL APPROX 40 GALLONS ON ROADWAY	NONE TAKEN, I SUPERVISED THE CLEAN UP FROM THE COMPANY AT FAULT	PW
10/13/2009	DICKERSON PK @ SPRING ST.	OIL LEAK (LARGE OIL SPILL FROM A MVA)	PUT DOWN 100 LBS OF ABSORBENT	PW/PD
10/19/2009	JAMES ROBERTSON PKWY (BEN WEST BUILDING)	OIL SPILL	PUT DOWN 100 LBS SPILL GONE AND BROOMED	PW
10/21/2009	BOWING PARK @ ABBOTTSFORD DR.(BEHIND 136 ABBOTSFORD)	HYDRAULIC SPILL APPROX 10 - 15 GAL	COVERED WITH SPILL GONE AND SWEPT UP	PW

Table 3-E.2 Summary of Public Works Hazmat Response Spill Calls in PY7 (Continued)

Date	Location	Situation	Actions	Agencies
10/25/2009	1709 4TH AVE NORTH	BLOOD CLEAN UP	WASH WITH BLEACH/WATER AND SWEPT UP SPILL GONE	PW
10/31/2009	OHB @ CANE RIDGE RD	OIL SPILL ON ROAD	PUT DOWN 50LBS ABSORBENT AND BROOMED	PW/PD/FD
11/02/2009	3rd av. @ union St.	APPROX 5 GAL OF OIL ON ROAD	COVERED WITH 100 LBS SPILL GONE	PW
11/04/2009	6451 CURRYWOOD DR	HYDRAULIC OIL ON RD	USED 50 LBS SPILL GONE TO COVER AND CLEANED UP	PW
11/05/2009	Moringside Dr @ Ben Allen Rd	Hydrlic oil spill Approx 5 gal	covered with 100lbs spillgone and sweep up	Pw
11/11/2009	160 2ND AVE NORTH	GREASE SPILL APPROX 1-3 GAL ON SIDEWALK AND RD	COVERED WITH 50 LBS SPILL GONE	PW/PD
11/14/2009	CROSSFIELD DR. @ RIDGEWAY RD	HYDRAULIC OIL ON ROAD FROM A UNKNOWN TRASH TRUCK	PUT 200 LBS SPILL GONE ON ROAD	PW
11/16/2009	I-65 @ OHB	OIL SPILL APROX 20 GAL	COVERED WITH 500 LBS SPILL GONE	pw/ t-dot
11/27/2009	11 TH AVE S @ EDGEHILL AVE	HYDRAULIC OIL SPIL ON PARKING LOT APPROX 15 GALLONS	COVERED WITH 100 LBS SPILL GONE AND CLEANED UP	PW/SOLID WASTE
12/05/2009	SPRING ST. @ DICKERSON PK	OIL SPILL	PUT DOWN 50 LBS ABSORBENT	PD/PW
12/08/2009	BETHWOOD @ OAKWOOD	HYDRAULIC OIL SPILL APPROX 15-20 GALLONS	COVERED WITH 1200 LBS SPILL GONE	PW
12/16/2009	4507 GLENDALE PLACE	HYDRAULIC OIL SPILL ON ROAD	COVERED WITH 150 LBS OF SPILL GONE AND CLEANED UP	PW
01/06/2010	MYATT DR @ ROSELVELT AVE.	OIL ON ROADWAY	COVERED WITH 200 LBS SPILL GONE AND BROOMED	PD/FD/PW
01/07/2010	1509 DICKERSON PK	OIL LEAK	PUT DOWN 50 LBS OF SPILL-GONE AND BROOMED	PW / WATER
01/18/2010	CLARKSVILLE @ KOLZ LN	FLUIDS ON RO FROM 10-46 MVA	CARTERS WRECKER CLEANED UP, BUT RAN OUT OF OIL DRY, I USED 50LBS OR SPILL GONE TO FINISH	PW / PD
01/28/2010	7394 GEORGE E HORN RD	10 GALS OIL ON ROAD	COVERED WITH 30 LBS SPILL GONE AND CLEANED UP	PW
02/03/2010	740 SOUTH 5TH ST	25 GAL GAS SPILL AT FUEL PUMPS	PUT GOWN 9 BOXES SPILL GONE, FLEET SHOWED UP AND TOOK CARE OF CLEAN-UP	PW
02/06/2010	DICKERSON RD @ GRACE ST	GAS ON ROAD AND SIDEWALK	COVERED WITH 100 LBS SPILL GONE	PW/PD/FD
02/25/2010	ASHLAND CITY HWY @ CLARKSVILLE PK	OIL SPILL FROM MVA	COVERED WITH 100 LBS SPILL GONE	PW
02/25/2010	JAMES ROBERTSON PKWY @ 2 ND AVE	OIL SPILL	COVERED WITH 100 LBS SPILL GONE	PW
03/21/2010	3RD AVE @ DEADRICK ST	46- LOST A LOT OF OIL ON STEPS	PUT DOWN 75 LBS OF SPILL GONE AND BROOMED	FD/PD/PW
03/26/2010	2929 SUMMERCREST BLVD	OIL ON RD	PUT 1500 LBS ADSORBENT ON ROAD WITH SPREADER TRUCK	PW
04/06/2010	IVY DR. @ RIVERWOOD DR	OIL LEAK	1500 LBS SO SPILL GONE ON SPILL	PW

Table 3-E.2 Summary of Public Works Hazmat Response Spill Calls in PY7 (Continued)

Date	Location	Situation	Actions	Agencies
04/09/2010	BUSHNELL DR. @ MC EWEN DR.	OIL IN ROAD	PUT 1500 LBS SPILL GONE ON ROAD	PW
04/13/2010	MCCHESNEY AVE @ GALLATIN PK	OIL LEAK	COVERED WITH 200 LBS SPILL GONE	PW
05/06/2010	CHESTNUT @ WHARF ST	OIL SPILL	PUT DOWN 200 LBS OF SPILL GONE	PW / PD
06/03/2010	13TH AVE @ SIGLER	HYDRAULIC OIL SPILL	COVERED WITH 150 LBS SPILL GONE	PW
06/16/2010	VALLEY BROOK RD @ BEAR RD	HYDRAULIC OIL IN ROAD	COVERED WITH 350 LBS SPILL GONE	PW
06/17/2010	HORTON AVE. @ 17TH AVE S	HYDRAULIC OIL ON ROAD	COVERED WITH 150 LBS SPILL GONE	PW
06/23/2010	WOODLAWN DR. @ ESTES RD	OIL ON RD. EST.40 GAL	COVERED WITH 500 LBS SPILL GONE	PW

Note: This table was extracted from a spreadsheet submitted by Public Works field personnel.

Table 3-E.3 Summary of NPDES Office Response to Spill Calls in PY7

ID	DateTimeInit	DispatchTo	ProbAddress	DateTimeClosed
202136	7/5/2009 14:55	BINDER, DALE	320 DRAPER CIR	7/6/2009 7:12
203186	7/13/2009 11:31	HAYES, JOSH	1120 FOSTER	7/22/2009 6:41
203299	7/14/2009 6:30	BINDER, DALE	345 HILL AVE	7/14/2009 7:59
203830	7/17/2009 7:45	OHARA, KATHERINE	1804 ANTIOCH PIKE	7/17/2009 7:53
205108	7/28/2009 14:11	BARBERO, MICHELLE	506 FESSLERS LANE	8/27/2009 9:13
210968	9/17/2009 11:52	HAYES, JOSH	81 GLENROSE AVE	12/2/2009 6:54
211984	9/28/2009 8:52	BINDER, DALE	6100 BEALS LN	9/30/2009 10:28
215125	10/28/2009 9:59	SAAD, PHIL	2100 WOODMONT BLVD	1/14/2010 9:27
215163	10/28/2009 12:32	ERICKSON, SONYA	I-24W AND I-440	10/28/2009 12:49
216249	11/6/2009 17:07	ERICKSON, SONYA	299 PLUS PARK BLVD	11/6/2009 17:11
216726	11/12/2009 10:33	ERICKSON, SONYA	7779 RIVER ROAD PIKE	11/30/2009 14:15
217470	11/19/2009 13:33	ERICKSON, SONYA	I-40 AND HWY 70S	11/20/2009 15:04
220448	12/31/2009 13:18	SITZLAR, MEGAN	141 NEESE DRIVE	12/31/2009 13:22
221073	1/7/2010 15:36	ERICKSON, SONYA	13011 OLD HICKORY BLVD	1/8/2010 13:55
224511	2/8/2010 12:03	BINDER, DALE	3744 ANNEX AVE	2/10/2010 11:57
224623	2/9/2010 9:40	BINDER, DALE	2971 ELM HILL PK	2/17/2010 12:09
227404	3/9/2010 14:18	HAYES, JOSH	577 DONNELSON	3/30/2010 6:49
228773	3/23/2010 7:38	ERICKSON, SONYA	7200 CENTENNIAL BLVD	4/29/2010 15:12
228929	3/24/2010 6:41	HAYES, JOSH	1917 S. HAMILTON	3/24/2010 6:43
229247	3/26/2010 8:33	ERICKSON, SONYA	5330 CHARLOTTE PK	3/26/2010 17:02
233811	5/3/2010 14:04	HAYES, JOSH	360 MURFREESBORO PIKE	7/7/2010 6:11
240876	6/8/2010 13:28	ERICKSON, SONYA	4912 CHARLOTTE PK	6/22/2010 7:27
242818	6/22/2010 8:02	ERICKSON, SONYA	2415 MCGAVOCK PK	
243329	6/24/2010 18:04	ERICKSON, SONYA	1507 21ST AVE S	6/24/2010 18:12

Table 4-A.1 Summary of Public Works Landfill Monitoring Program

List of Active Landfills within Davidson County			
Landfill Name	**Landfill Type**	**Address**	**Notes:**
MS-COT Services	Construction/Demolition	3530 Central Pike, Suite 105	N/A
Southern Services Landfill	Construction/Demolition	4651 Amy Lynn Drive	N/A
List of Closed Landfills within Davidson County			
Landfill Name	**Landfill Type**	**Address**	**Notes:**
Bordeaux Landfill	Municipal Solid Waste	1400 County Hospital Road	N/A
Thermal Ash Monofill	Municipal Combustor Ash Monofill	1915 Cement Plant Road	N/A
Due West Landfill	Municipal Solid Waste	Old Due West Avenue	N/A
Lebanon Road Landfill	Municipal Solid Waste	1450 Lebanon Pike	N/A
River Hills Monofill	Municipal Combustor Ash Monofill	1821 River Hills Drive	N/A
List of Permitted Waste Transfer Stations in Davidson County			
Transfer Facility Name	**Address**	**Notes**	
Waste Management/Antioch Pike Transfer Station	1428 Antioch Pike	N/A	
Republic/Allied Waste/BFI	Freightliner Drive	N/A	
MTEC-Waste Management (formerly Tennessee Waste)	3211 Franklin-Limestone Rd.	N/A	

Note: All landfills operated my Metro have been closed and no longer have Tennessee Multi-Sector Permits, therefore, no surface runoff monitoring is required. Some of the landfills are monitored for subsurface parameters. All waste transfer stations were routinely inspected and no concerns for stormwater runoff were noted at each facility in Permit Year 7.

Table 4-A.2 Public Works Licensed Solid Waste Haulers

Issued to	Address	City
Waste Removal Services, LLC	164-B Old Carters Creek Pike	Franklin, TN 37064
Gray's Disposal	522 Thompson Lane	Nashville, TN 37204
Clean Earth Sanitation, Inc.	320 Century Court	Franklin, TN 37064
Crick Disposal Services, Inc.	2635 Hart Street	Nashville, TN 37207
Welsh Disposal	325 Hillcrest Drive	Madison, TN 37115
Hudgins Disposal Service	2510 Hart Street	Nashville, TN 37207
Waste Management, Inc.	1428 Antioch Pike	Antioch, TN 37013
Waste Management, Inc.	1428 Antioch Pike	Antioch, TN 37013
J. E. McMurtry	103 Donald Street	Nashville, TN 37207
TRI STAR Waste Systems, Inc.	701 41st Avenue N.	Nashville, TN 37209
Red River Service Corp.	120 Ewing Drive	Nashville TN, 37207
Shamrock Rolloff, LLC	3530 Central Pike	Hermitage, TN 37076
Mercie Threadkill	4571 Clarksville Hwy.	Nashville, TN 37202-4153
MS-COT SERVICES LLC	PO Box 145/3516 Central Pk	Hermitage, TN 37076
Landscape Services, Inc.	204 River Hills Drive	Nashville, TN 37210
Southeastern Recycling	15 Fairfield Avenue	Nashville, TN 37210
H. E. Parmer Co., Inc.	1635 County Hospital Rd	Nashville, TN 37218
Waste Management, Southern Services Landfill	4651 Amy Lynn Drive	Nashville, TN 37218
City of Goodlettsville	215 Cartwright Street	Goodletsville, TN 37072
Trash Express	4016 Brick Church Pike	Nashville, TN 37207
Allied Waste Services of Nashville	700 Murfreesboro Road	Nashville, TN 37210
Cordell Johnson	315 Hickory Street	Madison, TN 37116
Clarksville Disposal	50 Reynolds Street	Clarksville, TN 37040
Olympic Disposal, INC.	148 Volunteer Drive	Hendersonville, TN 37075
Odom - Vooys Partnership	148 Volunteer Drive	Hendersonville, TN 37075
Seventh Transport, Inc.	2542 Sullins Rd	Athens, TN 37303
PDQ Disposal, Inc.	625 Hamilton Avenue	Nashville, TN 37203
Burnice Winfrey Disposal, Inc.	1600 Emerald Drive	Nashville, TN 37128
Waste Industries, Inc.	7320 Centennial Blvd	Nashville, TN 37209
MLT Disposal	4571 Clarksville Hwy.	Nashville, TN 37218
Sweeping Corp of Amerca, Inc.	713 Mel Park Dr	Nashville, TN 37204
BFI/AAA Transfer Station	7320 Centenial Blvd	Nashville, TN 37210
AAA Transfer Station	1160 Freightliner Drive	Nashville TN 37210

Table 3-E.3 Summary of NPDES Water Quality Complaint Investigations Initiated in PY7

ID	Date/Time Initiated	Dispatch To	Problem Address	Date/Time Closed
201993	7/2/2009 8:16	ERICKSON, SONYA	32 MOORE AVE.	7/16/2009 16:17
202711	7/8/2009 15:17	ERICKSON, SONYA	1703 NASSAU ST	7/31/2009 16:02
203058	7/10/2009 17:09	ERICKSON, SONYA	2709 SHACKLETT DR	7/16/2009 9:29
203716	7/16/2009 10:03	ERICKSON, SONYA	2500 WEST END AVE	
204313	7/21/2009 15:08	ERICKSON, SONYA	4112 BRUSH HILL RD	7/28/2009 16:46
204998	7/28/2009 6:42	HAYES, JOSH	4537 NOLENSVILLE RD	7/28/2009 13:18
205015	7/28/2009 8:38	ERICKSON, SONYA	800 2ND AVENUE SOUTH	7/28/2009 17:07
205016	7/28/2009 8:43	HARDING, HAROLD	1909 FOSTER AVENUE	7/28/2009 9:08
205520	7/31/2009 13:04	ERICKSON, SONYA	3808 CLEGHORN AVE	8/5/2009 15:56
205566	7/31/2009 15:39	ERICKSON, SONYA	5555 EDMONDSON PK	8/5/2009 15:52
206353	8/7/2009 10:45	DOHN, REBECCA	3850 PRIEST LAKE DR	8/7/2009 10:46
206387	8/7/2009 14:21	ERICKSON, SONYA	2131 ABOTT MARTIN RD	4/28/2010 14:36
206411	8/7/2009 15:48	ERICKSON, SONYA	4004 HILLSBORO PK	1/13/2010 8:51
207251	8/14/2009 14:19	HAYES, JOSH	2012 24TH AVENUE N	8/14/2009 14:30
207488	8/17/2009 14:29	ERICKSON, SONYA	719 THOMPSON LN	9/2/2009 14:52
207502	8/17/2009 15:02	ERICKSON, SONYA	4412 ESTES RD	3/3/2010 7:36
207520	8/17/2009 16:19	ERICKSON, SONYA	328 FESSLERS LN	8/17/2009 16:22
207659	8/18/2009 15:09	ERICKSON, SONYA	642 HUNTINGTON PKY	8/31/2009 13:50
207661	8/18/2009 15:17	ERICKSON, SONYA	900 LEBANON PK	6/28/2010 8:02
207831	8/20/2009 8:12	ERICKSON, SONYA	1214 LEBANON PK	1/13/2010 8:43
207864	8/20/2009 9:52	ERICKSON, SONYA	509 CONWAY ST	8/26/2009 12:51
208163	8/24/2009 6:35	BARBERO, MICHELLE	2920 DONNA HILL DR	12/1/2009 7:31
208457	8/25/2009 12:33	HAYES, JOSH	2820 DICKERSON PIKE	8/25/2009 13:15
208666	8/26/2009 13:01	HAYES, JOSH	6514 ROBERTSON AVE	9/17/2009 6:26
208678	8/26/2009 13:40	ERICKSON, SONYA	715 MASSMAN DR	11/9/2009 9:41
208716	8/26/2009 15:54	ERICKSON, SONYA	3800 WEST END AVE	9/2/2009 14:58
208860	8/27/2009 17:02	ERICKSON, SONYA	1905 HAYES ST	8/28/2009 13:13
209059	8/31/2009 9:43	ERICKSON, SONYA	1319 PIERCE ST	2/9/2010 13:51
209217	9/1/2009 8:37	HAYES, JOSH	6514 ROBERTSON AVE	1/4/2010 7:47
210272	9/10/2009 14:23	HAYES, JOSH	245 GREAT CIRCLE ROAD	9/17/2009 6:25
210639	9/15/2009 11:02	HAYES, JOSH	625 SMITH AVE	
210862	9/16/2009 17:25	ERICKSON, SONYA	5770 OLD HICKORY BLVD	9/23/2009 10:03
210863	9/16/2009 17:54	ERICKSON, SONYA	243 WILLOW LN	10/30/2009 9:23
211533	9/23/2009 8:56	ERICKSON, SONYA	200 25TH AVE N	9/23/2009 9:05
211567	9/23/2009 10:10	ERICKSON, SONYA	700 MURFREESBORO RD	10/9/2009 9:13
211950	9/25/2009 16:44	ERICKSON, SONYA	0 SYLVAN ST	12/9/2009 14:21
211951	9/25/2009 16:48	ERICKSON, SONYA	0 SYLVAN ST	2/9/2010 8:29

Table 3-E.3 Summary of NPDES Water Quality Complaint Investigations Initiated in PY7 (continued)

ID	Date/Time Initiated	Dispatch To	Problem Address	Date/Time Closed
212399	9/30/2009 13:46	ERICKSON, SONYA	5418 CHARLOTTE PIKE	9/30/2009 13:52
212992	10/6/2009 18:17	ERICKSON, SONYA	6637 BEACON LN	10/30/2009 9:26
212993	10/6/2009 19:15	ERICKSON, SONYA	COMMODORE RESTAURANT	10/9/2009 9:04
213293	10/8/2009 16:48	ERICKSON, SONYA	7241 WILLOW CREEK DR.	10/9/2009 8:48
213699	10/13/2009 12:49	ERICKSON, SONYA	116 HIGHLAND VILLA DR	10/20/2009 8:46
213755	10/14/2009 8:28	ERICKSON, SONYA	900 63RD AVE N	11/30/2009 14:52
213856	10/14/2009 15:20	ERICKSON, SONYA	4717 CENTENNIAL BLVD	5/10/2010 11:40
214006	10/16/2009 6:25	OHARA, KATHERINE	2240 GALLATIN PIKE	11/20/2009 15:53
214007	10/16/2009 6:25	OHARA, KATHERINE	2240 GALLATIN PIKE	10/28/2009 10:37
214008	10/16/2009 6:51	DOHN, REBECCA	2000 ANTIOCH PIKE	12/31/2009 13:25
214045	10/16/2009 9:59	HAYES, JOSH	1200 49TH AVE N	
214262	10/20/2009 7:02	ERICKSON, SONYA	111 OLD HICKORY BLVD	11/9/2009 9:45
215076	10/27/2009 16:40	ERICKSON, SONYA	609 NAPOLEON AVE	10/28/2009 13:45
215167	10/28/2009 12:57	SAAD, PHIL	7004 CHARLOTTE PK	
216335	11/9/2009 11:30	ERICKSON, SONYA	214 SHADY GROVE RD	11/9/2009 14:28
216552	11/11/2009 8:19	ERICKSON, SONYA	2613 WEST END AVE	11/30/2009 14:50
216677	11/12/2009 7:25	ERICKSON, SONYA	2215 ROSA L PARKS BLVD	11/12/2009 15:27
217256	11/18/2009 7:29	ERICKSON, SONYA	1618 STATE STREET	12/18/2009 7:50
217258	11/18/2009 7:37	ERICKSON, SONYA	3939 HILLSBORO CIR	11/18/2009 7:57
217267	3/3/2010 8:15	ERICKSON, SONYA	4015 LEALAND LN	11/30/2009 14:15
217621	11/20/2009 15:06	ERICKSON, SONYA	7105 CHARLOTTE AVE	11/20/2009 15:09
217959	11/25/2009 14:25	ERICKSON, SONYA	273 WHITE BRIDGE RD	1/11/2010 8:23
219273	12/15/2009 8:09	ERICKSON, SONYA	606 LAFAYETTE	1/11/2010 8:26
219346	12/15/2009 14:01	HAYES, JOSH	639 LAFAYETTE	1/4/2010 7:38
219392	12/16/2009 8:45	GARMON, MARY	100 NORTH 1ST ST	3/12/2010 13:31
219479	12/16/2009 15:28	ERICKSON, SONYA	3920 CLIFTON	12/18/2009 13:07
219568	12/18/2009 6:59	ERICKSON, SONYA	1601 WEST DR	12/18/2009 12:19
219894	12/23/2009 10:40	SAAD, PHIL	273 WHITE BRIDGE ROAD	1/11/2010 9:33
220359	12/30/2009 13:16	HAYES, JOSH	611 COMMERCE ST	12/30/2009 13:47
220446	12/31/2009 12:59	DOHN, REBECCA	2800 WESTWOOD	12/31/2009 13:03
220767	1/5/2010 13:09	ERICKSON, SONYA	609 NASHUA LN	1/5/2010 13:14
220885	1/6/2010 12:19	ERICKSON, SONYA	421 UNION ST	1/6/2010 13:46
220905	1/6/2010 14:10	ERICKSON, SONYA	4716 B NOLENSVILLE RD	
223148	1/28/2010 10:12	ERICKSON, SONYA	2017 CANDLEWOOD DRIVE	2/9/2010 8:53
223622	2/1/2010 12:25	DOHN, REBECCA	NOEL COVE	
224429	2/8/2010 8:31	SWIFT, RICKY	4324 Harding Pike	4/28/2010 9:43
224560	2/8/2010 14:46	BARBERO, MICHELLE	4801 NOLENSVILLE RD	7/6/2010 15:31
225190	2/16/2010 7:39	ERICKSON, SONYA	3025 REELFOOT DR	2/16/2010 7:45
225273	2/16/2010 11:38	DOHN, REBECCA	5721 EDMONDSON	8/9/2010 10:34

Table 3-E.3 Summary of NPDES Water Quality Complaint Investigations Initiated in PY7 (continued)

ID	Date/Time Initiated	Dispatch To	Problem Address	Date/Time Closed
225752	2/19/2010 15:04	ERICKSON, SONYA	106 MADISON STREET	2/19/2010 15:11
225760	2/19/2010 15:19	ERICKSON, SONYA	2803 FOSTER AVE	
225765	2/19/2010 15:59	ERICKSON, SONYA	4601 MURPHY RD	4/29/2010 15:08
225993	2/23/2010 10:13	ERICKSON, SONYA	1314 NEELEYS BEND RD	2/23/2010 17:08
226467	2/26/2010 16:23	ERICKSON, SONYA	2402 DICKERSON PIKE	3/2/2010 7:28
226535	3/1/2010 13:01	ERICKSON, SONYA	OCKER SPRINGS RD & LICKTON P	4/29/2010 15:10
226707	3/2/2010 15:12	ERICKSON, SONYA	328 WALTON LN	3/2/2010 15:20
226822	3/3/2010 15:41	ERICKSON, SONYA	1110 BROOKMEADE	3/3/2010 16:39
226823	3/3/2010 15:43	ERICKSON, SONYA	2037 WILLIAMS VALLEY DRIVE	4/21/2010 16:04
226831	3/3/2010 16:25	ERICKSON, SONYA	4800 BUENA VISTA PK	3/3/2010 16:27
227229	3/8/2010 13:08	HERMAN, SHAWN	15459 OLD HICKORY BLVD	5/28/2010 7:00
227551	3/10/2010 13:00	ERICKSON, SONYA	3700 ASHLAND CITY HWY	5/10/2010 11:43
227553	3/10/2010 13:00	ERICKSON, SONYA	3700 ASHLAND CITY HWY	3/11/2010 10:02
227665	3/11/2010 10:10	ERICKSON, SONYA	701 28TH AVE N	3/11/2010 10:15
228194	3/16/2010 15:10	ERICKSON, SONYA	0 EDENWOLD RD	
228196	3/16/2010 15:34	ERICKSON, SONYA	1601 RIVERSIDE DR	3/16/2010 15:37
228223	3/17/2010 7:37	ERICKSON, SONYA	3606 HAMILTON CHURCH RD	3/17/2010 11:28
228932	3/24/2010 7:37	ERICKSON, SONYA	801 BRILEY PKY	6/8/2010 7:27
229111	3/25/2010 8:47	ERICKSON, SONYA	4111 NEBRASKA AVE	4/29/2010 15:13
229120	3/25/2010 9:22	ERICKSON, SONYA	360 MURFREESBORO PK	5/10/2010 11:24
229217	3/25/2010 15:52	ERICKSON, SONYA	109 MURPHY CT	3/25/2010 15:56
229228	3/25/2010 17:03	ERICKSON, SONYA	84 THOMPSON LN	3/25/2010 17:08
229659	3/30/2010 7:41	JOHNS, DENICE D	504 NORTHCRES DR	
229852	3/30/2010 16:27	ERICKSON, SONYA	2303 RADAR RIDGE DR	3/30/2010 16:49
229978	3/31/2010 14:02	ERICKSON, SONYA	59 WILLOW ST	4/6/2010 16:28
230037	3/31/2010 16:56	ERICKSON, SONYA	4015 LEALAND LN	4/6/2010 16:00
230403	4/5/2010 10:36	ERICKSON, SONYA	BBLE CREEK DR & RADAR RIDGE	4/5/2010 10:37
230683	4/6/2010 16:33	ERICKSON, SONYA	240 KNAPP BLVD	4/29/2010 15:14
230686	4/6/2010 16:42	ERICKSON, SONYA	1200 VILLA PL	4/21/2010 16:30
230694	4/6/2010 16:57	ERICKSON, SONYA	3501 NOLENSVILLE RD	
231133	4/9/2010 12:51	ERICKSON, SONYA	1814 MERIDIAN ST	4/9/2010 12:58
231161	4/9/2010 14:46	ERICKSON, SONYA	115 WEST END PL	4/29/2010 7:24
231411	4/13/2010 9:56	HOLT, BONNYE	7177 COCKRILL BEND BLVD	4/22/2010 7:42
231889	4/16/2010 7:48	ERICKSON, SONYA	1604 SPRINGFIELD HWY	5/18/2010 10:25
231940	4/16/2010 11:08	HAYES, JOSH	245 GREAT CIRCLE ROAD	4/19/2010 12:33
232347	4/21/2010 6:56	HAYES, JOSH	3590 HERMITAGE IND DR	6/29/2010 8:33
232496	4/21/2010 17:15	ERICKSON, SONYA	3313 EZELL ROAD	
232643	4/23/2010 8:39	HAYES, KIMBERLY	2505 DICKERSON ROAD	
232755	4/23/2010 14:50	ERICKSON, SONYA	2126 CANADY AVE	6/15/2010 8:38

Table 3-E.3 Summary of NPDES Water Quality Complaint Investigations Initiated in PY7 (continued)

ID	Date/Time Initiated	Dispatch To	Problem Address	Date/Time Closed
232760	4/23/2010 15:06	ERICKSON, SONYA	ORDWAY PL	5/18/2010 9:48
233121	4/27/2010 14:49	ERICKSON, SONYA	2403 ABBOTT MARTIN RD	4/29/2010 15:56
233183	4/28/2010 8:16	ERICKSON, SONYA	915 CHROKEE AVE	5/10/2010 11:49
233429	4/29/2010 13:40	ERICKSON, SONYA	0 JAMES AVE.	4/29/2010 13:48
233434	4/29/2010 13:52	ERICKSON, SONYA	741 MURFREESBORO RD	4/29/2010 14:11
233809	5/3/2010 14:00	DOHN, REBECCA	1515 GOLF	5/3/2010 14:11
236741	5/18/2010 10:57	ERICKSON, SONYA	6514 ROBERTSON AVE	
236849	5/18/2010 17:02	ERICKSON, SONYA	252 DONELSON HILLS DR	6/15/2010 8:41
236850	5/18/2010 17:10	ERICKSON, SONYA	1000 CINDER RD	
237155	5/20/2010 12:28	ERICKSON, SONYA	1314 GRANDVIEW	5/20/2010 14:59
237394	5/21/2010 16:06	ERICKSON, SONYA	2009 SEVIER ST	5/25/2010 16:16
237596	5/24/2010 17:03	ERICKSON, SONYA	4601 MURPHY RD	
240662	6/7/2010 13:28	HAYES, JOSH	1736 RIVER HILLS DR	
241097	6/9/2010 14:46	ERICKSON, SONYA	5815 CHARLOTTE PK	7/20/2010 14:59
241107	6/9/2010 15:11	ERICKSON, SONYA	5821 CHARLOTTE PK	7/20/2010 15:03
241111	6/9/2010 15:26	ERICKSON, SONYA	5823 CHARLOTTE PK	7/20/2010 15:07
241115	6/9/2010 16:12	ERICKSON, SONYA	6771 PENNYWELL DRIVE	6/11/2010 14:32
241490	6/11/2010 14:47	ERICKSON, SONYA	401 WIMPOLE DR	
241752	6/15/2010 8:33	DOHN, REBECCA	904 VISCO	6/15/2010 8:48
242769	6/21/2010 14:09	HAYES, JOSH	527 BASSWOOD	6/21/2010 14:13
243279	6/24/2010 14:34	ERICKSON, SONYA	4425 TYNE BLVD	
243281	6/24/2010 14:40	ERICKSON, SONYA	7501 RIVER FORK DR	6/24/2010 14:46
243812	6/29/2010 9:19	ERICKSON, SONYA	203 LUCIEN RD	
243987	6/29/2010 17:01	HAYES, JOSH	7200 CENTENNIAL BLVD	7/7/2010 7:06

Note: This list only refers to potential illicit discharges that rose to the level of initiating a detailed investigation. Many other reports of potential illicit discharges never rise to the level of full blown investigation and are, therefore, not documented in the database.

Table 6-C.2 Summary of Targeted Public Education Handouts for Specific Illicit Discharge Responses in PY7

Business Name	Address	Date	Inspector	Vehicle Repair	Oil Disposal	Pressure Wash	Restaurant	Lawn & Garden	Swimming Pool	Door Hanger	Natrual Foam	Custom Mailing
residence	1038 westchester	7/8/2009	SRE					x		x		
	4537 Nolensville Road	7/27/2009	JH				x			x		
	2002 richard Jones Rd	8/4/2009	SRE					x				
	2131 Abbott Martin Rd (Kroger)	8/10/2009	SRE			x	x					
	243 willow ln	9/17/2009	SRE	x	x							
	730 gallatin rd	9/17/2009	Boots			x						
	609 Napoleon Ave.	10/28/2009	SRE	x								
	sent by e-mail	11/6/2009	SRE						x			
Lois Brown	sent by e-mail	11/23/2009	SRE								x	
Tiffany Wilmont	sent by e-mail	11/23/2009	SRE								x	
	sent bv e-mail to Supremem oil	1/20/2010	SRE			x						
	2017 Candlewood Dr. (madison)	1/28/2010	SRE		x					x		
	1300 Antioch Pike	2/9/2010	SRE			x						also letter
Brad with Hampton Inn	310 4th Ave south	2/23/2010	SRE						x			faxed
Rebecca Monette	sent by e-mail to her	3/1/2010	SRE								x	
ownr of house	328 Walton Ln	3/1/2010	SRE							x		
TMSP permitted industries	Davidson Co.	3/1/2010	JH									150
Joelynn	jlmangrum@mwc-lawfirm.com	3/3/2010	SRE								x	
Residents	1110Brookmeade	3/3/2010	SRE								x	
Residents	4015 Lealand Lane	3/3/2010	SRE							x		
Residents	1211 BELL RD #264	3/16/2010	SRE							x	x	
Residents	4145 Boyd Dr	3/16/2010	SRE							x		
Shell Gas station	84 Thompson Ln	3/25/2010	SRE		x	x						
Pep Boys	5330 charlotte Pk	3/26/2010	SRE		x	x						
McCabe Watershed	Murphy Branch/Rd.	4/1/2010	JH									2,500
TN Drillers	statewide misc	4/21/2010	SRE									200
Discount Motors	3501 Nolensville Rd.	4/29/2010	SRE									1
Dragon Garden Rest.	4912 Charlotte Pk	6/9/2010	SRE			x						

Table 6-E.1 Summary of NPDES Response to MWS Sewer Overflows in PY7

ID	Date/Time Initiated	Dispatched To	Problem Address	Date/Time Closed
202723	7/8/2009 16:03	ERICKSON, SONYA	826 OVERHILL DR	9/30/2009 14:25
202725	7/8/2009 16:03	ERICKSON, SONYA	826 OVERHILL DR	7/9/2009 7:36
203061	7/10/2009 17:35	ERICKSON, SONYA	861 DOVERGLEN	7/16/2009 10:58
204310	7/21/2009 15:03	ERICKSON, SONYA	430 N ADAMWOOD CT	7/21/2009 15:06
206828	8/12/2009 9:06	ERICKSON, SONYA	6426 THUNDER BIRD LN	8/12/2009 9:17
211538	9/23/2009 9:08	ERICKSON, SONYA	6644 SHADYVIEW DR	9/23/2009 9:10
211541	9/23/2009 9:12	ERICKSON, SONYA	3120 KINROSS AVE	9/30/2009 16:21
211544	9/23/2009 9:22	ERICKSON, SONYA	1300 VASHTI ST	9/23/2009 9:30
211550	9/23/2009 9:39	ERICKSON, SONYA	411 ANNEX AVE	9/29/2009 8:34
211660	9/23/2009 15:39	ERICKSON, SONYA	309 GOLDIE	9/25/2009 16:30
211952	9/25/2009 17:00	ERICKSON, SONYA	355 OCALA	9/30/2009 16:29
211953	9/25/2009 17:06	ERICKSON, SONYA	415 CAPRI CT	9/25/2009 17:11
213154	10/8/2009 7:50	ERICKSON, SONYA	228 BURLINGTON PLACE	12/9/2009 14:21
213155	10/8/2009 7:50	ERICKSON, SONYA	228 BURLINGTON PLACE	10/9/2009 9:04
213746	10/14/2009 7:16	ERICKSON, SONYA	5604 STONEWAY TRAIL	12/9/2009 14:23
213747	10/14/2009 7:16	ERICKSON, SONYA	5604 STONEWAY TRAIL	10/20/2009 16:37
214018	10/16/2009 8:20	ERICKSON, SONYA	895 S 6TH ST	10/30/2009 9:30
214512	10/21/2009 15:16	ERICKSON, SONYA	134 VOLCANO CT.	10/22/2009 7:09
215850	11/4/2009 8:59	ERICKSON, SONYA	5510 COUNTRY DR	11/6/2009 8:17
215884	11/4/2009 10:10	BARBERO, MICHELLE	130 DODGE DR	12/1/2009 7:35
216127	11/6/2009 8:42	ERICKSON, SONYA	981 MURFREESBORO RD	12/18/2009 13:09
216558	11/11/2009 8:53	ERICKSON, SONYA	2511 CLARKSVILLE PK	11/11/2009 15:00
218117	11/30/2009 13:33	ERICKSON, SONYA	2019 26TH AVE N	12/18/2009 7:49
218540	12/4/2009 13:51	ERICKSON, SONYA	820 OVERHILLS DR	12/18/2009 13:09
220289	12/29/2009 23:06	BINDER, DALE	152 TUSCULUM RD	1/13/2010 15:53
221783	1/14/2010 10:42	ERICKSON, SONYA	100 IRIS AVE	2/9/2010 8:42
222013	1/17/2010 16:07	BINDER, DALE	NASHBORO VILLAGE & BELL ROAD	1/28/2010 10:52
225762	2/19/2010 15:30	ERICKSON, SONYA	4817 CATSKILL	2/19/2010 15:37
225763	2/19/2010 15:38	ERICKSON, SONYA	4837 CATSKILL DR	2/19/2010 15:44
225764	2/19/2010 15:51	ERICKSON, SONYA	500 HICKORYVIEW DR	2/19/2010 18:49
227660	3/11/2010 10:05	ERICKSON, SONYA	1309 BAPTIST WORLD CENTER DR	3/11/2010 10:08
228212	3/16/2010 16:19	ERICKSON, SONYA	2817 CATO RIDGE DR	3/16/2010 16:48
231983	4/16/2010 14:09	ERICKSON, SONYA	2970 ANDERSON RD	4/20/2010 7:27
236846	5/18/2010 16:47	ERICKSON, SONYA	235 MARGO LN	5/24/2010 16:08

Note: The NPDES Section only responds to Sewer Overflows when requested by the System Services Division to provide containment and cleanup guidance.

Table 6-E.2 Summary of Failing Septic Systems in PY7

Map & Parcel	Date Received	Street Name	Last Name	Job Description	Environmentalist	Sewage on Ground	Notice Issued	Citation	Abatement	Comments
181-00-0 031.00	3/13/2009	Old Hickory Blvd	Ditavong	repair	SF/SL	4/1/2009	5/25/2009		7/15/2009	Water Conservation
165-00-0 064.00	6/15/2009	Lavergne-Couchville Pk	Torres	Addition	JH	6/25/2009	7/1/2009	8/4/2009	8/20/2009	Vacate
063-04-0 041.00	6/16/2009	Laura Avenue	Gaines	Complaint	Fellwock	6/24/2009	6/25/2009	7/15/2009	9/9/2009	Connect to sewer by Court Order
008-00-0 206.00	8/3/2009	Baxter Road	Baker	Failure	Fellwock	8/4/2009	8/10/2009		9/9/2009	
014-00-0 018.00	8/10/2009	Clarksville Hwy	Davis	Failure	Fellwock	8/13/2009	8/17/2009		9/9/2009	
016-00-0 222.00	9/28/2009	Loma Terra Court	Allen	Addition	Fellwock	11/16/2009	11/17/2009		12/1/2009	
048-00-0 113.00	10/15/2009	Eatons Creek Road	Cothron	Failure	Fellwock	10/20/2009	10/26/2009		1/25/2010	
029-00-0 254.00	1/14/2010	Eatons Creek Road	Jones	Failure	Fellwock	1/28/2010	2/2/2010		2/25/2010	
048-00-0 159.00	2/19/2010	Clarksville Pk	Templett	Complaint	Fellwock	2/24/2010	2/26/2010		3/4/2010	
080-00-0 046.00	1/28/2010	County Hospital Rd	Myles	Failure	Fellwock	2/4/2010	2/8/2010		3/5/2010	
121-00-0 132.00	1/15/2010	Couchville Pk	Fauman	Failure	Lough	1/26/2010	1/29/2010		3/9/2010	
087-00-0 026.00	1/8/2010	New Hope Road	Smith	Failure	Lough	1/13/2010	1/14/2010		3/30/2010	
164-00-0 200.00	2/24/2010	Mt. View Rd	Brown	Failure	Lough	3/4/2010	3/5/2010		3/31/2010	
172-00-0 059.00	11/23/2009	Mt. Pisgah Road	Rucker	Complaint	Lough	11/24/2009	1/21/2010		4/2/2010	
028-00-0 137.00	3/16/2010	Higdon Rd	Kasmierkiewicz	Complaint	Fellwock	3/17/2010	3/18/2010		4/2/2010	
018-00-0 111.00	12/16/2009	Lickton Pk	White	Failure	Fellwock	12/18/2009	3/23/2010		4/2/2010	
063-00-0 089.00	1/4/2010	Menees Dr.	Norris	Failure	Fellwock	1/19/2010	1/20/2010		4/7/2010	
164-00-0 141.01	3/2/2010	Old Hickory Blvd	Fletcher	Complaint	Lough	3/8/2010	3/11/2010		4/13/2010	Vacate
164-00-0 125.00	1/28/2010	Murfreesboro Rd	Alvila	Complaint	Lough	2/4/2010	2/8/2010	2/8/2010	4/14/2010	Vacate - Court Order
173-00-0 110.00	1/22/2010	Old Hickory Blvd	Smith	Failure	Lough	1/26/2010	2/3/2010		4/15/2010	
087-00-0 057.00	1/8/2010	Central Pike	Baldwin	Complaint	Lough	1/13/2010	1/14/2010		4/20/2010	
002-00-0 032.00	3/16/2010	East End Road	Coleman	Loan Letter	Fellwock	3/24/2010	3/25/2010		4/23/2010	
016-00-0 155.00	3/24/2010	Union Hill Rd	Frensley	Failure	Fellwock	4/6/2010	4/7/2010		6/14/2010	
173-00-0 018.00	4/9/2010	Old Hickory Blvd	Wibon	Failure	Lough	4/15/2010	6/3/2010		6/15/2010	
181-00-0 231.00	1/14/2010	Pettus Road	Buckner	Complaint	Lough	1/26/2010	1/28/2010			Connect to Sewer - Precision Plumbing (sewage)
014-00-0 018.00	2/5/2010	Clarksville Pk	Davis	Failure	Fellwock	2/11/2010	2/12/2010	3/19/2010		Court 7/14/2010 - -- -Pumped
039-00-0 072.00	2/25/2010	Clarksville Pk	Curtis	Re-Check	Fellwock	2/24/2010	2/25/2010	3/12/2010	6/23/2010	Court 6/23/2010 - Mandatory Injunction
096-10-0 176.00	3/16/2010	Emery Dr.	Ulrich	Complaint	Lough	3/19/2010	3/30/2010	6/21/2010		Connect to sewer by 6/30/2010 (sewage)
017-00-0 057.00	4/20/2010	Lickton Pk	Spurlock	Failure	Fellwock	4/23/2010	4/28/2010		6/23/2010	10 Day Notice - Charles Nash
135-00-0 140.00	4/16/2010	Reynolds Road	Crowder	Failure	Lough	4/21/2010	5/4/2010	6/21/2010		30 Day Notice (sewage)
111-00-0 033.00	6/23/2010	Stewarts Ferry Pk	Smith	Failure	Fellwock	6/23/2010	6/28/2010			30 Day Notice (sewage)

Table 6-E.3 Summary of MWS System Services Sewer Overflow Responses in PY7

	July	August	September	October	November	December	January	February	March	April	May	June	Total
Wet Weather Overflows - CSO Permitted	38	26	37	35	6	16	21	12	26	14	31	26	**288**
Flood											162	3	**165**
Wet Weather Overflows - sewer (non pumps)	0	2	51	15	1	10	13	12	4	7	2	0	**117**
Wet Weather Overflows - Pump Stations	1	3	39	19	0	16	15	8	4	10	2	2	**119**
Wet Weather Overflows - TOTAL	**39**	**31**	**127**	**69**	**7**	**42**	**49**	**32**	**34**	**31**	**197**	**31**	**689**
Dry Weather Overflows - sewer (non-pumps)	6	5	3	10	18	17	12	12	9	10	12	14	**128**
Dry Weather Overflows - Pump Stations	0	1	0	0	1	0	1	0	0	0	5	1	**9**
Dry Weather Overflows - TOTAL	**6**	**6**	**3**	**10**	**19**	**17**	**13**	**12**	**9**	**10**	**17**	**15**	**137**
# of Overflows that Required Remediation	0	0	0	0	0	0	0	0	0	0	0	0	**0**
# of Overflows that Reached Creeks - Sewer	3	8	47	22	4	18	9	20	11	13	120	13	**288**
# of Overflows that Reached Creeks - Pump Stations(All)	1	2	37	17	1	10	14	3	4	9	58	3	**159**
# of Overflow Response Staff / per sewer event	2	2	2	2	2	2	2	2	2	2	2	2	**24**

Note: Numbers are estimates provided by the MWS System Services Division.

Table 6-E.4 Overflow Reduction Work in PY7

Type of Projects	# of Projects	Miles of Sanitary Lines	Money Spent
Inglewood Sewer Rehabilitation Phase 4 (Project #90-SC-150H)	1	2.06	356,768
Hermitage Area Sewer Rehabilitation (Project #99-SG-9C)	1	2.94	1,376,874
Sewer Rehabilitation Projects in FY09	2	5.00	$1,733,642
Other Projects that may have a Net Benefit to Water Quality by Reducing the Number of Sewer Overflows:	Barker Road / Omohundro Wastewater Equalization Basin (Project # 03-SC-136A) - $11,491,981 - Construction of a 15 MG Equalization Basin and pumping station for storage of excess flow during rainfall events to reduce separated sewer overflows at the Barker Road and Visco Drive SSO sites.		

Table 7-C.1 Stormwater Issues Found During Inspections of Grease Control Equipment

Permit Year	Stormwater Noncompliance Issues
Permit Year 2	51
Permit Year 3	61
Permit Year 4	74
Permit Year 5	43
Permit Year 6	32
Permit Year 7	34
Total	**295**

These numbers reflect non-compliance conditions found at Food Service Establishments (FSE) such as fats, oils, and grease observed on the ground. Data was extracted from the MWS FOG Enforcement NCN Summary.

Table 8-A.1 Summary of Construction Related Inspections

Inspection Type	Initial EPSC	Bond Reduction	Bond Release	Temp U&O	Final U&O	Routine General Permit	Initial Complaint	Follow-up Complaint	Total
Year Previous to Cycle II PY1	198	61	28	46	113	2,235	0	0	2,681
PY1	270	80	44	53	122	4,139	0	0	4,708
PY2	271	23	59	56	177	4,923	0	0	5,509
PY3	273	100	85	85	244	4,799	69	66	5,721
PY4	257	112	143	90	157	5,349	190	254	6,552
PY5	176	132	141	107	174	4,581	382	634	6,327
PY6	124	195	224	104	172	4,480	230	631	6,160
PY7	189	147	127	151	160	3,910	163	232	5,079
Total	**1,758**	**850**	**851**	**692**	**1,319**	**34,416**	**1,034**	**1,817**	**42,737**

Note: The shaded columns represent the inspections performed on non-permitted construction sites. For years previous to PY3, inspections of non-permitted sites were counted in the routine Grading Permit column. Inspection numbers obtained from the NPDES Office "Results Matter" spreadsheet.

Table 8-A.2 Summary of Grading Permits Processed

Year	Preconstruction Meetings	Grading Permits Issued	Permits Completed
Total FY03	257	198	102
Total FY04	305	270	159
Total FY05	284	271	220
Total FY06	296	252	196
Total FY07	251	239	188
Total FY08	222	165	205
Total FY09	148	109	238
Total FY10	146	121	117
Total	**1,909**	**1,625**	**1,425**

Table 8-A.3 Summary of Construction Complaint Investigations Initiated in PY7

ID	Date/Time Initiated	Dispatched To	Problem Address	Date/Time Closed
202721	7/8/2009 15:41	OHARA, KATHERINE	3110 CLARKSVILLE PIKE	7/8/2009 15:48
203242	7/13/2009 14:16	OHARA, KATHERINE	7140 WHITES CREEK PIKE	8/13/2009 8:44
205593	8/3/2009 8:16	OHARA, KATHERINE	1100 COUNTY HOSPITAL ROAD	8/13/2009 8:38
206908	8/12/2009 12:49	BINDER, DALE	309 WHITWORTH	8/26/2009 11:46
207535	8/18/2009 7:51	BINDER, DALE	7244 RIVERFRONT DR	8/31/2009 16:13
207639	8/18/2009 13:42	HERMAN, SHAWN	2515 UNA ANTIOCH PIKE	4/1/2010 7:16
207781	8/19/2009 13:09	MOORE, KIMBERLY	5446 LICKTON PIKE	8/27/2009 13:58
208357	8/25/2009 7:56	HERMAN, SHAWN	1645 BELL RD	10/15/2009 7:27
208735	8/27/2009 8:02	OHARA, KATHERINE	2432 BRICK CHURCH PIKE	4/29/2010 8:44
210107	9/9/2009 13:23	BINDER, DALE	2805 NOLENSVILLE PIKE	10/26/2009 11:20
210166	9/10/2009 7:23	OHARA, KATHERINE	901 DALEBROOK LN	12/11/2009 14:44
210191	9/10/2009 8:56	OHARA, KATHERINE	SPRINGFIELD HWY	4/20/2010 7:30
210890	9/17/2009 8:52	OHARA, KATHERINE	730 GALLATIN PIKE	6/4/2010 13:10
211559	9/23/2009 9:56	ERICKSON, SONYA	1441 ELM HILL PK	9/23/2009 11:02
211655	9/23/2009 15:25	HERMAN, SHAWN	2558 UNA ANTIOCH PIKE	11/18/2009 12:53
211743	9/24/2009 10:45	BINDER, DALE	4055 MANNING HOLLOW ROAD	12/15/2009 10:30
212440	10/1/2009 7:08	BINDER, DALE	3001 HAMILTON CHURCH RD #109	12/15/2009 10:32
212968	10/6/2009 15:10	BRYANT, HAROLD	0 JACKSONIAN DRIVE	1/6/2010 9:40
214080	10/16/2009 11:41	OHARA, KATHERINE	5461 CLARKSVILLE PIKE	10/16/2009 11:44
214263	10/20/2009 7:30	SAAD, PHIL	400 CRAIGHEAD ST	
214438	10/21/2009 11:03	OHARA, KATHERINE	0 SPRINGFIELD HIGHWAY	
214492	10/21/2009 13:24	MOORE, KIMBERLY	7236 OLD HARDING RD	11/30/2009 13:00
215130	10/28/2009 10:11	JOHNS, DENICE D	495 OLD HICKORY BLVD	7/9/2010 9:24
215462	10/30/2009 11:24	BRYANT, HAROLD	4307 CENTRAL PIKE	3/31/2010 9:06
215670	11/2/2009 15:57	BINDER, DALE	0 BENZING RD	7/20/2010 6:32
215722	11/3/2009 9:47	OHARA, KATHERINE	629 MYATT DRIVE	12/30/2009 13:42
215747	11/3/2009 10:45	OHARA, KATHERINE	BIDWELL ROAD	12/22/2009 14:01
215960	11/4/2009 15:26	OHARA, KATHERINE	1004 GALLATIN PIKE	11/4/2009 15:37
216496	11/10/2009 13:29	OHARA, KATHERINE	1503 DICKERSON PIKE	2/12/2010 15:04
216678	11/12/2009 7:37	HERMAN, SHAWN	4226 MOSS ROAD	2/9/2010 9:47
217769	11/23/2009 15:38	OHARA, KATHERINE	6261 HILLSBORO PIKE	11/23/2009 15:41
218311	12/2/2009 10:59	JOHNS, DENICE D	181 LITTLE GREEN ST	
218500	12/4/2009 10:15	OHARA, KATHERINE	1300 NEELEYS BEND ROAD	12/11/2009 14:47
218588	12/7/2009 9:32	SAAD, PHIL	7996 HIGHWAY 100	12/7/2009 10:05
218932	12/9/2009 14:48		1554 HUDSON ROAD	12/9/2009 14:54
219017	12/10/2009 11:35	MOORE, KIMBERLY	2661 OAK FOREST DRIVE	
219510	12/17/2009 9:06	HAYES, KIMBERLY	6185 PETTUS RD	
222926	1/26/2010 14:38	ERICKSON, SONYA	1300 ANTIOCH PK	2/9/2010 9:36
223511	2/1/2010 6:48	BINDER, DALE	675 OLD HICKORY BV	2/1/2010 6:52
225214	2/16/2010 9:18	OHARA, KATHERINE	OLD HICKORY BLVD	7/2/2010 15:18
226556	3/1/2010 14:01	OHARA, KATHERINE	4011 BANK STREET	3/1/2010 14:08
226572	3/1/2010 14:32	PACE, TIFFANY	528 MAY DRIVE	3/9/2010 10:42
227259	3/8/2010 15:17	OHARA, KATHERINE	3544 DICKERSON PIKE	
227320	3/9/2010 9:32	BINDER, DALE	2214 HOBSON PIKE	4/13/2010 6:09
227617	3/11/2010 6:28	BINDER, DALE	238 STONERS GLENN CT	4/13/2010 7:12

Table 8-A.3 Summary of Construction Complaint Investigations Initiated in PY7 (Continued)

ID	Date/Time Initiated	Dispatched To	Problem Address	Date/Time Closed
227937	3/15/2010 9:10	OHARA, KATHERINE	0 ARROWHEAD DRIVE	
228061	3/15/2010 16:17	OHARA, KATHERINE	3465 W HAMILTON AVE	3/30/2010 14:18
229132	3/25/2010 9:37	SAAD, PHIL	7734 HIGHWAY 70 SOUTH	7/9/2010 7:17
230041	4/1/2010 7:03	SAAD, PHIL	7709 SAWYER BROWN RD	8/3/2010 7:19
230519	4/6/2010 7:03	SAAD, PHIL	0 OLD HARDING PIKE	
231043	4/9/2010 7:46	OHARA, KATHERINE	4010 BLUE BERRY HILL RD	
231153	4/9/2010 14:19	OHARA, KATHERINE	3831 WHITES CREEK PIKE	8/23/2010 8:09
231364	4/13/2010 6:25	BINDER, DALE	3020 BROMLEY WAY	4/13/2010 6:41
232756	4/23/2010 14:57	ERICKSON, SONYA	2403 ABOTT MARTIN RD	5/10/2010 11:49
232825	4/26/2010 9:20	OHARA, KATHERINE	0 BULL RUN ROAD	4/26/2010 9:33
233227	4/28/2010 10:20	OHARA, KATHERINE	2408 DICKERSON PIKE	
235377	5/13/2010 8:29	PACE, TIFFANY	2518 WINFORD AVE.	7/9/2010 9:29
235854	5/17/2010 13:18	BINDER, DALE	325 A 54TH AVE N	
236806	5/18/2010 13:54	OHARA, KATHERINE	3961 KNIGHT DRIVE	
236825	5/18/2010 15:02	OHARA, KATHERINE	0 RIVER TRACE	
243137	6/23/2010 15:27	OHARA, KATHERINE	BOYDS HILLTOP DRIVE	

Table 8-A.4 Summary of Stormwater Engineering Plan Review Numbers in PY7

	July	August	September	October	November	January	February	March	April	May	June	Total
Number of Plan Submittals	135	122	145	112	98	104	97	138	126	62	122	**1367**
Number of Plan Approvals	51	39	54	51	29	40	40	44	45	26	53	**506**

* Plan Submittal Numbers Include: Access database tracked Preliminaries that are reviewed for the Planning department, Excel spreadsheet tracked "Site Plan Reviews" that are reviewed for Codes permits and KIVA tracked Grading Plans & As-Builts. It is all initial submittals, resubmittals and additional information submitted. The Access query is called 'Results Matter_In_All Submitted'. The Excel spreadsheet is called "SWEngr". The KIVA report is called SWREVSUM02 described as "SWGR DECISIONS BY ACT / EMPL". The numbers exclude SWUF reviews because they are not plan reviews.

* Plan Approvals Numbers Include review results of Approved, Conditionally Approved (Approved Except as Noted) and No Permit Required. Plans Approved Numbers Exclude review results of Returned for Corrections, Withdrawn, Hold or Denied. The numbers exclude SWUF reviews because they are not plan reviews. They also exclude SWEngr's site plan reviews because the review result is not currently tracked separately. The KIVA report is called SWREVSUM03 described as "SWGR SUMMARY BY ACTIVITY". For the Planning Preliminary plans, the query is "Results Matter_Out_All Approved".

Table 8-A.5 Summary Tier II Grading Permits and Single Family Home Grading Checklists in PY7

Oversight Activity on Smaller Grading Sites	Number of Activities in PY7
Submitted Checklists for Building Permit Signoffs	113
Checklists Distributed During Demolition Permit Sign-offs (with intent to possibly build/re-build)	90
Single Family Residential Requiring Tier II Grading Permit	16
Building Permit Sign-off for New Single Family Construction	104
Site Inspections for Single Family Residential Construction	546

Table 9-A.1 Buffer Expanded Floodplain (MWS Stormwater Buyout Properties)

Address Number	Street Name	Watershed (Creek)/Source of Flooding
3105	Ewingdale Drive	Ewing Creek
3109	Ewingdale Drive	Ewing Creek
3113	Ewingdale Drive	Ewing Creek
3117	Ewingdale Drive	Ewing Creek
3121	Ewingdale Drive	Ewing Creek
3125	Ewingdale Drive	Ewing Creek
3129	Ewingdale Drive	Ewing Creek
3133	Ewingdale Drive	Ewing Creek
3137	Ewingdale Drive	Ewing Creek
3141	Ewingdale Drive	Ewing Creek
3145	Ewingdale Drive	Ewing Creek
3149	Ewingdale Drive	Ewing Creek
3153	Ewingdale Drive	Ewing Creek
3157	Ewingdale Drive	Ewing Creek
3161	Ewingdale Drive	Ewing Creek
3165	Ewingdale Drive	Ewing Creek
3169	Ewingdale Drive	Ewing Creek
3173	Ewingdale Drive	Ewing Creek
3137	Gwynnwood Drive	Ewing Creek
3133	Gwynnwood Drive	Ewing Creek
355	Wimpole Drive	Mill Creek
357	Wimpole Drive	Mill Creek
359	Wimpole Drive	Mill Creek
361	Wimpole Drive	Mill Creek
363	Wimpole Drive	Mill Creek
365	Wimpole Drive	Mill Creek
369	Wimpole Drive	Mill Creek
373	Wimpole Drive	Mill Creek
375	Wimpole Drive	Mill Creek
377	Wimpole Drive	Mill Creek
379	Wimpole Drive	Mill Creek
381	Wimpole Drive	Mill Creek
383	Wimpole Drive	Mill Creek
385	Wimpole Drive	Mill Creek
387	Wimpole Drive	Mill Creek
300	Milner Court	Sevenmile Creek
301	Milner Court	Sevenmile Creek
303	Milner Court	Sevenmile Creek

Table 9-A.1 Buffer Expanded Floodplain (MWS Stormwater Buyout Properties) (Continued)

Address Number	Street Name	Watershed (Creek)/Source of Flooding
305	Milner Court	Sevenmile Creek
307	Milner Court	Sevenmile Creek
4754	Milner Drive	Sevenmile Creek
4800	Milner Drive	Sevenmile Creek
4802	Milner Drive	Sevenmile Creek
4804	Milner Drive	Sevenmile Creek
4806	Milner Drive	Sevenmile Creek
4808	Milner Drive	Sevenmile Creek
4810	Milner Drive	Sevenmile Creek
4947	Edmondson Pike	Sevenmile Creek
4955	Edmondson Pike	Sevenmile Creek
209	Blackman Road	Sevenmile Creek
213	Blackman Road	Sevenmile Creek
215	Blackman Road	Sevenmile Creek
217	Blackman Road	Sevenmile Creek
219	Blackman Road	Sevenmile Creek
5049	Briarwood Drive	Sevenmile Creek
497	Paragon Mills Road	Sevenmile Creek
505	Paragon Mills Road	Sevenmile Creek
281	Elysian Fields Road	Sevenmile Creek
5409	San Marcos Drive	Trib. to Sevenmile
4801	Humber Drive	Sinkhole
637	Brook Drive	Whittemore Branch
641	Brook Drive	Whittemore Branch
412	Brook View Estates Dr	Whittemore Branch
105	Cedarvalley Court	Whittemore Branch

Table 10-A.1 Presentations Given by NPDES in PY7

Date	Forum/Outreach Group	Title/Description of Outreach	Presenter	Estimated Audience Size
4/13/2010	AWRA	Thermograph Program overview and changes made	Mary Garmon	50
2/11/2010	Red River Waste Disposal	MS4 Permit Municipal Employee Stormwater Training	Josh Hayes	38
2/10/2010	TDEC Level One Erosion Control Workshop	Grading Permit Process and Erosion Control in Davidson County	Dale Binder	112
2/2/2010	Metro Health Department Inspectors	Health Department Orientation to the MS4 Permit	Josh Hayes	28
1/20/2010	TDEC Chinese Delegation Hosting Event	Metro Stormwater Sustainability Initiatives	Michael Hunt	20
1/19/2010	TDEC Water Quality Control Board	Rain Garden Overview	Michael Hunt	30
12/10/2009	Nashville Bar Assoc. - Environmental Law Committee	Metro Nashville's MS4 Program: Some Ongoing Considerations	Michael Hunt	6
12/2/2009	TDEC Level One Erosion Control Workshop	Grading Permit Process and Erosion Control in Davidson County	Dale Binder	109
10/26/2009	TNSA/APWA Annual Meeting	Metro Nashville's MS4 Program: Compliance, Management & Practicality in Tough Economic Times	Michael Hunt	40
10/24/2009	Let's Talk Trees: Managing Nashville's Urban Forest	Recent MWS Tree Initiatives	Michael Hunt	40
9/10/2009	TDEC Level One Erosion Control Workshop	Grading Permit Process and Erosion Control in Davidson County	Dale Binder	130
8/19/2009	Metro Stormwater Management Committee	MWS Sustainablility Initiatives	Rebecca Dohn	30

Note: Some of the presentations given by MWS NPDES personnel are also documented in the MWS PIO table (10-A.2) of presentations.

Table 10-A.2 Presentations Documented by the MWS PIO in PY7

Date	Event Name	Programs/ Activities	Students	Grade Level	Adults
Adopt-A-Stream Program					
7/25/2009	Neighborhood Association: S. Nashville Action Pe Browns Creek - 1.0 miles	1			
8/14/2009	Black & Veatch Harpeth River - 2.8 miles	1			
8/26/2009	Christ the King School & CTK Church - Browns Creek - 5 miles	1			
8/26/2009	Whites Creek Bandits Whites Creek 2.5 miles	1			
Teacher Led Activity					
9/8/2009	Mills, Dan Elementary	3	72	4th grade	
9/15/2009	Haywood Elementary	4	80	4th grade	
9/16/2009	Crieve Hall Elementary	2	60	4th grade	
9/17/2009	Binkley, Norman Elementary	3	67	4th grade	
9/18/2009	Sylvan Park Elem. Paideia Design Ctr.	2	58	1st grade	
9/22/2009	Haywood Elementary	1	28	4th grade	
9/28/2009	Shayne Elem.	3	78	4th grade	
9/29/2009	Shayne Elem.	2	52	4th grade	
9/30/2009	Buena Vista Elementary Enhanced Option	2	76	4th grade	
10/2/2009	Sylvan Park Elem. Paideia Design Ctr.	2	75	3rd grade	
10/13/2009	Shwab Elem.	3	58	4th grade	
10/14/2009	Cumberland Elementary	3	75	4th grade	
11/5/2009	Pennington Elem.	2	50	4th grade	
11/6/2009	Napier Elem. Enhanced Option	2	70	4th grade	
11/9/2009	Hickman Elementary	4	100	4th grade	
11/16/2009	Dodson Elementary	4	89	4th grade	
11/18/2009	Kelley, A.Z. Elementary	3	120	4th grade	
11/24/2009	Goodlettsville Elementary	4	89	4th grade	
12/4/2009	Ross Elem.	4	65	3rd & 4th grade	
12/9/2009	Una Elem.	4	100	4th grade	
12/10/2009	Una Elem.	3	75	4th grade	
1/20/2010	Glendale Elementary	3	49	4th grade	
1/21/2010	Joelton Elementary	2	42	4th grade	
1/22/2010	Sylvan Park Elem. Paideia Design Ctr.	4	76	2nd graders	
1/26/2010	Cockrill Elementary	4	86	4th grade	
1/28/2010	Sylvan Park Elem. Paideia Design Ctr.	3	73	4th grade	
2/9/2010	Jones Elem. Paideia Magnet	3	75	4th grade	
2/11/2010	Moss, J.E. Elementary	2	38	4th grade	
2/12/2010	Lakeview Elem. Design Center	5	77	4th grade	
2/17/2010	Westmeade Elem.	3	75	4th grade	
2/18/2010	Green, Alex Elementary	3	55	4th grade	
2/19/2010	Tom Joy Elem.	4	99	4th grade	
2/22/2010	Bordeaux Elementary Enhanced Option	2	34	4th grade	
2/23/2010	Bordeaux Elementary Enhanced Option	2	34	4th grade	
2/24/2010	Jones Elem. Paideia Magnet	3	75	4th grade	
2/25/2010	Croft Middle Design Center Environmental club	1	13	5th - 8th grade	
2/25/2010	Lockeland Elem. Design Center	3	61	4th grade	
3/2/2010	Maxwell Elementary School	1	22	4th grade	
3/5/2010	Carter-Lawrence Elementary Magnet	5	100	4th grade	
3/23/2010	Inglewood Elementary	3	42	4th grade	
4/5/2010	Green, Julia Elementary	5	104	4th grade	

Table 10-A.2 Presentations Documented by the MWS PIO in PY7 (Continued)

Date	Event Name	Programs/ Activities	Students	Grade Level	Adults
Classroom Programs					
Career Fair					
11/6/2009	MNPS High Schools- MWS engineering careers spotlighted	1	250	9th grade	
Enviroscape					
6/11/2010	Nashville Zoo Summer Camp	2	50	K-4th grade	10
6/17/2010	Library: Edmondson Pike Handouts: The Storm Drain & You	1	20	K-2nd grade	10
6/18/2010	Nashville Zoo Summer Camp	1	50	K-4th grade	10
6/21/2010	Library: Pruitt	1	10		2
6/25/2010	Nashville Zoo Summer Camp	2	50	5 & 6 year olds, 7-9 year olds	10
The Journey of Your Water & EnviroScape					
2/8/2010	Home School Group - Bellevue Enrichment Home School	2	80	K-4th grade	
The Water Cycle & Me					
9/1/2009	Mills, Dan Elementary	3	72	4th grade	
9/15/2009	Haywood Elementary	4	80	4th grade	
9/16/2009	Crieve Hall Elementary	2	60	4th grade	
9/17/2009	Binkley, Norman Elementary	3	67	4th grade	
9/18/2009	Sylvan Park Elem. Paideia Design Ctr.	2	58	1st grade	
9/22/2009	Haywood Elementary	1	28	4th grade	
9/28/2009	Shayne Elem.	3	78	4th grade	
9/29/2009	Shayne Elem.	2	52	4th grade	
9/30/2009	Buena Vista Elementary Enhanced Option	2	76	4th grade	
10/2/2009	Sylvan Park Elem. Paideia Design Ctr.	2	75	3rd grade	
10/13/2009	Shwab Elem.	3	58	4th grade	
10/14/2009	Cumberland Elementary	3	75	4th grade	
11/5/2009	Pennington Elem.	2	50	4th grade	
11/6/2009	Napier Elem. Enhanced Option	2	70	3rd & 4th grade	
11/9/2009	Hickman Elementary	4	100	4th grade	
11/16/2009	Dodson Elementary	4	89	4th grade	
11/18/2009	Kelley, A.Z. Elementary	3	120	4th grade	
11/24/2009	Goodlettsville Elementary	4	89	4th grade	
12/4/2009	Ross Elem.	4	65	3rd & 4th grade	
12/9/2009	Una Elem.	4	100	4th grade	
12/10/2009	Una Elem.	3	75	4th grade	
1/19/2010	Glendale Elementary	2	43	4th grade	
1/20/2010	Glendale Elementary	1	6	4th grade	
1/21/2010	Joelton Elementary	2	42	4th grade	
1/22/2010	Sylvan Park Elem. Paideia Design Ctr.	2	76	2nd grade	
1/26/2010	Cockrill Elementary	4	86	4th grade	
1/28/2010	Sylvan Park Elem. Paideia Design Ctr.	3	73	4th grade	
2/5/2010	Our Savior Lutheran Academy	2	15	2nd - 5th grade	
2/5/2010	Sylvan Park Elem. Paideia Design Ctr.	3	95	Kindergarten	
2/9/2010	Jones Elem. Paideia Magnet	3	75	4th grade	
2/11/2010	Moss, J.E. Elementary	1	38	4th grade	
2/12/2010	Lakeview Elem. Design Center	2	77	4th grade	

Table 10-A.2 Presentations Documented by the MWS PIO in PY7 (Continued)

Date	Event Name	Programs/ Activities	Students	Grade Level	Adults
2/17/2010	Westmeade Elem.	3	75	4th grade	
2/18/2010	Green, Alex Elementary	3	55	4th grade	
2/19/2010	Tom Joy Elem.	4	99	4th grade	
2/22/2010	Bordeaux Elementary Enhanced Option	2	34	4th grade	
2/23/2010	Bordeaux Elementary Enhanced Option	2	34	4th grade	
2/24/2010	Jones Elem. Paideia Magnet	3	75	4th grade	
2/25/2010	Lockeland Elem. Design Center	3	61	4th grade	
2/26/2010	Glendale Elementary	1	3	4th grade	
3/2/2010	Maxwell Elementary School	4	88	4th grade	
3/5/2010	Carter-Lawrence Elementary Magnet	5	100	4th grade	
3/11/2010	David Lipscomb Elementary School	4	68	2nd grade	
3/23/2010	Inglewood Elementary	3	42	4th grade	
4/5/2010	Green, Julia Elementary	4	104	4th grade	
4/29/2010	Fall-Hamilton Elementary Enhanced Option	3	45	3rd & 4th grade	
Water Fun & Games					
6/8/2010	Library: Hadley Park Handouts: Trash the Wipes, Don't Flush	2	40	preschool	15
6/16/2010	Library: Old Hickory Handout: Trash the Wipes Don't Flush	1	20		18
6/22/2010	Library: Southeast Handout: Trash the Wipes, Don't Flush	1	22		11
6/23/2010	Library: Hermitage Handout: Trash the Wipes, Don't Flush	2	65	preschool	38
6/28/2010	Library: North Branch Handout: Trash the Wipes, Don't Flush	1	30		8
6/29/2010	Library: Goodlettsville Branch Handout: Garden Hose Safety (Backflow Prevention)	1	20	school age	10
6/29/2010	Library: North Branch	1	15	school age	5
6/30/2010	Library: Inglewood - Handout: Trash the Wipes, Don't Flush	1	15		12
Water Presentation					
3/18/2010	Church: City Road United Methodist - Men's Group Monthly Meeting	1			25
Water Quality & You (Enviroscape)					
10/27/2009	Hume Fogg High Magnet	2	54	9th Grade Biology Class	
10/28/2009	Hume Fogg High Magnet	2	54	9th Grade Biology Class	
11/4/2009	University: Nashville State Community College	1		college	13
11/12/2009	Hume Fogg High Magnet	3	81	9th grade Biology I	
11/13/2009	Hume Fogg High Magnet	2	48	9th grade Biology 1 and APES	
11/23/2009	Hume Fogg High Magnet	2	50	9th grade, Bio I	
1/25/2010	Harpeth Hall	4	54	8th grade	
1/27/2010	Harpeth Hall	2	29	8th grade	
2/25/2010	Croft Middle Design Center Environmental club	1	10	5th - 8th grade	
3/22/2010	University: Nashville State Community College Environmental Science Class	1	24		

Table 10-A.2 Presentations Documented By the MWS PIO in PY7 (Continued)

Date	Event Name	Programs/ Activities	Students	Grade Level	Adults
Water Wise Gardening					
6/8/2010	Jr. Master Gardeners- garden hose backflow prevention	1	20	middle school age	1
Community Meeting					
Citizen Advisory Committee - LTCP					
2/18/2010	Library: East Branch	1			
3/11/2010	Lentz Public Health	1			
Community Group Meeting					
3/11/2010	Community Center: Coleman Community Center-Glenrose SW meeting	1			
Flood Recovery					
5/7/2010	Community Mt. Zion Baptist Church, Gilmore	1			
5/7/2010	Downtown Partnership Downtown Merchants	1			
5/11/2010	Community Cowan Street Business Group, Hollin	1			
5/15/2010	Community Inglewood Library, Cole	1			
5/17/2010	Community East Precinct, Hollin	1			
5/20/2010	Community Park Terrace, McGuire	1			
5/22/2010	Community Christ Church, Dominy	1			
5/22/2010	Community Hermitage Precinct, Stanley, Ricky Swift attended	1			
5/22/2010	Community Bordeaux Library	1			
6/3/2010	Community Bordeaux Hills HOA	1			
6/14/2010	TWIG (TN Women In Green)	1			
6/28/2010	Community Hazard Mitigation Buyout Plan - Bass Middle School	1			
6/29/2010	Community Hazard Mitigation Buyout Plan - Cresswell Middle School	1			
6/30/2010	Community 1 Hazard Mitigation Buyout Plan - Dupont Tyler Middle School				
Project Update Community Meeting					
2/8/2010	Library: Madison 1 - Pierce Road Community Meeting # 3 - update on project design status	1			
2/9/2010	Library: Donelson 1 - 608 Claridge Drive Stormwater Capital Improvements - pre-construction community meeting	1			
Booth					
3/4/2010	Nashville Lawn and Garden Show - Garden hose backflow prevention, rain barrels	1			
Event					
Misting Tent					
7/10/2009	Warner Parks: Full Moon Pickin' Party	1			
6/18/2010	Jefferson Street Jazz & Blues Festival	1			
Water Tower & Misting Tent					
9/13/2009	State Fair - 10 day event	1			

Table 10-A.2 Presentations Documented By the MWS PIO in PY7 (Continued)

Date	Event Name	Programs/ Activities	Students	Grade Level	Adults
Provide Water & Display					
Water Containers					
9/17/2009	Live on the Green Concerts	1			
9/24/2009	Live on the Green Concerts	1			
10/1/2009	Live on the Green Concerts	1			
10/8/2009	Live on the Green Concerts	1			
4/24/2010	Music City Marathon	1			
Water Tower					
7/25/2009	Brewers Festival	1			
7/26/2009	Music City Triathlon	1			
9/3/2009	Live on the Green Concerts	1			
9/10/2009	Live on the Green Concerts	1			
6/5/2010	Taste of Music City	1			
6/12/2010	Catfish Rodeo	1			
Water Truck					
9/19/2009	Wine on the River	1			
9/22/2009	Flat Rock Heritage Foundation	1			
Presentation					
Backflow Prevention					
3/23/2010	Master Gardeners - Stormwater pollution, rain barrels, backflow prevention	1			44
Composting					
10/1/2009	Master Composters	1			16
10/8/2009	Master Composters	1			13
CWIP					
7/18/2009	Neighborhood Association: Caldwell Abbay Hall	1			25
7/21/2009	Joelton Civitan	1			23
Downtown Construction Updates					
1/12/2010	Downtown Partnership Downtown Water Main Break - Residents	1			15
1/15/2010	Downtown Partnership Downtown Water Main Project Update	1			40
2/2/2010	Downtown Partnership Downtown Water Main Project Update	1			40
2/25/2010	Downtown Partnership District Merchants	1			25
2/26/2010	Downtown Partnership	1			25
3/15/2010	Downtown Partnership	1			25
Long Term Control Plan					
10/22/2009	Community - Advisory Committee Meeting for LTCP	1			
MWS Information					
7/26/2009	Housing Summitt	1			
10/26/2009	TNSA/APWA Annual Meeting - Nashville's MS4 Program: Compliance, Management & Practicality in Tough Economic Times	1			40
MWS Tree Initiatives					
10/24/2009	Let's Talk Trees Conference	1			40

Table 10-A.2 Presentations Documented By the MWS PIO in PY7 (Continued)

Date	Event Name	Programs/ Activities	Students	Grade Level	Adults
Special Presentation					
9/26/2009	TEEA (TN Environmental Education Association) Storm Drain Labeling Program	1			11
1/11/2010	Downtown Partnership Downtown Water Main Break - Businesses	1			40
2/12/2010	Downtown Partnership Downtown Water Main Project Update	1			40
Contest					
Art Contest					
4/8/2010	Green, Alex Elementary	1	15	4th grade	
4/8/2010	Kelley, A.Z. Elementary	1	12	4th grade	
4/8/2010	Lakeview Elem. Design Center	1	4	4th grade	
4/8/2010	Napier Elem. Enhanced Option	1	8	4th grade	
Tour: Biosolids					
Biosolids Facility Tour: Adults					
7/10/2009	TWIG (TN Women In Green)	1			16
Biosolids Facility Tour: Students					
11/19/2009	Hillsboro High	4	100	11th & 12th, IB Bio & Chem	
2/11/2010	Hume Fogg High Magnet	1	21	11th & 12th APES	
2/26/2010	Special Group requested for students by Mayor's Office	1	2		1
3/9/2010	Hume Fogg High Magnet	1	13	11th & 12th garde, APES	
Tour: MWS Facilities					
7/1/2009	MWS New Hire Tour	1			13
7/11/2009	MWS New Hire Tour	1			1
7/25/2009	MWS New Hire Tour	1			1
7/29/2009	Special Group 1 CL Moore requested this tour so that she could gain a better understanding of MWS	1			
8/1/2009	MWS New Hire Tour	1			1
8/6/2009	Special Group 1 Bond Rating Agency Tour requested by Finance Director Riebling, focus: Capital Plan future projects	9			
8/7/2009	Special Group Toby Copton requested for Mayor's Office interns	1			4
8/13/2009	Special Group 1 Bond Rating Agency Tour requested by Finance Director Riebling, focus: Capital Plan future projects	10			
8/14/2009	Special Group 1 Bond Rating Agency Tour requested by Finance Director Riebling, focus: Capital Plan future projects	9			
8/31/2009	Special Group Police Department tour requested by Mr. Potter	1			4
9/28/2009	Special Group Internal Audit Department, tour requested by Mr. Potter	1			8
10/7/2009	MWS New Hire Tour	1			2
10/9/2009	Special Group ASLA Conference Tour	1			9

Table 10-A.2 Presentations Documented By the MWS PIO in PY7 (Continued)

Date	Event Name	Programs/ Activities	Students	Grade Level	Adults
10/15/2009	Special Group Human Resources and Mayor's Office Representatives	1			7
10/19/2009	MWS New Hire Tour	1			13
10/31/2009	MWS New Hire Tour	1			3
11/2/2009	MWS New Hire Tour	1			2
11/28/2009	MWS New Hire Tour	1			1
1/4/2010	MWS New Hire Tour	1			2
2/22/2010	MWS New Hire Tour	1			4
3/22/2010	MWS New Hire Tour	1			
4/22/2010	Special Group LTCP Committee	1			5
Tour: WTP					
K.R. Harrington Tour: Adults					
11/10/2009	Special Group - Tennessee Water and Wastewater Association	1			16
3/4/2010	Special Group National Park Service Utility Operators	1			22
3/10/2010	Fleming Training Center - TDEC	1			30
3/22/2010	University: Nashville State Community College Environmental Science Class	1			24
4/14/2010	University: TSU Environmental Health Class	1			8
K.R. Harrington Tour: Students					
11/19/2009	Hillsboro High	4	100	11th & 12th, IB Bio & Chem	
2/24/2010	Martin Luther King Magnet	1			
3/8/2010	Vanderbilt School of Science & Math (High Schoo	1	25	9th grade	
3/30/2010	Hume Fogg High Magnet	1	13	AP Env Science - 11th/12th grade	
Omohundro Tour: Adults					
10/15/2009	Special Group National Preservation Conference	1			37
11/25/2009	Special Group Anniversary-Plan of Nashville Auction Winners	1			9
11/30/2009	Special Group Tennessean - promotion of photo book	1			3
12/2/2009	University: TSU	1		College-Civil Eng Class	6
12/15/2009	Special Group Shelby Bottoms Nature Center & Parks Staff	1			4
12/22/2009	Trades Advisory Council	1			4
3/25/2010	Special Group 1 David Lipscomb Connect 2010 - tour requested by Mayor's Office	1			22
Tour WWTP					
White's Creek Tour: Adults					
7/20/2009	University: Vanderbilt Medical	1			
11/18/2009	University: TSU	1		College-Civil Engineering Class	12

Table 10-A.2 Presentations Documented By the MWS PIO in PY7 (Continued)

Date	Event Name	Programs/ Activities	Students	Grade Level	Adults
White's Creek Tour: Students					
11/19/2009	Hillsboro High	2	100	11th & 12th, IB Bio & Chem	
3/3/2010	Academy at Opry Mills	1	9	12th grade	
3/3/2010	Martin Luther King Magnet	1	19	12th grade	
3/24/2010	Hume Fogg High Magnet	1	21	AP Env. Science - 11th/12th grade	
4/2/2010	Ensworth School	1	13	11th & 12th AP	1
4/6/2010	Ensworth School	1	13	11th & 12th AP Environmental Science	2

Note: Some the presentations documented by the MWS PIO are also documented in the NPDES presentation table (10-A.1) when NPDES personnel were involved in the presentations.

Table 11-A.1 Summary of Quantifiable Stats from Stormwater Management Program

Categories	Permit Year 1	Permit Year 2	Permit Year 3	Permit Year 4	Permit Year 5	Permit Year 6	Permit Year 7
Recycled Oil	16 tons	9.1 tons	17.82 tons	20.27 tons	26.88 tons	35.38 tons	36.40 tons
Recycled Plastic	266 tons	300.42 tons	1233.28 tons	[1]244.86 tons	[1]374.04	[1]391.93	[1]500.94
Recycled Paper	4,477 tons	2,573.84 tons	2,954.69 tons	3,333.47 tons	[2]4,083.74	[2]3,789.07	[2]3,318.88
Recycled Glass	1,798 tons	1,052.7 tons	1,107.05 tons	1,116.52 tons	1,607.48	2,110.05	1,866.14
Total Brush Collection	25,613.10 tons	31,702.78 tons	30,498.85 tons	30,269.40 tons	27,785.25	30,972.21	29,456.10
Total Waste Collected	159,595.04 tons	157,622.99 tons	150,972.54 tons	152,430.24 tons	153,266.01	149,474.79	151,425.06
# of Water Quality Complaints (non-construction) Investigations Initiated in Database	161	213	287	156	135	133	139
# of Construction Stormwater Related Inspections	4,708	5,509	5,721	6,552	6,327	6,160	5,079
# of Grading Permits Issued	270	271	252	239	165	109	121
# of Engineered Plans Submitted to Stormwater Development and Review	868	1,562	1,427	1,505	1,970	1,600	1,367
# of Construction Plans Approved or Declared No Permit Needed by Stormwater Development and Review	387	449	507	619	871	687	506
# of Stormwater Enforcements (NOVs and SWOs)	228	197	283	190	342	188	123

[1]The recycled plastic total does not include plastic bottles collected with metal cans.
[2]The recycled paper number does not include paper material collected in mixed recyclables from the curbside pick-up.

Table 11-A.2 Summary of Stormwater FY2011 Budget Expenditure Projections

Stormwater Division		Annual Expenditure "Projected" FY2011
Normal Operating Budget	Administration	$2,159,200
	Development Review and Permitting	$1,134,900
	NPDES Water Quality	$1,230,900
	Pumping Stations	$52,500
	Remedial Maint.	$1,039,000
	Routine Maint.	$3,292,300
	Master Planning	$150,000
	Street Sweeping Contracted Services	$750,000
	Class C Remedial Maintenance Projects	$500,000
	Stormwater Fleet Additions	$250,000
Stormwater Capital Projects		$1,621,200

Note: These numbers represent the projected expenditures. The actual expenditures are subject to change if revenue sources change.

Table A-1 Ambient Sampling Results for PY7

Watershed	Date	Time	Temp	pH	TKN	BOD5	COD	Lead	Nickel	Copper	Zinc	TSS	Nitrate+Nitrite	Fecal Coliform	Fecal Strep	Tot Ammonia Nitrogen	TDS	Tot Phos.	Diss. Phos.	Chrom.	Total N	Fl	Entero.	E-coli
Units			˚C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	colony/100 ml	colony/100 ml	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	colony/100 ml	colony/100 ml
Trip Blank	8/5/09	7:45			<0.1	<2	<10	<.001	<.0007	<.001	0.0080	1	<.2	<1	<2	<.1	15	0.04	0.04	<.001	<0.3	0.04	<2	<1
Trip Blank	10/7/09	7:10			<0.1	<2	<10	<.001	<.001	<.001	0.002	2	<.2	<1	<2	<.1	<1	0.03	0.03	<.001	<0.3	0.05	<2	<1
Trip Blank	12/2/09	6:25			<0.1	<2	<10	<.001	<.001	0.001	0.003	2	<.2	<1	<2	<.1	<1	0.03	0.03	<.001	<0.3	0.02	<2	<1
Trip Blank	2/10/10	7:10			0.1	<2	<10	<0.001	<0.001	<0.001	<0.001	<1	<0.2	<1	<10	<0.1	42	<0.1	<0.1	<0.001	<0.3	0.16	<10	<1
Trip Blank	4/7/10	7:00			<0.1	<2	<10	<0.001	<0.001	<0.001	<0.001	<1	---	<1	<2	<0.1	20	0.56	0.56	<0.001	---	0.15	<2	<1
Trip Blank	6/2/10	8:00			<0.10	<2	<10	<.001	<.001	<.001	0.001	3	---	<1	<2	<.1	<1	0.0	0.0	<.001	---	0.04	<2	<1
Field Blank	8/5/09	8:35			<0.1	<2	30	<.001	<.0007	<.001	0.0270	3	<.2	<1	<2	<.1	4	0.04	0.04	<.001	<0.3	0.02	<2	<1
Field Blank	10/7/09	8:45			0.82	<2	<10	<.001	<.001	<.001	0.007	<1	<.2	<1	<2	<.1	5	0.02	0.02	<.001	<1.02	0.04	<2	<1
Field Blank	12/2/09	6:55			<0.1	<2	<10	<.001	<.001	0.004	0.007	<1	<.2	<1	<2	<.1	<1	0.03	0.03	<.001	<0.3	0.02	<2	<1
Field Blank	2/10/10	8:45			0.23	<2	<10	<0.001	<0.001	<0.001	<0.001	<1	<0.2	<1	<10	<0.1	27	0.243	0.243	<0.001	<0.43	0.16	<10	<1
Field Blank	4/7/10	8:50			<0.1	<2	<10	<0.001	<0.001	<0.001	<0.001	<1	---	<1	<2	<0.1	13	0.22	0.22	<0.001	---	0.03	<2	<1
Field Blank	6/2/10	8:25			<0.10	<2	10	<.001	<.001	<.001	<.001	2	---	<1	<2	<.1	<1	0.0	0.0	<.001	---	0.01	<2	<1
Ewing	8/12/09	9:00	23.1	8.01	0.23	<2	18	<.001	<.010	<.001	0.0300	5	0.6	500	1200	0.19	465	0.66	0.66	<.001	0.8	0.37	780	340
Ewing	10/14/09	9:10	17.1	7.84	0.43	<2	15	0.0010	<.001	0.01	0.009	21	<.2	6400	22000	<.1	374	0.79	0.79	<.001	<0.63	0.39	16000	6000
Ewing	12/9/09	9:40	11.3	7.85	0.66	<2	<10	0.0010	<.001	0.001	0.006	17	0.4	1700	6800	<.1	323	1.27	1.27	0.0012	1.1	0.28	6800	1600
Ewing	2/10/10	8:50	4.9	8	0.3	<2	<10	<0.001	<0.001	<0.001	0.007	2	0.38	20	150	<0.1	421	0.657	0.657	<0.001	0.68	0.31	180	20
Ewing	4/12/10	8:10	12.8	7.86	0.28	<2	23	<0.001	<0.001	<0.001	0.001	2	---	110	18	<0.1	427	0.1	0.1	<0.001	---	0.38	27	90
Ewing	6/9/10	11:30	22.8	7.93	0.51	4	<10	0.001	<.001	0.0030	0.014	24	---	20000	61000	<.1	304	1.0	1.0	0.001	<0.71	0.31	45000	20000
Ewing, North	8/12/09	0:00	23.1	8.05	0.5	<2	48	<.001	<.010	<.001	0.0340	6	1.6	400	920	0.14	593	0.73	0.73	<.001	2.1	0.53	840	260
Ewing, North	10/14/09	9:40	17.1	7.98	0.47	<2	<10	<.001	<.001	0.001	0.016	10	<.2	1800	18000	<.1	387	0.81	0.81	<.001	<0.67	0.39	18000	1100
Ewing, North	12/9/09	9:55	11.5	7.89	0.78	<2	12	0.001	<.001	0.001	0.005	18	0.5	2400	6900	<.1	303	1.43	1.43	0.0013	1.3	0.26	7200	2400
Ewing, North	2/10/10	9:10	5.8	7.62	0.34	<2	<10	<0.001	<0.001	<0.001	0.007	3	0.41	50	54	<0.1	393	0.79	0.79	<0.001	0.75	0.3	130	50
Ewing, North	4/12/10	8:45	13.3	8	0.49	<2	<10	<0.001	<0.001	<0.001	0.003	3	---	40	9	<0.1	450	0.091	0.091	<0.001	---	0.32	14	20
Ewing, North	6/9/10	10:50	22.8	7.89	0.54	3	<10	<.001	<.001	0.002	0.010	10	<.2	15000	58000	<.1	285	0.9	0.9	<.001	<0.74	0.27	44000	15000
Ewing, South	8/12/09	9:30	22.8	8.12	0.35	<2	26	<.001	<.010	<.001	0.0290	3	0.7	650	1400	0.12	479	0.69	0.69	<.001	1.1	0.46	1100	460
Ewing, South	10/14/09	9:30	17.5	7.78	0.48	<2	17	<.001	<.001	0.006	0.047	13	<.2	3300	22000	<.1	407	0.80	0.80	<.001	<0.68	0.39	16000	3000
Ewing, South	12/9/09	10:05	12.2	7.98	0.56	<2	<10	<.001	<.001	0.001	0.005	6	0.4	1100	4500	<.1	468	0.89	0.89	<.001	1.0	0.36	4100	1000
Ewing, South	2/10/10	9:30	4.6	8.1	0.35	<2	<10	<0.001	<0.001	0.006	0.075	2	0.45	54	110	<0.1	590	0.11	0.11	<0.001	0.8	0.42	63	45
Ewing, South	4/12/10	8:30	12.8	8.02	0.37	<2	<10	<0.001	<0.001	<0.001	0.002	4	---	160	81	<0.1	517	0.091	0.091	<0.001	---	0.57	54	140
Ewing, South	6/9/10	11:05	22.8	7.84	0.44	5	<10	0.001	<.001	0.003	0.010	28	<.2	29000	54000	<.1	210	1.0	1.0	0.001	<0.64	0.31	34000	20000
Sevenmile	8/19/09	9:00	23.3	7.99	0.26	<2	16	<.001	<.001	<.001	0.0012	1	0.9	310	550	<.1	368	0.87	0.87	<.001	1.2	0.47	530	270
Sevenmile	10/21/09	10:15	13.4	8.22	0.73	<2	<10	<.001	<.001	<.001	0.023	1	0.6	190	380	<.1	408	0.96	0.96	<.001	1.3	0.45	280	110
Sevenmile	12/16/09	9:40	8.0	8.28	0.51	<2	<10	<.001	<.001	<.001	<.001	<1	0.5	190	330	<.1	368	0.95	0.95	<.001	1.0	0.41	330	110
Sevenmile	2/17/10	10:25	6.4	8.49	0.42	<2	<10	<0.001	<0.001	0.001	0.003	4	0.61	180	45	<0.1	347	0.77	0.77	<0.001	1.03	0.38	45	150
Sevenmile	4/21/10	9:40	13.4	8.15	0.43	<2	<10	<0.001	<0.001	<0.001	0.002	4	---	300	162	<0.1	350	0.131	0.131	<0.001	---	0.39	135	300
Sevenmile	6/16/10	9:20	23.9	7.99	0.21	<2	110	<.001	0.001	<.001	0.002	4	<.2	800	1500	<.1	339	1.0	1.0	<.001	<0.41	0.50	2000	610
Sevenmile, East	8/19/09	9:35	23.5	8.04	0.31	<2	12	<.001	<.001	<.001	0.0016	3	0.6	460	1400	<.1	418	0.98	0.98	<.001	0.9	0.41	1000	410
Sevenmile, East	10/21/09	9:45	13.1	8.10	0.5	<2	<10	<.001	<.001	0.002	0.005	4	0.5	110	280	<.1	448	0.85	0.85	<.001	1.0	0.37	270	90
Sevenmile, East	12/16/09	9:05	7.4	8.05	0.5	<2	<10	<.001	<.001	<.001	0.003	<1	0.4	250	250	<.1	385	0.95	0.95	<.001	0.9	0.42	180	200
Sevenmile, East	2/17/10	9:45	6.2		0.42	<2	<10	<0.001	<0.001	<0.001	<0.001	2	0.59	64	27	<0.1	367	0.797	0.797	<0.001	1.01	0.31	18	54
Sevenmile, East	4/21/10	9:10	13	7.75	0.31	<2	<10	<0.001	<0.001	<0.001	0.0019	7	---	220	310	<0.1	379	0.129	0.129	<0.001	---	0.3	260	220
Sevenmile, East	6/16/10	8:45	23.5	7.63	0.2	<2	10	<.001	<.001	<.001	0.001	5	<.2	340	2700	<.1	372	1.0	1.0	<.001	<0.4	0.38	2000	2100
Sevenmile, West	8/19/09	9:35	23.5	8.06	0.34	<2	12	<.001	<.001	<.001	0.0015	6	0.6	500	1400	<.1	430	0.97	0.97	<.001	0.9	0.48	1100	370
Sevenmile, West	10/21/09	9:45	12.4	7.97	0.4	<2	<10	<.001	<.001	0.001	0.004	3	0.5	130	260	<.1	440	0.97	0.97	<.001	0.9	0.46	240	90
Sevenmile, West	12/16/09	9:10	8.1	8.04	0.46	<2	<10	<.001	<.001	<.001	0.005	<1	0.5	50	130	<.1	397	0.86	0.86	<.001	1.0	0.36	130	50
Sevenmile, West	2/17/10	9:50	5.3	8.38	0.37	<2	<10	<0.001	<0.001	0.001	0.002	4	0.49	390	27	<0.1	418	0.783	0.783	<0.001	0.86	0.37	27	390
Sevenmile, West	4/21/10	9:20	12.9	7.74	0.44	<2	---	<0.001	<0.001	<0.001	0.0017	9	---	72	425	<0.1	437	0.142	0.142	<0.001	---	0.38	355	72
Sevenmile, West	6/16/10	8:45	24	7.68	0.2	<2	<10	<.001	<.001	<.001	0.001	5	<.2	480	2600	<.1	405	0.9	0.9	<.001	<0.4	0.51	3100	320
Sugartree	8/5/09	8:35	22.2	7.36	0.41	<2	51	0.003	<.0007	<.001	0.0800	<1	0.7	6800	6300	<.1	229	0.70	0.70	<.001	1.1	0.28	7900	4400
Sugartree	10/7/09	8:45	17.4	7.36	0.55	<2	<10	<.001	<.001	0.001	0.003	5	0.5	3800	9200	<.1	350	0.83	0.83	<.001	1.0	0.42	5600	2600
Sugartree	12/2/09	6:55	8.8	7.76	0.43	4	<10	<.001	<.001	0.004	0.009	5	0.1	3100	6800	<.1	169	1.22	1.22	<.001	0.5	0.31	5900	2100
Sugartree	2/3/10	6:45	7.3	7.84	0.34	<2	<10	<0.001	<0.001	<0.001	0.007	4	0.46	160	220	<0.1	460	0.57	0.57	<0.001	0.8	0.34	240	150
Sugartree	4/7/10	8:50	14.5	7.42	0.39	<2	20	<0.001	<0.001	0.001	0.002	3	---	40	45	<0.1	379	0.809	0.809	<0.001	---	0.34	27	10
Sugartree	6/2/10	8:25	18.6	7	<0.10	<2	<10	0.002	<.001	0.001	0.006	5	---	260	2000	<.1	302	1.2	1.2	<.001	---	0.34	2000	150
Sugartree, South	8/5/09	9:00	23.6	7.83	0.4	<2	21	<.001	<.0007	<.001	0.0880	7	0.3	3500	5500	<.1	347	0.72	0.72	<.001	0.7	0.38	5700	1000
Sugartree, South	10/7/09	9:20	18.2	7.8	0.63	<2	<10	<.001	<.001	0.004	0.002	13	0.3	7300	11000	<.1	315	0.89	0.89	<.001	1.0	0.44	10000	4800
Sugartree, South	12/2/09	7:10	9.9	8.8	0.28	<2	<10	<.001	<.001	0.004	0.009	7	<.2	12000	7100	<.1	154	0.62	0.62	<.001	<0.48	0.26	6300	10000
Sugartree, South	2/3/10	7:00	7.2	7.98	0.4	<2	<10	<0.001	0.005	<0.001	0.009	3	0.32	120	220	<0.1	509	0.811	0.81	<0.001	0.72	0.33	240	110
Sugartree, South	4/7/10	9:10	16.6	7.9	0.3	<2	14	<0.001	<0.001	0.001	0.002	6	---	110	45	<0.1	399	0.49	0.49	<0.001	---	0.4	27	72
Sugartree, South	6/2/10	8:55	21.2	7.88	0.17	<2	<10	<.001	<.001	0.001	0.002	22	---	2400	3700	<.1	381	0.6	0.6	<.001	---	0.41	3700	2100
Sugartree-dup	8/5/09	8:35	22.2	7.35	0.27	<2	28	<.001	<.0007	<.001	0.0710	<1	0.8	7500	6800	<.1	240	0.70	0.70	<.001	1.1	0.28	9300	2700
Sugartree-dup	10/7/09	8:45	17.3	7.5	0.65	<2	<10	<.001	0.0015	0.002	0.002	4	0.5	4400	10000	<.1	342	0.84	0.84	<.001	1.1	0.44	6200	2500
Sugartree-dup	12/2/09	6:55	8.9	7.9	0.52	4	27	<.001	<.001	0.005	0.009	5	0.1	3900	7400	<.1	172	1.00	1.00	<.001	0.6	0.30	7000	1400
Sugartree-dup	2/3/10	6:45	7.3	7.84	0.25	<2	<10	<0.001	<0.001	<0.001	0.5	4	0.46	200	240	<0.1	468	0.943	0.943	<0.001	0.71	0.34	240	130
Sugartree-dup	4/7/10	8:50	14.6	7.28	0.22	<2	32	<0.001	<0.001	0.001	0.003	<1	---	120	45	<0.1	360	0.835	0.835	<0.001	---	0.35	45	30
Sugartree-dup	6/2/10	8:25	18.5	7.13	<0.10	<2	<10	<.001	<.001	0.002	0.016	4	---	240	2000	<.1	343	1.2	1.2	<.001	---	0.34	2100	140

Note: * --- Indicates that data is missing due laboratory losing samples

Table B-1 Wet Weather Sampling Data Collected in PY7

Site	Date	BOD		COD		Cyanide		NH3-N		NO3-NO2		TKN		Total P		Diss P		TDS		TSS		Chromium		Copper		Lead		Nickel		Zinc		E.coli	
		Result	Unit	Result	Unit	Result	Unit	Result	Unit	Result	Unit	Result	Unit	Result	Unit	Result	Unit	Result	Unit	Result	Unit	Result	Unit	Result	Unit	Result	Unit	Result	Unit	Result	Unit	Result	Unit
Sugartree Comp	6/9/2010	**22.40**	mg/L	**65.6**	mg/L	0.0050	mg/L	**0.338**	mg/L	**0.428**	mg/L	**1.260**	mg/L	**0.673**	mg/L	**0.697**	mg/L	**120.0**	mg/L	**102.0**	mg/L	**2.75**	ug/L	**16.3**	ug/L	**5.07**	ug/L	5.00	ug/L	**50.1**	ug/L	**24890**	colonies/100mL
Sugartree FF	6/9/2010																									.						N/A	colonies/100mL
Stoners Comp	6/9/2010	**10.20**	mg/L	20.0	mg/L	0.0050	mg/L	**0.178**	mg/L	**0.389**	mg/L	0.500	mg/L	**0.456**	mg/L	**0.466**	mg/L	**69.0**	mg/L	**20.0**	mg/L	2.00	ug/L	4.00	ug/L	1.50	ug/L	5.00	ug/L	**41.4**	ug/L	**1890**	colonies/100mL
Stoners FF	6/9/2010	**13.20**	mg/L	20.0	mg/L	0.0050	mg/L	**0.268**	mg/L	0.250	mg/L	0.500	mg/L	**0.707**	mg/L	**0.628**	mg/L	**55.0**	mg/L	**54.5**	mg/L	2.00	ug/L	4.00	ug/L	**2.92**	ug/L	5.00	ug/L	**42.1**	ug/L	**860**	colonies/100mL
Harpeth Comp	6/9/2010	**18.20**	mg/L	**33.5**	mg/L	0.0050	mg/L	**0.365**	mg/L	**0.554**	mg/L	**0.964**	mg/L	**0.339**	mg/L	**0.277**	mg/L	**697.0**	mg/L	**47.5**	mg/L	2.00	ug/L	**6.28**	ug/L	**2.77**	ug/L	5.00	ug/L	**148**	ug/L	**200**	colonies/100mL
Harpeth FF	6/9/2010																															N/A	colonies/100mL
Field Blank	6/9/2010	**12.50**	mg/L	20.0	mg/L	0.0050	mg/L	**0.0901**	mg/L	0.250	mg/L	0.500	mg/L	0.020	mg/L	0.020	mg/L	20.0	mg/L	4.0	mg/L	2.00	ug/L	4.00	ug/L	1.50	ug/L	5.00	ug/L	5.00	ug/L	<1	colonies/100mL
Trip Blank	6/9/2010	**13.10**	mg/L	20.0	mg/L	0.0050	mg/L	0.05	mg/L	0.250	mg/L	0.500	mg/L	0.020	mg/L	**0.023**	mg/L	**28.0**	mg/L	4.0	mg/L	2.00	ug/L	4.00	ug/L	1.50	ug/L	5.00	ug/L	5.00	ug/L	<1	colonies/100mL
Sugartree Comp	12/8/2009	**5.11**	mg/L	**39.6**	mg/L	0.0050	mg/L	0.05	mg/L	0.250	mg/L	**0.823**	mg/L	**0.880**	mg/L	**0.732**	mg/L	**120.0**	mg/L	**85.2**	mg/L	**2.80**	ug/L	**13.1**	ug/L	**7.06**	ug/L	ot reported		**47**	ug/L	**8800**	colonies/100mL
Sugartree FF dup	12/8/2009	**4.90**	mg/L	**23.2**	mg/L	0.0050	mg/L	0.05	mg/L	**0.393**	mg/L	0.500	mg/L	**0.552**	mg/L	**0.349**	mg/L	**321.0**	mg/L	**35.6**	mg/L	2.00	ug/L	**6.47**	ug/L	**2.69**	ug/L	3.00	ug/L	**21.8**	ug/L	**2060**	colonies/100mL
Sugartree FF	12/8/2009	**7.64**	mg/L	**25.6**	mg/L	0.0050	mg/L	0.05	mg/L	**0.379**	mg/L	**1.170**	mg/L	**0.757**	mg/L	**0.443**	mg/L	**311.0**	mg/L	**66.8**	mg/L	2.00	ug/L	**6.23**	ug/L	**3.74**	ug/L	3.00	ug/L	**18.9**	ug/L	**2790**	colonies/100mL
Stoners Comp	12/8/2009	**2.68**	mg/L	20.0	mg/L	0.0050	mg/L	0.05	mg/L	0.250	mg/L	0.500	mg/L	**0.263**	mg/L	**0.097**	mg/L	**33.0**	mg/L	**31.2**	mg/L	2.00	ug/L	**5.72**	ug/L	**4.52**	ug/L	3.00	ug/L	**47.3**	ug/L	**100**	colonies/100mL
Stoners FF	12/8/2009	**26.60**	mg/L	**131.0**	mg/L	0.0050	mg/L	**0.115**	mg/L	0.250	mg/L	0.500	mg/L	**0.620**	mg/L	**0.331**	mg/L	**55.0**	mg/L	**149.0**	mg/L	**4.43**	ug/L	**21.7**	ug/L	**15.3**	ug/L	3.00	ug/L	**186**	ug/L	**1810**	colonies/100mL
Harpeth Comp	12/8/2009	**2.98**	mg/L	**32.6**	mg/L	0.0050	mg/L	0.05	mg/L	0.250	mg/L	0.500	mg/L	**0.411**	mg/L	**0.317**	mg/L	**32.0**	mg/L	**27.6**	mg/L	2.00	ug/L	4.00	ug/L	**2.41**	ug/L	3.00	ug/L	**46.2**	ug/L	**8550**	colonies/100mL
Harpeth FF	12/8/2009	**5.74**	mg/L	**171.0**	mg/L	0.0050	mg/L	0.05	mg/L	**0.418**	mg/L	**2.120**	mg/L	**0.671**	mg/L	**0.454**	mg/L	**95.0**	mg/L	**110.0**	mg/L	**3.16**	ug/L	**14.2**	ug/L	**6.9**	ug/L	3.00	ug/L	**148**	ug/L	**100**	colonies/100mL
Field Blank	12/8/2009	2.00	mg/L	20.0	mg/L	0.0050	mg/L	0.05	mg/L	0.250	mg/L	0.500	mg/L	**0.0460**	mg/L	**0.057**	mg/L	20.0	mg/L	4.0	mg/L	2.00	ug/L	4.00	ug/L	1.50	ug/L	3.00	ug/L	5.00	ug/L	<1	colonies/100mL
Trip Blank	12/8/2009	2.00	mg/L	20.0	mg/L	0.0050	mg/L	0.05	mg/L	0.250	mg/L	0.500	mg/L	**0.0270**	mg/L	**0.039**	mg/L	20.0	mg/L	4.0	mg/L	2.00	ug/L	4.00	ug/L	1.50	ug/L	3.00	ug/L	5.00	ug/L	<1	colonies/100mL

Notes:
On the June 9, 2010 sampling event, NPDES was unable to obtain a quality first flush sample for the Sugartree and Harpeth sampling points due to staff arriving to the site after the first flush had occurred.
Values in bold text are results that exceeded the method detection limit (mdl), while non-bold values are values that did not exceed mdl.

Table D-1 Biological Assessment Scoring Results

Date	Test Stream	Reference Stream	Biological Score %
Sevenmile Creek			
5/3/2000	Sevenmile	Whites 5/4/00	52
11/20/2000	Sevenmile	"too dry, not done"	---
5/7/2001	Sevenmile	Whites 5/11/01	90
10/9/2001	Sevenmile	Whites 10/10/01	57
5/3/2002	Sevenmile	Whites 6/4/02	52
10/21/2002	Sevenmile	Whites 10/21/02	52
5/13/2003	Sevenmile	Whites 5/13/03	57
10/21/2003	Sevenmile	Whites 10/22/03	52
5/11/2004	Sevenmile	Whites 5/11/04	67
10/14/2004	Sevenmile	Whites 10/15/04	86
5/10/2005	Sevenmile	Whites 5/11/05	62
10/17/2005	Sevenmile	Whites 10/18/05	76
5/15/2006	Sevenmile	Whites 5/16/06	76
10/17/2006	Sevenmile	Whites 10/18/06	78
5/9/2007	Sevenmile	Whites 5/8/07	62
10/15/2007	Sevenmile	Season Too Dry - Assessment Not done	
5/19/2008	Sevenmile	Whites 5/19/08	81
10/14/2008	Not sampled due to need of ESA permit (while being processed by USFWS)		
5/19/2009	Not sampled due to need of ESA permit (while being processed by USFWS)		
10/30/2009	Sevenmile	Whites 9/22/09	57
6/18/2010	Sevenmile	Whites 6/8/10	52
Browns Creek			
5/29/2001	Browns	Whites 5/11/01	52
10/9/2001	Browns	Whites 10/10/01	38
5/30/2002	Browns	Whites 6/4/02	48
10/23/2002	Browns	Whites 10/21/02	33
5/13/2003	Browns	Whites 5/13/03	29
10/23/2003	Browns	Whites 10/22/03	38
5/10/2004	Browns	Whites 5/11/04	24
10/13/2004	Browns	Whites 10/15/04	62
5/11/2005	Browns	Whites 5/11/05	33
10/17/2005	Browns	Not done-severe illicit discharge made conditions hazardous to health	
5/15/2006	Browns	Whites 5/16/06	43
10/17/2006	Browns	Whites 10/18/06	67
5/9/2007	Browns	Whites 5/8/07	52
10/15/2007	Browns	Season Too Dry - Assessment Not done	
5/19/2008	Browns	Whites 5/19/08	43
10/14/2008	Browns	Whites10/14/08	43
5/20/2009	Browns	Whites5/19/09	38
11/5/2009	Browns	Whites 9/22/09	29
6/18/2010	Browns	Whites 6/8/10	24

Note: These values represent the score of the two assessed streams as compared to the reference reach of Whites Creek.

Table E-1 Summary of Event Mean Concentrations Used In Seasonal Loading Calculation

Land Use	Fecal coliform	TSS	TDS	Total Phosphorus	Dissolved Phosphorus	NO2/NO3 Nitrogen	COD	BOD(5)	Zinc	Lead	Cadmium	Copper	TKN
Industrial	2400[1]	90[1]	84[1]	.27[1]	0.17[2]	0.75[1]	61[1]	9[1]	.220[1]	.0237[1]	.0019[1]	.0218[1]	.0014[1]
Commercial	3000[1]	48[1]	74[1]	.23[1]	0.17[2]	0.62[1]	60[1]	12[1]	.150[1]	.017[1]	.0009[1]	.015[1]	.0016[1]
Residential	7750[1]	50[1]	69[1]	.31[1]	0.29[2]	0.58[1]	55.5[1]	9.05[1]	.073[1]	.012[1]	.0005[1]	.0111[1]	.00142[1]
Open Area/Vacant Land/Misc.	5000[1]	72.3[2]	134[2]	.33[2]	0.14[2]	0.85[2]	71.6[2]	25.4[2]	.033[2]	.020[2]	.001[2]	.007[2]	.0010[2]
Transportation	1700[1]	99[1]	77.5[1]	0.25[1]	1.93[2]	0.28[1]	100[1]	8[1]	.200[1]	.0275[1]	.001[1]	.035[1]	.002[1]

Note: The Event Mean Concentrations for each land use were obtained from two sources as identified by the superscript: (1) The median values from a study conducted by the University of Alabama and the Center of Watershed Protection, which was titled "Evaluation of NPDES Phase I Municipal Stormwater Monitoring Data. (2) The Event Mean Concentrations used for the calculations for the end of the 1st permit cycle which were derived from the Nashville MS4 Wet Weather sampling program. The Fecal coliform number for Open Area/Vacant land is Medium value of all land uses from source 1. The same parameters used in the EMC calculation in the 1st permit cycle were used for this permit cycle.

Table E-2 Impervious Areas per Watershed

Watershed	Building Footprint (Acres)	Paved Parking Lot (Acres)	Unpaved Parking Lot (Acres)	Paved Roadway (Acres)	Unpaved Roadway (Acres)	Unpaved Roadways Considered to be Impervious (50% of total area) (Acres)	Sidewalk (Acres)	Greenway (Acres)	Surface Water (Acres)	Total Impervious Area (Acres)	Total Watershed Area (Acres)	Total Watershed Land Area (Acres)	Percent Impervious Per Watershed
Back Creek	3.55	0	0	14.88	0	0	0	0	24.64	18.43	1,620.26	1,595.62	**1.16%**
Browns Creek	826.67	971.03	137.11	668.97	18.3	9.15	24.58	6.79	42.67	2,644.30	8,847.37	8,804.70	**30.03%**
Bull Run Creek	9.21	0	0	32.86	5.62	2.81	0	0	39.05	44.88	2,952.05	2,913.00	**1.54%**
Cooper Creek	233.12	73.12	8.33	173.41	0.29	0.145	8.62	7.65	17.74	504.4	2,373.63	2,355.89	**21.41%**
Cub Creek	4.76	0.52	0	16.88	0	0	0	0	23.87	22.16	1,605.16	1,581.29	**1.40%**
Cumberland River	2,353.56	2,109.86	386.66	2,172.48	188.73	94.37	209.48	19.84	4,905.00	7,346.25	51,093.76	46,188.76	**15.90%**
Davidson Branch	114.25	58.36	0.51	125.92	0.85	0.425	0.93	9.08	15.56	309.48	2,391.79	2,376.23	**13.02%**
Dry Creek	283.3	210.43	42.36	267.22	16.96	8.48	3.81	6.75	39.58	822.35	5,635.37	5,595.79	**14.70%**
Ewing Creek	373.61	287.46	37.43	521.34	14.43	7.215	10.2	23.18	110.01	1,260.44	9,003.38	8,893.37	**14.17%**
Gibson Creek	265.27	255.27	16.18	213.19	0.6	0.3	11.57	5.29	12.89	767.07	2,749.19	2,736.30	**28.03%**
Gizzard Branch	138.65	246.68	0.3	101.41	1.89	0.945	2.54	3.91	18.93	494.44	1,466.61	1,447.68	**34.15%**
Harpeth River	622.06	307.02	4.34	676.39	27.49	13.75	23.67	8.17	369.88	1,655.40	18,170.91	17,801.03	**9.30%**
Indian Creek	10.25	0.83	0	30.92	2.96	1.48	0	0	80.17	43.48	3,929.99	3,849.82	**1.13%**
Island Creek	0.61	0	0	9.77	0	0	0	2.89	6.36	13.27	516.92	510.56	**2.60%**
Little Harpeth River	189.23	74.09	1.37	278.78	56.79	28.4	3.71	4.41	139.94	579.98	8,889.23	8,749.29	**6.63%**
Loves Branch	95.9	64.16	0.75	131.38	14.7	7.35	1.82	5.29	16.8	306.65	1,457.59	1,440.79	**21.28%**
Marrowbone Creek	67.06	16.13	4.72	171.24	10.68	5.34	0	0	253.98	264.49	12,182.46	11,928.48	**2.22%**
Mansker Creek	300.76	290.7	8.79	422.47	16.37	8.185	6.93	32.36	191.78	1,070.20	13,075.79	12,884.01	**8.31%**
Mill Creek Lower	1734	1969.56	112.7	1399.78	49.72	24.86	37.04	22.58	256.28	5,300.52	13,376.47	13,120.19	**40.40%**
Mill Creek Upper	489.66	337.17	9.79	533.42	11.94	5.97	26.03	25.6	198.68	1,427.64	14,479.56	14,280.88	**10.00%**
Overall Creek	87.76	65.93	6.73	168.2	10.68	5.34	1.92	7.86	59.62	343.74	4,950.36	4,890.74	**7.03%**
Pages Branch	142.8	122.44	92.95	156.61	15.1	7.55	7.54	2.52	14.2	532.41	2,068.73	2,054.53	**25.91%**
Percy Priest Lake, Lower	352.62	356.66	41.93	310.52	11.09	5.545	9.97	18.26	2,319.63	1,095.51	13,376.47	11,056.84	**9.91%**
Percy Priest Lake, Upper	531.95	238.71	9.62	501.26	37.85	18.925	15.35	2.09	7,122.69	1,317.91	19,575.01	12,452.32	**10.58%**
Pond Creek	3.27	0	0.41	9.25	2.88	1.44	0	0	19.17	14.37	1,688.32	1,669.15	**0.86%**
Richland Creek	1109.39	595.24	67.22	984.18	52.6	26.3	39.85	7.05	111.1	2,829.23	14,680.11	14,569.01	**19.42%**
Sevenmile Creek	959.38	643.34	25.04	793.74	8.1	4.05	28.08	3.51	97.3	2,457.14	10,962.35	10,865.05	**22.62%**
South Harpeth River, Lower	33.07	2.04	2.35	122.63	33.91	16.955	0	0	180.1	177.05	9,256.78	9,076.68	**1.95%**
Stoner Creek	494.48	351.59	38.02	501.52	6.81	3.405	17.17	9.74	85.12	1,415.93	7,543.58	7,458.46	**18.98%**
Stones River	370.52	463.4	43	435.98	19.79	9.895	12.22	20.1	262.27	1,355.12	9,258.64	8,996.37	**15.06%**
Sugartree Creek	315.25	171.34	0	203.72	2.62	1.31	6.88	0	16.09	698.5	3,030.72	3,014.63	**23.17%**
Sulpher Creek	19.92	3.81	0	79.59	4.5	2.25	0	0.43	58.08	106	3,839.61	3,781.53	**2.80%**
Sycamore Creek	98.91	37.56	1.77	279.05	17.34	8.67	0.1	13.16	224.81	439.22	13,066.82	12,842.01	**3.42%**
Whites Creek	478.75	194.27	68.69	809.71	37.3	18.65	6.01	38.7	489.76	1,614.78	31,738.54	31,248.78	**5.17%**
Overall County	**14,524.74**	**11,594**	**1,297.87**	**14,389.09**	**795.1**	**397.55**	**764.01**	**389.41**	**18,012**	**43,356.76**	**329,224.00**	**311,212.00**	**13.93%**

Note: This calculation was performed by extracting GIS coverages of known impervious areas (roads, buildings, sidewalks, etc.). Impervious areas not captured in GIS would not be covered in this calculation. For calculation purposes, approximately 50% of the unpaved roads (gravel) were considered to be impervious. Impervious calculations were not performed on the Combined Sewer System drainage areas. The impervious areas were not recalculated for the PY7 annual report as many of the GIS coverages used to run the calculation have not changed significantly since the PY5 calculation.

Table E-3 Land Use Per Watershed

Watershed	Percent Commercial	Percent Industrial	Percent Residential	Percent Open Space/Natural/ Misc.	Percent Transportation	Total Watershed Land Area (Acres)	Estimated Commercial Land Area (Acres)	Estimated Industrial Land Area (Acres)	Estimated Residential Land Area (Acres)	Estimated Open Space/Natural Land Area (Acres)	Estimated Transportation Land Area (Acres)
Back Creek	0.00%	0.00%	89.22%	9.87%	0.92%	1,595.62	0	0	1,423.61	157.49	14.68
Browns Creek	9.75%	8.94%	49.08%	24.20%	8.03%	8,804.70	858.46	787.14	4,321.35	2,130.74	707.02
Bull Run Creek	0.02%	0.00%	44.04%	54.64%	1.30%	2,913.00	0.58	0	1,282.89	1,591.66	37.87
Cooper Creek	8.38%	1.27%	65.22%	17.81%	7.32%	2,355.89	197.42	29.92	1,536.51	419.58	172.45
Cub Creek	0.61%	0.00%	74.83%	23.51%	1.05%	1,581.29	9.65	0	1,183.28	371.76	16.6
Cumberland River (Overall)	13.31%	5.17%	38.39%	37.19%	5.93%	46,188.76	6,147.72	2,387.96	17,731.86	17,177.60	2,738.99
Davidson Branch	5.58%	0.92%	72.87%	15.33%	5.30%	2,376.23	132.59	21.86	1,731.56	364.28	125.94
Dry Creek	5.54%	4.91%	52.88%	31.58%	5.09%	5,595.79	310.01	274.75	2,959.05	1,767.15	284.83
Ewing Creek	7.41%	4.97%	44.22%	37.45%	5.95%	8,893.37	659	442	3,932.65	3,330.57	529.16
Gibson Creek	14.78%	1.07%	60.37%	16.00%	7.78%	2,736.30	404.43	29.28	1,651.90	437.81	212.88
Gizzard Branch	31.23%	1.69%	35.53%	24.52%	7.04%	1,447.68	452.11	24.47	514.36	354.97	101.92
Harpeth River	3.33%	0.05%	45.58%	47.16%	3.87%	17,801.03	592.77	8.9	8,113.71	8,394.97	688.9
Indian Creek	1.01%	0.00%	56.95%	41.18%	0.86%	3,849.82	38.88	0	2,192.47	1,585.36	33.11
Island Creek	0.00%	0.00%	29.22%	68.89%	1.89%	510.56	0	0	149.19	351.72	9.65
Little Harpeth	5.77%	0.07%	45.37%	45.01%	3.78%	8,749.29	504.83	6.12	3,969.55	3,938.06	330.72
Loves Branch	6.97%	0.49%	49.22%	33.30%	10.02%	1,440.79	100.42	7.06	709.16	479.78	144.37
Marrowbone Creek	0.69%	0.14%	45.74%	51.93%	1.49%	11,928.48	82.31	16.7	5,456.09	6,194.46	177.73
Mansker Creek	3.26%	1.76%	59.22%	32.41%	3.36%	12,884.01	420.02	226.76	7,629.91	4,175.71	432.9
Mill Creek Lower	19.81%	9.29%	40.70%	23.00%	7.21%	13,120.19	2,599.11	1,218.87	5,339.92	3,017.64	945.97
Mill Creek Upper	5.70%	1.10%	47.81%	41.62%	3.77%	14,280.88	814.01	157.09	6,827.69	5,943.70	538.39
Overall Creek	5.48%	4.76%	52.33%	33.79%	3.64%	4,890.74	268.01	232.8	2,559.32	1,652.58	178.02
Pages Branch	17.58%	6.64%	34.17%	33.31%	8.30%	2,054.53	361.19	136.42	702.03	684.36	170.53
Percy Priest Lake Lower	2.90%	6.14%	24.48%	64.07%	2.40%	11,056.84	320.65	678.89	2,706.71	7,084.12	265.36
Percy Priest Lake Upper	1.92%	0.12%	22.81%	72.39%	2.75%	12,452.32	239.08	14.94	2,840.37	9,014.23	342.44
Pond Creek	0.09%	0.00%	62.81%	36.38%	0.72%	1,669.15	1.5	0	1,048.39	607.24	12.02
Richland Creek	10.89%	2.89%	56.41%	22.60%	7.22%	14,569.01	1,586.57	421.04	8,218.38	3,292.60	1,051.88
Sevenmile Creek	10.19%	1.47%	60.35%	20.67%	7.31%	10,865.05	1,107.15	159.72	6,557.06	2,245.81	794.24
South Harpeth River Lower	0.59%	0.00%	46.34%	51.38%	1.69%	9,076.68	53.55	0	4,206.13	4,663.60	153.4
Stoners Creek	10.34%	3.17%	54.24%	25.52%	6.74%	7,458.46	771.2	236.43	4,045.47	1,903.40	502.7
Stones River	32.81%	1.23%	30.94%	30.09%	4.92%	8,996.37	2,951.71	110.66	2,783.48	2,707.01	442.62
Sugartree Creek	8.97%	0.03%	65.58%	18.61%	6.81%	3,014.63	270.41	0.9	1,976.99	561.02	205.3
Sulpher Creek	0.50%	0.11%	56.96%	40.24%	2.19%	3,781.53	18.91	4.16	2,153.96	1,521.69	82.82
Sycamore Creek	0.75%	0.01%	59.08%	37.89%	2.27%	12,842.01	96.32	1.28	7,587.06	4,865.84	291.51
Whites Creek	3.07%	0.56%	19.97%	73.72%	2.67%	31,248.78	959.34	174.99	6,240.38	23,036.60	834.34

Note: There are a variety of land uses within Davidson County. In order to determine the major categories, NPDES used GIS to lump a majority of the diverse land uses into one of the five major categories. The percentages were estimated based on total watershed area. Using the estimated percentages, the land use acres were calculated from the total watershed land area. The Open Space/Natural/Misc. includes park land, rural residential, agriculture, undeveloped land, etc. Due to the lack of major change to the GIS land use coverage from the previous years, the calculation for PY7 was based on the PY5 numbers.

Table E-4 Annual Runoff Calculation for PY7

Watershed	(P) Rainfall Total (in.)	(Pj) Fraction of Rain Events Producing Runoff	(Ia) Percent Impervious per Watershed	(Rv) Runoff Coefficient (Rv= 0.05+0.9Ia)	Annual Runoff (in.) R=P*Pj*Rv	Annual Runoff (ft)	Total Watershed Land Area (acres)	Total Watershed Land Area (ft^2)	Estimated Total Runoff Volume (ft^3)
Back Creek	65.69	0.9	1.16	0.06	3.57	0.30	1,595.62	69,505,207.20	20,696,758.08
Browns Creek	65.69	0.9	30.03	0.32	18.93	1.58	8,804.70	383,532,732	605,172,547.83
Bull Run Creek	65.69	0.9	1.54	0.06	3.78	0.31	2,913.00	126,890,280	39,922,506.03
Cooper Creek	65.69	0.9	21.41	0.24	14.35	1.20	2,355.89	102,622,568.40	122,703,029.87
Cub Creek	65.69	0.9	1.4	0.06	3.70	0.31	1,581.29	68,880,992.40	21,243,900.27
Cumberland River	65.69	0.9	15.9	0.19	11.42	0.95	46,188.76	2,011,982,385.60	1,914,110,357.55
Davidson Branch	65.69	0.9	13.02	0.17	9.88	0.82	2,376.23	103,508,578.80	85,255,261.69
Dry Creek	65.69	0.9	14.7	0.18	10.78	0.90	5,595.79	243,752,612.40	218,925,561.79
Ewing Creek	65.69	0.9	14.17	0.18	10.50	0.87	8,893.37	387,395,197.20	338,833,631.56
Gibson Creek	65.69	0.9	28.03	0.30	17.87	1.49	2,736.30	119,193,228	177,503,594.80
Gizzard Branch	65.69	0.9	34.15	0.36	21.13	1.76	1,447.68	63,060,940.80	111,023,459.88
Harpeth River	65.69	0.9	9.3	0.13	7.90	0.66	17,801.03	775,412,866.80	510,769,476.16
Indian Creek	65.69	0.9	1.13	0.06	3.56	0.30	3,849.82	167,698,159.20	49,712,869.52
Island Creek	65.69	0.9	2.6	0.07	4.34	0.36	510.56	22,239,993.60	8,042,503.21
Little Harpeth River	65.69	0.9	6.63	0.11	6.48	0.54	8,749.29	381,119,072.40	205,924,989.03
Loves Branch	65.69	0.9	21.28	0.24	14.28	1.19	1,440.79	62,760,812.40	74,679,634.18
Marrowbone Creek	65.69	0.9	2.22	0.07	4.14	0.34	11,928.48	519,604,588.80	179,146,134.31
Mansker Creek	65.69	0.9	8.31	0.12	7.38	0.61	12,884.01	561,227,475.60	345,047,777.41
Mill Creek Lower	65.69	0.9	40.4	0.41	24.45	2.04	13,120.19	571,515,476.40	1,164,579,258.02
Mill Creek Upper	65.69	0.9	10	0.14	8.28	0.69	14,280.88	622,075,132.80	429,073,212.47
Overall Creek	65.69	0.9	7.03	0.11	6.70	0.56	4,890.74	213,040,634.40	118,887,959.29
Pages Branch	65.69	0.9	25.91	0.28	16.74	1.40	2,054.53	89,495,326.80	124,864,446.68
Percy Priest Lake, Lower	65.69	0.9	9.91	0.14	8.23	0.69	11,056.84	481,635,950.40	330,283,939.67
Percy Priest Lake, Upper	65.69	0.9	10.58	0.15	8.59	0.72	12,452.32	542,423,059.20	388,083,431.22
Pond Creek	65.69	0.9	0.86	0.06	3.41	0.28	1,669.15	72,708,174	20,683,333.88
Richland Creek	65.69	0.9	19.42	0.22	13.29	1.11	14,569.01	634,626,075.60	702,807,042.36
Sevenmile Creek	65.69	0.9	22.62	0.25	14.99	1.25	10,865.05	473,281,578	591,282,632.85
South Harpeth River, Lower	65.69	0.9	1.95	0.07	3.99	0.33	9,076.68	395,380,180.80	131,583,300.10
Stoner Creek	65.69	0.9	18.98	0.22	13.06	1.09	7,458.46	324,890,517.60	353,456,495.24
Stones River	65.69	0.9	15.06	0.19	10.97	0.91	8,996.37	391,881,877.20	358,222,827.30
Sugartree Creek	65.69	0.9	23.17	0.26	15.28	1.27	3,014.63	131,317,282.80	167,260,487.88
Sulpher Creek	65.69	0.9	2.8	0.08	4.45	0.37	3,781.53	164,723,446.80	61,028,653.36
Sycamore Creek	65.69	0.9	3.42	0.08	4.78	0.40	12,842.01	559,397,955.60	222,630,801.04
Whites Creek	65.69	0.9	5.17	0.10	5.71	0.48	31,248.78	1,361,196,856.80	647,356,881.57
Overall County	**65.69**	**0.9**	**13.93**	**0.18**	**10.37**	**0.86**	**311,212.00**	**13,556,394,720**	**11,712,781,263.23**

Note: The average rainfall for Davidson County was calculated from downloaded NOAA monthly climate reports for the PY7 reporting period. The simple method was used to calculate the runoff volume: $R = P * P_j * R_v$, Where: P = Annual rainfall (inches); P_j = Fraction of annual rainfall events producing runoff (assumed to be 0.9); and R_v= Runoff coefficient.

Table E-5 PY7 Pollutant Loading Estimates

Watershed	Annual Runoff (inches)	Fecal coliform (mpn/100ml)	TSS (mg/l)	TDS (mg/l)	Total P (mg/l)	DP (mg/l)	NO2/NO3 (mg/l)	COD (mg/l)	BOD(5) (mg/l)	Zn (mg/l)	Pb (mg/l)	Cd (mg/l)	Cu (mg/l)	TKN (mg/l)	Total Watershed Land Area Per Land Use	Fecal coliform (billion colonies)	TSS (pounds)	TDS (pounds)	Total P (pounds)	DP (pounds)	NO2/NO3 (pounds)	COD (pounds)	BOD(5) (pounds)	Zn (pounds)	Pb (pounds)	Cd (pounds)	Cu (pounds)	TKN (pounds)
Back Creek																												
Industrial	3.57	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Commercial	3.57	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Residential	3.57	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	1,423.61	40,606.56	57,482.51	79,325.86	356.39	333.40	666.80	63,805.58	10,404.33	83.92	13.80	0.57	12.76	1.63
Open/Vacant Land	3.57	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	157.49	2,898.19	9,195.30	17,042.47	41.97	17.81	108.11	9,106.27	3,230.44	4.20	2.54	0.13	0.89	0.13
Transportation	3.57	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	14.68	91.85	1,173.64	918.761	2.96	22.88	3.32	1,185.50	94.84	2.37	0.33	0.01	0.41	0.02
Total																**43,596.60**	**67,851.45**	**97,287.09**	**401.33**	**374.08**	**778.22**	**74,097.35**	**13,729.61**	**90.49**	**16.67**	**0.71**	**14.07**	**1.78**
Browns Creek																												
Industrial	18.93	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	787.14	36,843.30	303,152.37	282,942.21	909.46	572.62	2,526.27	205,469.94	30,315.24	741.04	79.83	6.40	73.43	4.72
Commercial	18.93	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	858.46	50,226.92	176,330.64	271,843.06	844.92	624.50	2,277.60	220,413.29	44,082.66	551.03	62.45	3.31	55.10	5.88
Residential	18.93	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	4,321.35	653,155.22	924,604.32	1,275,953.96	5,732.55	5,362.71	10,725.41	1,026,310.79	167,353.38	1,349.92	221.91	9.25	205.26	26.26
Open/Vacant Land	18.93	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	2,130.74	207,776.16	659,227.36	1,221,804.52	3,008.92	1,276.51	7,750.25	652,844.80	231,595.78	300.89	182.36	9.12	63.83	9.12
Transportation	18.93	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	707.02	23,440.99	299,525.20	234,476.80	756.38	5,839.23	847.14	302,550.71	24,204.06	605.10	83.20	3.03	105.89	6.05
Total																**971,442.59**	**2,362,839.88**	**3,287,020.55**	**11,252.22**	**13,675.57**	**24,126.68**	**2,407,589.53**	**497,551.12**	**3,547.99**	**629.75**	**31.10**	**503.51**	**52.02**
Bull Run Creek																												
Industrial	3.78	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Commercial	3.78	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	0.58	6.77	23.75	36.62	0.11	0.08	0.31	29.69	5.94	0.07	0.01	0.00	0.01	0.00
Residential	3.78	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	1,282.89	38,663.31	54,731.65	75,529.68	339.34	317.44	634.89	60,752.13	9,906.43	79.91	13.14	0.55	12.15	1.55
Open/Vacant Land	3.78	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	1,591.66	30,947.69	98,190.10	181,984.43	448.17	190.13	1,154.38	97,239.44	34,495.56	44.82	27.16	1.36	9.51	1.36
Transportation	3.78	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	37.87	250.35	3,198.97	2,504.24	8.08	62.36	9.05	3,231.28	258.50	6.46	0.89	0.03	1.13	0.06
Total																**69,868.12**	**156,144.48**	**260,054.97**	**795.70**	**570.02**	**1,798.62**	**161,252.54**	**44,666.43**	**131.26**	**41.19**	**1.94**	**22.80**	**2.98**
Cooper Creek																												
Industrial	14.35	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	29.92	1,061.22	8,731.85	8,149.73	26.20	16.49	72.77	5,918.25	873.18	21.34	2.30	0.18	2.12	0.14
Commercial	14.35	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	197.42	8,752.72	30,728.01	47,372.35	147.24	108.83	396.90	38,410.02	7,682.00	96.03	10.88	0.58	9.60	1.02
Residential	14.35	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	1,536.51	175,981.89	249,119.36	343,784.72	1,544.54	1,444.89	2,889.78	276,522.49	45,090.60	363.71	59.79	2.49	55.30	7.07
Open/Vacant Land	14.35	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	419.58	31,003.85	98,368.30	182,314.69	448.98	190.48	1,156.47	97,415.91	34,558.16	44.90	27.21	1.36	9.52	1.36
Transportation	14.35	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	172.45	4,332.54	55,360.56	43,337.81	139.80	1,079.25	156.58	55,919.76	4,473.58	111.84	15.38	0.56	19.57	1.12
Total																**221,132.22**	**442,308.09**	**624,959.31**	**2,306.76**	**2,839.94**	**4,672.50**	**474,186.43**	**92,677.53**	**637.82**	**115.56**	**5.17**	**96.12**	**10.71**
Cub Creek																												
Industrial	3.70	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Commercial	3.70	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	9.65	110.36	387.43	597.29	1.86	1.37	5.00	484.29	96.86	1.21	0.14	0.01	0.12	0.01
Residential	3.70	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	1,183.28	34,957.68	49,485.97	68,290.64	306.81	287.02	574.04	54,929.42	8,956.96	72.25	11.88	0.49	10.99	1.41
Open/Vacant Land	3.70	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	371.76	7,085.75	22,481.51	41,666.98	102.61	43.53	264.31	22,263.85	7,898.07	10.26	6.22	0.31	2.18	0.31
Transportation	3.70	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	16.60	107.57	1,374.57	1,076.05	3.47	26.80	3.89	1,388.46	111.08	2.78	0.38	0.01	0.49	0.03
Total																**42,261.36**	**73,729.48**	**111,630.96**	**414.75**	**358.72**	**847.23**	**79,066.02**	**17,062.96**	**86.50**	**18.61**	**0.83**	**13.77**	**1.76**
Cumberland River																												
Industrial	11.42	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	2,387.96	67,390.64	554,500.63	517,533.92	1,663.50	1,047.39	4,620.84	375,828.20	55,450.06	1,355.45	146.02	11.71	134.31	8.63
Commercial	11.42	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	6,147.72	216,868.56	761,356.05	1,173,757.24	3,648.16	2,696.47	9,834.18	951,695.06	190,339.01	2,379.24	269.65	14.28	237.92	25.38
Residential	11.42	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	17,731.86	1,615,910.36	2,287,477.24	3,156,718.60	14,182.36	13,267.37	26,534.74	2,539,099.74	414,033.38	3,339.72	548.99	22.87	507.82	64.96
Open/Vacant Land	11.42	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	17,177.60	1,009,935.78	3,204,300.72	5,938,814.61	14,625.44	6,204.73	37,671.59	3,173,277.06	1,125,715.60	1,462.54	886.39	44.32	310.24	44.32
Transportation	11.42	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	2,738.99	54,752.08	699,613.41	547,677.16	1,766.70	13,638.93	1,978.70	706,680.21	56,534.42	1,413.36	194.34	7.07	247.34	14.13
Total																**2,964,857.43**	**7,507,248.04**	**11,334,501.52**	**35,886.16**	**36,854.89**	**80,640.05**	**7,746,580.27**	**1,842,072.48**	**9,950.30**	**2,045.39**	**100.24**	**1,437.63**	**157.42**
Davidson Branch																												
Industrial	9.88	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	21.86	534.10	4,394.68	4,101.70	13.18	8.30	36.62	2,978.62	439.47	10.74	1.16	0.09	1.06	0.07
Commercial	9.88	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	132.59	4,049.44	14,216.30	21,916.79	68.12	50.35	183.63	17,770.37	3,554.07	44.43	5.03	0.27	4.44	0.47
Residential	9.88	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	1,731.56	136,616.31	193,393.59	266,883.16	1,199.04	1,121.68	2,243.37	214,666.89	35,004.24	282.35	46.41	1.93	42.93	5.49
Open/Vacant Land	9.88	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	364.28	18,542.52	58,831.26	109,037.19	268.52	113.92	691.65	58,261.66	20,668.24	26.85	16.27	0.81	5.70	0.81
Transportation	9.88	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	125.94	2,179.60	27,850.53	21,802.18	70.33	542.94	78.77	28,131.85	2,250.55	56.26	7.74	0.28	9.85	0.56
Total																**161,921.97**	**298,686.36**	**423,741.02**	**1,619.20**	**1,837.20**	**3,234.04**	**321,809.39**	**61,916.57**	**420.64**	**76.62**	**3.39**	**63.98**	**7.41**
Dry Creek																												
Industrial	10.78	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	274.75	7,320.06	60,230.59	56,215.21	180.69	113.77	501.92	40,822.95	6,023.06	147.23	15.86	1.27	14.59	0.94
Commercial	10.78	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	310.01	10,324.35	36,245.48	55,878.44	173.68	128.37	468.17	45,306.85	9,061.37	113.27	12.84	0.68	11.33	1.21
Residential	10.78	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	2,959.05	254,577.30	360,378.76	497,322.69	2,234.35	2,090.20	4,180.39	400,020.42	65,228.56	526.15	86.49	3.60	80.00	10.23
Open/Vacant Land	10.78	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	1,767.15	98,086.47	311,206.45	576,786.51	1,420.44	602.61	3,658.72	308,193.39	109,331.17	142.04	86.09	4.30	30.13	4.30
Transportation	10.78	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	284.83	5,375.27	68,684.35	53,768.05	173.45	1,339.00	194.26	69,378.13	5,550.25	138.76	19.08	0.69	24.28	1.39
Total																**375,683.44**	**836,745.63**	**1,239,970.91**	**4,182.61**	**4,273.95**	**9,003.47**	**863,721.74**	**195,194.41**	**1,067.45**	**220.36**	**10.55**	**160.33**	**18.07**
Ewing Creek																												
Industrial	10.50	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	442.00	11,467.91	94,359.74	88,069.09	283.08	178.24	786.33	63,954.94	9,435.97	230.66	24.85	1.99	22.86	1.47
Commercial	10.50	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	659.00	21,372.60	75,032.36	115,674.89	359.53	265.74	969.17	93,790.45	18,758.09	234.48	26.57	1.41	23.45	2.50
Residential	10.50	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	3,932.65	329,486.59	466,420.11	643,659.75	2,891.80	2,705.24	5,410.47	517,726.32	84,422.04	680.97	111.94	4.66	103.55	13.25
Open/Vacant Land	10.50	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	3,330.57	180,027.69	571,187.67	1,058,632.76	2,607.08	1,106.03	6,715.21	565,657.50	200,666.21	260.71	158.00	7.90	55.30	7.90
Transportation	10.50	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	529.16	9,724.93	124,263.67	97,277.11	313.80	2,422.51	351.45	125,518.86	10,041.51	251.04	34.52	1.26	43.93	2.51
Total																**552,079.73**	**1,331,263.55**	**2,003,313.60**	**6,455.29**	**6,677.76**	**14,232.63**	**1,366,648.06**	**323,323.82**	**1,657.85**	**355.89**	**17.22**	**249.08**	**27.63**
Gibson Creek																												
Industrial	17.87	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	29.28	1,293.47	10,642.87	9,933.35	31.93	20.10	88.69	7,213.50	1,064.29	26.02	2.80	0.22	2.58	0.17
Commercial	17.87	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	404.43	22,332.57	78,402.49	120,870.51	375.68	277.68	1,012.70	98,003.11	19,600.62	245.01	27.77	1.47	24.50	2.61
Residential	17.87	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	1,651.90	235,645.69	333,579.24	460,339.35	2,068.19	1,934.76	3,869.52	370,272.96	60,377.84	487.03	80.06	3.34	74.05	9.47
Open/Vacant Land	17.87	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	437.81	40,293.01	127,840.73	236,938.55	583.51	247.55	1,502.97	126,602.99	44,912.23	58.35	35.36	1.77	12.38	1.77
Transportation	17.87	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	212.88	6,661.28	85,116.80	66,631.84	214.94	1,659.35	240.73	85,976.57	6,878.13	171.95	23.64	0.86	30.09	1.72
Total																**306,226.02**	**635,582.13**	**894,713.60**	**3,274.25**	**4,139.43**	**6,714.61**	**688,069.13**	**132,833.11**	**988.35**	**169.64**	**7.66**	**143.60**	**15.74**
Gizzard Branch																												
Industrial	21.13	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	24.47	1,277.96	10,515.27	9,814.25	31.55	19.86	87.63	7,127.02	1,051.53	25.70	2.77	0.22	2.55	0.16
Commercial	21.13	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	452.11	29,514.68	103,616.60	159,742.26	496.50	366.98	1,338.38	129,520.75	25,904.15	323.80	36.70	1.94	32.38	3.45
Residential	21.13	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	514.36	86,744.44	122,795.14	169,457.30	761.33	712.21	1,424.42	136,302.61	22,225.92	179.28	29.47	1.23	27.26	3.49
Open/Vacant Land	21.13	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	354.97	38,621.97	122,538.89	227,112.19	559.31	237.28	1,440.64	121,352.48	43,049.62	55.93	33.90	1.69	11.86	1.69
Transportation	21.13	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	101.92	3,770.35	48,176.87	37,714.22	121.66	939.21	136.26	48,663.51	3,893.08	97.33	13.38	0.49	17.03	0.97
Total																**159,929.41**	**407,642.78**	**603,840.22**	**1,970.34**	**2,275.54**	**4,427.33**	**442,966.37**	**96,124.30**	**682.04**	**116.22**	**5.57**	**91.08**	**9.77**

Table E-5 PY7 Pollutant Loading Estimates (Continued)

Watershed	Annual Runoff (inches)	Fecal coliform (mpn/100ml)	TSS (mg/l)	TDS (mg/l)	Total P (mg/l)	DP (mg/l)	NO2/NO3 (mg/l)	COD (mg/l)	BOD(5) (mg/l)	Zn (mg/l)	Pb (mg/l)	Cd (mg/l)	Cu (mg/l)	TKN (mg/l)	Total Watershed Land Area Per Land Use	Fecal coliform (billion colonies)	TSS (pounds)	TDS (pounds)	Total P (pounds)	DP (pounds)	NO2/NO3 (pounds)	COD (pounds)	BOD(5) (pounds)	Zn (pounds)	Pb (pounds)	Cd (pounds)	Cu (pounds)	TKN (pounds)
Harpeth River																												
Industrial	7.90	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	8.90	173.90	1,430.92	1,335.52	4.29	2.70	11.92	969.84	143.09	3.50	0.38	0.03	0.35	0.02
Commercial	7.90	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	592.77	14,478.31	50,828.71	78,360.92	243.55	180.02	656.54	63,535.89	12,707.18	158.84	18.00	0.95	15.88	1.69
Residential	7.90	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	8,113.71	511,954.76	724,721.43	1,000,115.57	4,493.27	4,203.38	8,406.77	804,440.79	131,174.58	1,058.09	173.93	7.25	160.89	20.58
Open/Vacant Land	7.90	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	8,394.97	341,742.94	1,084,274.05	2,009,581.23	4,948.97	2,099.56	12,747.34	1,073,776.24	380,920.62	494.90	299.94	15.00	104.98	15.00
Transportation	7.90	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	688.90	9,534.89	121,835.26	95,376.09	307.66	2,375.17	344.58	123,065.92	9,845.27	246.13	33.84	1.23	43.07	2.46
Total																**877,884.81**	**1,983,090.36**	**3,184,769.33**	**9,997.75**	**8,860.84**	**22,167.16**	**2,065,788.67**	**534,790.74**	**1,961.46**	**526.09**	**24.46**	**325.17**	**39.76**
Indian Creek																												
Industrial	3.56	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Commercial	3.56	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	38.88	427.37	1,500.37	2,313.07	7.19	5.31	19.38	1,875.46	375.09	4.69	0.53	0.03	0.47	0.05
Residential	3.56	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	2,192.47	62,257.89	88,132.05	121,622.23	546.42	511.17	1,022.33	97,826.58	15,951.90	128.67	21.15	0.88	19.57	2.50
Open/Vacant Land	3.56	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	1,585.36	29,044.03	92,150.23	170,790.19	420.60	178.44	1,083.37	91,258.04	32,373.66	42.06	25.49	1.27	8.92	1.27
Transportation	3.56	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	33.11	206.24	2,635.27	2,062.96	6.65	51.37	7.45	2,661.89	212.95	5.32	0.73	0.03	0.93	0.05
Total																**91,935.53**	**184,417.92**	**296,788.45**	**980.87**	**746.29**	**2,132.54**	**193,621.96**	**48,913.61**	**180.75**	**47.91**	**2.21**	**29.89**	**3.88**
Island Creek																												
Industrial	4.34	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Commercial	4.34	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Residential	4.34	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	149.19	5,167.93	7,315.70	10,095.67	45.36	42.43	84.86	8,120.43	1,324.14	10.68	1.76	0.07	1.62	0.21
Open/Vacant Land	4.34	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	351.72	7,860.35	24,939.15	46,221.94	113.83	48.29	293.20	24,697.69	8,761.47	11.38	6.90	0.34	2.41	0.34
Transportation	4.34	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	9.65	73.32	936.93	733.46	2.37	18.27	2.65	946.40	75.71	1.89	0.26	0.01	0.33	0.02
Total																**13,101.61**	**33,191.78**	**57,051.06**	**161.55**	**108.99**	**380.71**	**33,764.52**	**10,161.33**	**23.96**	**8.91**	**0.43**	**4.37**	**0.57**
Little Harpeth River																												
Industrial	6.48	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	6.12	98.09	807.11	753.30	2.42	1.52	6.73	547.04	80.71	1.97	0.21	0.02	0.20	0.01
Commercial	6.48	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	504.83	10,114.24	35,507.86	54,741.28	170.14	125.76	458.64	44,384.82	8,876.96	110.96	12.58	0.67	11.10	1.18
Residential	6.48	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	3,969.55	205,451.74	290,836.78	401,354.76	1,803.19	1,686.85	3,373.71	322,828.83	52,641.46	424.62	69.80	2.91	64.57	8.26
Open/Vacant Land	6.48	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	3,938.06	131,498.01	417,213.81	773,259.35	1,904.30	807.88	4,905.00	413,174.40	146,573.04	190.43	115.41	5.77	40.39	5.77
Transportation	6.48	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	330.72	3,754.71	47,977.07	37,557.81	121.15	935.31	135.69	48,461.69	3,876.93	96.92	13.33	0.48	16.96	0.97
Total																**350,916.78**	**792,342.63**	**1,267,666.50**	**4,001.20**	**3,557.33**	**8,879.77**	**829,396.78**	**212,049.11**	**824.91**	**211.33**	**9.85**	**133.21**	**16.20**
Loves Branch																												
Industrial	14.28	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	7.06	249.20	2,050.46	1,913.76	6.15	3.87	17.09	1,389.75	205.05	5.01	0.54	0.04	0.50	0.03
Commercial	14.28	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	100.42	4,430.71	15,554.81	23,980.34	74.53	55.09	200.92	19,443.51	3,888.70	48.61	5.51	0.29	4.86	0.52
Residential	14.28	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	709.16	80,831.01	114,424.11	157,905.27	709.43	663.66	1,327.32	127,010.76	20,710.76	167.06	27.46	1.14	25.40	3.25
Open/Vacant Land	14.28	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	479.78	35,281.27	111,939.60	207,467.58	510.93	216.76	1,316.03	110,855.81	39,325.94	51.09	30.97	1.55	10.84	1.55
Transportation	14.28	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	144.37	3,609.59	46,122.78	36,106.22	116.47	899.16	130.45	46,588.67	3,727.09	93.18	12.81	0.47	16.31	0.93
Total																**124,401.79**	**290,091.76**	**427,373.17**	**1,417.51**	**1,838.54**	**2,991.80**	**305,288.51**	**67,857.55**	**364.95**	**77.29**	**3.49**	**57.90**	**6.28**
Marrowbone Creek																												
Industrial	4.14	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	16.70	170.80	1,405.35	1,311.66	4.22	2.65	11.71	952.51	140.53	3.44	0.37	0.03	0.34	0.02
Commercial	4.14	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	82.31	1,052.27	3,694.18	5,695.19	17.70	13.08	47.72	4,617.72	923.54	11.54	1.31	0.07	1.15	0.12
Residential	4.14	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	5,456.09	180,192.27	255,079.57	352,009.81	1,581.49	1,479.46	2,958.92	283,138.32	46,169.40	372.42	61.22	2.55	56.63	7.24
Open/Vacant Land	4.14	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	6,194.46	131,985.55	418,760.68	776,126.30	1,911.36	810.88	4,923.19	414,706.29	147,116.48	191.14	115.84	5.79	40.54	5.79
Transportation	4.14	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	177.73	1,287.55	16,452.05	12,879.13	41.55	320.73	46.53	16,618.23	1,329.46	33.24	4.57	0.17	5.82	0.33
Total																**314,688.44**	**695,391.83**	**1,148,022.09**	**3,556.31**	**2,626.81**	**7,988.07**	**720,033.09**	**195,679.42**	**611.77**	**183.31**	**8.61**	**104.48**	**13.51**
Mansker Creek																												
Industrial	7.38	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	226.76	4,135.58	34,028.20	31,759.65	102.08	64.28	283.57	23,063.56	3,402.82	83.18	8.96	0.72	8.24	0.53
Commercial	7.38	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	420.02	9,575.25	33,615.63	51,824.09	161.07	119.06	434.20	42,019.53	8,403.91	105.05	11.91	0.63	10.50	1.12
Residential	7.38	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	7,629.91	449,344.98	636,091.24	877,805.91	3,943.77	3,689.33	7,378.66	706,061.28	115,132.51	928.69	152.66	6.36	141.21	18.06
Open/Vacant Land	7.38	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	4,175.71	158,656.95	503,383.09	932,964.51	2,297.60	974.74	5,918.06	498,509.39	176,845.51	229.76	139.25	6.96	48.74	6.96
Transportation	7.38	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	432.90	5,592.36	71,458.32	55,939.59	180.45	1,393.08	202.10	72,180.12	5,774.41	144.36	19.85	0.72	25.26	1.44
Total																**627,305.13**	**1,278,576.47**	**1,950,293.75**	**6,684.97**	**6,240.48**	**14,216.59**	**1,341,833.88**	**309,559.16**	**1,491.04**	**332.63**	**15.39**	**233.96**	**28.12**
Mill Creek Lower																												
Industrial	24.45	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	1,218.87	73,676.36	606,220.53	565,805.83	1,818.66	1,145.08	5,051.84	410,882.80	60,622.05	1,481.87	159.64	12.80	146.84	9.43
Commercial	24.45	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	2,599.11	196,383.70	689,440.26	1,062,887.06	3,303.57	2,441.77	8,905.27	861,800.32	172,360.06	2,154.50	244.18	12.93	215.45	22.98
Residential	24.45	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	5,339.92	1,042,307.78	1,475,487.37	2,036,172.57	9,148.02	8,557.83	17,115.65	1,637,790.98	267,063.21	2,154.21	354.12	14.75	327.56	41.90
Open/Vacant Land	24.45	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	3,017.64	380,011.69	1,205,692.24	2,234,616.32	5,503.16	2,334.67	14,174.81	1,194,018.87	423,576.53	550.32	333.52	16.68	116.73	16.68
Transportation	24.45	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	945.97	40,502.87	517,539.26	405,144.37	1,306.92	10,089.40	1,463.75	522,766.93	41,821.35	1,045.53	143.76	5.23	182.97	10.46
Total																**1,732,882.40**	**4,494,379.65**	**6,304,626.15**	**21,080.33**	**24,568.75**	**46,711.31**	**4,627,259.90**	**965,443.21**	**7,386.43**	**1,235.22**	**62.38**	**989.55**	**101.45**
Mill Creek Upper																												
Industrial	8.28	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	157.09	3,214.15	26,446.57	24,683.46	79.34	49.95	220.39	17,924.90	2,644.66	64.65	6.96	0.56	6.41	0.41
Commercial	8.28	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	814.01	20,818.91	73,088.53	112,678.15	350.22	258.86	944.06	91,360.66	18,272.13	228.40	25.89	1.37	22.84	2.44
Residential	8.28	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	6,827.69	451,110.08	638,589.90	881,254.06	3,959.26	3,703.82	7,407.64	708,834.79	115,584.77	932.34	153.26	6.39	141.77	18.14
Open/Vacant Land	8.28	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	5,943.70	253,357.59	803,847.05	1,489,841.01	3,669.01	1,556.55	9,450.48	796,064.30	282,402.70	366.90	222.36	11.12	77.83	11.12
Transportation	8.28	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	538.39	7,802.84	99,703.50	78,050.72	251.78	1,943.71	281.99	100,710.61	8,056.85	201.42	27.70	1.01	35.25	2.01
Total																**736,303.58**	**1,641,675.55**	**2,586,507.41**	**8,309.60**	**7,512.90**	**18,304.56**	**1,714,895.26**	**426,961.11**	**1,793.71**	**436.17**	**20.44**	**284.09**	**34.12**
Overall Creek																												
Industrial	6.70	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	232.80	3,853.79	31,709.59	29,595.62	95.13	59.90	264.25	21,492.05	3,170.96	77.51	8.35	0.67	7.68	0.49
Commercial	6.70	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	268.01	5,545.82	19,469.61	30,015.66	93.29	68.95	251.48	24,337.02	4,867.40	60.84	6.90	0.37	6.08	0.65
Residential	6.70	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	2,559.32	136,810.74	193,668.82	267,262.97	1,200.75	1,123.28	2,246.56	214,972.39	35,054.06	282.76	46.48	1.94	42.99	5.50
Open/Vacant Land	6.70	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	1,652.58	56,993.64	180,828.09	335,144.74	825.36	350.15	2,125.92	179,077.34	63,527.43	82.54	50.02	2.50	17.51	2.50
Transportation	6.70	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	178.02	2,087.43	26,672.83	20,880.25	67.36	519.99	75.44	26,942.25	2,155.38	53.88	7.41	0.27	9.43	0.54
Total																**205,291.42**	**452,348.94**	**682,899.22**	**2,281.88**	**2,122.27**	**4,963.64**	**466,821.05**	**108,775.23**	**557.53**	**119.16**	**5.74**	**83.70**	**9.68**
Pages Branch																												
Industrial	16.74	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	136.42	5,646.07	46,456.73	43,359.62	139.37	87.75	387.14	31,487.34	4,645.67	113.56	12.23	0.98	11.25	0.72
Commercial	16.74	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	361.19	18,685.89	65,600.19	101,133.62	314.33	232.33	847.34	82,000.23	16,400.05	205.00	23.23	1.23	20.50	2.19
Residential	16.74	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	702.03	93,824.07	132,817.04	183,287.52	823.47	770.34	1,540.68	147,426.92	24,039.88	193.91	31.88	1.33	29.49	3.77
Open/Vacant Land	16.74	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	684.36	59,008.09	187,219.48	346,990.46	854.53	362.53	2,201.06	185,406.85	65,772.82	85.45	51.79	2.59	18.13	2.59
Transportation	16.74	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	170.53	4,999.27	63,879.88	50,006.98	161.31	1,245.34	180.67	64,525.13	5,162.01	129.05	17.74	0.65	22.58	1.29
Total																**182,163.39**	**495,973.33**	**724,778.20**	**2,293.01**	**2,698.29**	**5,156.88**	**510,846.47**	**116,020.43**	**726.98**	**136.88**	**6.77**	**101.95**	**10.56**

Table E-5 PY7 Pollutant Loading Estimates (Continued)

Watershed	Annual Runoff (inches)	Fecal coliform (mpn/100ml)	TSS (mg/l)	TDS (mg/l)	Total P (mg/l)	DP (mg/l)	NO2/NO3 (mg/l)	COD (mg/l)	BOD(5) (mg/l)	Zn (mg/l)	Pb (mg/l)	Cd (mg/l)	Cu (mg/l)	TKN (mg/l)	Total Watershed Land Area Per Land Use	Fecal coliform (billion colonies)	TSS (pounds)	TDS (pounds)	Total P (pounds)	DP (pounds)	NO2/NO3 (pounds)	COD (pounds)	BOD(5) (pounds)	Zn (pounds)	Pb (pounds)	Cd (pounds)	Cu (pounds)	TKN (pounds)
Percy Priest Lake, Lower																												
Industrial	8.23	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	678.89	13,810.13	113,631.87	106,056.42	340.90	214.64	946.93	77,017.16	11,363.19	277.77	29.92	2.40	27.52	1.77
Commercial	8.23	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	320.65	8,153.41	28,624.03	44,128.71	137.16	101.38	369.73	35,780.03	7,156.01	89.45	10.14	0.54	8.95	0.95
Residential	8.23	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	2,706.71	177,799.47	251,692.33	347,335.41	1,560.49	1,459.82	2,919.63	279,378.48	45,556.31	367.47	60.41	2.52	55.88	7.15
Open/Vacant Land	8.23	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	7,084.12	300,222.30	952,538.31	1,765,423.70	4,347.69	1,844.47	11,198.58	943,315.95	334,640.02	434.77	263.50	13.17	92.22	13.17
Transportation	8.23	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	265.36	3,823.59	48,857.24	38,246.83	123.38	952.47	138.18	49,350.74	3,948.06	98.70	13.57	0.49	17.27	0.99
Total																**503,808.90**	**1,395,343.77**	**2,301,191.06**	**6,509.61**	**4,572.77**	**15,573.06**	**1,384,842.37**	**402,663.58**	**1,268.16**	**377.53**	**19.12**	**201.84**	**24.03**
Percy Priest Lake, Upper																												
Industrial	8.59	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	14.94	317.08	2,608.97	2,435.04	7.83	4.93	21.74	1,768.30	260.90	6.38	0.69	0.06	0.63	0.04
Commercial	8.59	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	239.08	6,342.64	22,266.97	34,328.25	106.70	78.86	287.62	27,833.71	5,566.74	69.58	7.89	0.42	6.96	0.74
Residential	8.59	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	2,840.37	194,662.39	275,563.42	380,277.52	1,708.49	1,598.27	3,196.54	305,875.39	49,876.98	402.32	66.14	2.76	61.18	7.83
Open/Vacant Land	8.59	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	9,014.23	398,569.51	1,264,572.04	2,343,743.48	5,771.91	2,448.69	14,867.03	1,252,328.60	444,261.82	577.19	349.81	17.49	122.43	17.49
Transportation	8.59	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	342.44	5,148.00	65,780.37	51,494.74	166.11	1,282.39	186.05	66,444.82	5,315.59	132.89	18.27	0.66	23.26	1.33
Total																**605,039.61**	**1,630,791.77**	**2,812,279.02**	**7,761.03**	**5,413.13**	**18,558.97**	**1,654,250.84**	**505,282.03**	**1,188.36**	**442.79**	**21.38**	**214.46**	**27.43**
Pond Creek																												
Industrial	3.41	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Commercial	3.41	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	1.50	15.82	55.55	85.63	0.27	0.20	0.72	69.43	13.89	0.17	0.02	0.00	0.02	0.00
Residential	3.41	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	1,048.39	28,568.03	40,440.81	55,808.32	250.73	234.56	469.11	44,889.30	7,319.79	59.04	9.71	0.40	8.98	1.15
Open/Vacant Land	3.41	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	607.24	10,675.45	33,870.82	62,775.79	154.60	65.59	398.20	33,542.88	11,899.29	15.46	9.37	0.47	3.28	0.47
Transportation	3.41	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	12.02	71.85	918.05	718.68	2.32	17.90	2.60	927.32	74.19	1.85	0.26	0.01	0.32	0.02
Total																**39,331.15**	**75,285.23**	**119,388.42**	**407.91**	**318.24**	**870.63**	**79,428.94**	**19,307.15**	**76.53**	**19.35**	**0.88**	**12.60**	**1.64**
Richland Creek																												
Industrial	13.29	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	421.04	13,831.56	113,808.25	106,221.03	341.42	214.97	948.40	77,136.70	11,380.82	278.20	29.97	2.40	27.57	1.77
Commercial	13.29	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	1,586.57	65,150.41	228,722.22	352,613.42	1,095.96	810.06	2,954.33	285,902.77	57,180.55	714.76	81.01	4.29	71.48	7.62
Residential	13.29	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	8,218.38	871,815.50	1,234,139.07	1,703,111.91	7,651.66	7,158.01	14,316.01	1,369,894.36	223,379.17	1,801.84	296.19	12.34	273.98	35.05
Open/Vacant Land	13.29	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	3,292.60	225,343.81	714,965.60	1,325,109.14	3,263.33	1,384.44	8,405.54	708,043.39	251,177.40	326.33	197.78	9.89	69.22	9.89
Transportation	13.29	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	1,051.88	24,476.64	312,758.61	244,836.28	789.79	6,097.21	884.57	315,917.78	25,273.42	631.84	86.88	3.16	110.57	6.32
Total																**1,200,617.92**	**2,604,393.74**	**3,731,891.79**	**13,142.17**	**15,664.69**	**27,508.86**	**2,756,895.01**	**568,391.38**	**3,752.97**	**691.82**	**32.08**	**552.81**	**60.65**
Sevenmile Creek																												
Industrial	14.99	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	159.72	5,919.22	48,704.27	45,457.32	146.11	92.00	405.87	33,010.67	4,870.43	119.05	12.83	1.03	11.80	0.76
Commercial	14.99	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	1,107.15	51,288.70	180,058.20	277,589.73	862.78	637.71	2,325.75	225,072.75	45,014.55	562.68	63.77	3.38	56.27	6.00
Residential	14.99	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	6,557.06	784,702.17	1,110,821.74	1,532,934.00	6,887.09	6,442.77	12,885.53	1,233,012.13	201,058.73	1,621.80	266.60	11.11	246.60	31.55
Open/Vacant Land	14.99	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	2,245.81	173,395.18	550,144.17	1,019,630.97	2,511.03	1,065.29	6,467.81	544,817.74	193,273.33	251.10	152.18	7.61	53.26	7.61
Transportation	14.99	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	794.24	20,849.45	266,411.00	208,554.07	672.76	5,193.67	753.49	269,102.02	21,528.16	538.20	74.00	2.69	94.19	5.38
Total																**1,036,154.72**	**2,156,139.38**	**3,084,166.08**	**11,079.77**	**13,431.42**	**22,838.45**	**2,305,015.32**	**465,745.21**	**3,092.84**	**569.38**	**25.81**	**462.12**	**51.30**
South Harpeth River, Lower																												
Industrial	3.99	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Commercial	3.99	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	53.55	660.82	2,319.94	3,576.57	11.12	8.22	29.97	2,899.92	579.98	7.25	0.82	0.04	0.72	0.08
Residential	3.99	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	4,206.13	134,087.64	189,814.01	261,943.33	1,176.85	1,100.92	2,201.84	210,693.55	34,356.34	277.13	45.56	1.90	42.14	5.39
Open/Vacant Land	3.99	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	4,663.60	95,917.01	304,323.27	564,029.29	1,389.03	589.28	3,577.80	301,376.84	106,913.01	138.90	84.18	4.21	29.46	4.21
Transportation	3.99	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	153.40	1,072.70	13,706.80	10,730.07	34.61	267.21	38.77	13,845.25	1,107.62	27.69	3.81	0.14	4.85	0.28
Total																**231,738.18**	**510,164.01**	**840,279.26**	**2,611.60**	**1,965.64**	**5,848.37**	**528,815.57**	**142,956.95**	**450.97**	**134.37**	**6.29**	**77.17**	**9.95**
Stoner Creek																												
Industrial	13.06	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	236.43	7,630.12	62,781.79	58,596.34	188.35	118.59	523.18	42,552.10	6,278.18	153.47	16.53	1.33	15.21	0.98
Commercial	13.06	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	771.20	31,110.41	109,218.67	168,378.78	523.34	386.82	1,410.74	136,523.33	27,304.67	341.31	38.68	2.05	34.13	3.64
Residential	13.06	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	4,045.47	421,587.85	596,798.34	823,581.71	3,700.15	3,461.43	6,922.86	662,446.16	108,020.50	871.33	143.23	5.97	132.49	16.95
Open/Vacant Land	13.06	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	1,903.40	127,972.74	406,028.93	752,529.41	1,853.24	786.22	4,773.51	402,097.81	142,643.64	185.32	112.32	5.62	39.31	5.62
Transportation	13.06	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	502.70	11,491.46	146,836.05	114,947.41	370.80	2,862.56	415.29	148,319.24	11,865.54	296.64	40.79	1.48	51.91	2.97
Total																**599,792.58**	**1,321,663.78**	**1,918,033.65**	**6,635.88**	**7,615.62**	**14,045.58**	**1,391,938.64**	**296,112.52**	**1,848.06**	**351.55**	**16.44**	**273.05**	**30.15**
Stones River																												
Industrial	10.97	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	110.66	3,000.67	24,689.99	23,043.99	74.07	46.64	205.75	16,734.33	2,469.00	60.35	6.50	0.52	5.98	0.38
Commercial	10.97	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	2,951.71	100,048.71	351,238.96	541,493.40	1,683.02	1,243.97	4,536.84	439,048.70	87,809.74	1,097.62	124.40	6.59	109.76	11.71
Residential	10.97	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	2,783.48	243,728.52	345,021.27	476,129.36	2,139.13	2,001.12	4,002.25	382,973.61	62,448.85	503.73	82.81	3.45	76.59	9.80
Open/Vacant Land	10.97	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	2,707.01	152,924.27	485,194.56	899,254.09	2,214.58	939.52	5,704.22	480,496.96	170,455.63	221.46	134.22	6.71	46.98	6.71
Transportation	10.97	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	442.62	8,501.52	108,631.05	85,039.46	274.32	2,117.76	307.24	109,728.34	8,778.27	219.46	30.18	1.10	38.40	2.19
Total																**508,203.69**	**1,314,775.84**	**2,024,960.30**	**6,385.12**	**6,349.01**	**14,756.30**	**1,428,981.94**	**331,961.48**	**2,102.62**	**378.10**	**18.37**	**277.72**	**30.80**
Sugartree Creek																												
Industrial	15.28	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	0.90	34.01	279.80	261.15	0.84	0.53	2.33	189.64	27.98	0.68	0.07	0.01	0.07	0.00
Commercial	15.28	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	270.41	12,771.27	44,835.82	69,121.89	214.84	158.79	579.13	56,044.78	11,208.96	140.11	15.88	0.84	14.01	1.49
Residential	15.28	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	1,976.99	241,210.45	341,456.70	471,210.24	2,117.03	1,980.45	3,960.90	379,016.93	61,803.66	498.53	81.95	3.41	75.80	9.70
Open/Vacant Land	15.28	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	561.02	44,160.94	140,112.80	259,683.47	639.52	271.31	1,647.25	138,756.24	49,223.58	63.95	38.76	1.94	13.57	1.94
Transportation	15.28	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	205.30	5,494.50	70,207.79	54,960.64	177.29	1,368.70	198.57	70,916.96	5,673.36	141.83	19.50	0.71	24.82	1.42
Total																**303,671.15**	**596,892.90**	**855,237.39**	**3,149.52**	**3,779.78**	**6,388.17**	**644,924.55**	**127,937.54**	**845.11**	**156.16**	**6.91**	**128.27**	**14.55**
Sulpher Creek																												
Industrial	4.45	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	4.16	45.72	376.19	351.11	1.13	0.71	3.13	254.97	37.62	0.92	0.10	0.01	0.09	0.01
Commercial	4.45	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	18.91	259.78	912.01	1,406.02	4.37	3.23	11.78	1,140.02	228.00	2.85	0.32	0.02	0.29	0.03
Residential	4.45	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	2,153.96	76,442.73	108,212.07	149,332.65	670.91	627.63	1,255.26	120,115.39	19,586.38	157.99	25.97	1.08	24.02	3.07
Open/Vacant Land	4.45	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	1,521.69	34,841.19	110,543.33	204,879.75	504.55	214.05	1,299.61	109,473.06	38,835.42	50.46	30.58	1.53	10.70	1.53
Transportation	4.45	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	82.82	644.73	8,238.32	6,449.19	20.80	160.61	23.30	8,321.53	665.72	16.64	2.29	0.08	2.91	0.17
Total																**112,234.16**	**228,281.91**	**362,418.72**	**1,201.77**	**1,006.23**	**2,593.09**	**239,304.97**	**59,353.14**	**228.86**	**59.26**	**2.72**	**38.01**	**4.80**

Table E-5 PY7 Pollutant Loading Estimates (Continued)

Watershed	Annual Runoff (inches)	Fecal coliform (mpn/100ml)	TSS (mg/l)	TDS (mg/l)	Total P (mg/l)	DP (mg/l)	NO2/NO3 (mg/l)	COD (mg/l)	BOD(5) (mg/l)	Zn (mg/l)	Pb (mg/l)	Cd (mg/l)	Cu (mg/l)	TKN (mg/l)	Total Watershed Land Area Per Land Use	Fecal coliform (billion colonies)	TSS (pounds)	TDS (pounds)	Total P (pounds)	DP (pounds)	NO2/NO3 (pounds)	COD (pounds)	BOD(5) (pounds)	Zn (pounds)	Pb (pounds)	Cd (pounds)	Cu (pounds)	TKN (pounds)
Sycamore Creek																												
Industrial	4.78	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	1.28	15.11	124.34	116.05	0.37	0.23	1.04	84.27	12.43	0.30	0.03	0.00	0.03	0.00
Commercial	4.78	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	96.32	1,421.41	4,990.13	7,693.12	23.91	17.67	64.46	6,237.66	1,247.53	15.59	1.77	0.09	1.56	0.17
Residential	4.78	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	7,587.06	289,239.81	409,446.90	565,036.72	2,538.57	2,374.79	4,749.58	454,486.05	74,109.89	597.79	98.27	4.09	90.90	11.63
Open/Vacant Land	4.78	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	1,865.84	45,890.97	145,601.80	269,856.73	664.57	281.94	1,711.78	144,192.10	51,151.95	66.46	40.28	2.01	14.10	2.01
Transportation	4.78	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	291.51	2,437.73	31,148.90	24,384.24	78.66	607.25	88.10	31,463.54	2,517.08	62.93	8.65	0.31	11.01	0.63
Total																**339,005.03**	**591,312.07**	**867,086.85**	**3,306.09**	**3,281.89**	**6,614.95**	**636,463.63**	**129,038.88**	**743.07**	**149.00**	**6.52**	**117.60**	**14.44**
Whites Creek																												
Industrial	5.71	2400	90	84	0.27	0.17	0.75	61	9	0.22	0.0237	0.0019	0.0218	0.0014	174.99	2,468.69	20,312.73	18,958.55	60.94	38.37	169.27	13,767.52	2,031.27	49.65	5.35	0.43	4.92	0.32
Commercial	5.71	3000	48	74	0.23	0.17	0.62	60	12	0.15	0.017	0.0009	0.015	0.0016	959.34	16,917.46	59,391.78	91,562.32	284.59	210.35	767.14	74,239.72	14,847.94	185.60	21.03	1.11	18.56	1.98
Residential	5.71	7750	50	69	0.31	0.29	0.58	55.5	9.05	0.073	0.012	0.0005	0.0111	0.00142	6,240.38	284,285.06	402,432.97	555,357.50	2,495.08	2,334.11	4,668.22	446,700.60	72,840.37	587.55	96.58	4.02	89.34	11.43
Open/Vacant Land	5.71	5000	72.3	134	0.33	0.14	0.85	71.6	25.4	0.033	0.02	0.001	0.007	0.001	23,036.60	677,063.95	2,148,172.71	3,981,398.94	9,804.94	4,159.67	25,255.14	2,127,374.36	754,683.08	980.49	594.24	29.71	207.98	29.71
Transportation	5.71	1700	99	77.5	0.25	1.93	0.28	100	8	0.2	0.0275	0.001	0.035	0.002	834.34	8,337.45	106,534.62	83,398.32	269.03	2,076.89	301.31	107,610.73	8,608.86	215.22	29.59	1.08	37.66	2.15
Total																**989,072.60**	**2,736,844.81**	**4,730,675.63**	**12,914.57**	**8,819.38**	**31,161.09**	**2,769,692.92**	**853,011.53**	**2,018.52**	**746.80**	**36.35**	**358.47**	**45.59**

Note: The above calculation was performed, as prescribed by the MS4 permit, for purposes of estimating loadings of pollutant runoff. The calculation is not scientific and by no means represents actual loading numbers for streams. As NPDES further develops GIS coverages and sampling plans, the calculation will continue to be refined as a more accurate estimate. There are numerous variables that are not accounted for in this calculation such as a strong public education program, a strong illicit discharge detection and elimination program, a strong industrial inspection program, etc. Future estimates will attempt to quantify non-structural BMPs.

The "Simple Method" was used to calculate the Pollutant Loading Estimates:

For Chemical Parameters;

$L = 0.226 * R * C * A$

Where:

0.226 = Unit conversion factor
L = Annual load (pounds)
R = Annual runoff (inches)
C = Pollutant concentration (Event Mean Concentrations) (mg/l)
A = Watershed land area (acres) (Per each land use)

For the Biological Parameters:

$L = 0.00103 * R * C * A$

Where:

L = Annual load (billion colonies)
0.00103 = Unit conversion factor
R = Annual runoff (inches)
C = Pollutant concentration (Event Mean Concentration) (colonies/100ml)
A = Watershed land area (acres) (Per each land use)

The same EMC values used in PY5's calculation were used for PY7. Refer to Annual Report for PY5 for more details of the calculation.

Table E-6 Estimated Pollutant Loading Reduction by BMPs Per Each Watershed

Watershed	Total Watershed Land Area (acres)	Number of Estimated Properties with BMPs per Watershed	Estimated BMP Treatment Area per Watershed
Back Creek	1,595.62	1	0.19%
Browns Creek	8,804.70	56	1.91%
Bull Run Creek	2,913.00	0	0.00%
Cooper Creek	2,355.89	9	1.15%
Cub Creek	1,581.29	0	0.00%
Cumberland River	46,188.76	185	1.20%
Davidson Branch	2,376.23	8	1.01%
Dry Creek	5,595.79	22	1.18%
Ewing Creek	8,893.37	33	1.11%
Gibson Creek	2,736.30	10	1.10%
Gizzard Branch	1,447.68	9	1.87%
Harpeth River	17,801.03	54	0.91%
Indian Creek	3,849.82	0	0.00%
Island Creek	510.56	0	0.00%
Little Harpeth River	8,749.29	10	0.34%
Loves Branch	1,440.79	5	1.04%
Marrowbone Creek	11,928.48	2	0.05%
Mansker Creek	12,884.01	10	0.23%
Mill Creek Lower	13,120.19	115	2.63%
Mill Creek Upper	14,280.88	88	1.85%
Overall Creek	4,890.74	15	0.92%
Pages Branch	2,054.53	15	2.19%
Percy Priest Lake, Lower	11,056.84	56	1.52%
Percy Priest Lake, Upper	12,452.32	44	1.06%
Pond Creek	1,669.15	0	0.00%
Richland Creek	14,569.01	63	1.30%
Sevenmile Creek	10,865.05	72	1.99%
South Harpeth River, Lower	9,076.68	3	0.10%
Stoner Creek	7,458.46	63	2.53%
Stones River	8,996.37	35	1.17%
Sugartree Creek	3,014.63	38	3.78%
Sulpher Creek	3,781.53	2	0.16%
Sycamore Creek	12,842.01	2	0.05%
Whites Creek	31,248.78	46	0.44%
Overall County	**311,212.00**	**1071**	**1.03%**

Note: The pollutant removal estimates of post-construction BMPs installed around the county were calculated using the following technique. Properties that obtained grading permits for site development after the 2000 were mapped to each respective watershed. Some sites have multiple BMPs installed that treat a variety of different areas. For purposes of this calculation, each mapped property with a BMP was assumed to treat approximately 3 acres of runoff. Some BMP treat more than 10 acres, while other treat less than one. We determined 3 to be a good average number. The number of BMPs mapped for each watershed was multiplied by 3 acres and divided by the total land area for the watershed.

Table E-7 Estimated Pollutant Loadings Per Watershed Subtracting Estimated Loading Reduction Values for Post-Construction BMPs Installed Around the County

Watershed	Percentage of Watershed Land Area Treated by Post-Construction BMPs	Fecal coliform (billion colonies)	TSS (pounds)	TDS (pounds)	Total P (pounds)	DP (pounds)	NO2/NO3 (pounds)	COD (pounds)	BOD(5) (pounds)	Zn (pounds)	Pb (pounds)	Cd (pounds)	Cu (pounds)	TKN (pounds)
Back Creek (After Estimated BMP Reduction)		**43,547.41**	**67,774.91**	**97,177.34**	**400.87**	**373.66**	**777.34**	**74,013.77**	**13,714.12**	**90.39**	**16.65**	**0.71**	**14.05**	**1.78**
Browns Creek	1.91%	971,442.59	2,362,839.88	3,287,020.55	11,252.22	13,675.57	24,126.68	2,407,589.53	497,551.12	3,547.99	629.75	31.10	503.51	52.02
Browns Creek (After Estimated BMP Reduction)		**960,321.09**	**2,335,789.07**	**3,249,389.32**	**11,123.40**	**13,519.01**	**23,850.47**	**2,380,026.41**	**491,854.94**	**3,507.37**	**622.54**	**30.74**	**497.75**	**51.43**
Bull Run Creek	0.00%	69,868.12	156,144.48	260,054.97	795.70	570.02	1,798.62	161,252.54	44,666.43	131.26	41.19	1.94	22.80	2.98
Bull Run Creek (After Estimated BMP Reduction)		**69,868.12**	**156,144.48**	**260,054.97**	**795.70**	**570.02**	**1,798.62**	**161,252.54**	**44,666.43**	**131.26**	**41.19**	**1.94**	**22.80**	**2.98**
Cooper Creek	1.15%	221,132.22	442,308.09	624,959.31	2,306.76	2,839.94	4,672.50	474,186.43	92,677.53	637.82	115.56	5.17	96.12	10.71
Cooper Creek (After Estimated BMP Reduction)		**219,611.64**	**439,266.61**	**620,661.85**	**2,290.90**	**2,820.42**	**4,640.37**	**470,925.75**	**92,040.25**	**633.44**	**114.77**	**5.14**	**95.46**	**10.64**
Cub Creek	0.00%	42,261.36	73,729.48	111,630.96	414.75	358.72	847.23	79,066.02	17,062.96	86.50	18.61	0.83	13.77	1.76
Cub Creek (After Estimated BMP Reduction)		**42,261.36**	**73,729.48**	**111,630.96**	**414.75**	**358.72**	**847.23**	**79,066.02**	**17,062.96**	**86.50**	**18.61**	**0.83**	**13.77**	**1.76**
Cumberland River	1.20%	2,964,857.43	7,507,248.04	11,334,501.52	35,886.16	36,854.89	80,640.05	7,746,580.27	1,842,072.48	9,950.30	2,045.39	100.24	1,437.63	157.42
Cumberland River (After Estimated BMP Reduction)		**2,943,482.15**	**7,453,124.19**	**11,252,784.91**	**35,627.44**	**36,589.18**	**80,058.67**	**7,690,730.94**	**1,828,791.97**	**9,878.57**	**2,030.64**	**99.52**	**1,427.27**	**156.29**
Davidson Branch	1.01%	161,921.97	298,686.36	423,741.02	1,619.20	1,837.20	3,234.04	321,809.39	61,916.57	420.64	76.62	3.39	63.98	7.41
Davidson Branch (After Estimated BMP Reduction)		**160,940.72**	**296,876.31**	**421,173.14**	**1,609.39**	**1,826.06**	**3,214.44**	**319,859.21**	**61,541.36**	**418.09**	**76.15**	**3.37**	**63.59**	**7.37**
Dry Creek	1.18%	375,683.44	836,745.63	1,239,970.91	4,182.61	4,273.95	9,003.47	863,721.74	195,194.41	1,067.45	220.36	10.55	160.33	18.07
Dry Creek (After Estimated BMP Reduction)		**373,024.82**	**830,824.19**	**1,231,195.94**	**4,153.01**	**4,243.70**	**8,939.75**	**857,609.40**	**193,813.07**	**1,059.90**	**218.80**	**10.48**	**159.20**	**17.94**
Ewing Creek	1.11%	552,079.73	1,331,263.55	2,003,313.60	6,455.29	6,677.76	14,232.63	1,366,648.06	323,323.82	1,657.85	355.89	17.22	249.08	27.63
Ewing Creek (After Estimated BMP Reduction)		**548,392.32**	**1,322,371.86**	**1,989,933.20**	**6,412.18**	**6,633.16**	**14,137.57**	**1,357,520.04**	**321,164.30**	**1,646.78**	**353.51**	**17.10**	**247.42**	**27.44**
Gibson Creek	1.10%	306,226.02	635,582.13	894,713.60	3,274.25	4,139.43	6,714.61	688,069.13	132,833.11	988.35	169.64	7.66	143.60	15.74
Gibson Creek (After Estimated BMP Reduction)		**304,211.60**	**631,401.13**	**888,827.97**	**3,252.71**	**4,112.20**	**6,670.44**	**683,542.85**	**131,959.30**	**981.85**	**168.52**	**7.61**	**142.66**	**15.64**
Gizzard Branch	1.87%	159,929.41	407,642.78	603,840.22	1,970.34	2,275.54	4,427.33	442,966.37	96,124.30	682.04	116.22	5.57	91.08	9.77
Gizzard Branch (After Estimated BMP Reduction)		**158,139.75**	**403,081.13**	**597,083.06**	**1,948.29**	**2,250.07**	**4,377.78**	**438,009.44**	**95,048.64**	**674.41**	**114.92**	**5.51**	**90.06**	**9.66**
Harpeth River	0.91%	877,884.81	1,983,090.36	3,184,769.33	9,997.75	8,860.84	22,167.16	2,065,788.67	534,790.74	1,961.46	526.09	24.46	325.17	39.76
Harpeth River (After Estimated BMP Reduction)		**873,091.24**	**1,972,261.98**	**3,167,379.35**	**9,943.16**	**8,812.46**	**22,046.12**	**2,054,508.73**	**531,870.59**	**1,950.75**	**523.22**	**24.32**	**323.39**	**39.54**
Indian Creek	0.00%	91,935.53	184,417.92	296,788.45	980.87	746.29	2,132.54	193,621.96	48,913.61	180.75	47.91	2.21	29.89	3.88
Indian Creek (After Estimated BMP Reduction)		**91,935.53**	**184,417.92**	**296,788.45**	**980.87**	**746.29**	**2,132.54**	**193,621.96**	**48,913.61**	**180.75**	**47.91**	**2.21**	**29.89**	**3.88**
Island Creek	0.00%	13,101.61	33,191.78	57,051.06	161.55	108.99	380.71	33,764.52	10,161.33	23.96	8.91	0.43	4.37	0.57
Island Creek (After Estimated BMP Reduction)		**13,101.61**	**33,191.78**	**57,051.06**	**161.55**	**108.99**	**380.71**	**33,764.52**	**10,161.33**	**23.96**	**8.91**	**0.43**	**4.37**	**0.57**

Table E-7 Estimated Pollutant Loadings Per Watershed Subtracting Estimated Loading Reduction Values for Post-Construction BMPs Installed Around the County

(Continued)

Watershed	Percentage of Watershed Land Area Treated by Post-Construction BMPs	Fecal coliform (billion colonies)	TSS (pounds)	TDS (pounds)	Total P (pounds)	DP (pounds)	NO2/NO3 (pounds)	COD (pounds)	BOD(5) (pounds)	Zn (pounds)	Pb (pounds)	Cd (pounds)	Cu (pounds)	TKN (pounds)
Little Harpeth River	0.34%	350,916.78	792,342.63	1,267,666.50	4,001.20	3,557.33	8,879.77	829,396.78	212,049.11	824.91	211.33	9.85	133.21	16.20
Little Harpeth River (After Estimated BMP Reduction)		**350,194.84**	**790,712.54**	**1,265,058.52**	**3,992.97**	**3,550.01**	**8,861.50**	**827,690.45**	**211,612.86**	**823.21**	**210.89**	**9.83**	**132.94**	**16.16**
Loves Branch	1.04%	124,401.79	290,091.76	427,373.17	1,417.51	1,838.54	2,991.80	305,288.51	67,857.55	364.95	77.29	3.49	57.90	6.28
Loves Branch (After Estimated BMP Reduction)		**123,624.71**	**288,279.68**	**424,703.55**	**1,408.66**	**1,827.06**	**2,973.11**	**303,381.50**	**67,433.67**	**362.67**	**76.81**	**3.47**	**57.54**	**6.24**
Marrowbone Creek	0.05%	314,688.44	695,391.83	1,148,022.09	3,556.31	2,626.81	7,988.07	720,033.09	195,679.42	611.77	183.31	8.61	104.48	13.51
Marrowbone Creek (After Estimated BMP Reduction)		**314,593.46**	**695,181.96**	**1,147,675.62**	**3,555.24**	**2,626.02**	**7,985.66**	**719,815.78**	**195,620.36**	**611.58**	**183.25**	**8.61**	**104.45**	**13.51**
Mansker Creek	0.23%	627,305.13	1,278,576.47	1,950,293.75	6,684.97	6,240.48	14,216.59	1,341,833.88	309,559.16	1,491.04	332.63	15.39	233.96	28.12
Mansker Creek (After Estimated BMP Reduction)		**626,428.73**	**1,276,790.20**	**1,947,569.04**	**6,675.64**	**6,231.76**	**14,196.73**	**1,339,959.23**	**309,126.68**	**1,488.96**	**332.16**	**15.37**	**233.63**	**28.08**
Mill Creek Lower	2.63%	1,732,882.40	4,494,379.65	6,304,626.15	21,080.33	24,568.75	46,711.31	4,627,259.90	965,443.21	7,386.43	1,235.22	62.38	989.55	101.45
Mill Creek Lower (After Estimated BMP Reduction)		**1,705,542.35**	**4,423,470.87**	**6,205,156.73**	**20,747.74**	**24,181.13**	**45,974.34**	**4,554,254.64**	**950,211.21**	**7,269.90**	**1,215.73**	**61.40**	**973.94**	**99.85**
Mill Creek Upper	1.85%	736,303.58	1,641,675.55	2,586,507.41	8,309.60	7,512.90	18,304.56	1,714,895.26	426,961.11	1,793.71	436.17	20.44	284.09	34.12
Mill Creek Upper (After Estimated BMP Reduction)		**728,136.68**	**1,623,466.49**	**2,557,818.51**	**8,217.43**	**7,429.57**	**18,101.54**	**1,695,874.06**	**422,225.36**	**1,773.82**	**431.33**	**20.21**	**280.94**	**33.74**
Overall Creek	0.92%	205,291.42	452,348.94	682,899.22	2,281.88	2,122.27	4,963.64	466,821.05	108,775.23	557.53	119.16	5.74	83.70	9.68
Overall Creek (After Estimated BMP Reduction)		**204,158.08**	**449,851.69**	**679,129.18**	**2,269.28**	**2,110.55**	**4,936.24**	**464,243.90**	**108,174.73**	**554.45**	**118.50**	**5.71**	**83.23**	**9.63**
Pages Branch	2.19%	182,163.39	495,973.33	724,778.20	2,293.01	2,698.29	5,156.88	510,846.47	116,020.43	726.98	136.88	6.77	101.95	10.56
Pages Branch (After Estimated BMP Reduction)		**179,769.46**	**489,455.40**	**715,253.39**	**2,262.88**	**2,662.83**	**5,089.11**	**504,133.08**	**114,495.73**	**717.42**	**135.08**	**6.68**	**100.61**	**10.42**
Percy Priest Lake, Lower	1.52%	503,808.90	1,395,343.77	2,301,191.06	6,509.61	4,572.77	15,573.06	1,384,842.37	402,663.58	1,268.16	377.53	19.12	201.84	24.03
Percy Priest Lake, Lower (After Estimated BMP Reduction)		**499,215.91**	**1,382,623.08**	**2,280,212.19**	**6,450.26**	**4,531.08**	**15,431.08**	**1,372,217.41**	**398,992.69**	**1,256.60**	**374.09**	**18.95**	**200.00**	**23.81**
Percy Priest Lake, Upper	1.06%	605,039.61	1,630,791.77	2,812,279.02	7,761.03	5,413.13	18,558.97	1,654,250.84	505,282.03	1,188.36	442.79	21.38	214.46	27.43
Percy Priest Lake, Upper (After Estimated BMP Reduction)		**601,191.40**	**1,620,419.51**	**2,794,392.19**	**7,711.67**	**5,378.70**	**18,440.93**	**1,643,729.37**	**502,068.30**	**1,180.81**	**439.98**	**21.25**	**213.09**	**27.25**
Pond Creek	0.00%	39,331.15	75,285.23	119,388.42	407.91	318.24	870.63	79,428.94	19,307.15	76.53	19.35	0.88	12.60	1.64
Pond Creek (After Estimated BMP Reduction)		**39,331.15**	**75,285.23**	**119,388.42**	**407.91**	**318.24**	**870.63**	**79,428.94**	**19,307.15**	**76.53**	**19.35**	**0.88**	**12.60**	**1.64**
Richland Creek	1.30%	1,200,617.92	2,604,393.74	3,731,891.79	13,142.17	15,664.69	27,508.86	2,756,895.01	568,391.38	3,752.97	691.82	32.08	552.81	60.65
Richland Creek (After Estimated BMP Reduction)		**1,191,272.74**	**2,584,122.07**	**3,702,844.07**	**13,039.88**	**15,542.76**	**27,294.74**	**2,735,436.32**	**563,967.22**	**3,723.75**	**686.44**	**31.83**	**548.51**	**60.18**
Sevenmile Creek	1.99%	1,036,154.72	2,156,139.38	3,084,166.08	11,079.77	13,431.42	22,838.45	2,305,015.32	465,745.21	3,092.84	569.38	25.81	462.12	51.30
Sevenmile Creek (After Estimated BMP Reduction)		**1,023,795.31**	**2,130,420.62**	**3,047,377.67**	**10,947.61**	**13,271.21**	**22,566.03**	**2,277,520.74**	**460,189.73**	**3,055.95**	**562.59**	**25.50**	**456.61**	**50.69**
South Harpeth River, Lower	0.10%	231,738.18	510,164.01	840,279.26	2,611.60	1,965.64	5,848.37	528,815.57	142,956.95	450.97	134.37	6.29	77.17	9.95
South Harpeth River, Lower (After Estimated BMP Reduction)		**231,600.31**	**509,860.50**	**839,779.35**	**2,610.05**	**1,964.47**	**5,844.89**	**528,500.96**	**142,871.90**	**450.70**	**134.29**	**6.29**	**77.13**	**9.95**

Table E-7 Estimated Pollutant Loadings Per Watershed Subtracting Estimated Loading Reduction Values for Post-Construction BMPs Installed Around the County

(Continued)

Watershed	Percentage of Watershed Land Area Treated by Post-Construction BMPs	Fecal coliform (billion colonies)	TSS (pounds)	TDS (pounds)	Total P (pounds)	DP (pounds)	NO2/NO3 (pounds)	COD (pounds)	BOD(5) (pounds)	Zn (pounds)	Pb (pounds)	Cd (pounds)	Cu (pounds)	TKN (pounds)
Stoner Creek	2.53%	599,792.58	1,321,663.78	1,918,033.65	6,635.88	7,615.62	14,045.58	1,391,938.64	296,112.52	1,848.06	351.55	16.44	273.05	30.15
Stoner Creek (After Estimated BMP Reduction)		**590,673.20**	**1,301,568.92**	**1,888,871.46**	**6,534.98**	**7,499.83**	**13,832.03**	**1,370,775.31**	**291,610.36**	**1,819.97**	**346.21**	**16.19**	**268.90**	**29.69**
Stones River	1.17%	508,203.69	1,314,775.84	2,024,960.30	6,385.12	6,349.01	14,756.30	1,428,981.94	331,961.48	2,102.62	378.10	18.37	277.72	30.80
Stones River (After Estimated BMP Reduction)		**504,644.83**	**1,305,568.69**	**2,010,779.86**	**6,340.41**	**6,304.55**	**14,652.96**	**1,418,975.03**	**329,636.81**	**2,087.90**	**375.45**	**18.24**	**275.77**	**30.58**
Sugartree Creek	3.78%	303,671.15	596,892.90	855,237.39	3,149.52	3,779.78	6,388.17	644,924.55	127,937.54	845.11	156.16	6.91	128.27	14.55
Sugartree Creek (After Estimated BMP Reduction)		**296,781.05**	**583,349.79**	**835,832.61**	**3,078.06**	**3,694.02**	**6,243.23**	**630,291.63**	**125,034.72**	**825.93**	**152.62**	**6.75**	**125.36**	**14.22**
Sulpher Creek	0.16%	112,234.16	228,281.91	362,418.72	1,201.77	1,006.23	2,593.09	239,304.97	59,353.14	228.86	59.26	2.72	38.01	4.80
Sulpher Creek (After Estimated BMP Reduction)		**112,127.31**	**228,064.59**	**362,073.69**	**1,200.63**	**1,005.27**	**2,590.62**	**239,077.16**	**59,296.64**	**228.64**	**59.20**	**2.72**	**37.98**	**4.80**
Sycamore Creek	0.05%	339,005.03	591,312.07	867,086.85	3,306.09	3,281.89	6,614.95	636,463.63	129,038.88	743.07	149.00	6.52	117.60	14.44
Sycamore Creek (After Estimated BMP Reduction)		**338,910.00**	**591,146.30**	**866,843.78**	**3,305.16**	**3,280.97**	**6,613.10**	**636,285.21**	**129,002.71**	**742.87**	**148.96**	**6.52**	**117.56**	**14.44**
Whites Creek	0.44%	989,072.60	2,736,844.81	4,730,675.63	12,914.57	8,819.38	31,161.09	2,769,692.92	853,011.53	2,018.52	746.80	36.35	358.47	45.59
Whites Creek (After Estimated BMP Reduction)		**986,451.85**	**2,729,592.98**	**4,718,140.74**	**12,880.35**	**8,796.01**	**31,078.52**	**2,762,354.06**	**850,751.30**	**2,013.17**	**744.82**	**36.26**	**357.52**	**45.47**

Note: The above pollutant loading numbers were calculated with the assumption of 60% pollutant removal from properties identified within each watershed as having post-construction BMPs to treat stormwater runoff. For purpose of this calculation only the properties developed after 2000 (when Nashville's stormwater regulations were revised to require specific water quality treatment) were mapped and considered to treat runoff of up to 60% pollutant removal. Since all properties that installed post-construction BMPs treat different amounts of land area, an estimate of 3 acres of treatment for each property was assumed in the calculation. Even though post-construction BMPs were designed to focus pollution reduction on TSS it is also assumed in this calculation that by virtue of removing sediment from runoff, other contaminants would be removed as well. The following formula was used to perform the calculation.

$L_{BMP} = L - ((L * T)*60\%)$

Where:

L_{BMP} =Annual loading after estimating the pollutant reduction of post-construction BMPs

L=Annual loading (without factoring BMPs) from Table E-5

T=the percentage of land treated by structural BMPs (calculated in Table E-6)

Appendix B – Example Public Educational Materials

Photograph of post-flood trash collected from Mill Creek by volunteers organized by the Cumberland River Compact. NPDES assisted with the clean-up.

Photograph of post-flood trash collected from Mill Creek by volunteers organized by the Cumberland River Compact. NPDES assisted with the clean-up.

Photograph of the 2,600 Public Education Mail-outs that were Sent on the Murphy Branch Illicit Discharge

MWS Stormwater Booth at the Tennessee Lawn and Garden Show

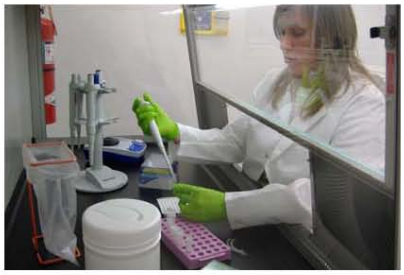
Volume 26 No 1 January 2010

mainstream

Submit an article to mainstream: Send to Kathy Halbrooks by the first Friday of the month for next months issue.

AHEAD OF OUR TIME

Metro Water Services, NPDES division, is pleased to announce the completion of an innovative molecular laboratory which will help MWS understand sources of fecal contamination present in streams and rivers in Davidson County. Dr. Steve Winesett, Watershed Group supervisor, has been given the arduous task of delisting all of EPA's 303d impaired streams impacting Davidson County and this molecular technology is a promising tool in those efforts. Specifically, this lab will initially be devoted to conducting real-time polymerase chain reaction (RT-PCR) to differentiate DNA sequences from host-specific fecal bacteria (*Bacteroides* spp.). This will allow us to compare results with traditional pathogen indicator (*E.coli*) methodologies, which are only able to detect presence/absence of fecal contamination, but do not indicate fecal sources. PCR has the capability to distinguish between human and non-human (e.g. dogs, cows, wildlife) fecal inputs. This will essentially help us determine if the source of contamination is a sewer overflow or not. Anticipated results will not only assist in delisting efforts, but will also provide information to other MWS departments in prioritizing sewer and stormwater infrastructure projects. This technology will build partnerships among all MWS departments to achieve their specific planning and infrastructure goals. Megan Sitzlar, another member of the Watershed Group who is currently pursuing a PhD in Biological Sciences, will be conducting the analyses and interpreting results.



Copy of MWS' Publication with the new PCR laboratory highlighted.

Metro Planning Digest

A weekly selection of issues and activities relevant to local planning in Nashville and Davidson County

Issue #109
June 29, 2010

Virtual tour of LID sites around Metro

Metro Water Services and the Metro Planning Department's mapping division have created an interactive map of local sites which incorporate Low Impact Development strategies, including bioretention, green roofs, and permeable pavement.

The bikes are there, now they need better streets

A selection of reports on Denver's bike-sharing program.

Ten principles for liveable transportation

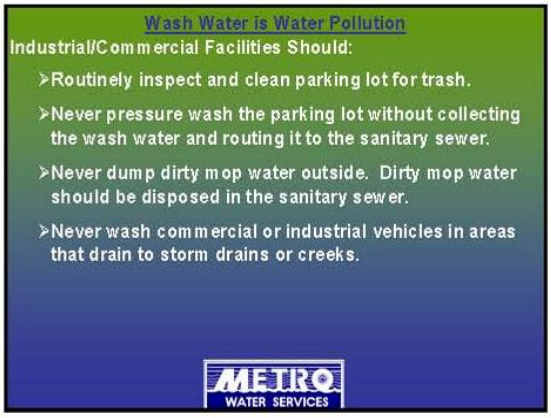
They seem to be working in Denmark.

Questions, comments, or link suggestions: craig.owensby@nashville.gov

The Metro Nashville-Davidson County Planning Department publishes this weekly digest to inform members of the Planning Commission, Metro Council, Board of Zoning Appeals, and other interested parties about planning and growth issues in other communities which could apply to our city and region, with particular emphasis on appropriate development, smart growth, multimodal transportation, and other information which will help us build a sustainable future and a more livable city.

Metro Planning publication that highlights the new website of example LID sites

Slides Aired on Metro Public Access Channel



Slides Aired on Metro Public Access Channel

Slides Aired on Metro Public Access Channel

EPSC Best Management Practices For Water and Geothermal Well Drilling

Background and Purpose

Of the many drilling methods available, the main method for drilling wells and holes for geothermal loops in Nashville is air rotary drilling. Any drilling technique involves heavy equipment, water, bentonite clay, cuttings, and related by-products that end up on the ground at the site. Once these by-products become entrained in stormwater, they are referred to as "suspended solids" and are easily transported off-site, into the Municipal Separate Storm Sewer System (MS4) and/or into Waters of the State. The transportation of suspended solids is considered non-point source pollution and may adversely impact wetlands, surface waters, and stormwater culverts. Discharges of this nature are not allowed in Davidson County under Metro Code of Laws §15.64.205 (illicit discharge ordinance http://www.nashville.gov/stormwater/illicit_discharge_ordinance.asp). Per this Code, such discharges can receive administrative penalties of $50 to $5,000. It is the responsibility of the drilling contractor to manage sediment properly.

The goal of this educational material is to help disseminate information about Best Management Practices for drilling operations. This fact sheet describes the Best Management Practices (BMP's) that are expected in drilling operations in Davidson County unless other suitable BMPs are already on the site (related to ongoing construction site activities). This flyer highlights BMP's that are practical ways to ensure minimal risk to the environment while allowing the drilling operation and/or construction project to continue.

The Effects of Suspended Solids and Turbidity

- Sediment can clog gravely areas where fish lay eggs. Turbidity also makes it harder for fish to breathe because it clogs their gills.
- Sediment deposited on primary producers, such as plants and algae, will severely reduce their ability to receive sunlight to photosynthesize. This negatively impacts the food web at the most basic level.
- Increasing turbidity which can inhibit the ability of both the predator and prey to detect each other. This could lead to significant changes in the trophic interactions in the food web of lakes.
- Nutrients such as nitrogen and phosphorus that adhere to sediment particles may end up in water bodies and lead to premature eutrophication of water bodies.

What is a BMP?

When the drilling process is changed or structures are installed to limit the pollutants escaping off-site, it is called Best Management Practices. Best Management Practices can also be described as structural and non-structural initiatives implemented to prevent erosion and control sediment. It is the driller's responsibility to make sure that BMP's are put in place and maintained during the entire well drilling process. Consideration should be given to terrain, vegetative cover, soil types, and the weather. Clever, on-the-fly, modifications to the best laid BMP's may have to be implemented in order to ensure the sediment stays on-site. Pay attention to your operation as it progresses. The following BMP's are suggestions which can be used alone or in combination to reduce sediment runoff to the Maximum Extent Practicable. Further ideas and guidance can be found in the Metro Nashville Stormwater Management Manual Volume 4, Best Management Practices. Please contact Luke Ewing at the TN Dept. of Environment and Conservation for further assistance at 615-532-0191. You may also contact the NPDES office at Metro at 615-880-2420 if you are have questions about designing a system you feel will be effective.

Reduce

Consider reducing the size of the drill bit to the smallest size possible for the operation. Choice Mechanical in Nashville found that minimizing the geothermal drill bit to 5 ¼" saved money by reducing grout utilization 20%. They also noticed an equivalent reduction of cuttings.

Driller Mail-Out Brochure (Page 1)

Diversion Device (cost $2,000-$5,500):

Diverters are designed to fit on the well casing or on the rotation head. Diverters contain drill cuttings and divert them through a flow line to a better location. The diverter is designed to prevent the "geyser effect" that results from injecting pressurized air and water into the drill hole. The flow line can be directed into a pond, trench, ring or any device listed below.

Containment and Filtration:

In many low flow operations, the recommended practice is limited detention and filtration or 100% containment and removal off-site.

- **Sediment Filter Bag:** (cost $65-$200) Can be applied to the end of the diverter flow line. The bag traps sediment and allows clean water to flow through. The sediment filter bag can be deposited in a landfill or allowed to dry, slit open, and the sediment spread on vegetated land or it can be used later as backfill. The bag can be set up in an empty dumpster, utilized, and left in place to be thrown out with the rest of the construction debris when the dumpster gets full.
- **Trench:** A trench 10-15 feet long can be excavated immediately down gradient of the well. The downstream edge of the trench should be level to allow water to spill out uniformly over the entire length of the trench. A semi-circle of silt fence or straw bales should be installed downgrade of the trench for further sediment removal. From the trench, the water should be directed as sheet flow across a thickly vegetated area.
- **Sediment pond**: A temporary pond can be constructed down-gradient of the well to catch the slurry. On some construction sites a detention pond already exists and can be utilized. Clear water can be released from the pond after the sediment settles. The water can be allowed to fully evaporate and the sediment can be left on site and used later, hauled away, or spread uniformly over a vegetated area as fertilizer. The pond should have the capacity to prevent overflow or by-pass. If not, overflow material will have to be removed offsite, contained in a vessel, or effectively filtered.
- **Ring:** A circle of material can be constructed that captures the slurry product and filters it. For example, a ring of silt fence, hay bales, or size 57 stone can be constructed into which the slurry is directed. The straw bales or rock ring will stop the sediment, but let clean water through. If the sediment is contained on-site, it can be left in the ring for future use as backfill or fertilizer. The ring should have the capacity to prevent overflow or by-pass. If not, overflow material will have to be removed offsite, contained in a dumpster, or effectively filtered.
- **Portable Sediment Tank:** Can be constructed with steel drums, sturdy wood or other material. The tank should be strong enough to enable transfer off-site under fully loaded conditions. A stable path should be provided for a removal vehicle. Details in section CP-02 of Metro Stormwater Management Manual, Vol. 4. http://www.nashville.gov/stormwater/docs/SWMM/vol4/swmanual03_vol4_cp02.pdf
- **Filter Box:** Elevated box constructed with steel drums or sturdy wood material with a stone filter at the bottom to trap slurry and filter water. Details in section CP-02 of Metro Stormwater Management Manual, Vol. 4. http://www.nashville.gov/stormwater/docs/SWMM/vol4/swmanual03_vol4_cp02.pdf
- **Frac tank:** Slurry and cuttings can be directed into a fully enclosed metal box. Frac tanks have a large capacity, up to 21,000 gallons. They can easily be transported off-site by a tractor with a winch and a fifth wheel. They can be rented from various environmental supply companies.
- **Dewatering containers**: Similar to frac tanks, but serve to separate the water from the sludge that settles to the bottom of the container. The liquid phase can then be released and the rest of the container removed and contents disposed of in a landfill. They can be rented from various environmental supply companies.

Slurry Removal:

Uncontrolled slurry allowed to freely flow on the site can always be shoveled, scooped, skid loaded, and deposited in a dump truck for removal and off-site disposal in a landfill or other appropriate location.

Turbidity Reduction Treatments:

The purpose of turbidity reduction treatments is to remove TSS through technology.

- ***Mud cleaner:*** A mud cleaner is a combination of hydrocyclones, vibratory screen and desanders that provide liquid/solid separation at a high flow rate. The weighted mud flows to the inlet head section of the desander and/or desilter entering the hydrocyclones for separation of particles. Mud leaving the underflow is further screened with fine mesh to separate larger particles allowing only barite size particles to pass through the screen returning and recovering the clean mud.

Driller Mail-Out Brochure (Page 2)

Water Quality Standards

Many Federal, State and Local regulations – originating from the Clean Water Act - apply to protecting our streams and rivers from pollutant sources. Illicit discharges of sediment, slurry, etc. to the MS4 and/or to "Waters of the State" represent violations to Metro Stormwater Regulations (§15.64.205) and/or to the State Water Quality Standards (Chapter 1200-4-3)

Metro Illicit Discharge Ordinance Title 15 WATER, SEWERS AND OTHER PUBLIC SERVICES - Chapter 15.64 STORMWATER MANAGEMENT 15.64.205 Non-stormwater discharges states:

- Except as hereinafter provided, all non-stormwater discharges into community waters, into the waters of the state, or into the municipal separate storm sewer system of the metropolitan government are prohibited and are declared to be unlawful.

TDEC 2007 GENERAL WATER QUALITY CRITERIA Chapter 1200-4-3 includes some pertinent sections:

- Turbidity, Total Suspended Solids, or Color - There shall be no turbidity, total suspended solids, or color in such amounts or of such character that will materially affect fish and aquatic life. In wadeable streams, suspended solid levels over time should not be substantially different than conditions found in reference streams.
- Solids, Floating Materials and Deposits - There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character that may be detrimental to fish and aquatic life
- Nutrients - The waters shall not contain nutrients in concentrations that stimulate aquatic plant and/or algae growth to the extent that aquatic habitat is substantially reduced and/or the biological integrity fails to meet regional goals. Additionally, the quality of downstream waters shall not be detrimentally affected.
- Biological Integrity - The waters shall not be modified through the addition of pollutants or through physical alteration to the extent that the diversity and/or productivity of aquatic biota within the receiving waters are substantially decreased or adversely affected, except as allowed under 1200-4-3-.06.

The ideas listed in this Guidance Document are not the only ways to obtain compliance on your drilling site. As a contractor, you have the responsibility and duty to think of ways that are cost effective for you and do not violate the Metro illicit discharge ordinance or the TDEC General Water Quality Criteria while drilling. Please perform your duties in Metro Nashville/Davidson County in a responsible manner.

Thank you very much for recognizing the importance of our streams as a valuable natural resource and your help in the protection and improvement of the streams within Metro Nashville/Davidson County.

This publication is a public service of:
Metro Water Services--NPDES Program--Storm Water Quality Control Team
1607 County Hospital Road
Nashville, TN 37218
Phone (615) 880-2420
www.nashville.gov/stormwater

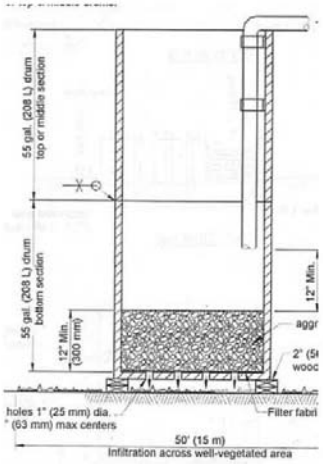
Metro Water Services is in the process of complying with all appropriate Americans with Disabilities Act Guidelines. For additional information contact Joseph A. Estes, Sr., 1600 2nd Avenue North, Nashville, TN 37208-2206; telephone 615-862-4862.

Driller Mail-Out Brochure (Page 3)

Sediment Filter Bag

Mud Cleaner

Diversion device



Filter Box

Frac Tank

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Driller Mail-Out Brochure (Page 4)

MAYOR DEAN CUTS RIBBON ON NEW DEADERICK STREET

Pedestrian, sustainable amenities create state's first 'green street'

NASHVILLE, Tenn. (October 8, 2009) -

Mayor Karl Dean (center) cuts the green ribbon on Deaderick Street alongside (left to right) Jim Snyder with Metro Public Works, Kathleen O'Brien with TPAC, Kim Hawkins with Hawkins Partners, District 6 Councilman Mike Jameson, and TDOT Commissioner Gerald Nicely.

Metro officials celebrated a newly transformed Deaderick Street today with music and a ceremonial ribbon-cutting event on the west steps of the Metro Courthouse Public Square.

The improved Deaderick Street includes a long list of sustainable features that qualify it as the first green street in Tennessee, and one of the first in the Southeast. New streetscape amenities were made possible after the city's downtown Petway Transit Mall was relocated off Deaderick to its new home at Music City Central one block away.

At today's event, Mayor Karl Dean cut a green ribbon to commemorate the completion of the project. The celebration included musical entertainment by Decca Records and SONY/ATV artists One Flew South, featuring Grammy Award-winning composer Marcus Hummon, and Transit, a band formed by Nashville MTA employees.

"Creating an attractive and sustainable street was a key priority with this project. But the vision doesn't stop there," Dean said. "We have created a long-term redevelopment plan for Deaderick Street that includes improved building street-fronts and more commercial and retail activity. So while today marks the completion of significant improvements, it also marks a new beginning for Deaderick."

Construction on the Deaderick streetscape improvement project began in October 2008 with removal of outdated MTA bus shelters and rows of severely distressed and dying trees, which were replaced with a combination of new trees and plantings that are better suited for an urban environment. Other changes include new green spaces and planting beds, and a landscaped median extending the entire length of the corridor. To ensure that the trees and new plantings stay healthy and thrive, project designers included an irrigation system and bioswales, or rain gardens, to capture, filter and infiltrate rainwater.

The project also includes new traffic signals and pedestrian signals, new street lights, new pedestrian lights, additional on-street parking, new solar-powered parking meters, and new paving and striping.

Another streetscape feature are information kiosks describing each of the sustainable aspects of the project, as well as the history and evolution of Deaderick Street since its early days as an alley that connected present-day Third and Fifth avenues.

Celebrating Deaderick Street Video

For media inquiries contact:
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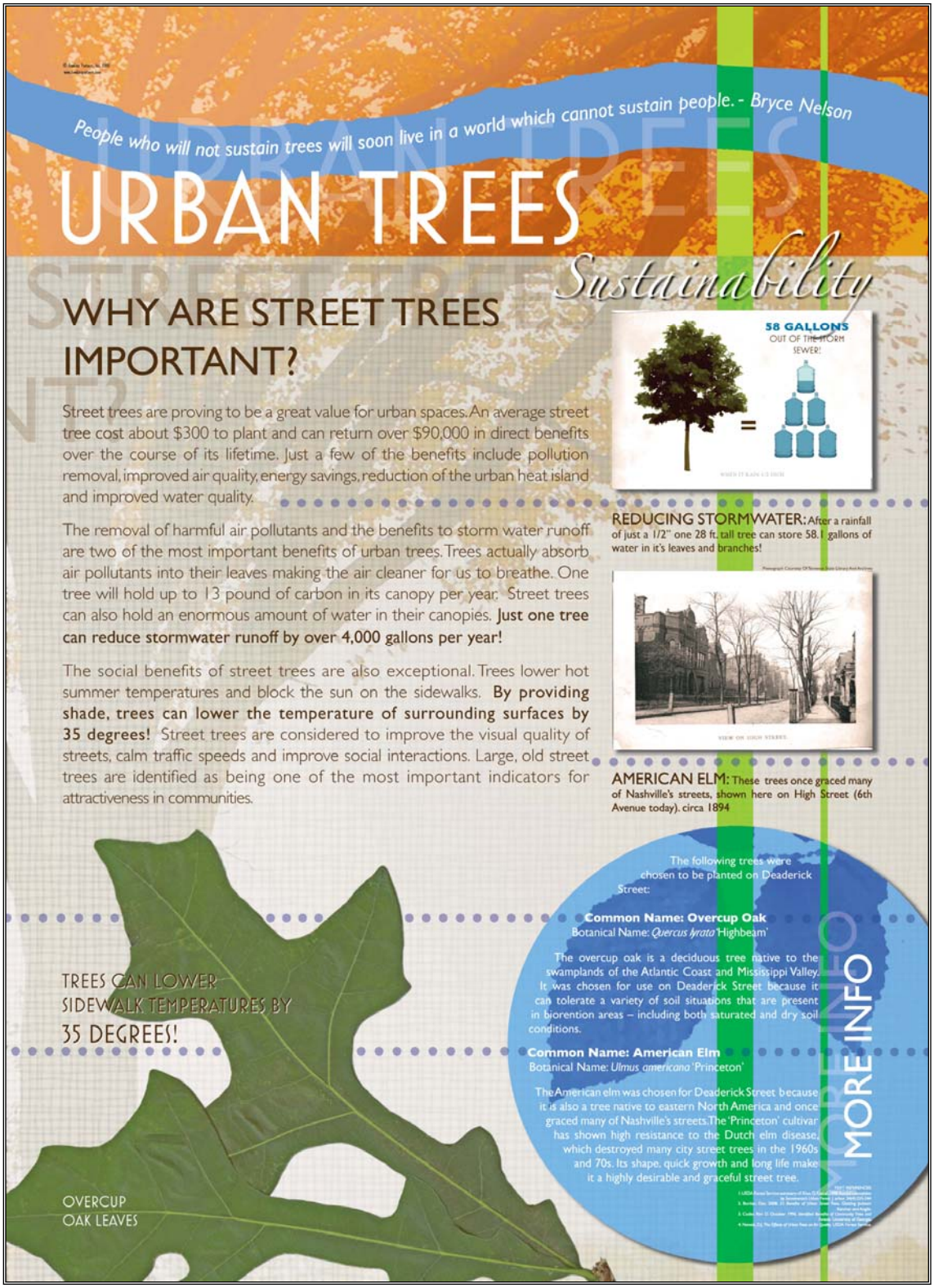
Deaderick Street Green Initiatives Announcement



Flyer describing sustainable aspects of the Deaderick Street project

Shelby Bottoms Nature Center

July & August 2009 Program Schedule

Shelby Bottoms Nature Center is open
Tuesday through Friday
From 12 to 4 p.m. and
Saturday 9 a.m. to 4 p.m.

Shelby Bottoms Greenway is open
7 days a week from dawn to dusk.

Mailing Address:
Shelby Bottoms Nature Center
1900 Davidson St
Nashville, TN 37206

Phone: 615-862-8539
Fax: 615-262-0245
Email:
shelbybottomsnature@nashville.gov
Web: www.nashville.gov/parks/nature

Requests for ADA accommodation should be directed to the Nature Center at (615) 862-8539.

Summer is in high gear and it's high time to get over here! If you haven't attended a nature center program yet, now is the time. Talented seasonal and intern naturalists have joined our staff for the summer so look for them when you are out in the park. You will be as delighted as we are with their friendliness, knowledge, and professionalism. You may find them out in the park with plant or animal field guides, cool natural items to investigate and maybe even binoculars and a spotting scope so you may observe wildlife up close!

In addition, we are lucky to once again have gracious guest presenters and volunteer naturalists. Join Volunteer Naturalist Yvonne for Stories by the River or come discover what life was like in prehistoric times right here along the Cumberland River with Aaron Deter-wolf, a state Prehistoric Archaeologist. And you may notice that history and archaeology is a theme this summer so don't miss out on the other exciting programs led by our own Seasonal Naturalists, Katie and Amanda.

You'll also find a fantastic intro to nature photography program by another of the Nature Centers' fine seasonal naturalists: Ed Schneider of Bells Bend Outdoor Center. A photographer and avid birder, he will share some of his best photos with you and some of his talent and tips as well.

So come on out and enjoy these dog days of summer at the nature center! We might even debut the new GPS guided telescope donated by the very generous Nashville Public Television for the Full Sturgeon Moon night hike if the weather is just right… Hope to see you here!

JULY

Stroll Me Down the River	Friday, July 10 11 a.m.– 12 p.m. Age level: All ages Call 862-8539 to register	This is an opportunity for mommies to bring their little one (and stroller) for a nature hike that is stroller friendly! Leader: Christie Wiser
History Hike: Flora and Fauna	Saturday, July 11 8:30 – 10:30 a.m. Age level: All ages Call 862-8539 to register	Come hike the newly named Bottomland Trail and learn about a little explored and very pretty part of the park and learn how some plant species are harmful to our forests. Leader: Amanda Ratliff, Seasonal Naturalist
Rain Barrel Workshop	Saturday, July 11 10 a.m. and 11:30 a.m. Age level: Adults; children welcome Call 862-8539 to register	Complete your own 55 gallon rain barrel to take home! Learn how to capture rainwater to use on your landscaping and house plants while you save energy used to process drinking water and slow storm water runoff. $35 materials fee. Leader: Mekayle Houghton, Cumberland River Compact

Registration is required! Programs could be cancelled due to inclement weather or low registration, so sign up today!

metro parks

Example public education flyer form the Shelby Park Nature Center

Shelby Bottoms Nature Center July 2009 programs

JULY	Continued...	
Tree-Ring Dating at the Bottoms	Saturday, July 11 1-2 p.m. Age level: All ages Call 862-8539 to register	What a big tree! It must be so old! Maybe… maybe not? Come and learn about scientific methods used by ecologists and archaeologists to date the forest. Find out about rainfall and the effects of human activity on the trees of Shelby Bottoms. Meet at Shelby Bottoms Nature Center. Leader: Katie Caljean, Seasonal Naturalist
Hummingbirds on the back porch!	Friday, July 17 5 - 6 p.m. Age level: All ages Call 862-8539 to register	Join us at the Nature Center for lemonade on the back porch on a hot summer day! We will be keeping our eyes open for hummingbirds to come to our feeders. We will play games and learn a lot about the ruby-throated hummingbird! Leader: Christie Wiser
History Hike: How we got around	Saturday, July 18 8:30 -10 a.m. Age level: All ages Call 862-8539 to register	Trains, boats, bridges, and greenways are an important part of the history of our community! Hike along the Cumberland River and learn about the history of transportation and how it impacts the environment in the East Nashville area. Leader: Amanda Ratliff, Seasonal Naturalist
Turtle Power!	Saturday, July 18 11a.m. - 12 p.m. Age level: All ages Call 862-8539 to register	Find out just how powerful turtles really are! We will also take a nature hike in search for a few. Leader: Christie Wiser 
Adventures in Garbology: What Trash Can Tell Us	Saturday, July 18 1 - 2 p.m. Age level: All ages Call 862-8539 to register	"… a man never lies to his garbage heap." Franz Boas, father of American Anthropology Garbology is just what it sounds like -- the study of garbage. From our own garbage, we can learn about the habits of a group of people. Come and find out how everyday pieces of trash can suddenly become valuable and interesting artifacts. And, maybe find out what your garbage has to say about you! Leader: Katie Caljean, Seasonal Naturalist
Raw Foods Cooking Class 	Friday, July 24 5 - 6 p.m. Age level: Adults; children welcome Call 862-8539 to register	Learn how to make a few "raw food" dishes with some of the wonderful local produce that can be found in Middle Tennessee this time of year! Leader: Christie Wiser
History Hike: Agriculture and the land	Saturday, July 25 8:30 - 10 a.m. Age level : All ages Call 862-8539 to register	Did you know most of the greenway used to be farmland? Come hike part of the Cornelia Fort Trail and learn the history of agriculture in Shelby Bottoms, and get the chance to see some really big old trees! Leader : Amanda Ratliff, Seasonal Naturalist
Prehistoric Life Along the Cumberland	Saturday, July 25 12 - 1 p.m. Age level: All ages Call 862-8539 to register	Music City sits atop an incredibly rich archaeological past that stretches back nearly 12,000 years to the end of the ice age, when some of the city's first residents set up camp across the river from Shelby Bottoms. Come learn about local archaeological sites and prehistoric life along the Cumberland River with Aaron Deter-Wolf, Prehistoric Archaeologist from Tennessee Department of Environment & Conservation. Leader: Aaron Deter-wolf, TDEC

Registration is required! Programs could be cancelled due to inclement weather or low registration, so sign up today!

metro parks

Example public education flyer form the Shelby Park Nature Center (Page 2)

Shelby Bottoms Nature Center August 2009 programs

AUGUST

Honey Bee Helpers	Saturday, August 1 10 - 11 a.m. Age level: All ages Call 862-8539 to register	Learn all about how honey bees help us and the environment and how they "talk" to each other! Enjoy a "waggle dance" and a local honey tasting! Leader: Diana Andrew, Intern Naturalist
The Beetles	Saturday, August 1 2 - 3 p.m. Age level: All ages Call 862-8539 to register	Click beetles, water beetles, and green june beetles are a few of the types of beetles that live in this area. Come to the Nature Center to discover more about this intriguing insect! Leader: Christie Wiser
Full Sturgeon Moon Hike	Friday, August 7 8 - 9:30 p.m. Age level: All ages Call 862-8539 to register	Some Native Americans called August's full moon the Sturgeon Moon. Come to the Nature Center to find out why and to learn about sturgeon, the moon, Native American tradition and much more as well as hopefully observe this beautiful full moon as we hike the trails by only its light! Leader: Denise Weyer
Archaeology and the Environment 	Saturday, August 8 10 - 11 a.m. Age levels: All ages Call 862-8539 to register	How can archaeology help us to understand the natural world? The natural materials used to make everyday objects, human eating habits, and the location of our workplaces and homes provide us with important information about the ecological past, present, and future. Come, listen, and learn about stories our Earth has to tell us! Leader: Katie Caljean and Amanda Ratliff, Seasonal Naturalists
Butterflies at the Bottoms	Saturday, August 8 2 - 3 p.m. Age level: All ages Call 862-8539 to register	Summer brings wonderful varieties of butterflies to Shelby Bottoms. Join me for a hike to explore some of these beautiful insects! Leader: Christie Wiser 
Rain Barrel Workshop	Saturday, August 15 10 a.m. and 11:30 a.m. Age level: Adults; children welcome Call 862-8539 to register	Complete your own 55 gallon rain barrel to take home! Learn how to capture rainwater to use on your landscaping and house plants while you save energy used to process drinking water and slow storm water runoff. $35 materials fee. Leader: Mekayle Houghton, Cumberland River Compact
Intro to Nature Photography	Saturday, August 22 10 a.m. - 12 p.m. Age level: Adults, 13+ Call 862-8539 to register	Bring your own camera and try your hand at taking photographs of nature! Joining us will be photographer Ed Schneider. Ed has captured some wonderful images at Shelby Bottoms Nature Park, of birds in particular. Sign up today; space is limited. Leader: Ed Schneider, Photographer/Naturalist and Christie Wiser
Wildflower Hike	Friday, August 28 5 - 6 p.m. Age level: All ages Call 862-8539 to register	Meet me at the Nature Center for an evening hike in search of some of the beautiful wildflowers that are blooming this time of year! Leader: Christie Wiser
Stories by the River 	Saturday, August 29 10 - 11 a.m. Age level: All ages Call 862-8539 to register	Meet on the porch by the river for an hour of fun as you are led on a journey of nature and imagination with storyteller, Ms Yvonne. You may even do a craft, play a game or go on a hike too! Leader: Yvonne Saunders, Volunteer Naturalist

Registration is required! Programs could be cancelled due to inclement weather or low registration, so sign up today!

Be sure to check out a program at Warner Park Nature Center, Bells Bend Outdoor Center and Beaman Park Nature Center!
Go to www.nashville.gov/parks/nature for more info.

metro parks

Example public education flyer form the Shelby Park Nature Center (Page 3)

Stormwater maintenance slideshow that aired on Channel 3

Stormwater maintenance slideshow that aired on Channel 3 (Page 2)

Stormwater maintenance slideshow that aired on Channel 3 (Page 3)

TENNESSEAN.COM

November 9, 2009

Ensworth students battle stormwater runoff

By Lea Ann Overstreet Allen
THE TENNESSEAN

As part of Ensworth High School's service learning day held on Oct. 7, its freshmen worked with Harpeth River Watershed Association (HRWA) staff and volunteers to help improve the health of the Harpeth River.

This event was only one of a series of activities that will focus on implementing the school's storm-water management plan, which was developed by Hawkins Partners Inc. and approved by Metro Water's Stormwater Division.

The overall plan includes stabilizing stream banks and planting trees and other vegetation along the banks and along the Metro Greenway to alleviate the effects of storm-water runoff.

Storm-water runoff is caused by precipitation from rain or snow that falls on hard surfaces. Because the precipitation hits hard surfaces like roads, driveways and even rooftops, the runoff travels to nearby streams and through drainage systems instead of soaking into the ground. The runoff carries with it contaminants, which then pose a threat to the environment.

On that day in October, every Ensworth High student participated in some sort of service learning project. Sophomores, for example, hosted a series of sports clinics for more than 200 local Special Olympics athletes.

"We dedicate an entire school day for our service learning projects, because our goal at Ensworth is not only to educate our students, but also to give them awareness of social issues and help them find ways to help others," said Roc Batten, director of service learning.

According to Lindsay Gardner, director of science restoration programs with HRWA, while the school's other students concentrated on their particular events, the freshmen completed several tasks benefiting HRWA, including using natural materials to restore the stream bank's stability and planning for where the students will plant shade trees along stretches of the Little Harpeth and main Harpeth River in December.

The students removed exotic plants including privet and Japanese honeysuckle from areas along the stream bank, which will be replaced with native river cane and trees next year in the spring and fall.

Local Newspaper Article

Caller's often flooded street isn't anything to celebrate | tennessean.com | The Tennessean Page 1 of 2

Caller's often flooded street isn't anything to celebrate

BY JENNY UPCHURCH • THE TENNESSEAN • DECEMBER 9, 2009

JENNY UPCHURCH
action@tennessean.com
615-726-5970

Action Line

PROBLEM: Kay Coggins called with a problem on her street, Celebration Way, south of Old Hickory Boulevard off Nolensville Pike.

A seep, or wet weather spring, flows out of the hillside there. When it rains, water pours down the street for days, she said.

It is breaking up the pavement on the street. And throughout winter, Kay said, it makes for hazardous slick and icy spots on about two blocks for drivers, many of whom don't expect to hit it.

ANSWER: Generally, unless an underground spring has an impact on public infrastructure such as a street or a sidewalk, it is an issue for the property owner to address, says Sonia Harvat, spokeswoman for the Metro Water Services.

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Reader asks about road closings near Percy Priest
Driver's wish for turn lane at Kingsbury to come true
Deaderick Street redesign may help man leave TPAC show
Reader will get his wish with new bus stop bench
Driver's suggestion brings relief to busy downtown intersection
Reader complains of dump; Metro has eyesore removed
Unemployment recipient asks about payment gap

But the stormwater division is investigating the Celebration Way complaint because it is affecting the sidewalk there.

The solution most likely will be to redirect the spring so that it does not flow across the sidewalk. But Harvat said it is too early to know what Water Services will do.

She said her agency may work with Metro Public Works and/or the property owner to put deicing salt on the sidewalk or block the sidewalk off, especially in winter, until the stormwater division can design a project and get money for it.

WHO'S WORKING ON IT: Metro Water Services, stormwater division, 615-862-4600

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Local Newspaper Article

After years of waiting, stormwater projects start flowing | Nashville City Paper Page 1 of 2

The City Paper
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After years of waiting, stormwater projects start flowing

Friday, September 25, 2009 at 12:02am

By Nate Rau

After years of having to tell Davidson County residents and business owners with flooding issues that there was no funding to fix their problems, district Metro Council members have been able to give their constituents good news: Help is on the way.

Since Metro Council passed into law Mayor Karl Dean's stormwater fee earlier this year, the new dedicated funding stream has allowed Metro Water to get started on projects across the county.

The fee was applied to Metro Water customers' bills beginning in July.

Since that time, the department has completed or started nearly 40 stormwater projects, with about that same amount planned to start before the end of the year.

"The funny thing is we've gotten so many projects started, I've had several people call me and say, 'Hey what's going on?' and they're extremely delighted when I tell them it's stormwater," said District 26 Councilman Greg Adkins.

The councilman has one of the most needy districts for stormwater projects because of Seven Mile Creek passing through the Crieve Hall neighborhood.

"We've got three or four going on in the district and in general I'm getting positive feedback," Adkins said.

The new stormwater fee charges residential customers monthly between $3 and $4.50 and commercial customers between $10 and $400. The fee is based on the amount of impervious surface on a property, which leads to runoff and contributes to the water department's stormwater system.

Prior the new dedicated funding source, Metro Water was forced to tell customers with stormwater problems that lack-of-funding meant simply adding their names to the bottom of a lengthy list. The backlog of stormwater projects reached the hundreds before Dean moved to create the new fee and begin work this summer.

Metro Water categorizes stormwater projects into three different levels, with C projects being the least severe and A projects being a threat to person and property. Since July, 18 Class A projects have been launched and 21 Class C projects.

District 31 Councilman Parker Toler said the Water Department was also beginning the process of re-assessing backlogged projects to determine which ones needed to be remedied first.

"I think it's going to be a positive," said Toler, a 30-year veteran of the Water Department. "It's going to take a while sorting out ones that need it the most and looking at the ones that had been on the list for so long."

Besides the stormwater fee, Dean also implemented water and sewer rate increases in order to improve the Water Department's weak bonding capacity and begin critical new

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