

Phase II Storm Water Permit Notice of Intent (NOI)

Phase II Municipal Separate Storm Sewer Systems (MS4s)

The purpose of this set of questions is for a Tennessee city, county, utility district or military base to apply for NPDES permit to discharge storm water runoff from a Phase II municipal separate storm sewer system.

You must provide the following information to the Division of Water Pollution Control as application material. You may print this form blank and complete it on paper, or you can complete the form electronically. The document is a Microsoft Word 2000 document. Submit two paper copies, one of which must bear an original signature on page three. Or, submit a copy electronically to phase.two@state.tn.us, according the procedure given in the permit part 2.3.

I. Administrative Information

Name of city, county, storm water utility district or other public institution that operates a Phase II MS4 Knox County, Tennessee	
Responsible elected official or officer Mike Ragsdale	Title County Executive
Street address City, State Zip	Office of County Executive City-County Building 400 Main Street Knoxville, TN 37902
Program Contact Person/e-mail address/phone no. Chris Granju, P.E. - Stormwater Management Coordinator 205 West Baxter Avenue Knoxville, TN 37917 Phone: 865-215-5840 e-mail: chris.granju@knoxcounty.org	Technical Contact Person/e-mail address/phone no. Chris Granju, P.E. - Stormwater Management Coordinator 205 West Baxter Avenue Knoxville, TN 37917 Phone: 865-215-5840 e-mail: chris.granju@knoxcounty.org
Provide an organizational chart that shows the different departments involved in storm water management	<input checked="" type="checkbox"/> Organizational Chart attached. (Appendix 2.1)

II. Description of Storm Sewer System

A. Area served

If city, town, or utility district, give:

Area of jurisdiction in square miles within current corporate boundaries	N/A
Additional area of urban growth boundary	N/A

If county, give:

Area of county in square miles	525.78 sq. miles
Area unincorporated	411.47 sq. miles
Unincorporated, urbanized	135.87 sq. miles
If you wish the permit to regulate non-UA portions of your county, indicate by checking appropriate box:	<input checked="" type="checkbox"/> Entire county; or <input type="checkbox"/> Non-UA portions, as follows (describe):

B. Storm Drainage Infrastructure

Give figures for the following features of storm water drainage infrastructure owned or operated by the local government. If you represent a county government, indicate whether the figures represent the entire county or only the urbanized area. Figures for length and number of culverts and catch basins may be rough estimates.

For counties: Entire county UA only

Estimates are based off of averages taken from sample sites around the county for the given parameters.

Open ditches (miles, or feet).....	1,530.5 miles
Storm sewers (miles, or feet).....	900.4 miles
Culverts (estimate number).....	61,238 culverts
Catch basins (estimate number).....	71,593 catch basins
Detention basins (estimate number operated by local government).....	0 detention basins
Retention basins (estimate number operated by local government).....	0 retention basins

C. Map

Include a map that shows areas zoned for commercial or industrial activity. Alternatively, present a map that shows actual commercial use and industrial use.	<input checked="" type="checkbox"/> Map attached. (Appendix 2.2)
Identify municipal/county wastewater treatment plants, landfills, vehicle fleet maintenance centers, power plants, airports and any other municipally owned or operated industrial activities. Identify State or Federal vocational/technical/college/university campuses and military installations.	<input checked="" type="checkbox"/> Map attached. (Appendix 2.2)
Include a map, depicting city or county-roads, topography or drainage patterns, and “blue line,” and intermittent blue-line streams.	<input checked="" type="checkbox"/> Map attached. (Appendix 2.2)

D. Identifying impaired streams and other waterbodies

Identify any streams (that flow through your jurisdiction or within two miles downstream jurisdiction boundaries) that are impaired according to the later of either the State’s 305(b) report or the State’s 303(d) report. For any impairment, indicate the nature of pollution (cause) and the source.

Stream Name	Cause of Impairment	Source of Impairment
Grable Branch	oil and grease siltation other habitat alterations	minor industrial point source channelization industrial permitted runoff urban runoff/storm sewer
Hines Branch	other habitat alterations	urban runoff/storm sewer
Knob Fork	siltation other habitat alterations	urban runoff/storm sewer

Grassy Creek	siltation	land development
Meadow Creek	siltation	land development
Beaver Creek	phosphorus nitrate pathogens siltation other habitat alterations	major municipal point source pasture grazing land development
Williams Branch	siltation	industrial permitted runoff
Foster Branch	siltation	industrial permitted runoff
North Fork Bullrun Creek	unknown toxicity	minor municipal point source
Bullrun Creek	siltation other habitat alterations pathogens	pasture grazing channelization
Third Creek	pathogens nutrients siltation other habitat alterations	collection system failure land development hydromodification urban runoff/storm sewer
Whites Creek	other habitat alterations	urban runoff/storm sewer
First Creek	pathogens nutrients siltation other habitat alterations	collection system failure urban runoff/storm sewer hydromodification
Second Creek	other habitat alterations pathogens nutrients siltation	urban runoff/storm sewer collection system failure hydromodification
Sinking Creek	pathogens	urban runoff/storm sewer
Turkey Creek	nutrients siltation	land development
Fourth Creek	other habitat alterations	urban runoff/storm sewer channelization
Williams Creek	other habitat alterations pathogens	urban runoff/storm sewer
Baker Creek	other habitat alterations pathogens	urban runoff/storm sewer
Goose Creek	pathogens siltation other habitat alterations PCBs	collection system failure urban runoff/storm sewer hazardous waste
Love Creek	siltation other habitat alterations	land development
Roseberry Creek	pathogens	pasture grazing septic tanks
Swampond Creek	siltation other habitat alterations	land development channelization
Little Flat Creek	pathogens	livestock in stream
Flat Creek	siltation other habitat alterations	hydromodification dam construction
Fort Loudon Reservoir	PCBs	contaminated sediment
Gallagher Creek	siltation	pasture grazing
Stock Creek	siltation other habitat alterations	pasture grazing channelization

Roddy Branch	siltation other habitat alterations	pasture grazing channelization removal of riparian vegetation urban runoff/storm sewer
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Shaded cells indicate a stream or water body that is located within the city of Knoxville	
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E. Has the state or EPA promulgated a TMDL for any streams directly affected by runoff from your MS4? Yes No

If so, list stream segment(s) and parameter(s) of concern:

Stream segment:	Parameters of concern:

III. Existing Legal Authority to Control Storm Water Discharges to MS4

You must review ordinances that apply to control of pollution that might enter the MS4. Extract those portions of your ordinances that do apply to control of the storm sewer system and attach a copy of those portions to this application.

Copy of ordinances is attached. (Appendices 1.1, 1.3, and 1.4)

Ordinances that deal with storm water issues might be found, for example, in conjunction with litter control, prohibition of dumping, clean up of spills, grading/building permits, sewer connection ordinances, erosion and sediment practices, subdivision regulations or other land use/development ordinances.

IV. Signature of Responsible Corporate Officer

This Notice of Intent (NOI) must be signed as follows:

For a municipality, State, Federal, or other public agency, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

- (i) The chief executive officer of the agency, or
- (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

This notice of intent provides that more than one municipality (county, city, utility district, etc.) can apply jointly for coverage under this general permit. In this case, the signatory criteria above must be met by each municipality seeking coverage under this permit.

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

_____	County Executive _____	_____
Signature	Title/Municipality	Date

(Go to next page.)

V. Your Proposed Storm Water Quality Management Program

This Notice of Intent requires you to provide a brief description of your existing and planned for a storm water management program. The following six sections correspond to the six minimum control measures for a Phase II storm water management program.

If another MS4 will be responsible for implementing any or all portions of any or all following six minimum measures, then attach either the interlocutory agreement or the proposed agreement and schedule for adoption. You must still complete this NOI by answering the relevant questions for the six following measures.

Notes:

- i. Boxes for your responses have been colored green (on our screen) and your answers therein will be green.
- ii. You may extend the tables in order to list more than four proposed BMPs, by going to the last row of the table and striking the “TAB” key until new rows are added.

1) Public Education and Outreach

- a. The following is a set of questions on your current public education and outreach program.

These questions are intended to highlight minimum program requirements under the MS4 permit. Each element not currently performed must be implemented by the end of the first permit period. Thus, each question with a “No” answer must be addressed with a solution in the MS4’s proposed program.

Questions related to public education and outreach	
<p>Does the municipality currently distribute educational materials on the topics of storm water quality, stream water quality, pollution impacts, pollution prevention, etc.? If yes, briefly describe the materials, including media used (e.g., written brochures, public service announcements, etc.); the topic(s) covered, intended target audience(s), and the distribution method.</p> <p style="color: green;">Comment: Please see Appendix 1.2</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Does the municipality currently conduct or participate in public outreach activities focusing on the topics of storm water quality, stream water quality, pollution impacts, pollution prevention, etc.? If yes, briefly describe the outreach activities, topic(s) covered, intended target audience(s), and the frequency of activities.</p> <p style="color: green;">Comment: Please see Appendix 1.2</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

- b. List the best management practices (BMPs) that you will implement in the area of public education and outreach. These should be based on a set of priorities you have identified in the area of public education and outreach. In the top half of the row, give a short, descriptive name to the BMP. In the bottom half of the row, more fully describe the BMP. In the next question, you will be asked for more detail for accomplishing these BMPs.

1	Best Management Practices for Public Education and Outreach
A	Grading Permit Brochure A grading permit brochure is issued for each permitted site development greater than one acre. This brochure outlines correct erosion and sediment control practices, references the TDEC Erosion and Sediment Control Handbook, describes the permitting procedures, and outlines regulations regarding the permitting of a site grading project in Knox County.
B	Adopt-A-Watershed Program Knox County financially sponsors the CAC Americorps Water Quality Team. This team implements the Adopt-a-Watershed program along with volunteer cleanup projects and other water quality education and outreach efforts. The Adopt-a-Watershed program teaches watershed education through hands-on activities. Adopt-a-Watershed is geared towards high school students and operates in schools within the Knox County area.
C	Water Quality Forum World Wide Web Site Knox County supports the maintenance and development of a watershed education World Wide Web site through both funding and staff time. Examples of some of the educational programs featured on the website are Adopt-A-Watershed, Kids-in-the-Creek, and Waterfest. The internet address for this site is www.waterqualityforum.org
D	Tennessee Growth Readiness Knox County will facilitate training for Knox County staff and others (education professionals, community leaders, technical staff, other agencies, etc.) in presentation of the Tennessee Growth Readiness education program. The Tennessee Growth Readiness education program (based on University of Connecticut's NEMO program) is a modular presentation, which relates land use to water quality. The program is constructed in a way to facilitate custom-tailored presentations to specific audiences who are responsible for community land use decisions.
E	Grab Bag Programs/Events Knox County supports the Kids-in-the-Creek and Waterfest programs/events that target area school children - public, private, and home schooled. These programs/events promote hands-on watershed education including stream/stormwater quality, pollution impacts, and pollution prevention.
F	Erosion/Sediment Control Training Knox County sponsors the TDEC/UT erosion and sediment control courses that are intended to educate engineers, developers, builders, and anyone else in the industry on how to properly use erosion control to prevent pollution.

Potential BMPs. List additional BMPs you might incorporate into your program after annual review of program effectiveness.

G	Quarterly Newspaper Articles Knox County will produce articles with the purpose of providing water quality education. These articles will be published quarterly in a local newspaper.
H	Special Education Initiatives for Restaurants and Auto-Related Businesses Knox County will produce pollution prevention education for restaurant and auto-related businesses. This will be accomplished by partnering with the Water Quality Forum, local utility districts, and the Knox County Health Department.

c. Measurable Goals and Implementation Milestones

Attached at the back of this NOI is an addendum, BMP Measurable Goals and Implementation Milestones. You must complete the addendum, providing more details on Measurable Goals and Implementation Milestones for each BMP above.

d. Administrative Information

Public Education and Outreach – Administrative Information	
Primary contact person on above BMPs	
Chris Granju, P.E. - Stormwater Management Coordinator	
Other department(s) that will be involved and their role	
Knox County Schools: working with Knox County Engineering, providing the opportunity to educate the local public school children on water quality issues.	Knox County Health Department: coordinating education initiatives with inspection procedures.
Knox County Libraries: allowing Knox County Engineering to make education materials available to the public at all of their locations throughout Knox County.	Knox County Executive's Office: providing press releases and articles.
Knoxville/Knox County/Knoxville Utilities Board Geographical Information Systems: providing all kinds of maps and other educational information.	
Equipment needs, if any	
Digital projector and screen, laptop computer	

What specific groups will be targeted (e.g., service industries such as carpet cleaning, civic groups, schools, church groups) if applicable
Schools, community/civic groups, business associations, elected officials, real estate professionals, restaurant operators, and auto-related business operators will be targeted.

Will you partner with another MS4 operator, or with another institution (e.g. Chamber of Commerce, environmental interest organizations, civic groups) in order to carry out the chosen BMPs? List these institutions and briefly describe their role.
Many of the Knox County public education and outreach projects are implemented through partnerships with the local Water Quality Forum (WQF). While there are no formal agreements governing the partnerships through which the programs are implemented, each WQF partner provides input and expertise to help realize project goals.

Will another governmental entity be responsible for implementing one or more of the chosen BMPs? If so, identify the entity and which BMP(s) it will implement. Include a copy of the interlocutory agreement, or contract, or proposed agreement with execution schedule.	
Entity	BMP
N/A	

2) Public Participation and Involvement

a. The following is a set of questions on your current public participation and involvement program.

These questions are intended to highlight minimum program requirements under the MS4 permit. Each element not currently performed must be implemented by the end of the first permit period. Thus, each question with a “No” answer must be addressed with a solution in the MS4’s proposed program.

Questions related to public participation and involvement	
<p>Does the current municipal storm water management program comply with local, State and Federal public notice requirements? If yes, describe how the public is notified.</p> <p>Comment: All legislative actions such as ordinance changes and funding for stormwater activities must be approved by Knox County Commission. The Knox County Commission process encourages and analyzes public opinion and input on all legislative actions. The Knox County Commission does this by advertising for public meetings by faxing press releases to all media outlets, posting meetings on the Knox County website, and by faxing/ mailing letters to local homeowners associations. Also, all of the meetings are televised on the local community cable channel. The Knox County Commission is required to have two public meetings on any subject before an ordinance can be amended. Also, public input is encouraged on program development through efforts such as Watershed Initiatives.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

b. List the best management practices (BMPs) that you will implement in the area of Public Participation and Involvement. In the top half of the row, give a short, descriptive name to the BMP. In the bottom half of the row, more fully describe the BMP.

You may not desire to dictate the ways in which the public participates or is involved in the storm water quality management program; in this case, your proposed program should provide a forum and a structure by which to encourage or allow the public to participate. On the other hand, there may be specific ways you do want the public to be involved, based on your program needs. For instance, you may want stream watch groups to be organized. As such, your proposed program should describe how you will accomplish this, and the time schedule.

2	Best Management Practices for Public Participation and Involvement
A	<p>Water Quality Forum</p> <p>The Water Quality Forum (WQF) is a partnership of government agencies and private entities who work towards a common goal of increasing awareness of water quality issues and improving water quality in the Knox County area. Knox County actively supports the WQF through commitments of time in project development and implementation. Knox County also supplies funding for WQF activities and participates in quarterly WQF meetings.</p>
B	<p>Adopt-a-Stream</p> <p>The Adopt-a-Stream program is a collaborative effort between Knox County, and other Water Quality Forum partners, that allows schools, community groups, civic groups, sports clubs, families, individuals, etc. to adopt a section of a stream near their home or business. They then do periodic stream clean-ups and stream walks to assess the health of the stream. The goal is to increase public awareness of the importance of the creeks and streams in our county and to restore health to those waterways damaged by people and nature.</p>

C	Environmental Stewardship Program The Environmental Stewardship Program (ESP) is a program organized by Knox County with the WQF partners to provide opportunities for the use of environmentally-friendly techniques (replacing paved surfaces with swales, native vegetation, wetlands, etc.) for private property drainage problems in Knox County. Knox County supports the Environmental Stewardship Program in project development, design, materials and labor.
D	River/Stream Clean-up (and Awareness) Days Through the WQF and other partnerships, Knox County provides support for community river/stream clean up days.
E	Watershed Initiatives Knox County organizes watershed planning initiatives with partners in the community. These initiatives involve collection of water quality data to be shared among interested parties. Public input is used strongly in these projects through 'open house' style meetings and with the direct input from citizen groups and individuals in the planning process.

Potential BMPs. List additional BMPs you might incorporate into your program after annual review of program effectiveness.

F	Grab Bag Knox County supports plant giveaways, stream bank restoration projects, and also watershed based community groups (ex: citizens monitoring streams).
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c. Measurable Goals and Implementation Milestones

Attached at the back of this NOI is an addendum, BMP Measurable Goals and Implementation Milestones. You must complete the addendum, providing more details on Measurable Goals and Implementation Milestones for each BMP above.

d. Administrative Information

Public Participation and Involvement – Administrative Information	
Contact person on implementing these BMPs	
Chris Granju, P.E. - Stormwater Management Coordinator	
What specific groups will be targeted and in what way (e.g., schools, colleges/universities, neighborhood groups)	
Schools, civic/community groups, Boy Scouts, government agencies, religious organizations, universities, children's groups and individuals will be targeted.	
Will you partner with another MS4 operator, or with another institution (e.g. Chamber of Commerce, environmental interest organizations, civic groups) in order to carry out the chosen BMPs? List these institutions and briefly describe their role.	
Many of the Knox County public education and outreach projects are implemented through partnerships with the local Water Quality Forum (WQF). While there are no formal agreements governing the partnerships through which the programs are implemented, each WQF partner provides input and expertise to help realize project goals.	
The Major Partners are: Knox County Stormwater Management, Tennessee Valley Authority, Ijams Nature Center, The University of Tennessee Water Resources Research Center, The Town of Farragut, Knoxville/Knox County/Knoxville Utilities Board Geographical Information Systems, Knox County Soil Conservation District, and the City of Knoxville Stormwater Department	
Will another governmental entity be responsible for implementing one or more of the chosen BMPs? If so,	

identify the entity and which BMP(s) it will implement. Include a copy of the interlocutory agreement, or contract, or proposed agreement with execution schedule.	
Entity	BMP
N/A	

3) Illicit Discharge Detection and Elimination

The following are common sources of illicit discharges to an MS4:

- | | |
|-------------------------------|--|
| Sanitary wastewater | Effluent from septic tanks |
| Car wash wastewaters | Improper oil disposal |
| Radiator flushing disposal | Laundry wastewaters/gray water |
| Spills from roadway accidents | Improper disposal of auto and household toxics |
| Carpet cleaning wastewaters | |

- a. Following is a set of questions on your current illicit discharge detection and elimination program.

These questions are intended to highlight minimum program requirements under the MS4 permit. Each element not currently performed must be implemented by the end of the first permit period. Thus, each question with a “No” answer must be addressed with a solution in the MS4’s proposed program.

Questions related to storm sewer system map	
Does the municipality currently have a storm sewer system map completed for the entire regulated municipal separate storm sewer system? The map must depict, at a minimum: city streets, topography or drainage patterns, blue line streams and intermittent blue-line streams (as shown on USGS 1:24,000 scale quadrangle maps) and outfalls (points where the city or county-operated MS4 discharges into the streams).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>Comment: Knox County has digital mapping showing a minimum of 4-foot contour intervals of topography, public and private roads, and detected streams or drainageways. Knox County has delineated watersheds for major streams and rivers. For each watershed, Knox County will delineate sub-basins for each of which a single outfall will be identified. Knox County has developed these sub-basins and outfall maps for the Beaver and Ten Mile Creek watersheds, and will produce similar delineations for the remaining watersheds. Sub-basin delineation will be used to associate areas of land use to detected or potential pollutants in receiving waters. These associations will be used for both regulatory and planning purposes.</p>	

Questions related to an illicit discharge ordinance	
Does the municipality currently have an ordinance or regulatory mechanism that prohibits non-storm water discharges into the storm sewer system? If yes, please attach a copy of the ordinance and give page number(s) of this section of ordinance. If NO, proceed to the next section (inspections and enforcement).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Comment: Please see the Stormwater Management Ordinance, section 4.0 (Appendix 1.1)</p>	
Does the ordinance or regulatory mechanism clearly define non-storm water discharges, either through a written description of a non-storm water discharge or through a listing of unallowable or allowable non-stormwater discharges?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Comment: Please see the Stormwater Management Ordinance, section 4.2 (Appendix 1.1)</p>	

Does the ordinance or regulatory mechanism allow right-of-entry on private property for inspection of suspected discharges?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Comment: Please see the Stormwater Management Ordinance, section 2.0 (Appendix 1.1)	
Does the ordinance or regulatory mechanism prohibit dumping?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Comment: Please see Stormwater Management Ordinance, section 4.3 (Appendix 1.1) and the Criminal Littering Ordinance 0-96-4-101 (Appendix 1.3).	
Does the ordinance or regulatory mechanism give the MS4 owner/operator the authority to eliminate non-storm water discharges in the event of violations? If yes, please note page number and paragraph number.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment: This is not specifically written in the Knox County Stormwater Ordinance, but it is common practice to do this.	
Does the ordinance or regulatory mechanism define penalties for violations? If yes, please note page number and paragraph number.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Comment: Please see the Stormwater Management Ordinance, section 9.0 (Appendix 1.1).	
Does the municipality have ordinance or other regulatory mechanism that prohibits contamination of storm water runoff from industrial and commercial properties, including restaurants and auto repair shops, auto supply shops, large commercial parking areas.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Comment: Yes, please see Stormwater Management Ordinance, section 4.0 (Appendix 1.1).	

Questions related to inspection/screening and enforcement procedures	
Does the municipality presently have personnel and procedures in place for inspection and/or screening for non-storm water discharges?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment/Detail (screening procedures, policies and responsible departments and personnel by title):	
Does the municipality presently have procedures and personnel in place for enforcement of violations of the illicit discharge ordinance? If yes, please describe.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Comment: Please see the Stormwater Management Ordinance, sections 4.4 and 9.0 (Appendix 1.1). Complaints are taken and put into the Work Order Database. Site investigations are made by Knox County staff (Health Dept, Maintenance Department, Planning and Development, or Stormwater Management). Work Order actions are then documented and files maintained as "open" until the problem is corrected. Then the Work Order is "closed" and maintained in the system. The formal operating procedure for enforcement is not currently documented in the ordinance.	
How are enforcement actions documented?	
Comment: Enforcement actions are documented through court records and the Knox County Work Order System Database .	
Has the municipality defined priority areas for non-stormwater discharge screening and inspections? If yes, please describe.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment:	
If Yes, provide a map of illicit discharge screening priority areas.	<input type="checkbox"/> Attached

Responding to public input and complaints	
Does the municipality presently have procedures in place to receive and consider information and complaints about non-storm water discharges that are submitted by the public? If so, provide brief description: responsible departments, personnel, steps followed.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Comment: Complaints are taken and put into the Work Order Database. Site investigations are made by Knox County staff (Health Dept., Maintenance Dept., Planning and Development, or Stormwater Management). Work Order actions are then documented and files maintained as “open” until the problem is corrected. Then the Work Order is “closed” and maintained in the system.</p>	

Questions related to education	
Has the municipality educated these groups - public employees, businesses, property owners, the general community, and elected officials - regarding ways to detect, prevent and eliminate illicit discharges? If yes, briefly describe the educational materials, including media used (e.g., written brochures, public service announcements, etc.), the topic(s) covered, intended target audience(s), and the distribution method.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>Comment:</p>	

b. List the best management practices (BMPs) that you will implement in the area of Illicit Discharge Detection and Elimination. In the top half of the row, give a short, descriptive name to the BMP. In the bottom half of the row, more fully describe the BMP.

1	Best Management Practices for Illicit Discharge Elimination and Detection
A	Illicit Discharge Complaint Tracking Database
	Knox County will use a database to track and keep records of complaints from the public. Also, Knox County will develop and implement a protocol for receiving complaints, inspections, and enforcement.
B	Non-Stormwater Screening Area Prioritization Map
	Knox County will develop and maintain a digital (GIS) map of Knox County showing priority areas for potential non-stormwater discharges to waters of the U.S.
C	Illicit Discharge Education for Citizens
	Knox County will develop educational tools for citizens on detection and hazards of illicit discharges to stormwater systems by using practices listed in section 1 of Public Education and Outreach and others.
D	Stormwater Ordinance Amendments
	Knox County will amend the Stormwater Ordinance to meet local needs and NPDES Phase II requirements.
E	Outfall Mapping - Knox County has digital mapping showing a minimum of 4-foot contour intervals of topography, public and private roads, and detected streams or drainageways. Knox County has delineated watersheds for major streams and rivers. For each watershed, Knox County will delineate sub-basins for each of which a single outfall will be identified. Knox County has developed these sub-basin and outfall maps for the Beaver and Ten Mile Creek watersheds, and will produce similar delineations for the remaining watersheds. Sub-basin delineation will be used to associate areas of land use to detected or potential pollutants in receiving waters. These associations will be used for both regulatory and planning purposes.

Potential BMPs. List additional BMPs you might incorporate into your program after annual review of program effectiveness.

F	Education for Key Industries
	Knox County will provide on-going illicit discharge prevention and detection education for key industries.

c. Measurable Goals and Implementation Milestones

Attached at the back of this NOI is an addendum, BMP Measurable Goals and Implementation Milestones. You must complete the addendum, providing more details on Measurable Goals and Implementation Milestones for each BMP above.

d. Administrative Information

Illicit Discharge Detection and Elimination System – Administrative Information	
Primary contact person on above BMPs	
Chris Granju: Stormwater Management Coordinator – organizes Knox County efforts	
Other department(s) that will be involved and their role	
Knox County Health Department: discharges related to sanitary sewer or septic system failures; restaurant inspectors	Engineering and Public Works/Planning & Development: initial work order response by subdivision inspectors
Engineering and Public Works/Highway Maintenance: initial work order response by highway crews	Knoxville/Knox County/Knoxville Utilities Board Geographical Information Systems: provide all kinds of maps and other educational information
Equipment needs, if any	
N/A	

What specific groups will be targeted (e.g., particular businesses, civic organizations, church groups) if applicable	
Auto service businesses, restaurants, and community organizations will be targeted.	

Will you partner with another MS4 operator, or with another institution (e.g. Chamber of Commerce, environmental interest organizations, civic groups) in order to carry out the chosen BMPs? List these institutions and briefly describe their role.	
Many of the Knox County public education and outreach projects are implemented through partnerships with the local Water Quality Forum (WQF). While there are no formal agreements governing the partnerships through which the programs are implemented, each WQF partner provides input and expertise to help realize project goals. See Section d of Public Participation/Involvement on p. 10.	

Will another governmental entity be responsible for implementing one or more of the chosen BMPs? If so, identify the entity and which BMP(s) it will implement. Include a copy of the interlocutory agreement, or contract, or proposed agreement with execution schedule.

Entity	BMP
N.A.	

(Go to next page.)

4) **Construction Site Runoff Program**

a. Following is a set of questions on your current erosion and sediment control program.

These questions are intended to highlight minimum program requirements under the MS4 permit. Each element not currently performed must be implemented by the end of the first permit period. Thus, each question with a “No” answer must be addressed with a solution in the MS4’s proposed program.

Questions related to a construction site runoff ordinance		
<p>Do you currently have an erosion and sediment control - or similar - ordinance or regulatory mechanism? If yes, include a copy and reference the page number(s). If No, proceed to the next set of questions below about construction site plans review.</p> <p><i>Comment:</i> Please see the Stormwater Management Ordinance, section 3 (Appendix 1.1). Knox County requires an erosion and sediment control plan developed in accordance with the <i>TDEC Erosion and Sediment Control Handbook</i>.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<p>Does the ordinance or regulatory mechanism require that site operators implement erosion prevention, sediment control, and other construction waste controls for land disturbance activities?</p> <p><i>Comment:</i> Please see the Stormwater Management Ordinance, section 3.3 (Appendix 1.1).</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<p>Does the ordinance/regulatory mechanism require (explicitly or implicitly) that controls be implemented for any land disturbances greater than or equal to one acre, or less than one acre if part of a large common plan of development or sale that would disturb one acre or more? If yes, note the page number and paragraph number where this is defined.</p> <p><i>Comment:</i> Knox County requires a stormwater management plan for any site which individually (or is a part of a larger site) disturbs an area over 10,000 square feet. Please see the Stormwater Management Ordinance, section 3.4. (Appendix 1.1)</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<p>Does the ordinance or regulatory mechanism contain or reference technical standards for erosion and sediment control? If yes, note the page number and paragraph number where this is defined.</p> <p><i>Comment:</i> In general, Knox County refers to the <i>TDEC Erosion and Sediment Control Handbook</i>. This is not written specifically in the Stormwater Management Ordinance.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<p>Do those technical standards agree with or exceed the following standards, summarized here, in the TDEC construction activity general permit (Section IV.D.2.): requirement for an erosion and sediment control pollution prevention plan; pre-construction ground cover not to be disturbed more than 20 days prior to grading; sequencing and phasing of construction activities; erosion and sediment control designed to control the rainfall and runoff from a 2 year, 24 hour storm, 2 year, including sediment basins to serve disturbed areas of ten acres; temporary or permanent ground cover provided within 15 days after final grading?</p> <p><i>Comment:</i></p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<p>Do technical standards require that construction activities maintain riparian buffers during construction?</p> <p><i>Comment:</i></p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<p>Does the ordinance or regulatory mechanism clearly define the criteria - primarily who must submit - for submitting erosion and sediment control information or plans? If yes, note page number and paragraph number.</p> <p><i>Comment:</i> Please see the Stormwater Management Ordinance, sections 3.1, 3.3, and 3.4. (Appendix 1.1).</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Does the ordinance or regulatory mechanism require approval by the local government prior to commencement of land disturbance activities? If yes, note page number and paragraph number.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Comment: An approved Grading Plan is required prior to land disturbing activities. Please see the Stormwater Management Ordinance, Section 6.0 (Appendix 1.1) and the Knox County Zoning Ordinance, Article 6.11 (Appendix 1.4).	
Does the ordinance or regulatory mechanism require re-submittal of erosion and sediment control information or plans if site plans or conditions change during land disturbance activities? If yes, note page number and paragraph number.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment: This is done in practice, but not required by ordinance.	
Does the ordinance or regulatory mechanism allow right-of-entry for government officials onto construction sites for inspections? If yes, note page number and paragraph number.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Comment: Please see the Stormwater Management Ordinance, Section 2.0 (Appendix 1.1).	
Does the ordinance or regulatory mechanism give the MS4 owner/operator the authority to STOP WORK in the event of non-compliance violations? If yes, note page number and paragraph number.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment: This is not specifically written in the Knox County Stormwater Ordinance, but is it common practice.	

Questions related to construction site plans review	
Does the municipality presently have in place a technical review process (i.e. engineering department, planning department, zoning board) that evaluates new development and redevelopment construction for construction site runoff?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Comment: Plans review for construction site runoff is done by Knox County Engineering and Public Works as part of a permitting process coordinated with the Metropolitan Planning Commission and Knox County Codes Administration.	
Does the technical review process require an erosion prevention and sediment control plan with appropriate BMPs?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Comment: Please see the Zoning Ordinance Section 6.11 (Appendix 1.4).	
Does the review process include a requirement for pre-construction meeting between the municipality and site developer, for priority construction sites, including at a minimum those construction activities discharging directly into, or immediately upstream of, waters the state recognizes as impaired or high quality?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Comment: This is not currently stated in the ordinance, but it is a practice in Knox County's operations.	
If there is a review process, provide a brief narrative or a flow chart of the process, describing the process steps, responsible personnel (by department, title and contact person), and criteria used for evaluation of information or plans that are submitted.	<input checked="" type="checkbox"/> Attached
Narrative: Please see Appendix 1.51.	

Responding to public input and complaints	
Does the municipality presently have procedures in place for receipt and consideration of information and complaints submitted by the public?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Comment: Knox County uses a custom-built work order database to track complaints, investigations, and work completed as a result of public input.</p>	
If Yes, please provide a brief narrative of the receipt process and procedures, describing process steps, responsible departments, and personnel (by title). If available, provide information on complaint tracking, documentation, etc.	<input checked="" type="checkbox"/> Attached
<p>Narrative: Complaints are taken and put into the Work Order Database. Site investigations are made by Knox County staff (Maintenance Dept. - Supervisors, Planning and Development – Subdivision Inspectors, or Stormwater Management). Work Order actions are then documented and files maintained as “open” until the problem is corrected. Then the Work Order is “closed” and maintained in the system.</p>	

Questions related to enforcement and inspection procedures	
Does the municipality presently have personnel and procedures in place for construction site runoff inspection?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Comment/Detail (inspection procedures, policies and responsible departments and personnel by title): There are no formal written procedures, but the following departments/personnel; inspect construction site runoff: Planning & Development – Subdivision Inspectors; Stormwater Management – Soil Scientist; and Soil Conservation District – Soil Conservationist.</p>	
Does the program provide for inspection of priority sites at least once per month?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Comment: Sites are prioritized based on the sensitivity of each site (next to blue lines, etc.). These sites are inspected at least once per month. Most sites, when possible, are inspected once every one-two weeks.</p>	
Does the municipality presently have procedures and personnel in place for enforcement of violations of construction site requirements?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Comment: All staff listed above are deputized to issue civil citations for violations of Knox County code.</p>	
Does the municipality use a STOP WORK order to enforce non-compliance with construction site policies and requirements?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Comment: Stop work orders are given verbally, in writing, and posted on construction sites. Violations of stop work orders are considered to be violations of Knox County code.</p>	
How are enforcement actions documented?	
<p>Response: Citations are documented by court records. The work order database documents actions in response to public inquiries. Certified mail is used to document issuance of citations. Staff files are maintained in printed and digital formats. A central filing system plan is anticipated during the first permit cycle.</p>	

Questions related to training and education	
Does the municipality presently make construction site runoff control training/information available to the public, developers, engineers, and contractors? (Be aware that the state of Tennessee regularly conducts erosion prevention and sediment control classes across the state. Local governments are encouraged to refer developers and contractors to these classes.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<i>Comment:</i> Knox County refers local contractors and other site operators to the TDEC Fundamentals of Erosion and Sediment Control training course which is offered throughout the year.	
Has municipal staff completed state-sponsored training, including the Tennessee Fundamentals of Erosion Prevention and Sediment Control; and the Erosion Prevention and Sediment Control Design Course?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<i>Comment:</i> The Engineering Department and Stormwater Management Department have completed the state-sponsored training.	

b. List the best management practices (BMPs) you will implement to establish and run a construction site runoff control program. In the top half of the row, give a short, descriptive name to the BMP. In the bottom half of the row, more fully describe the BMP.

1	Best Management Practices for Construction Site Runoff Control Program
A	Pre-Construction Meetings for Site Development and Capital Improvement Projects Knox County will develop criteria for priority construction sites that may require pre-construction meetings (ex: next to blue line streams or streams on 303d list).
B	Construction Site Inspections Knox County will formulate procedures for construction site inspections.
C	Buffer Zone Protection Knox County will develop design requirements to protect riparian buffers during construction.
D	Erosion and Sediment Control Note Required on Design Plans A note will be required on all design plans stating that the owner is responsible for the installation and maintenance of construction site pollution prevention controls throughout the life of the project.
E	Stormwater Ordinance Amendments Amend Stormwater Ordinance to meet local needs and Phase II requirements.
F	Erosion and Sediment Control Design Education Knox County sponsors the TDEC/UT erosion and sediment control courses, that are intended to educate engineers, developers, builders, and anyone else in the industry on how to properly use erosion control to prevent pollution.
G	Grading Permit Requirements—Tracking Responsible Parties Knox County will revise the method by which responsible parties for land disturbing activities are tracked in the Grading Permit process. The Knox County process will parallel the tracking required with the TDEC construction permit. Ultimately, the permitting logistics will be streamlined to the point where the same permit form and process can be used to meet both local and TDEC requirements.
H	Complaint Receipt Knox County will use a database to track and keep records of complaints from the public. Also, it will develop and implement a protocol for receiving complaints, inspections, and enforcement.

Potential BMPs. List additional BMPs you might incorporate into your program after annual review of program effectiveness.

I	Streamlining NPDES Construction Permitting with TDEC Requirements Knox County will streamline the construction permitting process to function so that a single permitting procedure will be suitable for TDEC and Knox County regulations.
J	Contractor Certifications Knox County will require certification of completion of the TDEC Fundamentals of Erosion Control Training in order to obtain a grading permit.

c. Measurable Goals and Implementation Milestones

Attached at the back of this NOI is an addendum, BMP Measurable Goals and Implementation Milestones. You must complete the addendum, providing more details on Measurable Goals and Implementation Milestones for each BMP above.

d. Administrative Information

Construction Site Runoff Control Program – Administrative Information	
Primary contact person on above BMPs Leo LaCamera, P.E. - Hydrologist	
Other department(s) that will be involved and their role	
Stormwater Management: Aid with pre-construction meetings, commercial and capital improvement project site inspections, other construction site drainage/runoff issues	Soil Conservation District: Aid with commercial and capital improvement project inspections (drainage and erosion control)
Codes Administration: Issues building permits for Knox County	Engineering: Subdivision Inspectors – Inspect subdivisions while under construction for site runoff and erosion control; plans review and grading permits
Maintenance Department: District Supervisors – Aid with any runoff or erosion problems	
Equipment needs, if any	
Four-wheel drive vehicles, personal equipment such as proper clothing, boots, raincoats, gloves, etc.	

Will you partner with another MS4 operator, or with another institution (e.g. Chamber of Commerce, environmental interest organizations, civic groups) in order to carry out the chosen BMPs? List these institutions and briefly describe their role.	
N/A	
Will another governmental entity be responsible for implementing one or more of the chosen BMPs? If so, identify the entity and which BMP(s) it will implement. Include a copy of the interlocutory agreement, or contract, or proposed agreement with execution schedule.	
Entity	BMP
N/A	

5) Post-Construction Runoff Control

a. Following is a set of questions on your current post-construction runoff control program.

These questions are intended to highlight minimum program requirements under the MS4 permit. Each element not currently performed must be implemented by the end of the first permit period. Thus, each question with a “No” answer must be addressed with a solution in the MS4’s proposed program.

Structural and non-structural strategies	
The following is a general question related to this one of the six minimum measures.	
Does the municipality currently have in place mechanisms or strategies to reduce pollutants in post-construction runoff to the MS4 from new development or redevelopment projects that result in land disturbance of one acre or more? <i>For example, land use planning requirements, zoning directives, site-based local controls such as riparian buffer zone protection; storage or detention of storm water prior to release to streams; practices to cause storm water to percolate the soil rather than runoff immediately; vegetative practices.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Comment:	
If Yes, please provide a brief narrative of - and/or references to - the structural and non-structural strategies, describing strategies implemented, best management practices allowed, technical guidance, responsible departments, and personnel (by title).	<input checked="" type="checkbox"/> Attached
Narrative: <i>Please see Appendix 1.52.</i>	

Questions related to a post-construction site management ordinance	
Do you currently have an ordinance or regulatory mechanism that addresses post-construction runoff from new development and redevelopment projects? If yes, reference the page number in your ordinance. If No, proceed to the next section on post - construction plans review.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment:	
Does the ordinance or regulatory mechanism require controls to mitigate pollutants in storm water runoff? If yes, note page number and paragraph number.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment:	
Does the ordinance or regulatory mechanism require (explicitly or implicitly) that controls be implemented for any new development or redevelopment projects greater than or equal to one acre, including projects less than one acre that are part of a large common plan of development or sale, that discharge into your small MS4? If yes, note page number and paragraph number.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment:	
Does the ordinance or regulatory mechanism contain or reference technical standards for water quality controls? If yes, note page number and paragraph number.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment:	
Does the ordinance or regulatory mechanism clearly define the criteria for submittal - who must submit - of post-construction water quality control design information or plans? If yes, note page number and paragraph number.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Comment:		
Does the ordinance or regulatory mechanism require approval prior to construction of post-construction water quality controls? If yes, note page number and paragraph number.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment:		
Does the ordinance or regulatory mechanism require re-submittal of post-construction water quality control design information or plans if site plans change after the initial design has been approved? If yes, please note page number and paragraph number.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment:		
Does the ordinance or regulatory mechanism give the MS4 owner/operator the authority to penalize the owner of post-construction water quality controls for violations? If yes, note page number and paragraph number.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment:		
Does the ordinance or regulatory mechanism allow the municipality right-of-entry on property where post-construction water quality controls are installed for inspections? If yes, please note page number and paragraph number.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment:		
Does the ordinance or regulatory mechanism require that post-construction water quality controls have adequate and long-term operation and maintenance? If yes, please note page number and paragraph number. If no, how does the MS4 owner/operator maintain post-construction water quality controls.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment:		
Does the ordinance or regulatory mechanism require establishment and maintenance of riparian buffers during construction and after construction, in areas of new development and redevelopment		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment:		
Questions related to post-construction control plans review		
Does the municipality presently have in place a technical review process (i.e. engineering department, planning department, zoning board) that evaluates new development and redevelopment with regard to the impact that post-development runoff will have on receiving streams?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment:		
If Yes, provide a brief narrative or a flow chart of the review process, describing the process steps, responsible personnel (by department, title and contact person), and criteria used for evaluation of information or plans that are submitted.		<input type="checkbox"/> Attached

b. List the mechanisms (BMPs) you will implement to establish and maintain a post-development runoff control program. In the top half of the row, give a short, descriptive name to the BMP. In the bottom half of the row, more fully describe the BMP.

1	Best Management Practices for Post Construction Runoff Program
A	Knox County Site Planning Roundtable Knox County staff will organize and facilitate the Knox County Site Planning Roundtable. The Site Planning Roundtable is modeled after a process developed by the Center for Watershed Protection. The Roundtable is a consensus-building process in which watershed stakeholders (regulators, developers, engineers, planners, environmental groups, etc.) identify local codes and ordinances that act to prohibit or impede water quality-friendly site design. The Roundtable will, by consensus, identify and explore key site design principles and make recommendations for specific changes in Knox County site development regulations.
B	Environmental Stewardship Program The Environmental Stewardship Program (ESP) is a program organized by Knox County with the WQF partners to provide opportunities for the use of environmentally-friendly techniques (replacing paved surfaces with swales, native vegetation, wetlands, etc.) for private property drainage problems in Knox County. Knox County supports the Environmental Stewardship Program in project development, design, materials and labor.
C	Stormwater Management Ordinance Amend Stormwater Ordinance to meet local needs and NPDES Phase II requirements, including long term maintenance BMPs.

Potential BMPs. List additional BMPs you might incorporate into your program after annual review of program effectiveness.

D	Grab Bag Knox County will implement post-construction planning, procedures, and policies as recommended by the site-planning roundtable.
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c. Measurable Goals and Implementation Milestones

Attached at the back of this NOI is an addendum, BMP Measurable Goals and Implementation Milestones. You must complete the addendum, providing more details on Measurable Goals and Implementation Milestones for each BMP above.

d. Administrative Information

Post Construction Runoff Control Program - Administrative Information	
Primary contact person on above BMPs	
Chris Granju, P.E. – Stormwater Management Coordinator	
Other department(s) that will be involved and their role	
Engineering and Public Works: Maintenance Dept; Planning and Development - Capital Improvement Projects; Environmental Stewardship Program projects; enforcement of Stormwater Ordinance and post construction pollution prevention policies.	Parks and Recreation: Director of Parks and Recreation – Involved in Environmental Stewardship Program projects; active in the Site Planning Roundtable
Metropolitan Planning Commission: Director of MPC – Active in Site Planning Roundtable; incorporate post construction in general planning.	Soil Conservation District: Soil Conservationist – Involved in Environmental Stewardship Program Projects; active in Site Planning Roundtable; enforce Stormwater Ordinance and post construction pollution prevention policies.
Equipment needs, if any	
N/A	

Will you partner with another MS4 operator, or with another institution (e.g. Chamber of Commerce, environmental interest organizations, civic groups) in order to carry out the chosen BMPs? List these institutions and briefly describe their role.	
N/A	
Will another governmental entity be responsible for implementing one or more of the chosen BMPs? If so, identify the entity and which BMP(s) it will implement. Include a copy of the interlocutory agreement, or contract, or proposed agreement with execution schedule.	
Entity	BMP
N/A	

6) Pollution Prevention and Good Housekeeping

- a. The following is a set of questions on your current pollution prevention and good housekeeping program.

These questions are intended to highlight minimum program requirements under the MS4 permit. Each element not currently performed must be implemented by the end of the first permit period. Thus, each question with a “No” answer must be addressed with a solution in the MS4’s proposed program.

Questions related to staff education and training	
Does the municipality’s current operation and maintenance program provide annual training for staff on preventing and reducing storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance? If yes, briefly describe the training, including the educational materials used, the topic(s) covered, an estimate of the number of employees trained and the training method.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment: The Knox County Central Service Center (fleet service center) does have a spill prevention plan in place and will provide training for employees on material handling, spill cleanup materials and points of contact for emergencies.	
Are training activities documented? If yes, please describe how	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comment:	

Questions related to municipal operations pollution prevention	
<p>Does the municipality's operations and maintenance program have policies and procedures in place that address pollution prevention? Consider the following in your response: maintenance activities, maintenance schedules; long term inspection procedures for structural and non-structural storm water controls to reduce floatables and other pollutants; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways; controls for reducing or eliminating pollutants from municipal parking lots, maintenance and storage yards, fleet or maintenance areas with outdoor storage areas, salt/sand storage areas, snow disposal areas, waste transfer stations; disposal of waste removed from storm sewers and the areas listed above; and assessment of impacts on water quality from new flood management projects.</p> <p>Comment: There are operations in place, but development of formal pollution prevention plans/standard operating procedures is anticipated.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Questions related to municipal industrial activities	
<p>Has the MS4 owner/operator obtained a Tennessee Multi-Sector General Permit or a no-exposure waiver for all qualifying municipal industrial activities? If yes, please give permit numbers or copy of the No-Exposure Certification form.</p> <p>Comment: At present, Knox County is applying for No Exposure Certification for the county salt storage facility.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

List municipally-owned or operated facilities that have a notable potential for contaminating runoff: for example - vehicle maintenance garages; waste transfer operations; golf courses; salt or other materials storage; landfill. If more than one facility for a given type of operation, give the number of such facilities. Indicate if any of these are covered by an NPDES permit. Is there a documented pollution prevention plan in place for these facilities?

Facility or type of facilities/operation	Number	Is activity covered by NPDES permit?	Is a pollution prevention plan in effect?
Salt Storage Shed		No, applying for No Exposure Certification	No
Pellissippi State Technical Community College		No	
Knoxville College		No	
University of Tennessee, Knoxville		No	
Army National Guard		No	
Army Reserve		No	
Marine and Naval Reserve		No	

b. List and briefly describe proposed management practices for municipal pollution prevention and good housekeeping.

In addition to considering industrial-type operations as in item a., you must also consider municipal infrastructure, and related maintenance activities, maintenance schedules and long-term inspection procedures for structural controls and the proper disposal of waste from storm sewers/ catch basins, etc. Also included in this program area is discharge of pollutants from roads and parking lots.

1	Best Management Practices for Pollution Prevention and Good Housekeeping
A	Pollution Prevention Training Knox County will train applicable staff on procedures, technology, and practices.
B	Salt Storage Facility Knox County will install a salt storage facility which protects stormwater systems from discharges of pollutants.
C	Truck Wash Rack Knox County will install a truck wash rack which protects surface drainage from discharges from maintenance and municipal truck wash operations.
D	Pollution Prevention Policy Knox County will implement a policy to be applied by all departments outlining pollution prevention practices and training protocols.

Potential BMPs. List additional BMPs you might incorporate into your program after annual review of program effectiveness.

E	Appropriate Tennessee Multi-Sector Permits Knox County will apply for appropriate Tennessee Multi-Sector Permits where necessary.
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c. Measurable Goals and Implementation Milestones

Attached at the back of this NOI is an addendum, BMP Measurable Goals and Implementation Milestones. You must complete the addendum, providing more details on Measurable Goals and Implementation Milestones for each BMP above.

d. Administrative Information

Municipal pollution prevention and good housekeeping - Administrative Information	
Primary contact person on above BMPs Chris Granju, P.E. - Stormwater Management Coordinator	
Department(s) that will be involved and their role	
Stormwater Management : Implementation of pollution prevention plans and training.	Fleet Service: Implementation of pollution prevention plans and training.
Highway Maintenance: Implementation of pollution prevention plans and training.	Parks and Recreation: Implementation of pollution prevention plans and training.
Solid Waste Facilities: Implementation of pollution prevention plans and training.	Knox County Schools: Implementation of pollution prevention plans and training.
Knox County Health Department: Implementation of pollution prevention plans and training.	Knox County Sheriff's Department: Implementation of pollution prevention plans and training.
Equipment needs, if any N/A	

Will you partner with another MS4 operator, or with another institution (e.g. Chamber of Commerce, environmental interest organizations, civic groups) in order to carry out the chosen BMPs? List these institutions and briefly describe their role.

N/A

Will another governmental entity be responsible for implementing one or more of the chosen BMPs? If so, identify the entity and which BMP(s) it will implement. Include a copy of the interlocutory agreement, or contract, or proposed agreement with execution schedule.

Entity	BMP
N/A	

(See next page for addendum.)

Addendum to Small MS4 NPDES Permit Notice of Intent BMP Measurable Goals and Implementation Milestones

The purpose of this addendum is to record the measurable goals for each BMP, and the dates (month and year) by which interim actions are to be accomplished. Space is given for four BMPs for each of the six minimum measures. You may add tables for additional BMPs.

Measurable goals are BMP design objectives, or goals that will quantify the progress of implementing the actions or performance of a BMP. They are ways to measure activities or effects of a BMP. For each of the six minimum measures and for each BMP, define the measurable goal you will use to monitor effectiveness of this BMP. The BMPs you list here should match exactly those given in Part IV., 1) – 6) of the permit NOI. There is space already prepared here for four BMPs for each minimum measure. You can add additional tables. You can also extend tables by using Tab key in the last row of the table and beyond.

For each BMP, establish milestones for implementation. These tables are set up for once/year milestones. You may change the milestone dates to time frames less than one year. Also, certain BMPs - e.g., an ordinance - should be put in place within one year.

Best Management Practices for Public Education and Outreach

BMP 1A	Grading Permit Brochure	
Measurable Goal(s)	Distribute a Grading Permit brochure with each grading permit.	
Milestone Yr 1	Continue to distribute the brochure.	
Milestone Yr 2	Continue to distribute the brochure.	
Milestone Yr 3	Continue to distribute the brochure.	
Milestone Yr 4	Continue to distribute the brochure.	
Milestone Yr 5	Continue to distribute the brochure.	

BMP 1B	Adopt-a-Watershed Program	
Measurable Goal(s)	Financial support in the amount of at least \$15,000 to the Adopt-a-Watershed Program.	
Milestone Yr 1	Provide financial support equal to or exceeding \$15,000.	
Milestone Yr 2	Provide financial support equal to or exceeding \$15,000.	
Milestone Yr 3	Provide financial support equal to or exceeding \$15,000.	
Milestone Yr 4	Provide financial support equal to or exceeding \$15,000.	
Milestone Yr 5	Provide financial support equal to or exceeding \$15,000.	

BMP 1C	Water Quality Forum World Wide Web Site
Measurable Goal(s)	Knox County support of the maintenance and development of a watershed education World Wide Web site through contributions of funding and staff time.
Milestone Yr 1	Funding and support of Web site development. A project activity log documenting time, content, and financial contributions will be developed.
Milestone Yr 2	Funding and support of Web site development. A project activity log documenting time, content, and financial contributions will be developed.
Milestone Yr 3	Funding and support of Web site development. A project activity log documenting time, content, and financial contributions will be developed.
Milestone Yr 4	Funding and support of Web site development. A project activity log documenting time, content, and financial contributions will be developed.
Milestone Yr 5	Funding and support of Web site development. A project activity log documenting time, content, and financial contributions will be developed.

BMP 1D	Tennessee Growth Readiness
Measurable Goal(s)	Provide Tennessee Growth Readiness presentations to citizen groups, legislative groups, and other interested parties.
Milestone Yr 1	Make presentation and maintain a log of presentations given by Knox County or Knox County agents.
Milestone Yr 2	Make presentation and maintain a log of presentations given by Knox County or Knox County agents.
Milestone Yr 3	Make presentation and maintain a log of presentations given by Knox County or Knox County agents.
Milestone Yr 4	Make presentation and maintain a log of presentations given by Knox County or Knox County agents.
Milestone Yr 5	Make presentation and maintain a log of presentations given by Knox County or Knox County agents.

BMP 1E	Grab Bag Programs/Events
Measurable Goal(s)	Provide support for the Kids-in-the-Creek and Waterfest programs/events that target area school children - public, private, and home schooled. These programs/events promote hands-on watershed education including stream/stormwater quality, pollution impacts, and pollution prevention.
Milestone Yr 1	Knox County will document support for the activities listed above or any added activities.
Milestone Yr 2	Knox County will document support for the activities listed above or any added activities.
Milestone Yr 3	Knox County will document support for the activities listed above or any added activities.
Milestone Yr 4	Knox County will document support for the activities listed above or any added activities.
Milestone Yr 5	Knox County will document support for the activities listed above or any added activities.

BMP 1F	Erosion/Sediment Control Training
Measurable Goal(s)	Knox County staff will be certified as having completed the extent of TDEC's Erosion and Sediment Control training programs. Knox County will advertise and refer contractors, owners, and designers to the TDEC training courses.

Milestone Yr 1	Maintain documentation of staff training and monitor attendance of local offerings of the TDEC class.
Milestone Yr 2	Maintain documentation of staff training and monitor attendance of local offerings of the TDEC class.
Milestone Yr 3	Maintain documentation of staff training and monitor attendance of local offerings of the TDEC class.
Milestone Yr 4	Maintain documentation of staff training and monitor attendance of local offerings of the TDEC class.
Milestone Yr 5	Maintain documentation of staff training and monitor attendance of local offerings of the TDEC class.

Best Management Practices for Public Participation and Involvement

BMP 2A	Water Quality Forum
Measurable Goal(s)	Participation in Water Quality Forum meetings, subcommittees and other initiatives.
Milestone Yr 1	Continuation of involvement in Water Quality Forum activities. These activities will be documented by Knox County.
Milestone Yr 2	Continuation of involvement in Water Quality Forum activities. These activities will be documented by Knox County.
Milestone Yr 3	Continuation of involvement in Water Quality Forum activities. These activities will be documented by Knox County.
Milestone Yr 4	Continuation of involvement in Water Quality Forum activities. These activities will be documented by Knox County.
Milestone Yr 5	Continuation of involvement in Water Quality Forum activities. These activities will be documented by Knox County.

BMP 2B	Adopt-a-Stream
Measurable Goal(s)	One orientation program for stream adopters given each year. At least four presentations explaining and encouraging participation in Adopt-a-Stream will be given each year.
Milestone Yr 1	Continued support of Adopt-a-Stream by Knox County. The support will be documented in terms of time and financial contributions. Printed and digital media with information about the Adopt-a-Stream program will be maintained by Knox County.
Milestone Yr 2	Continued support of Adopt-a-Stream by Knox County. The support will be documented in terms of time and financial contributions. Printed and digital media with information about the Adopt-a-Stream program will be maintained by Knox County.
Milestone Yr 3	Continued support of Adopt-a-Stream by Knox County. The support will be documented in terms of time and financial contributions. Printed and digital media with information about the Adopt-a-Stream program will be maintained by Knox County.
Milestone Yr 4	Continued support of Adopt-a-Stream by Knox County. The support will be documented in terms of time and financial contributions. Printed and digital media with information about the Adopt-a-Stream program will be maintained by Knox County.
Milestone Yr 5	Continued support of Adopt-a-Stream by Knox County. The support will be documented in terms of time and financial contributions. Printed and digital media with information about the Adopt-a-Stream program will be maintained by Knox County.

BMP 2C	Environmental Stewardship Program	
Measurable Goal(s)	Continued Knox County support financially and by staff. There will be at least 4 public presentations made to explain and encourage participation in the ESP program.	
Milestone Yr 1	Knox County will continue financial and staff support and make public presentations. Documentation will be made of activities.	
Milestone Yr 2	Knox County will continue financial and staff support and make public presentations. Documentation will be made of activities.	
Milestone Yr 3	Knox County will continue financial and staff support and make public presentations. Documentation will be made of activities.	
Milestone Yr 4	Knox County will continue financial and staff support and make public presentations. Documentation will be made of activities.	
Milestone Yr 5	Knox County will continue financial and staff support and make public presentations. Documentation will be made of activities.	

BMP 2D	River/Stream Clean-Up (and Awareness) Days	
Measurable Goal(s)	Staff support, participation, and supply of materials and equipment for community volunteer river clean-up days. These events include Waterfest, Earth Day, the Knox County Health and Benefits Fair, CPR, and River Rescue.	
Milestone Yr 1	Continued support with documentation by Knox County.	
Milestone Yr 2	Continued support with documentation by Knox County.	
Milestone Yr 3	Continued support with documentation by Knox County.	
Milestone Yr 4	Continued support with documentation by Knox County.	
Milestone Yr 5	Continued support with documentation by Knox County.	

BMP 2E	Watershed Initiatives	
Measurable Goal(s)	Facilitate, plan, coordinate and provide funding for watershed planning initiatives in Knox County. These initiatives will be planned around community involvement with the goal of placing Knox County in the role of facilitation of a community-based watershed planning process.	
Milestone Yr 1	Knox County support of watershed initiatives in one or more Knox County watersheds. Activities and contributions will be documented.	
Milestone Yr 2	Knox County support of watershed initiatives in one or more Knox County watersheds. Activities and contributions will be documented.	
Milestone Yr 3	Knox County support of watershed initiatives in one or more Knox County watersheds. Activities and contributions will be documented.	
Milestone Yr 4	Knox County support of watershed initiatives in one or more Knox County watersheds. Activities and contributions will be documented.	
Milestone Yr 5	Knox County support of watershed initiatives in one or more Knox County watersheds. Activities and contributions will be documented.	

Best Management Practices for Illicit Discharge Detection and Elimination

BMP 3A	Illicit Discharge Complaint Tracking Database
Measurable Goal(s)	Develop, implement, and maintain a digital database with protocol for receiving, inspecting, and enforcement of illicit discharge complaints.
Milestone Yr 1	Scope Knox County needs and prioritize.
Milestone Yr 2	Select software platform for database.
Milestone Yr 3	Develop software and complaint tracking procedures.
Milestone Yr 4	Provide training for Knox County staff.
Milestone Yr 5	Utilization of database and procedures.

BMP 3B	Non-Stormwater Screening Area Prioritization Map
Measurable Goal(s)	Develop and maintain a digital (GIS) map of Knox County showing priority areas for potential non-stormwater discharges to waters of the US.
Milestone Yr 1	Identify priority land uses in Knox County.
Milestone Yr 2	Develop map showing areas.
Milestone Yr 3	Field check map and maintain it.
Milestone Yr 4	Maintain map.
Milestone Yr 5	Maintain map.

BMP 3C	Illicit Discharge Education for Citizens
Measurable Goal(s)	Implement education tools for citizens on detection and hazards of illicit discharges to stormwater systems.
Milestone Yr 1	Compile a list of potential illicit discharge hazards in Knox County.
Milestone Yr 2	Research established education programs for identified illicit discharge hazards.
Milestone Yr 3	Develop education tools for citizens on detection and hazards of illicit discharges to stormwater systems.
Milestone Yr 4	Implement education tools for citizens on detection and hazards of illicit discharges to stormwater systems.
Milestone Yr 5	Implement education tools for citizens on detection and hazards of illicit discharges to stormwater systems.

BMP 3D	Stormwater Ordinance Amendments	
Measurable Goal(s)	Amend the Knox County Stormwater Ordinance to meet local needs and NPDES Phase II requirements.	
Milestone Yr 1		
Milestone Yr 2	Review and amend Knox County Stormwater Ordinance, if necessary.	
Milestone Yr 3		
Milestone Yr 4		
Milestone Yr 5		

BMP 3E	Outfall Mapping	
Measurable Goal(s)	Develop a digital (GIS) map showing location of stormwater outfall locations to waters of the US.	
Milestone Yr 1	Develop a digital (GIS) map showing location of stormwater outfall locations to waters of the US.	
Milestone Yr 2	Develop a digital (GIS) map showing location of stormwater outfall locations to waters of the US.	
Milestone Yr 3	Develop a digital (GIS) map showing location of stormwater outfall locations to waters of the US.	
Milestone Yr 4	Develop a digital (GIS) map showing location of stormwater outfall locations to waters of the US.	
Milestone Yr 5	Develop a digital (GIS) map showing location of stormwater outfall locations to waters of the US.	

Best Management Practices for Construction Site Runoff Control Program

BMP 4A	Pre-Construction Meetings for Site Development and Capital Improvement Projects	
Measurable Goal(s)	Hold pre-construction meetings for development projects. The meetings will allow Knox County to explain construction site runoff control procedures, enforcement and the permitting process.	
Milestone Yr 1	Knox County will document pre-construction meetings.	
Milestone Yr 2	Knox County will document pre-construction meetings.	
Milestone Yr 3	Knox County will document pre-construction meetings.	
Milestone Yr 4	Knox County will document pre-construction meetings.	
Milestone Yr 5	Knox County will document pre-construction meetings.	

BMP 4B	Construction Site Inspections	
Measurable Goal(s)	All construction sites in Knox County will be inspected by Knox County staff.	
Milestone Yr 1	Continue inspection and maintain documentation in the form of site inspection logs and work order files.	
Milestone Yr 2	Continue inspection and maintain documentation in the form of site inspection logs and work order files.	
Milestone Yr 3	Continue inspection and maintain documentation in the form of site inspection logs and work order files.	
Milestone Yr 4	Continue inspection and maintain documentation in the form of site inspection logs and work order files.	
Milestone Yr 5	Continue inspection and maintain documentation in the form of site inspection logs and work order files.	

BMP 4C	Buffer Zone Protection	
Measurable Goal(s)	Knox County will develop design requirements to protect riparian buffers during construction.	
Milestone Yr 1		
Milestone Yr 2	Knox County will develop design requirements to protect riparian buffers during construction.	
Milestone Yr 3		
Milestone Yr 4		
Milestone Yr 5		

BMP 4D	Erosion and Sediment Control Note Required on Design Plans	
Measurable Goal(s)	A note will be required on all design plans stating that the owner is responsible for the installation and maintenance of construction site pollution prevention controls throughout the life of the project.	
Milestone Yr 1		
Milestone Yr 2	Require the note be included in the Knox County Design Guideline document.	
Milestone Yr 3		
Milestone Yr 4		
Milestone Yr 5		

BMP 4E	Stormwater Ordinance Amendments	
Measurable Goal(s)	Amend Knox County Stormwater Management Ordinance to meet local needs and NPDES Phase II requirements.	
Milestone Yr 1		
Milestone Yr 2	Amend Knox County Stormwater Management Ordinance to meet local needs and NPDES Phase II requirements.	

Milestone Yr 3	
Milestone Yr 4	
Milestone Yr 5	

BMP 4F	Erosion and Sediment Control Design Education
Measurable Goal(s)	Knox County staff will be certified as having completed the extent of TDEC's Erosion and Sediment Control training programs. Knox County will advertise and refer contractors, owners, and designers to the TDEC training courses.
Milestone Yr 1	All Knox County inspection and plans review staff will complete TDEC training and Knox County will advertise course and coordinate scheduling with TDEC.
Milestone Yr 2	All Knox County inspection and plans review staff will complete TDEC training and Knox County will advertise course and coordinate scheduling with TDEC.
Milestone Yr 3	All Knox County inspection and plans review staff will complete TDEC training and Knox County will advertise course and coordinate scheduling with TDEC.
Milestone Yr 4	All Knox County inspection and plans review staff will complete TDEC training and Knox County will advertise course and coordinate scheduling with TDEC.
Milestone Yr 5	All Knox County inspection and plans review staff will complete TDEC training and Knox County will advertise course and coordinate scheduling with TDEC.

BMP 4G	Grading Permit Requirements – Tracking Responsible Parties
Measurable Goal(s)	Knox County will revise the method by which responsible parties for land disturbing activities are tracked in the Grading Permit process. The Knox County process will parallel the tracking required with the TDEC construction permit. Ultimately, the permitting logistics will be streamlined to the point where the same permit form and process can be used to meet both local and TDEC requirements.
Milestone Yr 1	
Milestone Yr 2	Using recommendations from the Knox County Site Planning Roundtable, develop a process to streamline permitting while better tracking responsible parties.
Milestone Yr 3	Implement a revised permitting process and document appropriately.
Milestone Yr 4	
Milestone Yr 5	

BMP 4H	Complaint Receipt
Measurable Goal(s)	Knox County will use a database to track and keep records of complaints received from the public. Also, develop and implement a protocol for receiving complaints, inspections, and enforcement.
Milestone Yr 1	Knox County will use a database to track and keep records of complaints received from the public. Also, develop and implement a protocol for receiving complaints, inspections, and enforcement.
Milestone Yr 2	Knox County will use a database to track and keep records of complaints received from the public. Also, develop and implement a protocol for receiving complaints, inspections, and enforcement.

Milestone Yr 3	Knox County will use a database to track and keep records of complaints received from the public. Also, develop and implement a protocol for receiving complaints, inspections, and enforcement.
Milestone Yr 4	Knox County will use a database to track and keep records of complaints received from the public. Also, develop and implement a protocol for receiving complaints, inspections, and enforcement.
Milestone Yr 5	Knox County will use a database to track and keep records of complaints received from the public. Also, develop and implement a protocol for receiving complaints, inspections, and enforcement.

Best Management Practices for Post-Construction Runoff Control

BMP 5A	Knox County Site Planning Roundtable
Measurable Goal(s)	Knox County staff will organize and facilitate the Knox County Site Planning Roundtable. The Site Planning Roundtable is modeled after a process developed by the Center for Watershed Protection. The Roundtable is a consensus-building process in which watershed stakeholders (regulators, developers, engineers, planners, environmental groups, etc.) identify local codes and ordinances that act to prohibit or impede water quality-friendly site design. The Roundtable will, by consensus, identify and explore key site design principles and make recommendations for specific changes in Knox County site development regulations.
Milestone Yr 1	Knox County will begin Site Planning Roundtable.
Milestone Yr 2	Knox County will complete the Roundtable process.
Milestone Yr 3	Knox County will report on the findings of the Roundtable.
Milestone Yr 4	Knox County will look at ordinance revisions pursuant to Roundtable recommendations.
Milestone Yr 5	Knox County will implement ordinance revisions.

BMP 5B	Environmental Stewardship Program
Measurable Goal(s)	Continued Knox County support financially and by staff. There will be at least 4 public presentations made to explain and encourage participation in the ESP program.
Milestone Yr 1	Knox County will continue financial and staff support and make public presentations. Documentation will be made of activities.
Milestone Yr 2	Knox County will continue financial and staff support and make public presentations. Documentation will be made of activities.
Milestone Yr 3	Knox County will continue financial and staff support and make public presentations. Documentation will be made of activities.
Milestone Yr 4	Knox County will continue financial and staff support and make public presentations. Documentation will be made of activities.
Milestone Yr 5	Knox County will continue financial and staff support and make public presentations. Documentation will be made of activities.

BMP 5C	Stormwater Management Ordinance	
Measurable Goal(s)	Amend the Knox County Stormwater Ordinance to meet local needs and NPDES Phase II requirements.	
Milestone Yr 1		
Milestone Yr 2		
Milestone Yr 3		
Milestone Yr 4		
Milestone Yr 5	The Stormwater Management Ordinance will be updated.	

Best Management Practices for Municipal Pollution Prevention and Good Housekeeping

BMP 6A	Pollution Prevention Training	
Measurable Goal(s)	Knox County will train appropriate staff on procedures, technology, and practices.	
Milestone Yr 1	Knox County will train appropriate staff on procedures, technology, and practices. Knox County will document training.	
Milestone Yr 2		
Milestone Yr 3		
Milestone Yr 4		
Milestone Yr 5		

BMP 6B	Salt Storage Facility	
Measurable Goal(s)	Knox County will install a salt storage facility which protects stormwater systems from discharges of pollutants.	
Milestone Yr 1	Knox County will install a salt storage facility which protects stormwater systems from discharges of pollutants.	
Milestone Yr 2		
Milestone Yr 3		
Milestone Yr 4		
Milestone Yr 5		

BMP 6C	Truck Wash Rack	
Measurable Goal(s)	Knox County will install a truck wash rack which protects surface drainage from discharges from maintenance and municipal truck wash operations.	
Milestone Yr 1	Knox County will install a truck wash rack which protects surface drainage from discharges from maintenance and municipal truck wash operations.	
Milestone Yr 2		
Milestone Yr 3		
Milestone Yr 4		
Milestone Yr 5		

BMP 6D	Pollution Prevention Policy	
Measurable Goal(s)	Knox County will implement a policy to be applied by all departments outlining pollution prevention practices and training protocols.	
Milestone Yr 1	Knox County will develop a policy to be applied by all departments outlining pollution prevention practices and training protocols.	
Milestone Yr 2	Knox County will implement and document a policy to be applied by all departments outlining pollution prevention practices and training protocols.	
Milestone Yr 3	Knox County will implement and document a policy to be applied by all departments outlining pollution prevention practices and training protocols.	
Milestone Yr 4	Knox County will implement and document a policy to be applied by all departments outlining pollution prevention practices and training protocols.	
Milestone Yr 5	Knox County will implement and document a policy to be applied by all departments outlining pollution prevention practices and training protocols.	

(end)

APPENDIX 1.1
Knox County Stormwater Management Ordinance

APPENDIX 1.2

Public Education and Outreach

Educational Materials/Public Outreach Activities:

1. **Homeowner's Guide to Drainageway Maintenance brochure:** The intention of this brochure is to educate homeowners/landowners about proper maintenance of drainageways on private properties. This brochure is given out whenever someone wants more information on this issue, when someone is having drainage problems on private property, and at public meetings or events.
2. **Grading Permit brochure:** A grading permit brochure is issued for each permitted site development greater than one acre. This brochure outlines correct erosion and sediment control practices, references the TDEC Erosion and Sediment Control Handbook, describes the permitting procedures, and outlines regulations regarding the permitting of a site grading project in Knox County. It is distributed any time anyone applies for a grading permit.
3. **Adopt-a-Stream Program/brochure:** The Adopt-a-Stream program is a collaborative effort between Knox County, and other Water Quality Forum partners, that allows schools, community groups, civic groups, sports clubs, families, individuals, etc. to adopt a section of a stream near their home or business. They then do periodic stream clean-ups and stream walks to assess the health of the stream. The goal is to increase public awareness of the importance of the creeks and streams in our county and to restore health to those waterways damaged by people and nature. The Adopt-a-Stream brochure explains the program and is given to anyone interested and at public meetings and events.
4. **Environmental Stewardship Program:** The Environmental Stewardship Program (ESP) is a program organized by Knox County with the WQF partners to provide opportunities for the use of environmentally-friendly techniques (replacing paved surfaces with swales, native vegetation, wetlands, etc.) for private property drainage problems in Knox County. Knox County supports the Environmental Stewardship Program in project development, design, materials and labor.

5. **River Rescue and CPR:** These are two river/stream clean-ups that are each scheduled annually. These clean-ups are intended for any individual or group that is interested in the health of local rivers and streams.
6. **Adopt-a-Watershed:** Knox County financially sponsors the CAC Americorps Water Quality Team. This team implements the Adopt-a-Watershed program along with volunteer cleanup projects and other water quality education and outreach efforts. The Adopt-a-Watershed program teaches watershed education through hands-on activities. Adopt-a-Watershed is geared towards high school students and operates in schools within the Knox County area. This program goes on throughout the school year.
7. **Grab Bag Programs/Events:** Knox County supports the Kids-in-the-Creek and Waterfest programs/events that target area school children - public, private, and home schooled. These programs/events promote hands-on watershed education including stream/stormwater quality, pollution impacts, and pollution prevention. These programs/events occur at least annually and sometimes up to four times a year.
8. **Tennessee Growth Readiness:** Knox County will facilitate training for Knox County staff and others (education professionals, community leaders, technical staff, other agencies, etc.) in presentation of the Tennessee Growth Readiness education program. The Tennessee Growth Readiness education program (based on University of Connecticut's NEMO program) is a modular presentation, which relates land use to water quality. The program is constructed in a way to facilitate custom-tailored presentations to specific audiences who are responsible for community land use decisions.
9. **Erosion/Sediment Control Training:** Knox County sponsors the TDEC/UT erosion and sediment control courses that are intended to educate engineers, developers, builders, and anyone else in the industry on how to properly use erosion control to prevent pollution. These training classes are provided many times a year at many locations around the state.
10. **Water Quality Forum Website:** Knox County supports the maintenance and development of a watershed education World Wide Web site through both funding and staff time. Examples of some of the educational programs featured on the website are Adopt-A-Watershed, Kids-in-the-Creek, and Waterfest. The internet address for this site is www.waterqualityforum.org. This website is running at all times.

APPENDIX 1.3
Knox County Criminal Littering Ordinance

APPENDIX 1.4
Knox County Zoning Ordinance

APPENDIX 1.5

Narratives

NARRATIVE 1.51

Narrative: Construction Site Plans Review Process – p. 17:

Knox County Engineering reviews site plans for commercial construction sites, residential subdivisions, and grading operations. Plans are reviewed by the Knox County Planning and Development Hydrologist, Leo LeCamera, P.E. Site plans may be submitted directly to Knox County Engineering, or may be forwarded as part of the zoning review process through the Metropolitan Planning Commission (MPC). Knox County Engineering issues Grading Permits for approved site development plans. The Knox County Codes Administration office issues building permits for construction and forwards site plans to Engineering for review. Ultimately, the MPC, or Codes Administration process relies on the Engineering review for final approval.

Site plans are reviewed to ensure compliance with MPC Minimum Subdivision Regulations, Knox County Zoning Ordinance, the Knox County Stormwater Management Ordinance, the Knox County Sinkhole Area Development Policy, FEMA Floodplain regulations, and any applicable state and federal regulations. Current minimum stormwater regulations require the post-development runoff be attenuated to meet pre-development conditions for the 2-year, 10-year, and 25-year 24-hour storm. Additional criteria may apply in cases such as floodplains, wetlands, sinkholes, steep slopes, or other environmentally-sensitive areas. Site plans are reviewed by a licensed Professional Engineer.

NARRATIVE 1.52

Narrative: Structural and non-structural strategies – p. 21:

MPC PLANNING

The Metropolitan Planning Commission staff creates and updates a General Plan and Sector Plans (ie., Northwest Sector, Southwest Sector, etc.) for Knox County. These plans are used as guides for land use decision making (zoning requests, design plan approval, transportation planning) by the Metropolitan Planning Commission and Knox County Commission. MPC plans reflect recommendations from Knox County Engineering staff, Tennessee Department of Environment and Conservation, and other agencies regarding environmental protection.

KNOX COUNTY

Knox County requires mitigation of stormwater runoff increases due to land development. Typical approaches include the use of stormwater detention ponds. When required by Knox County staff, stormwater retention or extended detention is required to address basin-specific issues. The Knox County Sinkhole Area Development Policy requires specific limitations on increases in stormwater or percolation basins are required to be installed as part of the developments.

SITE PLANNING ROUNDTABLE

Knox County is engaged in a Site Planning Roundtable process. The Site Planning Roundtable is a group of county-wide watershed stakeholders such as engineers, developers, regulators, environmentalist, real estate professionals, and others. The Roundtable is currently evaluating the policies and regulations that pertain to land development in Knox County and comparing these to standards and principles set forth by the Center for Watershed Protection and EPA. The Center for Watershed Protection principles address such strategies as reduced pavement widths for roadway construction, conservation, “open space” subdivision design, and the use of engineered swales instead of culverts. The goal of the Roundtable is to reach consensus on recommendations for improvements in local regulations to allow for the application of improved water quality protection practices. Specific ordinance recommendations are to be made to the appropriate legislative bodies in Knox County.

APPENDIX 2.1

Organizational Chart

APPENDIX 2.2

Maps