

**Public Information and Education Plan  
For The  
City of Kingsport  
Stormwater Management Program**

In fulfillment of Minimum Control Measure 4.2.1  
TN Small MS4 General NPDES Permit No. TNS075388

April, 2012

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## 1. Introduction

The purpose of developing and implementing the Public Information and Education Plan (PIE) is to provide a framework for the City of Kingsport's stormwater public education and outreach program. The primary goal of the PIE is to increase awareness of stormwater pollution impacts and to encourage changes in public behavior. The goals of the PIE are derived from the requirements of the State of Tennessee Small Municipal Separate Storm Sewer (MS4) General NPDES Permit, focusing on impacts of stormwater discharges to water bodies and the steps that the public can take to reduce pollutants in stormwater runoff. Specific goals of the PIE are as follows:

- Improve the quality of stormwater runoff from existing urban areas
- Improve the quality of stormwater runoff from all new development and redevelopment
- Identify and eliminate all unpermitted and/or illicit discharges to the stormwater system
- Create an atmosphere of public awareness concerning the negative impacts of polluted and/or excessive volumes of stormwater runoff

## 2. Regulatory Requirements

The Small MS4 General Permit contains minimum requirements for the Public Education and Outreach control measure in section 4.2.1. The permit requires that the program target specific pollutants and sources that may cause or contribute to impairment. In areas known as hotspots, the MS4 must focus education and outreach on those particular pollutants of concern. The PIE is to detail specific goals and identify specific public information events/activities that are designed to meet those goals as well as a schedule indicating when the events will occur over the remainder of the permit cycle. The PIE must incorporate components from outreach campaigns and communications; document, track and maintain records of public education and outreach activities; and establish a mode to evaluate the PIE's effectiveness so adjustments can be made, if necessary. The PIE must also include targeted educational campaigns addressing the following issues:

- a. General public awareness on the impacts on water quality from general housekeeping maintenance/activities;
- b. Homeowner associations and other operators of permanent BMPs awareness of the importance of maintenance activities;
- c. Local engineering and development community awareness of the stormwater ordinance, regulations and guidance materials related to long-term water quality impacts;
- d. General public and professional chemical applicators awareness on the proper storage, use, and disposal of pesticides, herbicides and fertilizers;
- e. General public and professional chemical applicators awareness on the proper storage, use and disposal of oil and other automotive-related fluids;

- f. General public and municipal employees on the awareness of identifying and reporting procedures for illicit connections/discharges, sanitary sewer seepage, spills, etc.;
- g. Local engineering, development and construction community awareness of stormwater ordinances, regulations and guidance materials related to construction phase water quality impacts; and
- h. Municipal employee/contractor awareness of water quality impacts from daily operations.

The PIE shows that the City's program provides both general information on impacts of stormwater discharges to water bodies and the steps that the public can take to reduce pollutants in stormwater runoff, and more targeted information for specific water resources, audiences, and/or pollutants located within the MS4. Most of the public information and education measures documented in this PIE are already in place as part of the City's on-going Small MS4 Permit compliance program. The PIE incorporates these existing activities and provides for new measures that address targeted geographic areas, people, or pollutants to meet the requirements of the current Small MS4 Permit. The PIE provides a mode for evaluating effectiveness by establishing a method to record metrics for each educational activity. Evaluation methods may include: direct observations, surveys, monitoring attendance, interviews, media reviews, or tracking stormwater related correspondence. By observing the number of impressions made from year to year, the City can evaluate the extent of its effort and decide whether it is properly allocating its resources, or if changes are needed. The metrics are also useful for the reporting requirement for the small MS4 permit.

### **3. Identifying Target Audiences**

To identify specific targets, Kingsport has chosen to use information prepared by the State of Tennessee in the published 303(d) List of impaired streams and their respective causes of impairment. It is important to understand that the 303(d) List is prepared for watershed planning purposes, and small MS4s represent one of many stakeholders in the overall process of addressing water quality issues. The City may choose to supplement information gathered from the 303(d) list with information it collected on its own, including, but not limited to visual observations in the field, information obtained from complaints, enforcement activities, or highly effective programs. Through examination of the 303(d) list, the City can determine which local water resources are exhibiting negative impacts, in the form of pollutants, which may be attributed to stormwater runoff from the small MS4. The next step is to consider the individuals or groups whose behaviors may affect the introduction of those pollutants to the MS4, thus identifying the target audience(s). Information and education on how their activities can have an impact on water quality can then be provided by the MS4, with the intent that the target audience will be inclined to change their approach to those activities. Target audiences are selected through a process of determining whose behaviors have the most potential to contribute pollutants to streams. This PIE Plan outlines activities that will be directed toward these targets. This PIE Plan outlines activities that will be directed toward these targets, which are identified in Table 1 below.

**Table 1. PIE Plan Targets for the City of Kingsport TN**

Target Streams	Target Pollutants	Target Audience(s)
<ul style="list-style-type: none"> <li>- Reedy Creek</li> <li>- Madd Branch</li> <li>- Tranbarger Branch</li> <li>- Horse Creek</li> <li>- Gammon Creek</li> <li>- Gravelly Creek</li> <li>- Miller Branch</li> <li>- Leslie Branch</li> <li>- Fall Creek</li> <li>- Wagner Creek</li> <li>- Clark Branch</li> <li>- U.T. Reedy Creek</li> <li>- Little Horse Creek</li> <li>- Kendrick Creek</li> <li>- Rock Springs Branch</li> <li>- Gaines Branch</li> </ul>	<ul style="list-style-type: none"> <li>- Escherichia Coli</li> <li>- Physical Substrate Habitat Alterations</li> <li>- Habitat Loss Due to Alteration in Stream-Side or Littoral Vegetative Cover</li> <li>- Loss of biological integrity due to siltation</li> <li>-Other Anthropogenic Habitat Alterations</li> </ul>	<ul style="list-style-type: none"> <li>- Land Developers</li> <li>- Design Community</li> <li>- Contractors</li> <li>- Construction Workers</li> <li>- General Public</li> <li>- Municipal Employees</li> <li>- TBD by MS4 based on information collected in the field.</li> </ul>

In addition to targeted information, broad-spectrum information provided to the general public has a place in stormwater information and education programs because it offers opportunities to introduce the concept of stormwater systems and their impacts on receiving waters. People can relate to places where they derive drinking water or recreate. More importantly, they can see the value in protecting those resources, which could result in positive behavioral changes. An advantage of incorporating general information for a general audience is that materials are typically already developed and available, relieving the City of the burden to develop new ones. Partnerships are often formed for the purpose of delivering stormwater messages to the general public, which also effectively leverages the city’s resources. For these reasons, the City has chosen to implement a number of activities that address dispenses information to the general public.

#### **4. Public Information and Education Activities and Goals**

A number of public information and education activities are currently being implemented by the City as a result of permit requirements that exist outside of public education and public outreach minimum control measures. New educational activities were added as a result of the issuance of the 2010 Small MS4 Permit. The total of these activities comprise the PIE, which is presented in Table 2. The activities and goals are set to meet targets or provide general information with the resources that are available to the City. Each activity is associated with one or more message delivery methods or activity types. The chosen activities correspond with permit requirements.

**Table 2. PIE Plan Activities and Goals**

#	Description	Goal(s)	Type	Target Groups	Target Pollutants	Target Streams	MS4 Permit Citation(s)
1	Website	<ul style="list-style-type: none"> <li>- Promote awareness on the water quality impacts from general housekeeping and maintenance practices.</li> <li>- Provide information on how to identify and report suspected illicit discharges.</li> <li>- Provide notice to the public for meetings.</li> <li>- Inform the development and construction community of impacts through ordinances, policies and guidance materials related to daily activities.</li> <li>- Inform home owner associations and other operators of permanent BMPs of the importance of maintenance activities.</li> </ul>	Internet	Public	All	All	4.2.1.a, d-h 4.2.2
2	Public Service Announcements (PSAs)	To broaden the public understanding of the storm sewer system and how behaviors contribute to water quality.	Radio/TV	Public	All	All	4.2.1.a, d, e, f
3	Public School Outreach	To engage youth by empowering students to make or influence informed choices on behaviors that affect stormwater.	Events, Printed Materials	School Children, Public	All	All	4.2.1
4	Watershed Groups	To provide resources and staff support to groups which encourage citizens to take ownership of their water resources.	Events	Public	Solid Waste/Litter	All	4.2.2
5	Public Notices	To comply with applicable state and local laws governing this activity.	Publications, Internet	Public	N/A	N/A	4.2.2
6	Hazardous Waste Collection Event Advertisements	To promote awareness that the improper disposal of these items has an impact on water quality,	Internet Pamphlets	Public	Household Hazardous Waste	All	4.2.1
7	Municipal Employee and Contractor Training	To make municipal employees/contractors aware of water quality impacts from daily operations, and to education staff on how to identify and report illicit discharges.	Training Event	Municipal Staff	All	All	4.2.1.h
8	Outreach to General Public/Professional Chemical Applicators**	To limit the improper storage, use and disposal of pesticides, herbicides, and fertilizers.	Internet, Radio/TV	Landscapers, Automotive	PHFs, Automotive Waste	All	4.2.1.d

**\*Indicates new activity to be added to existing program. \*\* Approached through the City's website and PSAs.**

#### 4. Public Information and Education Implementation and Metrics

Under section 4.2.1 of the Small MS4 Permit, the PIE must include a mode for evaluating effectiveness. The City must also track and maintain records and report education and outreach activities in the annual report for the small MS4 permit. The City will accomplish these requirements by providing a specific implementation schedule, with interim goals, and a way to record metrics for activities as they are performed. The annual entry of results verifies that the intended audience is being reached according to the plan. If any results are insufficient, reduced or missing, the City can seek adjustments to properly address inadequacies. Table 3 outlines the implementation schedule and corresponding metric(s) for each PIE Activity, along with a place to enter results annually.

**Table 3. Public Information and Education implementation and Metrics**

Activity	Supporting Documentation	Metric	Permit Year	Results	Comments
1. Website	Record of updates	Number of web hits	2		Requested
			3		Requested
			4		Requested
			5	1316	Need to be more specific
2. PSAs	Tennessee Association of Broadcasters (TAB) summary of statistics showing which stations and number of broadcasts per month/year.	Number of Broadcasts	2	Refer to TAB reports	Requested
			3		Requested
			4	649	Doesn't reflect audience reach
			5	837	Doesn't reflect audience reach
3. Public School Outreach	Information on number of 4 <sup>th</sup> grade students from correspondence with teachers.	Number of Project WET Stormwater booklets distributed	2	506	
			3	527	
			4	551	
			5	566	Possible feedback mechanism

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4. Support/Participate in Watershed Groups	Copies of sign-in sheets from meetings, other evidence of city participation. 2-Madd Branch Cleanup 3-Madd Branch Cleanup 4-Madd Branch Cleanup (10), Trout in Classroom (85) 5-Madd Branch Cleanup	Number of Participants in Events	2	12	
			3	12	
			4	95	
			5	10	Weight collected projects downward trend
5. Public Notices	Web hit counter, newspaper circulation information, number of posted notices	Number of Notices/Number of People in Attendance at Hearings and/or Comments Received	2		
			3		
			4	1/0/0	
			5	1/0/0	New permit may change requirement
6. Hazardous Waste Collection Event Advertisement	Web hit counter. Number of pamphlets distributed	Number of Web Hits	2		
			3		
			4		
			5	6	Working with Sullivan County to increase role
7. Municipal Staff Training	Sign-in sheets with name, date and topics	Number of Staff Trained	2	73	
			3	46	
			4	72	
			5	65	
8. Printed Materials	Watershed, Hot Spot, IDDE Brochures 2- 75 utility 3 – 75 utility, 50 C of C 4 – 75 watershed, 75 utility 5 – 75 watershed, 75 utility, 150 hot spots	Number Distributed	2	75	
			3	125	
			4	150	
			5	300	Feedback mechanism

