

## **Background NPDES Information**

In 1990 the U.S. Environmental Protection Agency's (EPA) Phase I stormwater program was promulgated under the Clean Water Act. Phase I relies on National Pollutant Discharge Elimination System (NPDES) permit coverage to address stormwater runoff from: (1) "medium" and "large" municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or greater, (2) construction activity disturbing 5 acres of land or greater, and (3) ten categories of industrial activity.

The NPDES Stormwater Phase II Final Rule was promulgated in December 1999, and is the next step in EPA's effort to preserve, protect, and improve the Nation's water resources from polluted stormwater runoff. The Phase II program expands the Phase I program by requiring additional operators of MS4s in urbanized areas and operators of small construction sites, through the use of NPDES permits, to implement programs and practices to control stormwater runoff. Phase II is intended to further reduce adverse impacts to water quality and aquatic habitat by instituting the use of controls on the unregulated sources of storm water discharges that have the greatest likelihood of causing continued environmental degradation. North Carolina is an EPA delegated state for the federal NPDES program and implements this program through the Division of Water Quality (DWQ). A small MS4 becomes part of the Phase II program in one of three ways:

- 1) Automatic designation,
- 2) Petitioning,
- 3) TMDL designation or
- 4) State designation

### Automatic designation

Automatic designation under the federal program applies to areas defined as an Urbanized Area by the U.S. Census Bureau. The definition of an Urbanized Area is complex, but in general terms it is any local government or group of local governments that combined have a population of 50,000 and a density of 1,000 people per square mile. Based on the most recent census data, there are 17 Urbanized Areas in North Carolina. These areas include 123 cities and 33 counties for automatic designation. Under the automatic designation process, permits have been issued to over 100 municipalities and some counties.

### Petitioning

Petitioning is the third mechanism for inclusion of small MS4s into the Phase II program. Under this option, anyone can petition DWQ to cover a local government under a Phase II permit if there are significant water quality concerns associated with that community. Affected communities are notified when a petition is received. DWQ will allow for public input and decide whether the community should be in the program.

## TMDL Designation

The State shall designate an owner or operator of a small municipal separate storm sewer system (MS4) as a regulated entity if the municipal separate storm sewer system (MS4) is specifically listed by name as a source of pollutants for urban stormwater in a total maximum daily load (TMDL) implementation plan developed in accordance with subsections (d) and (e) of 33 U.S.C. § 1313.

## State Designation

The federal regulations require state implementation agencies to develop state designation criteria to screen communities outside of Urbanized Areas to determine if they should be subject to Phase II. Under the state's designation criteria, the state must identify municipalities outside the Urbanized Areas as a candidate for designation as a regulated entity if the municipal separate storm sewer system (MS4) either:

- Discharges stormwater that has the potential to adversely impact water quality. An adverse impact on water quality includes any activity that causes or contributes to a violation of water quality standards, including, but not limited to, any activity that impairs designated uses or that has a significant biological or habitat impact, or
- That has either a population of more than 10,000 or more than 4,000 housing units and either a population density of 1,000 people per square mile or more or more than 400 housing units per square mile.

## **Waivers, Exemptions and Certification of Non-Ownership**

### Population of less than 1,000

Pursuant to Senate Bill 1210 and 40 CFR 122.32, municipalities with a population of less than 1,000, are not required to obtain a Phase II National Pollutant Discharge Elimination System (NPDES) permit for stormwater management unless the municipality is shown to be contributing to an impairment of State waters, as determined under the requirements of 33 U.S.C. § 1313(d). The State may waive the requirements otherwise applicable to the municipality if the municipal separate storm sewer system (MS4) serves a population of less than 1,000 within the urbanized area and they meet the following criteria:

- Their system is not contributing substantially to the pollutant loadings of a physically interconnected MS4 that is regulated by the NPDES storm water program; and
- If they discharge any pollutant(s) that have been identified as a cause of impairment of any water body to which they discharge, storm water controls are not needed based on waste load allocations that are part of an EPA approved or established "total maximum daily load" (TMDL) that addresses the pollutant(s) of concern.

The [Name of the Public Entity] (population number) is requesting their permit, [Permit No.] be rescinded and be granted a waiver pursuant to Senate Bill 1210 and 40 CFR 122.32. Existing municipal programs in place ensure [Name of the Public Entity] operations and activities are not

contributing substantially to the pollutant loadings of the water bodies to which it drains. The [Name of the Public Entity] does not drain to water bodies that do not meet water quality standards or which have impaired uses at this time. Attached are

- A list of the waters, including small streams, tributaries, lakes, and ponds, that receive a discharge from the MS4 and information on the receiving streams, including receiving stream name, stream segment, water quality classification, use support rating and if known, any water quality issues including threatened and endangered species and
- A summary of existing municipal programs in place to ensure operations and activities are not contributing substantially to the pollutant loadings of the water bodies to which it drains.

If circumstances change [Name of the Public Entity] will seek coverage under an NPDES permit.

#### For populations less than 10,000

Pursuant to 40 CFR 122.32, the State may waive the requirements otherwise applicable to the municipality if the MS4 serves a population under 10,000 and they meet the following criteria:

- The State has evaluated the waters, including small streams, tributaries, lakes, and ponds, that receive a discharge from the MS4 and has determined that storm water controls are not needed based on wasteload allocations that are part of an EPA approved or established TMDL that addresses the pollutant(s) of concern or, if a TMDL has not been developed or approved, an equivalent analysis that determines sources and allocations for the pollutant(s) of concern. The pollutant(s) of concern include biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the MS4; and
- The permitting authority has determined that future discharges from the MS4 does not have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts.

The [Name of the Public Entity] (population number) is requesting their permit, [Permit No.] be rescinded and be granted a waiver pursuant to 40 CFR 122.32. The [Name of the Public Entity] has evaluated the waters, including small streams, tributaries, lakes, and ponds, that receive a discharge from the MS4 and has determined that storm water controls are not needed based on waste load allocations that are part of an EPA approved or established TMDL. The [Name of the Public Entity] has determined that future discharges from the MS4 do not have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts. Existing municipal programs in place ensure [Name of the Public Entity] operations and activities are not contributing substantially to the pollutant loadings of the water bodies to which it drains. The [Name of the Public Entity] does not drain to waterbodies that do not meet water quality standards or which have impaired uses at this time. Attached are:

- The results of our evaluation,
- A list of the waters, including small streams, tributaries, lakes, and ponds, that receive a discharge from the MS4 and information on the receiving streams, including receiving

stream name, stream segment, water quality classification, use support rating and if known, any water quality issues including threatened and endangered species, and

- A summary of existing municipal programs in place to ensure operations and activities are not contributing substantially to the pollutant loadings of the water bodies to which it drains.

If circumstances change [Name of the Public Entity] will seek coverage under an NPDES permit.

### Stormwater Non-ownership/Non-operation Certification

Submission of Form SWU-266, Stormwater Non-ownership/Non-operation Certification on January 12, 2004, constitutes notice that [Name of the Public Entity], identified in Section I, does not own or operate a small MS4 as defined in 40 CFR 122. By signing and submitting Form SWU-266, the signing official is certifying that [Name of the Public Entity] does not currently own or operate a municipal separate storm sewer system (MS4) as defined in 40 CFR 122 and therefore is not currently required to complete and submit a permit application for an MS4.

### **Implementation of State Designation**

The state designation process is implemented in accordance with the schedule for Basinwide Plans. A list of public entities identified in each basin reviewed this year is provided below. To the extent possible, publication of this list will be coordinated with public notices issued through basinwide planning efforts. All public entities identified will be notified in writing by DWQ. As part of the public process, DWQ will accept public comment on the consideration of each identified entity. A final determination on designation for each of the listed public entities will involve review of the evaluation criteria, review of public comments received, and review of the effectiveness of any existing water quality protection programs. Where a public entity is designated under state designation, DWQ will notify the entity of its designation for stormwater coverage in writing. This notification will outline the basis of the designation and the date on which the application for a Phase II National Pollutant Discharge Elimination System (NPDES) permit for stormwater management must be submitted.

## **Permit Standards**

To obtain a Phase II National Pollutant Discharge Elimination System (NPDES) permit for stormwater management, an applicant shall, to the extent authorized by law, develop, implement, and enforce a stormwater management plan approved by the Commission that satisfies the six minimum control measures required by 40 Code of Federal Regulations § 122.34(b) (1 July 2003 Edition). The evaluation of the post-construction stormwater management measures required by 40 Code of Federal Regulations § 122.34(b)(5) (1 July 2003 Edition) shall be conducted as provided in Session Law 2006-246, Section 9.

## **Public Entities Identified for Possible Designation in 2011**

Possible public entities to be designated based on either:

- Housing Units (over 4,000) and at least 400 housing units per square mile,
- Population (over 10,000) and population density (1000 persons per square mile),
- Stormwater discharges that have the potential to adversely impact water quality, or
- Listed by name as a source of pollutants for urban stormwater in a total maximum daily load (TMDL) implementation plan.

*Population estimates from either 2008 are noted, depending on when DWQ performed the initial screening.*

### **Lumber Basin**

#### **LAURINBURG**

Estimated Population (2008): 15,911

Population Density: 1,277 persons per square mile.

Housing Units (2000 Census): 6,603

Housing Unit Density: 530 Housing Units / Square Mile

#### **LUMBERTON**

Estimated Population (2008): 23,028

Population Density: 1,445 persons per square mile.

Housing Units (2000 Census): 8,800

Housing Unit Density: 552 Housing Units / Square Mile

#### **PINEHURST**

Housing Units (2000 Census): 5,668

Housing Unit Density: 401 Housing Units / Square Mile

#### **RED SPRINGS**

*Potential stormwater discharges to impaired waters*

## **Yadkin Pee-Dee Basin**

### ALBEMARLE

Estimated Population (2008): 16,197  
Population Density: 1,011 persons per square mile.  
Housing Units (2000 Census): 6,954  
Housing Unit Density: 434 Housing Units / Square Mile  
*Potential stormwater discharges to impaired waters*

### ASHEBORO

Estimated Population (2008): 25,124  
Population Density: 1,391 persons per square mile.  
Housing Units (2000 Census): 9,515  
Housing Unit Density: 527 Housing Units / Square Mile  
*Potential stormwater discharges to impaired waters*

### FAIRVIEW

*Potential stormwater discharges to impaired waters*  
TMDL - Goose Creek TMDL, 2005.

KING – is currently waived\*

*Potential stormwater discharges to impaired waters*

### LEXINGTON

Estimated Population (2008): 21,378  
Population Density: 1,187 persons per square mile.  
Housing Units (2000 Census): 8,510  
Housing Unit Density: 473 Housing Units / Square Mile  
*Potential stormwater discharges to impaired waters*

### MOCKSVILLE

*Potential stormwater discharges to impaired waters*

### MOUNT AIRY

*Potential stormwater discharges to impaired waters*

### NORTH WILKESBORO

*Potential stormwater discharges to impaired waters*

### ROCKINGHAM

Housing Units (2000 Census): 4,375  
Housing Unit Density: 580 Housing Units / Square Mile

### SPENCER

TMDL - *Potential stormwater discharges to impaired waters*. Grants Creek Fecal TMDL, 2002.  
Special Watershed – High Rock Lake is an EPA targeted watershed.

## STATESVILLE

Estimated Population (2008): 23,320

Population Density: 1,135 persons per square mile.

Housing Units (2000 Census): 10,041

Housing Unit Density: 422 Housing Units / Square Mile

*Clear contributor in the TMDL. Fourth Creek Turbidity TMDL, 2004.*

*Potential stormwater discharges to impaired waters*

## UNIONVILLE

*Potential stormwater discharges to impaired waters*

WALKERTOWN – was waived\* before TMDL

TMDL - *Potential stormwater discharges to impaired waters. Salem Creek Fecal/Grants Creek Turbidity TMDLs, 2006.*

## WINGATE

*Potential stormwater discharges to impaired waters*

\*Waived from Phase II therefore DWQ implements post-construction.

### **Criteria for Designation of Public Entities**

In making designations, the DWQ will evaluate the public entities using the following criteria:

- Contribution to a violation of a water quality standard or adversely impacts water quality;
- Discharge to sensitive receiving waters;
- High population density, high growth or growth potential;
- Contiguity to an Urbanized Area (UA);
- Significant contributor of pollutants to waters of the state; and
- Effectiveness of applicable water quality protection programs.

### Contribution to a Violation of a Water Quality Standard

In making designations, the DWQ will evaluate whether the public entity may contribute to a violation of water quality standard or adversely impacts water quality by discharging or potentially discharging stormwater to sensitive waters within a growing population area based on:

- State and local water quality data and other environmental indicators;
- Documented comments and other information from interested stake holders; and
- Information collected by the Division of Water Quality.

### Discharge to Sensitive Receiving Waters

Sensitive Receiving Waters include:

- Waters classified as high quality, outstanding resource, shellfish, trout or nutrient sensitive waters;
- Waters which are occupied by or designated as critical habitat for federally-listed aquatic animal species that are listed as threatened or endangered by the U.S. Fish and Wildlife Service or National Marine Fisheries Service under the provisions of the Endangered Species Act, 16 U.S.C. 1531-1544; or
- Waters for which the designated use, as set forth in the state's classification system, have been determined to be impaired.

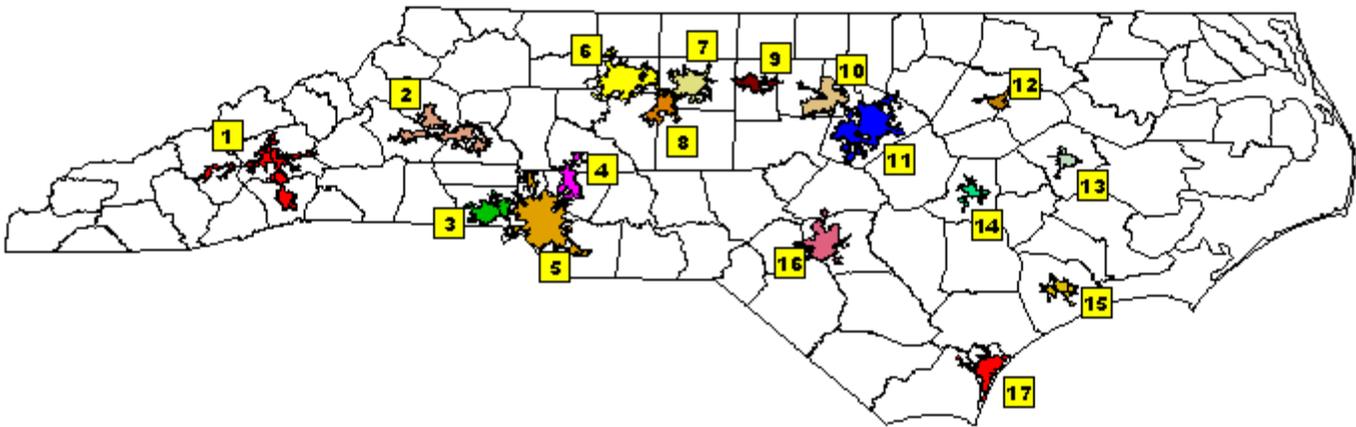
### High Population Density, High Growth or Growth Potential

In making designations, the DWQ will evaluate whether the public entity has an actual population growth rate that exceeds 1.3 times the State population growth rate for the previous 10 years or has an actual population increase that exceeds fifteen percent (15%) of its previous population for the previous two years.

Contiguity to an Urbanized Area

The definition of an Urbanized Area is complex, but in general terms it is any local government or group of local governments that combined have a population of 50,000 and a density of 1,000 people per square mile. Based on the 1990 census data, there are 17 Urbanized Areas in North Carolina. These areas include 60 cities and 25 counties for automatic designation. An additional 63 cities and 8 counties have been identified based on the 2000 US Census.

**2000 U.S. Census Urbanized Areas**



Number	Urbanized Area Name
<a href="#">1</a>	Asheville
<a href="#">2</a>	Hickory
<a href="#">3</a>	Gastonia
<a href="#">4</a>	Concord
<a href="#">5</a>	Charlotte
<a href="#">6</a>	Winston-Salem
<a href="#">7</a>	Greensboro
<a href="#">8</a>	High Point
<a href="#">9</a>	Burlington

Number	Urbanized Area Name
<a href="#">10</a>	Durham
<a href="#">11</a>	Raleigh
<a href="#">12</a>	Rocky Mount
<a href="#">13</a>	Greenville
<a href="#">14</a>	Goldsboro
<a href="#">15</a>	Jacksonville
<a href="#">16</a>	Fayetteville
<a href="#">17</a>	Wilmington

### Significant Contribution of Pollutants

In making designations, the DWQ will evaluate whether the public entity discharges are, or have the potential to be, a significant contributor of pollutants.

### Effectiveness of Existing Water Quality Programs

To determine the effectiveness of other applicable water quality protection programs, the DWQ shall consider whether the public entity has other state and /or local programs in place that effectively protect water quality and the water quality of the receiving waters and whether the waters support the uses set out in subsections (c), (d), and (e) of 15A NCAC 2B .0101 (Procedures for Assignment of Water Quality Standards – General Procedures) and the specific classification of the waters set out in 15A NCAC 2B .0300, et seq. (Assignment of Stream Classifications).

### **Implications for a Designated Community**

#### Stormwater Management Plan

All Regulated Public Entities (RPEs) shall develop, implement and enforce a stormwater management plan approved by the DWQ. The plan shall be designed to reduce discharge of pollutants to the maximum extent practicable and, except as otherwise provided, shall include but not be limited to the following minimum measures:

1. A public education and outreach program on the impacts of stormwater discharges on water-bodies to inform citizens of how to reduce pollutants in stormwater runoff.
2. A public involvement and participation program consistent with all applicable state and local requirements.
3. A program to detect and eliminate illicit discharges within the RPE jurisdictional area.
4. A program to reduce pollutants in any stormwater runoff to the MS4 or waters of the State from construction activities resulting from a land disturbance of greater than or equal to one acre.
5. A program to address post-construction stormwater runoff from new development and redevelopment projects that cumulatively disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4 or into an interconnected MS4 or waters of the State; and
6. A pollution prevention/good housekeeping program for municipal operations that addresses operation and maintenance, including a training component, to prevent or reduce pollutant runoff from those operations.

RPEs may use qualified existing state and local programs to meet the required permit minimum measures either in whole or in part.

RPEs shall have permit conditions that establish schedules for implementation of each component of the stormwater management program based on the submitted application, and shall fully implement a program within five years from permit issuance. Shorter time frames may be set in approved programs for implementation of specific measures.

**Public Comment and More Information**

As part of the public process, DWQ will accept public comment on the consideration of each identified entity. Public comments may be submitted to the Division of Water Quality in written format through mail or email. Please submit comments as noted below:

Send US Mail Comments to:	Send EMAIL Comments to:
<p style="text-align: center;">DIVISION OF WATER QUALITY            WATER QUALITY SECTION            STORMWATER PERMITTING UNIT            1617 MAIL SERVICE CENTER            RALEIGH, NORTH CAROLINA 27699-1617            Attn: Brian Lowther – or –            Mike Randall</p>	<p style="text-align: center;">phase2.info@ncmail.net</p>

Public comments will be accepted through [February 14, 2011](#). For more information, our web address is <http://portal.ncdenr.org/web/wq/ws/su/phase2>

**Public Meeting**

The Director of the Division of Water Quality may hold a public meeting if there is a significant degree of public interest in a proposed designation. Public notice of such a meeting will be circulated in newspapers in the geographic area of the discharge and to those on the Division of Water Quality’s mailing list at least thirty days prior to the meeting.

## **Delineation Process for *Regulated Coverage Areas Outside of Designated Phase II Municipalities***

Session Law 2006-246, Section 4(b) outlines a “Delineation Process” to delineate **regulated coverage areas** in unincorporated areas of a county outside a municipality that is designated as a regulated entity. If these areas are delineated, post-construction stormwater requirements in the Session Law will apply there. A list of public entities that are located in whole or in part in the candidate coverage areas is provided below.

The publication of this list has been coordinated with the public notice of the public entities identified for possible designation this year. All public entities identified here will also be notified in writing by DWQ. As part of the public process, DWQ will accept public comment on the consideration of each candidate coverage area. A final determination on whether any of the candidate coverage areas will be **delineated as a regulated coverage area** will involve review of the evaluation criteria below, review of public comments received, and review of the effectiveness of any existing water quality protection programs. For communities that are located in delineated regulated coverage areas and are not already Phase II regulated public entities, DWQ will notify each of its inclusion in a delineated area for stormwater coverage in writing. This notification will outline the basis of the delineation and the date on which the delineation becomes effective.

### **Criteria for Delineation as a Regulated Coverage Area**

In making delineation, the DWQ will evaluate the public entities within the candidate coverage areas using the following criteria:

- Contribution to a violation of a water quality standard or adversely impacts water quality;
- Discharge to sensitive receiving waters;
- Significant contributor of pollutants to waters of the state; and
- Effectiveness of applicable water quality protection programs.

### **Public Entities Identified in Candidate Coverage Areas**

The following public entities were identified within areas extending 1-, 2-, or 3-miles beyond the most recently available corporate limits (2008) of the Phase II Designation Candidates, as set out in Section 4(b) of the Session Law. The list omits counties already “tipped into” the Phase II Program and coastal counties where coastal stormwater post-construction requirements apply.

### **Lumber Basin**

ABERDEEN  
FOXFIRE VILLAGE  
SOUTHERN PINES

MOORE CO  
ROBESON CO  
SCOTLAND CO

### **Yadkin Pee-Dee Basin**

HAMLET  
TROUTMAN  
WILKESBORO

DAVIDSON CO  
IREDELL CO  
RICHMOND CO  
STANLY CO  
SURRY CO  
WILKES CO

### **Public Comment and More Information**

As part of the public process, DWQ will accept public comment on the consideration of each identified candidate coverage area (see attached map). Public comments may be submitted to the Division of Water Quality in written format through mail or email. Please submit comments as noted on page 12.

Public comments will be accepted through **February 14, 2011**. For more information, including maps of all candidate coverage areas, please visit <http://portal.ncdenr.org/web/wq/ws/su/phase2>