

North Carolina Phase II Stormwater Permitting Program

Mike Randall

NC Division of Water Quality

April 16, 2007

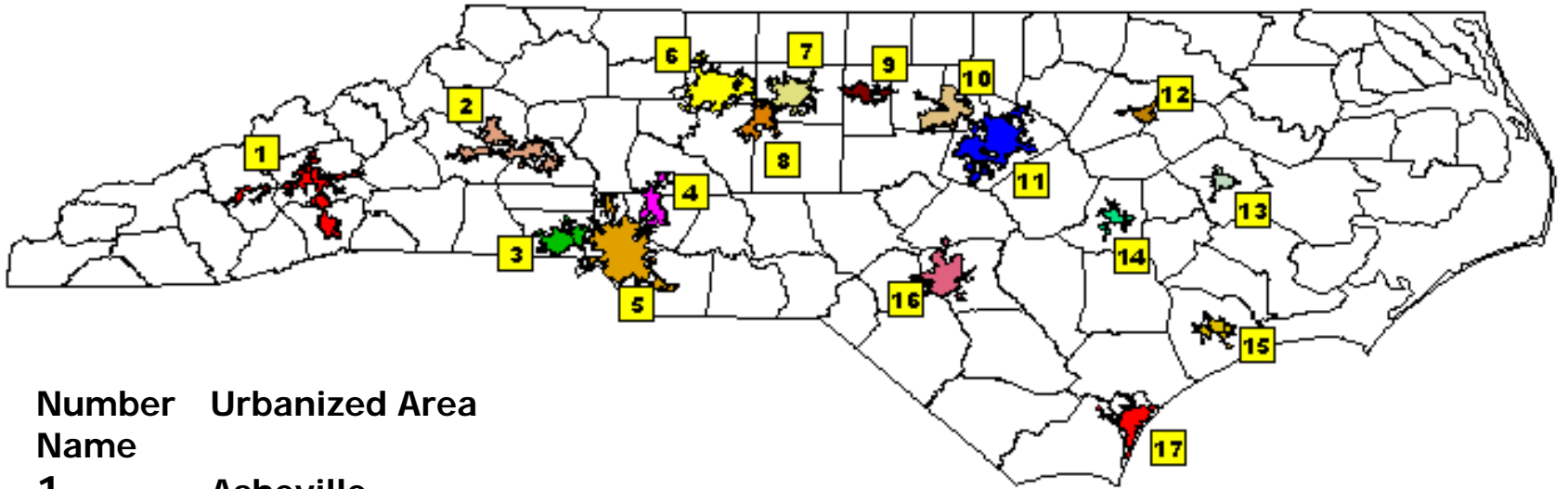


- Overview of Phase 2
- Expansion of Phase 2
- Phase 2 Post-Construction Requirements

I. Overview of Phase 2

Phase II

Public entities that own or
operate an MS4 in a U.S. Census
designated Urbanized Area



Number	Urbanized Area Name
1	Asheville
2	Hickory
3	Gastonia
4	Concord
5	Charlotte
6	Winston-Salem
7	Greensboro
8	High Point
9	Burlington
10	Durham
11	Raleigh
12	Rocky Mount
13	Greenville
14	Goldsboro
15	Jacksonville
16	Fayetteville
17	Wilmington



State Wide (123 Municipalities)

- 98 Municipalities (89 Permits)
- 12 Requested Waivers (9 Granted)
- 5 Exempt (populations < 1,000)
- 8 Municipalities certified they do not own or operate an MS4

Current Status (33 Counties)

- 23 counties have certified that they do not own or operate an MS4
- 8 applications are in process
- 2 permits have been issued (Mecklenburg and Caldwell Counties)

Current Status (Others)

- Six Phase I Municipalities
- NCDOT, Oak Island, and NC State (Issued)
- UNC Chapel Hill (In Process)
- ~ 15 Possible TMDL Designations
- ~ 25 Possible Designations
 - Population > 10,000
 - Housing Units > 4,000
- ~ 40 Impaired Waters

Public Entities that owns or operates an MS4 in a U.S. Census designated Urbanized Area

Six Minimum Measures

1. Public Education and Outreach Program
2. Public Involvement and Participation Program
3. Detect and Eliminate Illicit Discharges
4. Runoff from Construction Activities
5. Post-construction Stormwater Runoff Program from New Development and Redevelopment
6. Pollution Prevention/Good Housekeeping Program

II. Expansion of Phase 2 in NC

Expansion of Phase 2 Program

- Session Law provides for expansion.
- Based on 5-year basinwide planning cycle.
- Criteria for designation:
 - More than 4,000 housings units, or
 - Population greater than 10,000

Areas Considered for Phase 2 Designation in 2007

- **Tar-Pam River Basin**
 - Henderson / Tarboro / Washington
- **Catawba River Basin**
 - Kings Mountain / Mooresville
- **White Oak River Basin**
 - Atlantic Beach / Emerald Isle / Morehead City

Designation of Regulated Entities

- Actual population growth rate that exceeds 1.3 times the State population growth rate for the previous 10 years.
- Projected population growth rate that exceeds 1.3 times the projected State population growth rate for the next 10 years.
- actual population increase that exceeds 15% of its previous population for the previous two years.
- MS4 discharges adversely impacts water quality.
- MS4 discharges results in a significant contribution of pollutants to receiving waters, taking into account the effectiveness of other applicable water quality protection programs. To determine the effectiveness of other applicable water quality protection programs, the Commission shall consider the water quality of the receiving waters and whether the waters support the uses set out in 15A NCAC 2B .0101 and the specific classification of the waters set out in 15A NCAC 2B .0300, et seq. (Assignment of Stream Classifications).

Tentative Sched. for Phase 2 in New Areas

- DWQ publishes list of affected municipalities (Jan 07)
- Affected municipalities notified in writing (Feb 07)
- Public Notice issued (Feb 07)
- 30 day public comment period (Feb – Apr 07)
- EMC makes final decision on designation (May 07)
- Affected areas notified of EMC decision (May 07)
- Permit applications due from new areas (Oct 08)
- Permits drafted / noticed / issued by DWQ (Feb 09)
- New requirements implemented (Feb 2011)

III. Phase 2 Post-Construction Requirements

Coastal Counties Definitions

- **Shellfish Waters (SA)** – Waters classified as Shellfishing Waters (SA) by the EMC.
- **Shellfish Resource Waters (SR)** – Waters classified as SA that have > 500 ppm chlorides.
- **Non-SA Area** – Areas not within $\frac{1}{2}$ mile and draining to SA Waters. Approx. 90% of counties.

Post-construction model practices for low-density projects

- 24% except Shellfish Resource Waters (12%)
- Low-density projects must use vegetated conveyances to the maximum extent practicable

Post-construction model practices for high-density projects

- Projects in coastal counties must control and treat **runoff from the first one and one-half inches of rain**
- Projects located within one-half mile and draining to Shellfish Resource Waters must control and treat the **difference in the stormwater runoff from the predevelopment and post-development conditions for the one-year, 24- hour storm**

Post-construction model practices for high-density projects

- Draw down the treatment volume no faster than 48 hours, but no slower than 120 hours
- Discharge the storage volume at a rate equal to or less than the predevelopment discharge rate for the one-year, 24-hour storm.
- Remove an 85% Total Suspended Solids.

Comparison of Phase 2 & Existing Requirements

	Phase 2 – SR*	Phase 2 – SA*	Existing SA Waters*
Low Dens. Threshold	12%	24%	25%
High Dens Des. Strm.	1-yr, 24-hr storm	Runoff from 1.5” rain	Runoff from 1.5” rain
Density Limits	None	None	None ORW – No HD
Setback	30 ft	30 ft	30 ft
Threshold	1 acre	1 acre	1 acre
Other	No disch. for 1-yr, 24-hr	No disch. for 1-yr, 24-hr	No disch. for 1.5” rain

* These requirements apply within ½ mile & draining to these waters.

Comparison of Phase 2 & Existing Requirements: Non-SA Waters

	Phase 2 – Non-SA Waters	Existing Non-SA Waters
Low Dens. Threshold	24%	30%
High Dens Des. Strm.	Coastal -Runoff from 1.5” rain	Runoff from 1” rain
Density Limits	None	None
Setback	30 ft	30 ft
Threshold	1 acre	1 acre



For Further Information Contact:

Mike Randall

Phone: 919-733-5083 ext. 545

Cell: 919-389-7801

E-mail: mike.randall@ncmail.net