

*Stormwater Management
In
South Carolina*



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South Carolina Department of Health and Environmental Control



Stormwater Regulation

- Construction
- Industrial
- Municipal Separate Storm Sewer Systems (MS4s)



Construction



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Regulatory Origins



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S.C. Section 48-18
Erosion and Sediment
Reduction Act of 1983

S.C. Section 48-14
The Stormwater
Management and
Sediment Reduction
Act
(1991)

R. 72-405
Standards for
Stormwater
Management
and Sediment
Reduction

R. 72-100
Erosion and
Sediment
Reduction &
Stormwater
Regulations

R.72-300
Standards for
Stormwater
Management and
Sediment Reduction

SCDOT

State-Owned
Facilities

Most other sites, including
commercial and residential
disturbing 2 acres or more

S.C. Section 48-1
Pollution Control Act

Clean Water Act

R. 61-9
Pollution Control
Permits

NPDES
Construction
General
Permit

All sites,
statewide
that disturb 1
acre or more

1991 Stormwater Management and Sediment Reduction Act (R. 72-300)

- Erosion and Sediment Control
 - ◆ Sediment basins, traps, etc. on sites that disturb 10+ acres are required to be designed to achieve an 80% efficiency for the 10-year, 24-hour storm event
- Stormwater Management
 - ◆ Min. 2- and 10-year, pre- and post-development calculations
 - ◆ Allowance for waivers
 - ◆ Detention pond design
 - ◆ “First flush” requirements for some sites



NPDES Construction General Permit

- Reissued every 5 years
- Latest went into effect on September 1, 2006
- All sites 1 acre or greater (statewide), sites within ½ mile of a receiving waterbody in the Coastal Zone, and other sites on a case-by-case basis are required to obtain coverage
- Since September 1, 2006 we have received **7988** applications for coverage under the CGP



NPDES Construction General Permit

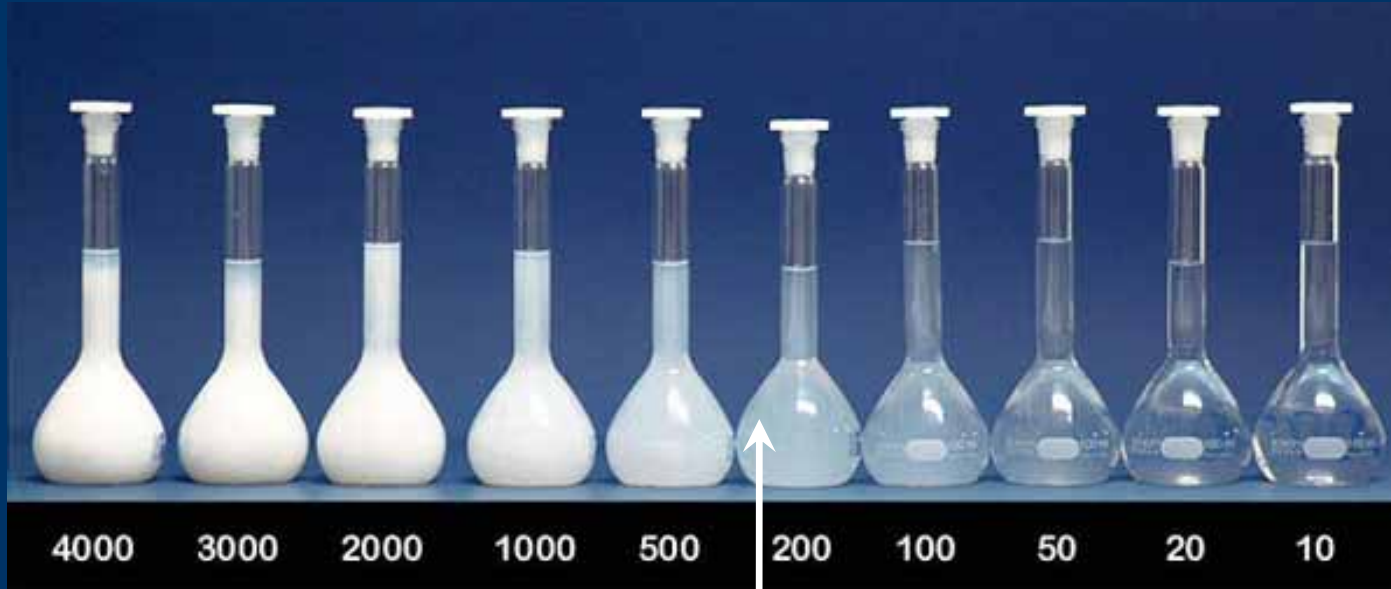
- Requires “qualified” inspectors
- Pre-construction conference for sites that disturb more than 10 acres
- Monthly reports for sites that disturb more than 10 acres
- Inspections either every 7 days or every 14 days and within 24 hrs of the end of a rainfall event that exceeds ½”
- Stabilization is required in no more than 14 days after the construction activity in that portion of the Site has temporarily or permanently ceased
- Additional analysis and possibly added controls if a site drains into an impaired waterbody or a waterbody with a TMDL

Construction

■ EPA

- ◆ Court-ordered Effluent Limits for Construction Sites
 - ◆ Effective in SC in August 2011 when NPDES Construction General Permit is re-issued
 - ◆ Limits initially applicable to sites with 20+ acres of active construction/land disturbance
 - ◆ Reduces to 10 active acres of construction after 4 years
 - ◆ Discharge limit of 280 NTUs – daily average for all storm events less than a 2-year, 24-hour

Turbidity



280 NTU

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Industrial



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Industrial

- Industrial General Permit – expired August 31, 2008
 - ◆ Transition to EPA's model Multi Sector Permit format
 - ◆ Extensive Stakeholder process
 - ◆ Public Notice March 2010 with proposed Effective date in October 2010
 - ◆ Department will require new NOI from all permitted facilities

Industrial



■ Changes

- ◆ Benchmarks – Discharge Targets
- ◆ Effluent Limits
- ◆ Water Quality Monitoring for sites that drain to an Impaired Water (303 (d) and/or TMDL)
- ◆ Each Sector has some combination of best management practices, effluent limits, and/or benchmarks.

MS4



South Carolina Department of Health and Environmental Control

MS4s

- MS4 stands for Municipal Separate Storm Sewer System meaning a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):
 - ◆ Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law);
 - ◆ Designed or used for collecting or conveying storm water.

MS4s – How are they defined?

- By Urbanized Area
- Urbanized Area defined by US Census
500 people/square mile



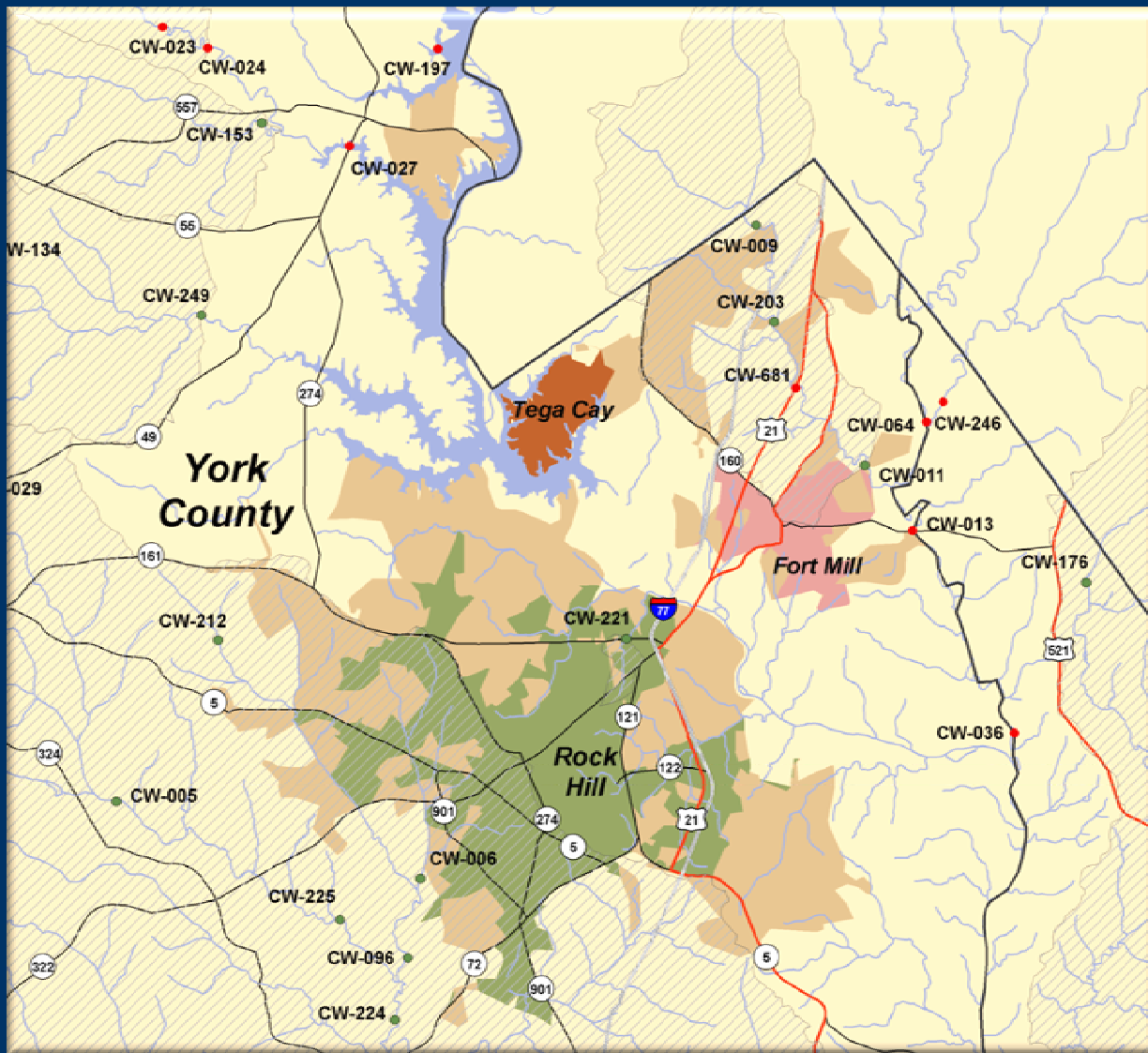
Phased Approach for MS4s

- Phase I –1990 - Large and Medium MS4s
 - ◆ Large: Urbanized Area with $\geq 250,000$ (SCDOT)
 - ◆ Medium: Urbanized Area 100,000 – 249,999 (Greenville County, Richland County, City of Columbia)
 - ◆ Each issued an individual NPDES Permit

Phased Approach for MS4s

- Phase II - 1999 – Small MS4s
 - ◆ Small: other urbanized areas (70 entities - Including 4 military facilities)
 - ◆ Horry County
 - ◆ City of Charleston
 - ◆ Florence County
 - ◆ City of Rock Hill
 - ◆ Shaw Air Force Base
 - ◆ And others
 - ◆ Issued coverage under a General Permit (2006)

York Area Small MS4s



Legend

- Completed TMDL
- Impaired Stations
- ▨ TMDL Watershed
- Streams
- Interstates
- US Highway
- State Highway
- Counties

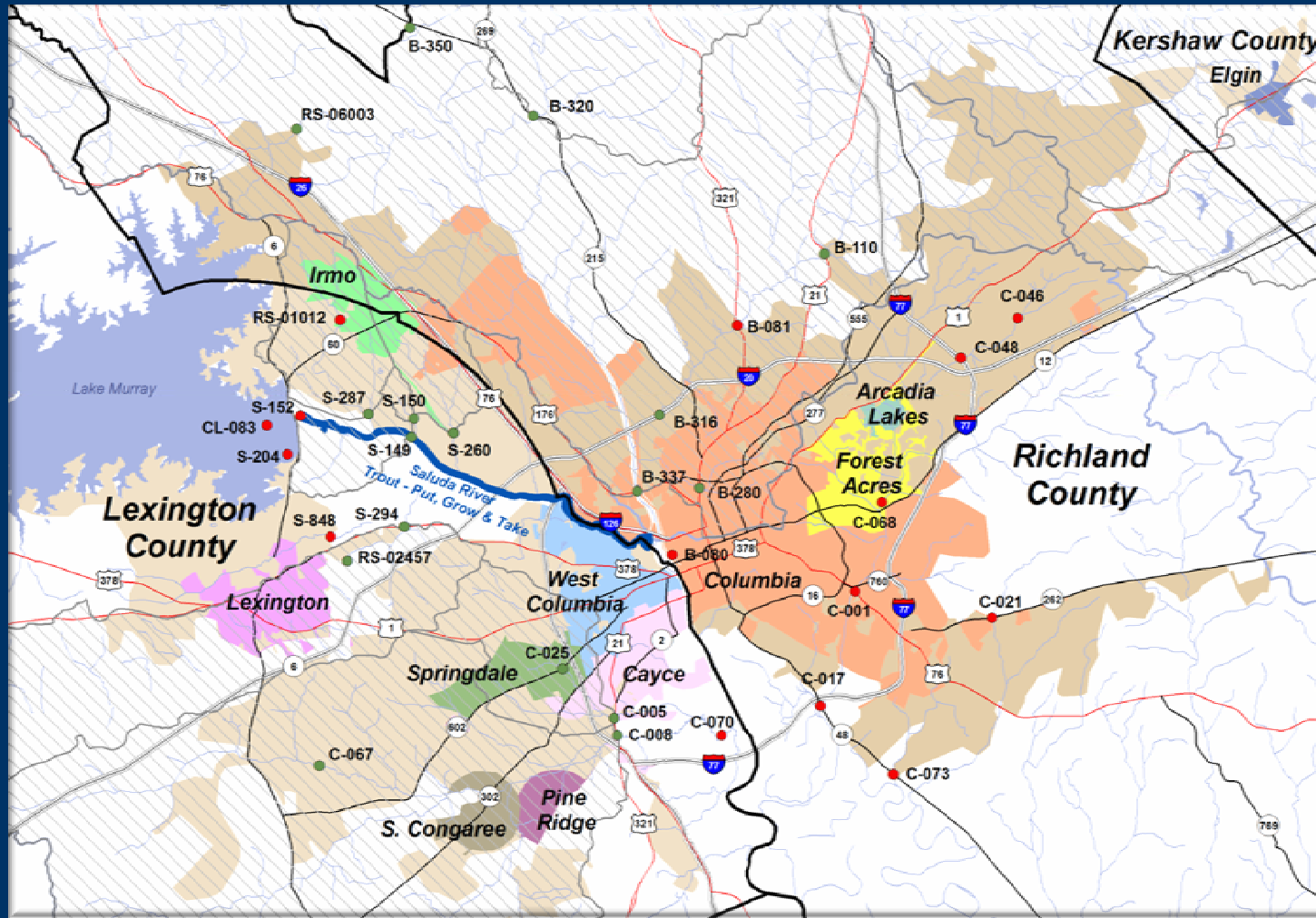
MS4 Categories

Responsible Entity

- City-Fort Mill
- City-Rock Hill
- City-Tega Cay
- County-Unincorporated

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Columbia Area MS4s



Legend

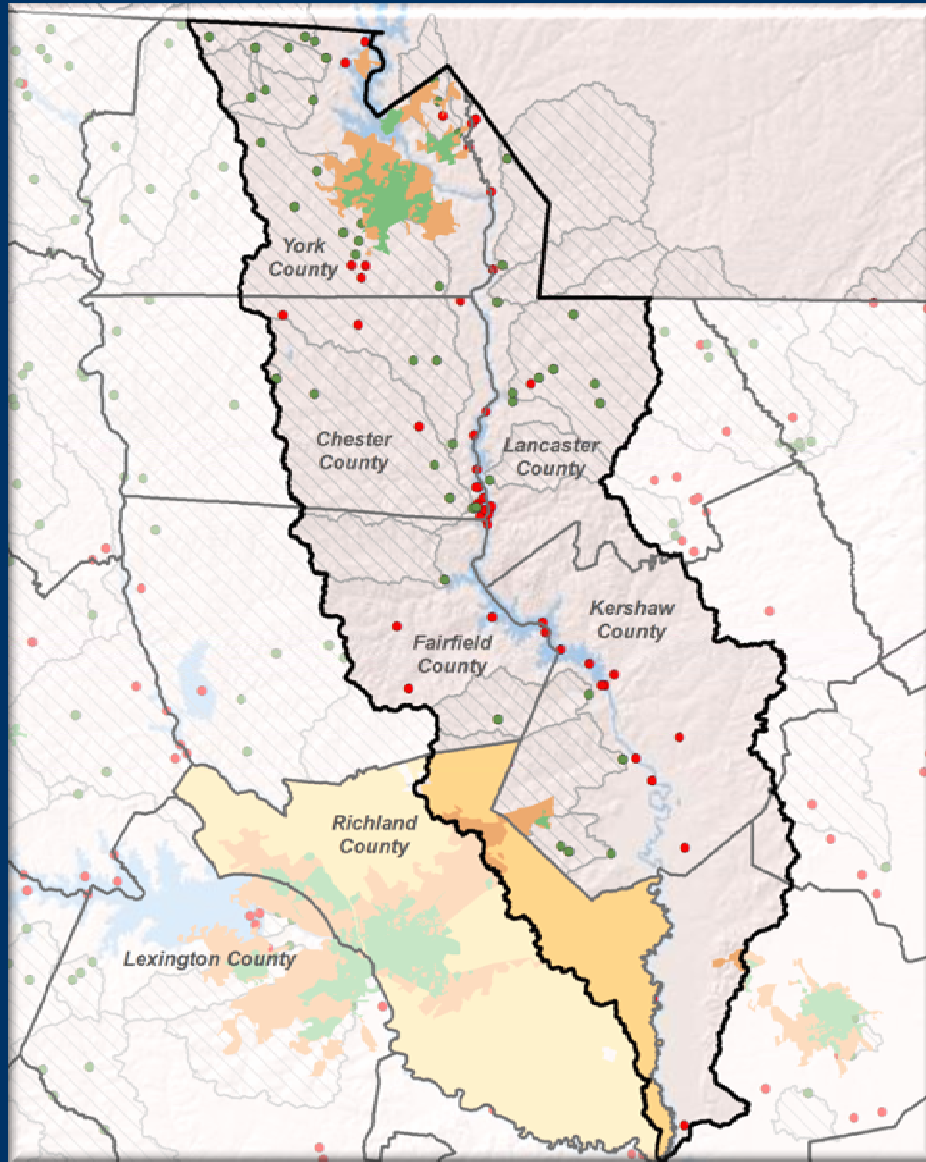
- Completed TMDL
- Impaired Stations
- ▨ TMDL Watershed
- Streams
- Interstates
- State Highway
- US Highway
- Counties
- SC Major River Basins

MS4 Categories Responsible Entity

- City Arcadia Lakes
- City-Cayce
- City-Columbia
- City-Elgin
- City Forest Acres
- City-Irmo
- City-Lexington
- City-Pine Ridge
- City-South Congaree
- City-Springdale
- City-West Columbia
- County-Unincorporated

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Catawba River Basin MS4s



Legend

● Completed TMDL

● Impaired Stations

□ Catawba River Basin - SC

□ Counties

▨ TMDL Watershed

MS4 Categories

Responsible Entity

■ Phase I - Richland County

■ Counties

■ Cities

What are Small MS4s required to do?

- Public Education and Outreach
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Site SW Runoff Control
- Post Construction SW Management in New Development and Redevelopment
- Pollution Prevention/Good Housekeeping for Municipal Operations

Additional Regulation of Stormwater

■ EPA

◆ National Research Council Report

◆ <http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=12465>

◆ Proposed Rulemaking for “Stormwater Management Including Discharges From New Development and Redevelopment”

- ◆ Expand the MS4 areas
- ◆ Establish requirements for stormwater from new and redevelopment
- ◆ Develop a single set of consistent requirements for all MS4s
- ◆ Other changes



Questions?

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