

# Municipal Separate Storm Water System (MS4) Permit Program

Virginia Department of Environmental Quality



# Permit Information

- Clean Water Act requires permit for MS4 systems
- Adopted by EPA in two phases
- Permit issued by DEQ
- Requires localities to reduce pollutants from these systems
- Permits require program plans to address minimum control measures such as urban house keeping (e.g. street cleaning) public education, identifying unauthorized connections, and structural storm water controls
- Permits also require TMDL action plans for the Chesapeake Bay and local watersheds

# Phase I MS4s

- Medium and large MS4s
- Serves population of greater than 100,000 people (1990 census)
- In Virginia there are 11 Phase I Permits:
  - Counties: Arlington, Chesterfield, Fairfax, Henrico, Prince William
  - Cities: Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, Virginia Beach
- Individual permits initially issued in the 1990s.

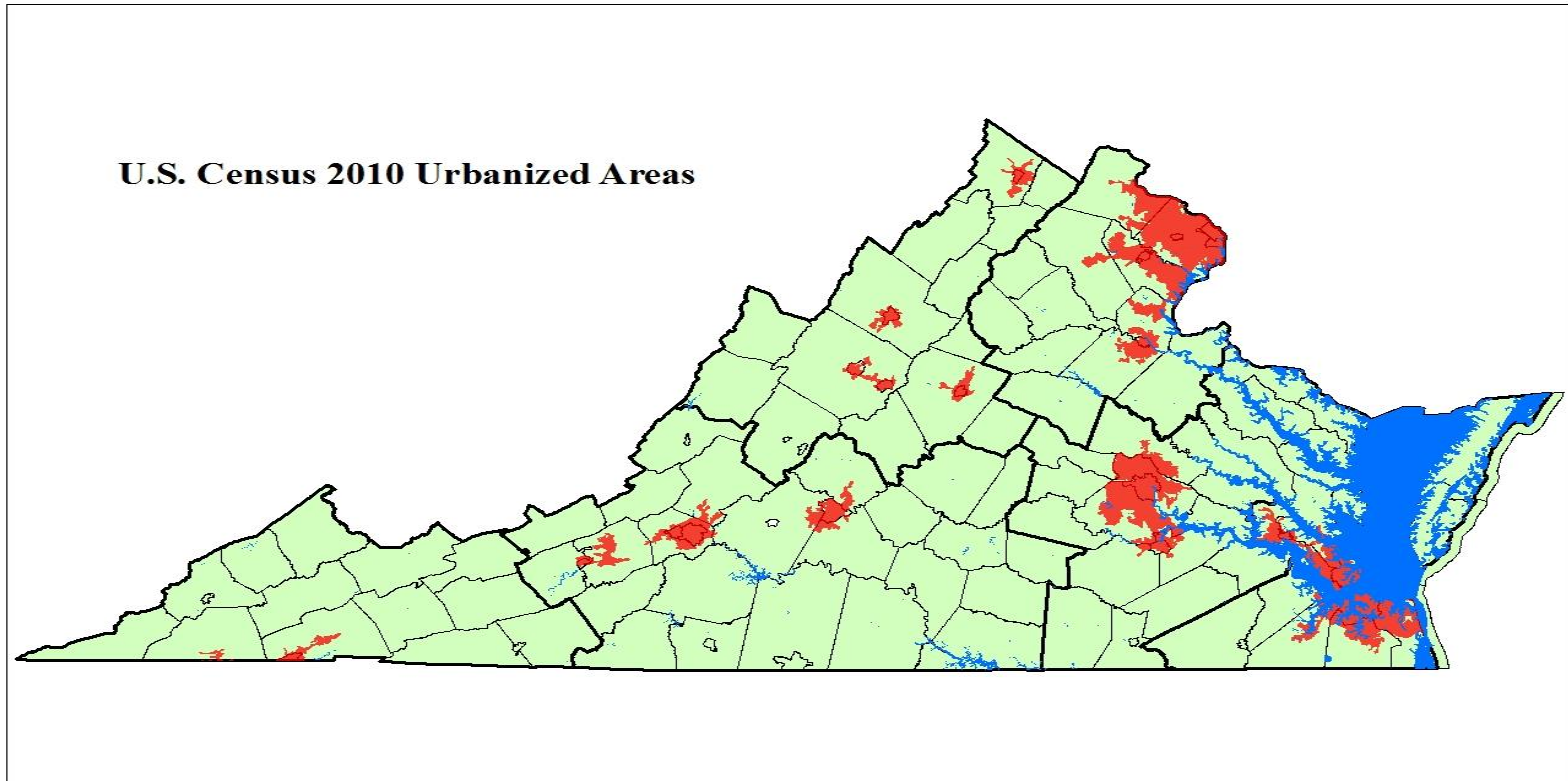
# Phase I MS4s

- Phase I Arlington County Permit reissued - June 2013
- EPA objected to Prince William and Chesterfield draft permit - May/June 2013
  - VDOT /County system interconnectivity issue
- Working to Resolve Issues:
  - VDOT coverage under the Phase II MS4 permit -Nov 2013
  - VDOT Individual Permit Application received – March 2014
  - Further discussions with MS4s and EPA
- Goal to resolve in the next month and then reissue permits.

# Small Phase II MS4s

- In 1999 Phase II Storm Water Rule became final
  - Required operators of small MS4s in "urbanized areas" (2000 census) to obtain a permit.
  - Small MS4s in Virginia first covered in 2003
- Small MS4s include storm sewer systems operated by cities, counties, towns, federal facilities and state facilities.
- Permitted under the reissued General Permit for Discharges from Small MS4s effective July 1, 2013.

# Small Phase II MS4s



- 89 existing Small MS4s.
- 16 newly designated Small MS4s (2010 census)
  - registration statements required by February 2014

# Recently Designated Small MS4s

Fauquier County

Town of Warrenton

Germanna Community College –  
Fredericksburg Campus

U.S. Geological Survey Headquarters

Arlington County Public Schools

VA Dept. of Juvenile Justice –  
Consolidated MS4s at Bon Air

Petersburg Federal Correctional  
Complex

Fort Monroe Authority

Augusta County

City of Staunton

City of Waynesboro

Montgomery County

City of Radford

Radford University

Town of Abingdon

Virginia Highlands Community  
College

## DEQ Review Status

5 ~ Ready for approval

8 ~ Minimal comments

3 ~ Substantial comments



# **Chesapeake Bay TMDL Action Plan Guidance**



# Background

- Two SAG meetings held on 08/15 and 09/26
- 4<sup>th</sup> draft substantially restructured for clarity
  - Calculation methodologies moved from body to appendices
- Guidance will be issued in April 2014
- Outreach to MS4 Planned in May/June 2014

# Overview - Purpose

- Phased Approach to reductions (WIP) - permittees must achieve 5% of Level 2 scoping run reductions during first permit cycle.
- Special Condition in MS4 permits lists the elements that must be included in the Action Plan
- Submitted as part of the Annual Report
- Document provides guidance for permittees on how to meet the Special Condition requirements, perform BMP calculations

# Overview - Required Reductions

- Scope
  - 5% reduction for “existing development” (sources as of June 30, 2009)
  - Reductions to account for an average land use cover greater than 16% used for post development SWMF design on sites greater than or equal to 1 acre
    - 5% incremental reduction for new sources (development and redevelopment between July 1, 2009 and June 30, 2014)
    - Offsets for grandfathered projects (sources after July 1, 2014)

# Overview - Required Reductions

- Calculating required reductions
  - Determine size of MS4
  - Regulated acres of pervious and impervious of service area
  - Permit tables

Subsource	Pollutant	Total Existing Acres Served by MS4 (06/30/09)	First Permit Cycle Required Reduction in Loading Rate (lbs/acre) <sup>1</sup>	Total Reduction Required First Permit Cycle (lbs)
Regulated Urban Impervious	Nitrogen	1000	0.04	40
Regulated Urban Pervious		1000	0.02	20
Regulated Urban Impervious	Phosphorus	1000	0.01	10
Regulated Urban Pervious		1000	0.002	2
Regulated Urban Impervious	Total Suspended Solids	1000	6.67	6670
Regulated Urban Pervious		1000	0.44	440

# Overview: Eligible BMPs & Credit Opportunities

- Structural BMPs
  - VA Stormwater Clearinghouse
  - Bay Program Retrofit Curves
  - Bay Program Established Efficiencies
- Land Use Changes
  - Forest Buffers
- Urban Stream Restoration
- Urban Nutrient Management
  - Unregulated or privately owned land
- Credit Trading

# Overview

- Reporting Control Measures:
  - Implementation for this permit cycle
    - Section I.C.4 of the General Permit
  - Historical Data
    - Not a requirement
- Reapplication Requirements
  - How permittees will meet the 40% (additional 35%) reductions by the end of the second permit cycle