

# Stormwater Management Requirements and Urban Development Areas

Presentation to  
Joint Subcommittee to Study Development and  
Land Use Tools in Virginia's Localities

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Presented by:

*Jack Frye,*

*Director, DCR Division of  
Soil and Water Conservation*



# Urban Development Area Requirements

- Must accommodate 10 to 20 years of localities' expected residential and commercial growth
- Must provide reasonably compact development (4 residential units/acre; 0.4 FAR for commercial development)
- Similar to typical intensity of development many localities currently identify for growth areas or growth centers.
- Incorporate many elements that mitigate impacts to water quality through protection of undeveloped land and reducing impervious cover through concentrating development and reduced need for pavement.



# Virginia's Stormwater Management Requirements

## Stormwater Management Act of 2004

- Code of Virginia Sec. 10.1-603
- Consolidated stormwater programs from multiple agencies into DCR.
- Authorizes future transfer of stormwater permitting to localities. [federal general permit coverage]
- Requires localities with MS4 permits and localities within the CBPA Area to adopt a local stormwater management program (107 localities); all others may adopt or defer to DCR to implement.
- Soil and Water Conservation Board authorized to adopt regulations for stormwater management programs in Virginia.
- Authorizes regulations to improve standards for stormwater management for water quality and quantity.

# Proposed Stormwater Management Regulations

- Authorized by Stormwater Management Act of 2004
- Board authorized regulatory action – July 2005
- Technical Advisory Committees met between May 2006 and September 2008 [17 TAC meetings, 4 subcommittee meetings, 13 technical advisory group meetings, 7 charrettes, 3 public meetings]
- TAC participants included: local gov., engineers, conservation orgs, development community, etc.
- September 2008: Soil and Water Board approved draft **proposed** regulations
- Spring 2009 –public comment begins for proposed regulations
- Fall 2009 (target) – regulations effective
- Localities have 12 - 18 months to adopt ordinances to implement regulations. [Optional localities have 6 months to decide if they will implement or defer to DCR to implement.]



# Proposed Stormwater Management Regulations

## Changes reflected in proposed regulations.

- Change from “Simple Method” to a “Runoff Reduction Method”:
  - ✓ Accommodates variations in runoff based on land cover conditions
  - ✓ Includes more variables and is more accurate
  - ✓ More closely matches real-world runoff conditions
- Accommodates the Act requirement to “replicate ... predevelopment site hydrology”



# Changes Reflected in Proposed Stormwater Management Regulations

- **Stormwater Quality Standards**
  - ✓ Consistent State-wide
  - ✓ Establishes a phosphorus runoff target for all development (.28 lbs/acre/year) (current watershed limit: .45 lbs/acre/year)
  - ✓ Redevelopment requires a 20% reduction in phosphorus
- **Stormwater Quantity Standards**
  - ✓ Stream channel protection standards based on one-year 24-hour storm (current standard: 2-year storm)
  - ✓ Flood protection standards based on 10-year storm event (same as current standard)
- **Incorporates better site design and LID techniques into site design process**
- **Allows for regional approaches, pro-rata fees, exceptions, etc.**

# UDA Requirements and Proposed Stormwater Management Requirements - Key Areas of Compatible

Urban Development Areas  
Sec 15.2-2223.1.B.

“The comprehensive plan shall further incorporate principle of **new urbanism** and traditional neighborhood development which may include: ... satisfaction requirements for stormwater management ... and **reduction of subdivision street widths...**”

Runoff Reduction Method  
in Proposed Reg's.

- Reduction of impervious cover (eg. narrower streets) reduces BMP requirements
- Benefits derived from early planning
- Regional approaches encouraged
- Stream stabilization and flooding control

# Analysis of Impacts of Proposed Reg's on Higher Density Development

- Initial evidence from studies indicates addressing stormwater requirements can be compatible with higher density development.
- Helped by upfront site planning, incorporation of LID Techniques, re-use of rainwater, better site design.
- Cost impact is currently being assessed.
- Initial design exercises showed that at some sites reducing the runoff volume to reduce pollution also helps to achieve the water quantity standards.
- Stormwater requirements will address all development – of all densities and intensities to varying degrees, both within and outside of UDAs.
- Based on public comments on the proposed regulations, DCR and Board will consider revisions to the regulations accordingly.

