

Stormwater Management in Virginia: Amendments to the Virginia Stormwater Management Program Regulations

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Acting Director**



- *State Parks * Soil and Water Conservation * Natural Heritage**
- * Outdoor Recreation Planning * Land Conservation**
- * Dam Safety and Floodplain Management**
- * Chesapeake Bay Local Assistance**

Why regulate Stormwater?

- Actual water quality monitoring still showing declines in stream health
- Pollutant loads from developed and developing lands continue to increase while loads from other sources are decreasing. (In 1985: 5% Total Phosphorus; In 2005: 30%)
- Today's standards still result in significant flooding and channel erosion
- Involves treating runoff during construction as well as long-term runoff post construction
- Concerns both Water Quality (pollutants carried off in SW runoff) and Water Quantity (volume and runoff velocity creating downstream flooding and channel erosion)
- Addressing SW management is major component to improving VA's rivers, streams, lakes, and Chesapeake Bay (along with addressing impacts from agriculture, sewage treatment plants, and air deposition)
- New EPA accountability measures and consequences for states for not meeting Chesapeake Bay pollution reduction milestones and TMDL
- Whatever is not addressed by SW will need to be addressed by municipal wastewater facilities, local SW systems, agriculture, air, etc.

State and Federal Authority

VA Stormwater Management Act (HB 1177) - 2004

- Consolidated into DCR and Virginia Soil and Water Conservation Board.
- Was administered by 4 boards, 3 state agencies. (3 of 4 boards and 2 of 3 agencies now reside within DCR)
- Board has authority to...”permit, regulate, and control stormwater runoff in the Commonwealth...and otherwise act to ensure the general health, safety and welfare of the citizens of the Commonwealth as well as protect the quality and quantity of state waters from the potential harm of unmanaged stormwater”.
- Board is authorized to:
 - adopt regulations that specify minimum technical criteria
 - establish minimum design criteria to control nonpoint source pollution and localized flooding
 - encourage low impact development designs, regional and watershed approaches, and nonstructural means for controlling SW
 - promote the reclamation and reuse of SW to protect state waters and public health and to minimize the direct discharge of pollutants into state waters
 - establish a statewide permit fee schedule set at a level sufficient to carry out its responsibilities under this article.

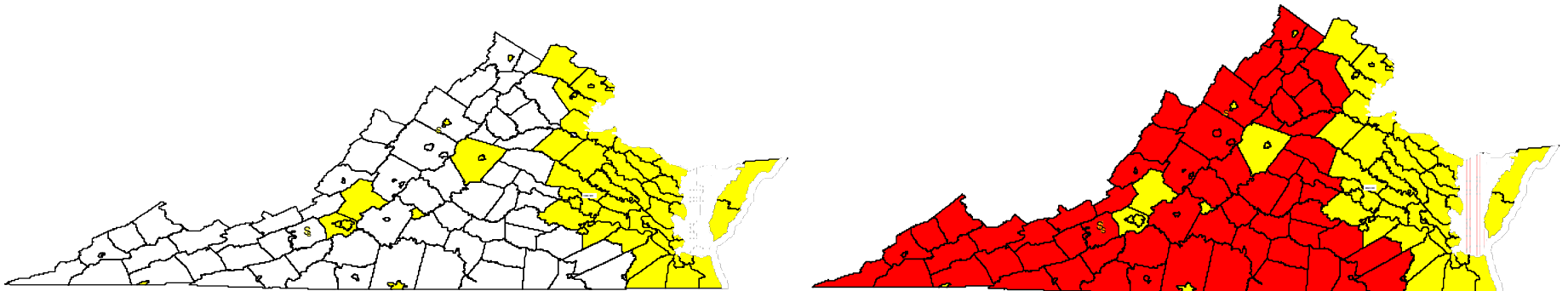
Federal Clean Water Act

- Received EPA authorization to administer federal CWA program January 2005
- Involves both new construction and MS4 systems
- Prohibits a permit holder from serving on state permitting board

Future administration of construction stormwater programs in VA

Localities with MS4 permits and localities within the CBPA Area must adopt a local stormwater management program. (yellow)

All other localities may elect to adopt a local SW construction program (Opt-in). Otherwise, DCR will operate a program within a locality. (red)



Regulatory Process

December 2005 - Process started

- Over 50 public meetings to develop regs and supporting documents; 2 Technical Advisory Committees plus subcommittees; Series of design charrettes (over 400 attended)
- Established BMP Clearinghouse with Water Center at VA Tech
- Worked with Center for Watershed Protection to develop Runoff Reduction Methodology and on SW practice design specifications
- Contracted with Virginia Tech economists to conduct an economic impact analysis
- Reviewed site design analyses
- Developed guidance to address the use of stormwater nutrient offsets

- **Summer 2009 - Formal Public Comment Period**
 - 5 public hearings across the state; Over 3400 public comments
 - Over 50 additional meetings with groups and individuals
- Director held two “Sounding Board” meetings with key stakeholders in September 2009
- Sept. 2009 Board meeting and took more **public comment** on possible changes
- October 5, 2009 Board **adopted and suspended regulations** to allow additional 30-day public comment on changes
- October 29 to November 25 , 2009 – Additional **public comment** period on Board adopted changes
- December 9, 2009 - Board adopted **final regulations; Governor approved**
- January 14, 2010 – Board responds to 25 petitioners and **will hold additional 30 day public comment period on changes adopted from February 15 to March 17**
- July 1, 2010 – **Statutory “Effective Date” of regulations**
- October 2011 and April 2012 – **Actual Implementation Begins should effective date not be changed**

Technical Criteria

- Criteria for locality-run SW programs and for DCR use when it administers a program.
- Two major components:
 - Water Quality (pollutants)
 - Water Quantity (volume, velocity)



Criteria for Local Construction Related Stormwater Programs

- Relates to locality-administered & DCR-administered programs
- Adoption procedures to be used by VA Soil & Water Conservation Board
- Locality adoption 15-21 months after effective date (October 2011 and April 2012 **ACTUAL Implementation Begins**)

Fees

- **Code of Virginia requires stormwater program to be funded by statewide permit fee schedule that is “set at a level sufficient to carry out its responsibilities”**
- **Fees proposed to be established at a level sufficient to support administration of local programs and DCR responsibilities**
- **Scaled based on disturbed acreage of project**

Water Quality Standards – Impacted by recent changes to EPA Bay pollution model

Original Proposal

- 0.28 lbs of phosphorus runoff per acre/per year statewide for new construction

October 5, 2009 Board Action

- Established separate design standards in Bay watershed (0.28 lbs of Phosphorus) and remainder of state (0.45)

October 23, 2009 – EPA released (preliminary) model projections different than those used to construct previous Tributary Strategies.

December 2009 Board Action

- **0.45 phosphorus design standard statewide**
- - Board had adopted this for Non-Bay areas in October. Similar design standard used since 1989
- - Runoff from entire site (impervious; managed turf; etc.)

- Board directed DCR to undertake a regulatory action and establish an Advisory Panel during 2010 to re-examine whether 0.45 is sufficient for Bay localities based upon completion of VA TMDL Implementation Plan.

Grandfathering of existing projects

- **Established new section on Grandfathering for projects that:**
 - **Meet requirements and obtain SW permit coverage by 7/01/10**
 - **Project would be grandfathered to 2014**
 - **If permits maintained, GF extended until 2019**
- **If governmental bonding or public financing has been issued for a project prior to July 1, 2010, the project will remain subject to today's existing criteria.**

Offsite compliance options

- Earlier proposal included 3 offsite options (pro-rata, watershed stormwater management plan, and developer site)
- 2009 General Assembly added 4th option (buying offsite certified nutrient credits)
- Board added 5th Option: Paying into a new State-level Buy-Down Fund; development achieving at least 0.45 could buy down remainder to 0.28
- State-level Buy-Down will remain in the regulation but not be available unless the Board establishes a future standard more stringent than 0.45 phosphorus standard in the Chesapeake Bay Watershed.

Inspection Requirements

- **Relaxed local inspection requirements and offered flexibility.**
- **Stormwater BMPs designed for single residential lots are not subject to local inspection requirements**

Fees to Administer Local Programs

- **Added flexibility: Qualifying local program may charge higher fees upon demonstration of need.**
- **Proposed regulations had already allowed for establishment of a lower fee where desired.**

Small Sites and Urban Development Areas

- **Should the Board establish a standard more stringent than 0.45 in the Bay Watershed, then UDA standards would apply**
- **Otherwise, not necessary as standards everywhere are 0.45**

Water Quantity Provisions to Address Impacts of Downstream Erosion and Flooding

- **Relaxed standard regarding velocity and volume of runoff from “forested condition” to “good pasture standard”**

Cost Considerations

- Costs vary considerably due to site factors (ex: soils and topography) and local provisions
- Early site assessment important to reduce costs
- Costs of addressing water quality impairments after-the-fact exceed the costs of addressing SW during development
- Lower costs from greater varieties of BMPs and increased BMP efficiencies
- Offsite options will reduce the costs of compliance
- VA Tech analysis did not take into account more recent offsite options or Board adopted amendments
- Board Actions will further reduce costs

Cost Analysis of Revised Regulations

- The Williamsburg Environmental Group (WEG) analyzed costs of compliance after the October Board Actions.
- WEG found that each site analyzed was able to achieve attainment with the water quality and water quantity requirements.
- The October Board Actions resulted in an average decreased cost of compliance for commercial sites by 33% and for residential sites by 37%.
- The December Board actions will very likely reduce compliance costs even further.