

## **Proposed revisions to the Virginia Stormwater Management Program Virginia Department of Conservation and Recreation June, 2009**

Following the 2004 passage of the Virginia Stormwater Management Act, the Virginia Department of Conservation and Recreation and the Virginia Soil and Water Conservation Board have worked to strengthen the state's stormwater regulations and, for the first time, locally address stormwater in each state's locality. These new regulations become a key component in Virginia's overall water quality strategy complementing advances in managing pollution from wastewater treatment plants and agricultural runoff. A public comment period is open on the proposed stormwater regulations through August 21, 2009.

### **Stormwater – Background**

- Stormwater (runoff from developed sites) is the fastest growing source of water pollution, according to the Chesapeake Bay Program. Nonpoint source, or runoff, pollution is the largest water pollution source and stormwater is the fastest growing segment of nonpoint source.
  - Stormwater picks up a variety of pollutants on its way to local waters, including nitrogen, phosphorus, sediment, heavy metals, oil, grease and other toxics. These come from lawns, parking lots, streets, construction sites and roofs.
  - A typical city block produces nine times more runoff than a forested area of the same size.
  - A 200,000 square foot retail area (either a large “big box” store or a small to medium size strip shopping center) is generally supported by 12 acres of parking. This shopping area would produce 309,694 gallons of stormwater per one inch of rain. With Virginia's total average rainfall of 40-46 inches, that is 12.4 to 14.2 *million* gallons of stormwater per site, per year.
  
- The Chesapeake Bay Program reports that over the last decade population in the Chesapeake Bay watershed has increased by eight percent. During that same period, impervious surfaces (rooftops, sidewalks, parking lots, streets) have increased by 41 percent.
  - When as little as 10 percent of a small drainage area is impervious, there are measurable impacts on water quality and aquatic species.
  - According to the National Research Council the changes in hydrology and rapid stormwater discharge created by development has led to “water quality and habitat degradation in virtually all urban streams.”
  - Impervious surfaces also play a role in downstream flooding.

### **Proposed regulations open for comment**

Several technical committees made up of representatives from local governments, developers, contractors and environmental groups have helped develop the proposed regulations. DCR conducted more than 50 public meetings attended by more than 300 people. The Center for Watershed Protection and Virginia Tech were among the institutions that provided technical support and economic benefit analysis in developing the proposals. If adopted the new regulations will:

- Determine the requirements that localities need to meet in order to operate a “qualifying local” program. This is similar to how the Virginia Erosion and Sediment Control Law has been administered for 30 years.

- Revise the statewide stormwater fee program providing localities no less than 70 percent of the fees generated to run their local programs.
- Significantly improve stormwater quality and quantity standards.
- Lower the statewide phosphorus standard from 0.45 lbs./acre/year to 0.28 for new construction. Phosphorus is seen as a leading indicator for other pollutions such as sediment, nitrogen and heavy metals. The rate for forested land is 0.11.
- Raise the required phosphorus reduction from 10 percent to 20 percent for redevelopment projects.
- Improve stream channel and flood protection.
- Provide developers with a new methodology, more efficient best management practices including low impact development techniques and rain water harvesting and off-site reduction options that treat stormwater as a usable resource and help reduce costs associated with meeting the proposed regulations.

### **Important considerations**

- These proposed regulations and standards are based on the best science available including the Chesapeake Bay watershed model and the nationally recognized ‘energy balance equation’ to determine water quantity.
- These new stormwater regulations, bringing local management to all parts of the state, increasing water quality standards and introducing quantity standards are part of Virginia’s overall water quality approach, which addresses all main water pollution sources – point sources (wastewater, industrial), agricultural and urban nonpoint sources. These regulations complement ongoing efforts with wastewater treatment plants and the agricultural community. They were developed so that each source is managed equitably.
- Analysis conducted by Virginia Tech and others have shown that the proposed technical criteria are generally attainable on-site. A stormwater offset program is also being established to assist with obtaining needed reductions off-site at a reasonable cost.
- Under the proposed timetable, these proposed regulations would not go into effect prior to July 1, 2010. Local programs would not be operational until 2011-12. DCR will continue to issue stormwater general construction permits until that time.

**For more information on stormwater and for links to review the proposed regulations and learn how to comment, go to [www.dcr.virginia.gov](http://www.dcr.virginia.gov); then click on “Policy, Regulations and Public Comment.”**

