



Position Paper on Proposed Stormwater Management Regulations

SUMMARY

Water quality is one of the most critical environmental issues facing the State and Chesapeake Bay. The Virginia Department of Conservation and Recreation (DCR) has worked hard to produce a set of regulations that have the potential to significantly address this issue while balancing a number of often competing positions.

The Virginia Chapter of the American Planning Association (APA Virginia) supports the overall purpose of the draft regulations and the general improvement to the requirements for managing the stormwater impacts of new development in the Commonwealth but feels that greater attention must be paid towards the potential unintended consequences on Virginia's urban areas and their capacity to absorb continued and inevitable population growth. APA Virginia is especially concerned that the technical criteria contained within Part II of the draft stormwater regulations do not adequately support the potential water quality value of existing urban areas and those "new urbanism" scale areas required of all fast-growing localities in Virginia by §15.2-2223.1 of the *Code of Virginia*. The increased pollutant removal requirements place these types of places at a disadvantage without a more robust off-site allowance or pro-rata program.

The draft regulations set up a scenario in which pollutant loading to waterways is reduced through the gradual redevelopment of urban areas with accompanying requirements for stricter pollutant removal from stormwater while at the same time, as the state's farms and forests are converted to developed land uses, water quality and quantity are managed by engineered stormwater controls. This scenario is problematic because the burden of the regulations themselves creates a disincentive to redevelop urban areas. Since expanding the suburban footprint outweighs any gains from other water quality improvement efforts, the regulations' unintended promotion of sprawl works against itself. Moreover, while higher density nodes can be connected by efficient transit systems, the large lots with land intensive structural Best Management Practices (BMP) required by the regulations force a dispersed development pattern that can only be served by automobiles, which ultimately results in even greater pollutant loading to the Bay as well as increased carbon emissions that contribute to climate change.

APA Virginia recommends changes be made to 4 VAC 50-60-96, which allows for Comprehensive Watershed Stormwater Management Plans, to support smart growth policies that would give credit for infill, redevelopment, and urban development areas as these development types are where higher densities support overall water quality goals by capturing population growth and reducing dispersed development patterns. Water

quality, transportation, and the creation of high quality livable environments all demand a coordinated planning effort that recognizes the overlapping benefits to each set of goals provided by smart growth planning principles.

IMPACTS OF PART II TECHNICAL CRITERIA ON EXISTING AND NEW URBAN AREAS

The proposed changes to stormwater regulation in Virginia raise the greatest concern in their potential impacts on existing urban areas as well as new high density urban development areas such as are required under the Urban Development Area (UDA) provisions of §15.2-2223.1 of the *Code of Virginia*. These development areas are expected to play important roles in local and regional economic development and in relieving the state's congested transportation system. Both also have potential roles in addressing water quality and other environmental concerns.

Virginia's existing urban areas face potentially the greatest impact from the proposed regulation. The *Economic Impact Analysis of Revisions to the Virginia Stormwater Regulation* commissioned by DCR, reports that the new regulations will result in a significant increase in the cost of managing stormwater; however, it is unable to quantify the exact economic impact of the proposed regulations. In addition, the charrettes that DCR has conducted across the state exploring the potential cost implications of the new technical requirements have consistently shown substantially increased costs for stormwater management. Generally, the cost of managing stormwater increases as lot size decreases and imperviousness increases. Small lot sizes with high imperviousness are the standard urban condition correlating to the highest costs for stormwater management and treatment. Because the regulations strongly favor on-site treatment, each individual development in an existing urban core must pay this higher cost. In many of Virginia's urban cores, higher development costs and higher market risk make these projects challenging developments to begin with. The increased costs associated with the new regulations may further compromise the ability of existing urban areas to absorb new development. Conversely, with larger lots and greater ability to utilize preserved forested areas and other open space, suburban greenfield development faces lower stormwater costs creating an incentive to develop greenfield sites on the suburban fringe while creating a disincentive to develop in the urban core.

There are only a limited number of structural BMPs available that are appropriate to urban and new urbanism environments. Urban land is generally valuable and urban design principles demand continuity in building frontages and street systems in order to promote walkability and general livability. This design imperative rules out land-intensive BMPs or the preservation of extensive areas in a natural, forested state. Unless managed as parkland, which limits an area's functionality as a stormwater BMP, these areas are effectively vacant space. Vacant space in urban environments tends to attract crime and to detract from the sense of place that is crucial for vibrancy and success in urban design. While there are exceptions to this rule, generally these design considerations rule out wet and dry ponds, constructed wetlands, vegetated buffers, grass swales, and other commonly used, and relatively inexpensive BMPs. Many of Virginia's

highly urban areas are also in the coastal plain where various forms of infiltration techniques have only limited applicability. Green roofs, rainwater harvesting and other methods now incorporated that treat rainfall close to where it falls while reducing total runoff are commendable; unfortunately the regulations appear to place a significant burden on local governments to ensure that these distributed systems under disparate ownership are adequately and properly maintained and perpetuated.

APA Virginia believes that the state should be seeking a means to encourage higher density development and infill or redevelopment as a strategy to protect water quality as well as the public investments in infrastructure rather than encouraging, inadvertently or not, the perpetuation of sprawl. Instead, under the proposed new stormwater regulations, it is both easier and less expensive to build a brand new downtown on a greenfield site than it would be to revitalize an existing downtown with new development of the same size. Worse still is that the easiest and least expensive option is to develop low density, sprawling commercial and residential areas. High-density developments, as required in certain Virginia localities as a result of the Urban Development Area provisions of §15.2-2223.1 of the *Code of Virginia*, will be more difficult to develop under these regulations despite their known potential benefits in protecting water quality.

SMART GROWTH AS A STORMWATER BMP

The basic premise of Smart Growth is that population growth should be accommodated as efficiently as possible within watershed areas that have already been disturbed. The Center for Watershed Protection has reported that once a watershed has reached a 10% developed threshold, water quality begins to decline. Low-density development expanding across the landscape quickly crosses that threshold for an ever-increasing number of small watersheds. By focusing the same amount of population growth in smaller areas at higher densities, the impact can be limited to a smaller number of watersheds by using land and the impervious area associated with development more efficiently. The same concept is used in cluster developments, which are recognized in the new buffer manual as a BMP through the credit provided for undeveloped forest set-asides. Smart Growth simply applies that same idea on a regional scale. The principles behind this approach are well documented on the EPA National Pollutant Discharge Elimination System webpage and in the EPA policy document, “Using Smart Growth Techniques as Stormwater Best Management Practices.” The case for high-density and redevelopment as an effective set of tools for protecting water quality is laid out in a number of different documents by the EPA and other environmental policy organizations.

CHAPTER POSITION

APA Virginia recognizes that the changes to the technical criteria of the Stormwater Regulations are essential to any attempt to reverse the trend of declining water quality in the Commonwealth and especially the Chesapeake Bay. APA Virginia believes that the Soil and Water Conservation Board should view this as an opportunity to support a

smarter and more sustainable growth strategy for the Commonwealth. The new stormwater regulations can play a role in this change through a more robust use of the Comprehensive Watershed Stormwater Management Plans (CWSMP) provisions linked directly to local comprehensive plans and the mandated Urban Development Areas.

While the Chapter applauds the baseline concept of treating the raindrops as close to where they fall as possible, APA Virginia is concerned that the emphasis on using undeveloped spaces to reduce runoff conflicts with the mandated use of new urbanism principles in the Commonwealth as well as the unintended consequences of potentially making greenfield development more economically feasible than brownfield redevelopment. APA Virginia believes that a new section of the BMP Manual should be created that incorporates many of the innovative, smart growth BMPs described on the US Environmental Protection Agency NPDES website. These BMPs should be available as part of a CWSMP within locally-designated UDAs with a designated pollutant removal credit. APA Virginia believes that it is imperative to include credits for the pollutant removal resulting from the amount of new impervious area avoided through this type of development over a conventional low-density development. Direct credits should also be available for lands placed under conservation easement as part of the transfer of development rights. By tying these credits to the UDAs, the stormwater program becomes a positive contributor to other state and local infrastructure investments, further reducing water quality impacts.

APA VA would welcome the opportunity to work with DCR in crafting these proposed additions to the BMP Manual as well as in other regulatory or program efforts tied to land use issues in the state. Through our membership of over 1,500 local, state, and private sector planners we have access to a wide range of experience and a network of on-the-ground professionals in all areas of the state. Water quality is one of the most important issues facing the state and we recognize the importance of planning now for healthier state waterways and Chesapeake Bay in the future.



VIRGINIA CHAPTER OF THE AMERICAN PLANNING ASSOCIATION

OUR MISSION:

We promote planning as the foundation for effectively addressing the physical, economic and social changes taking place in Virginia. The Virginia Chapter of the American Planning Association (APA Virginia) is committed to increasing awareness about planning's many benefits, and enhancing its practice throughout the Commonwealth.

WHO WE ARE:

APA Virginia is over 1,500 practicing professionals from the public and private sector, as well as academics and students. The American Planning Association (APA) is a nonprofit public interest and research organization committed to urban, suburban, regional, and rural planning. APA and its professional institute, the American Institute of Certified Planners (AICP), advance the art and science of planning to meet the needs of people and society.

MAKING GREAT COMMUNITIES HAPPEN:

APA Virginia will support state-level planning policies that make Virginia and its communities the best place to live, work and play. Sound planning offers a key to making Virginia the best place it can be for all Virginians. Every region requires planning that promotes good jobs in livable communities. Faster growing regions have the added need for planning that recognizes pressures that are unprecedented in Virginia's history. Good planning actively involves the people of a community in the process; it combines their input on what is "valuable" for a good community with the technical facts brought by professionals and scientists. Sound planning includes an understanding of the differences between technical and value judgments and blends both appropriately to recommend a direction that moves a community toward the best place it can be for its citizens.