Proposed Amendments to Parts I, II, III, and XIII of the Virginia Stormwater Management Program Regulations

Joseph H. Maroon
Director

DCR
Virginia Department of Conservation & Recreation

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

Key Points

- Stormwater runoff is a significant contributor to water quality problems in Chesapeake Bay and Virginia waters.
- Contributes to closing beaches, shellfish beds, downstream flooding, channel erosion, etc.
- Some localities have standards exceeding proposed state rules; many have NOT addressed stormwater runoff
- Nearly 4 year regulatory process
- One of most open and inclusive processes ever

- Virginia is not alone; EPA and many states are aggressively addressing pollution impacts from stormwater
- EPA establishing new accountability measures for states along with consequences for not meeting Ches. Bay pollution reduction milestones
- Additional changes to regulations being recommended by DCR to address key issues

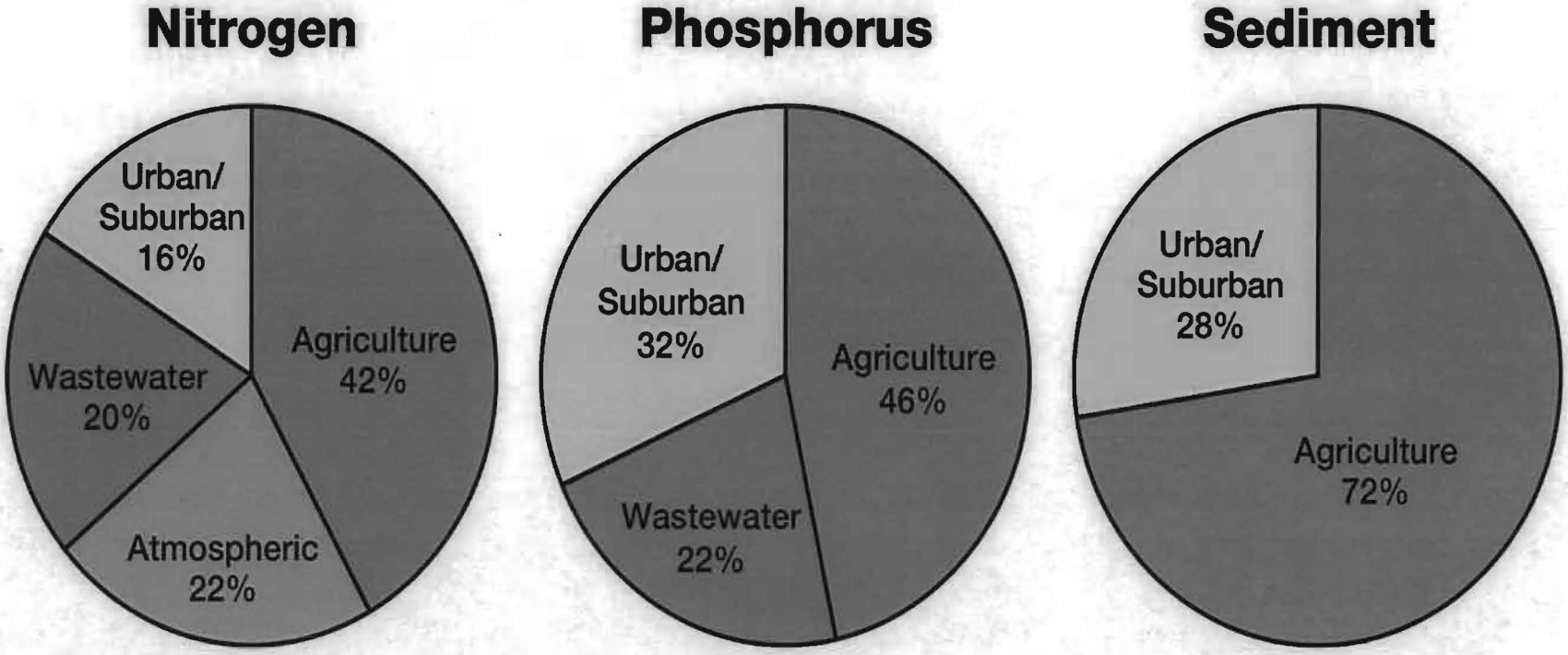
A Lot of Change Going On in the Bay States

STATE	NEW REGS	NEW MANUAL
DC	YES	YES
DE	YES	YES
MD	YES	?
PA	NO	YES
VA	YES	YES
WV	?	YES

Why regulate Stormwater?

- Regulated for 20 years in areas east of I-95 covered by Bay Act or Larger Municipalities covered by federal MS4 permit. Not addressed statewide
- Actual water quality monitoring still showing declines in stream health
- Today's standards still result in significant flooding and channel erosion
- Urban nutrient and sediment loads becoming bigger slice of the Bay pie (In 1985, 5% Total Phosphorus; In 2005, 30%)
- 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 SWM is key component to improving VA's rivers, streams, lakes, and Chesapeake Bay (along with impacts from agriculture, point sources, and air deposition
- Regulations aimed at reducing the impacts from new construction; even more stringent regulations would be required to have no impact

Nutrient and Sediment Sources



SOURCE: EPA Chesapeake Bay Program "State of the Chesapeake Bay Program: Summary Report to the Chesapeake Executive Council" 11/20/08.

- Pollutant loads from developed and developing lands continue to increase while loads from other sources are decreasing.

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.

- 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

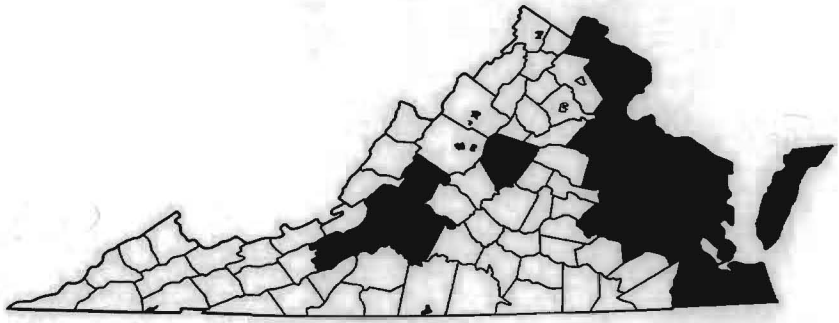
- Received EPA authorization to administer federal CWA program 1/29/05

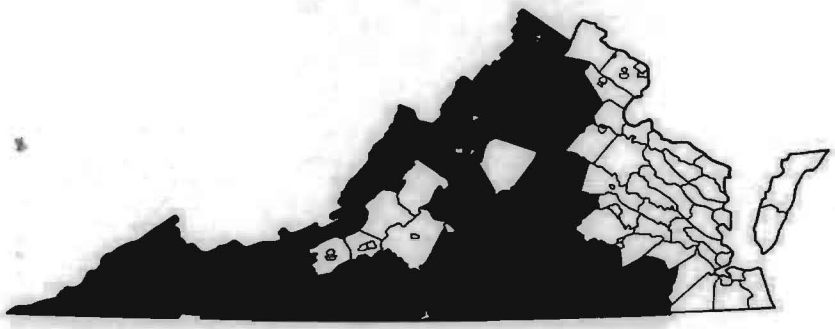
- Involves both new construction and urban storm systems

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.

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





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Regulatory Process

- Process started December 2005
- One of the most inclusive and open regulatory processes
- Over 50 public meetings
- 2 Technical Advisory Committees plus subcommittees
- A series of design charrettes (over 400 attended)
- Established BMP Clearinghouse with Virginia Water Resources Center, VT
- Worked with nationally-acclaimed Center for Watershed Protection and the Chesapeake Stormwater Network to develop Runoff Reduction Methodology and new and updated SW practice design specifications

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- Contracted with the Department of Agricultural and Applied Economics at Virginia Tech to conduct an economic impact analysis

- Reviewed site design analyses

- Developed guidance to address the use of stormwater nutrient offsets

- September 2008, Virginia Soil and Water Conservation Board authorized DCR to go to public comment

- Legislation in 2009 session to delay effective date to July 2010 and give localities more time to adopt

- Public Comment Period (Summer 2009)
  - 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

- Board meeting and public comment Sept. 17; Final Action October 6

Part II: Technical Criteria

- Criteria that will be employed by locality-run stormwater programs and by DCR when it administers a program.
  - Two major components:
    - Water Quality
    - Water Quantity

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Water Quality
Technical Criteria

- New Development design std of .28 lbs/acre/year for phosphorus.
  - Phosphorus removal will achieve reductions of N and sediment
  - Current standard is .45 lbs/acre/year
    - Load for a forested condition is ~.11 lbs/acre/year
  - Standard represents an average loading to maintain water quality based on Virginia's Tributary Strategies

- Redevelopment: 20% improvement over the predevelopment load.
  - Current standard is 10% from predevelopment load.
  - Tributary Strategies indicate a need for a 44% reduction.

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Water Quantity Technical Criteria

- Current regulations still allow channels to become degraded
- Developed with assistance from Water Quantity workgroup and TAC
- Requirements to minimize Stream Channel Erosion
- Aimed at reducing Downstream Flooding

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Offsite Compliance Options

- Local comprehensive watershed stormwater management plan
- Local pro-rata fee
- On nearby property controlled by developer
- Nonpoint Nutrient Offset program [HB2168]

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Part III: Local Construction SW Programs

- Contains requirements for locality-administered & DCR-administered programs
  - Locality adoption projected to occur between October 2011 and April 2012

- Also contains local program authorization and review procedures to be used by the Virginia Soil and Water Conservation Board

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Part XIII: Fees

- Code of Virginia requires stormwater program to be funded by permit fees
- Fees proposed to be established at a level sufficient to support administration of local programs
- Minimum 70% go back to local program; Proposal will return 72% to localities and remainder to DCR for program implementation
- Scaled based on acreage of project

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Addressing Public Comments

Should same water quality standards apply to Ches. Bay and the Southern Rivers?

DCR Recommendation:

- Separate standards should apply (0.28 standard in Bay region; 0.45 for non-Bay areas)
- Localities may elect to use a stricter standard. (ex: Swift Creek Reservoir 0.22)

Should same standards exist for small sites and redevelopment sites?

DCR Recommendations:

- Small Sites (less than 1 acre disturbance) would be held to the statewide 0.45 standard
- Redevelopment sites disturbing less than 1 acre would improve 10%, rather than 20%

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Addressing Public Comments

Will applying the stormwater standards in Urban Development Areas affect growth patterns?

- Stormwater requirements are only one of many factors affecting growth patterns.
- *"I can tell you that as someone attempting to deal with the consequences of sprawl, manage growth…I wish there was any ordinance and regulation that could have the dramatically sweeping affects that are being claimed by those opposed to this. It just is not true. All regulations and ordinances no matter how grandiose their proponents or their opponents want to make them are small pieces in a very large puzzle."*

  - former chair, Coalition of High Growth Communities

DCR Recommendations:

- Within a UDA, provide locality with flexibility to establish a standard b/w 0.28 and 0.45 in order to promote smarter growth

- UDA standards can be based on density, level of imperviousness, mixed-use and transit oriented development potential, proximity to the Chesapeake Bay or local waters of concern, presence of impaired waters, etc.

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Addressing Public Comments

Will the State allow for additional offsite compliance options?

- Current proposal includes 3 offsite options
- 4th added by 2009 GA (nutrient offset banks)

DCR Recommendations:

- Recommend Offering 5th Option: New State-level Buy-Down
- Developer's discretion to comply onsite or pay difference at a set fee
- Similarities to proposal by HBVA but will NOT allow backsliding, recognizes preference for protecting local waters, use of funds
- May be used where other options not available or if locality allows
- Use funds for local urban SW improvements and retrofits; long-term agricultural conservation practices; purchase existing offsets

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Addressing Public Comments

Should the final regulations provide for Grandfathering of existing projects?

- Not specifically addressed in current proposal
- However, anyone obtaining coverage under the existing Construction General Permit will be held to today's standards until the end of permit cycle on June 2014

DCR Recommendations:

- Establish new section on Grandfathering
- Grandfather multiple-phase projects that:
  - File with or obtain approval from a local government of their plan of development by January 1, 2010; and
  - Obtain SW permit coverage by July 2010
- Project would be grandfathered to June 2014
- If permit coverage is continuously maintained, the project will remain subject to today's existing criteria until June 2019

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Cost Considerations

- All project cases studied were able to achieve requirements
- 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 DCR Recommended Amendments

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Remaining Process

1. Completed comment period & public hearings

2. September 17: Present DCR recommendations to address key issues to Board; additional public comment

3. October 6: Final adoption by Board

4. By December: EPA oversight; Governor approval

5. July 2010: Effective Date but on-the-ground impact is phased-in when local program adopted

6. October 2011-April 2012: Approval of local programs by Board

DCR

David McGuigan

Comments from Region III of the Environmental Protection Agency to the Virginia Joint Commission of Administrative Rules On Proposed Regulations for the Virginia Stormwater Management Program September 16, 2009

Introduction

Region III of the Environmental Protection Agency appreciates the opportunity to provide comment to the Virginia Joint Commission of Administrative Rules on the proposed Virginia Stormwater Regulations. EPA review and comments are limited to the version of the regulation that was the subject of EPA's August 21, 2009 letter to Virginia's Department of Conservation and Recreation. It is EPA's opinion that this version of the regulations facilitate future development in Virginia and that possible future urban retrofits will be minimized therefore saving municipalities and taxpayers significant expenditures in the future. EPA understands that modifications are being proposed. EPA has not received an official copy and has not had an opportunity to review these revisions. However, we are concerned that the proposed modifications will adversely affect enforceability and the water quality goals. In the comments that follow, EPA intends to address its role in administering the Clean Water Act (CWA), how these proposed regulations meet the water quality requirements of the CWA, and the consequences if these regulations are not sufficiently protective of water quality.

Clean Water Act

EPA is charged with administering the National Pollutant Discharge Elimination System Permit Program of Clean Water Act (NPDES) under CWA § 402, 33 U.S.C. § 1342. Discharges of pollutants into waters of the United States are prohibited except as in compliance with specified sections of the CWA. See CWA § 301(a), 33 U.S.C. § 1311(a). The principal way for such a discharge to satisfy the CWA is for the discharger to obtain an NPDES permit. Among other things, such a permit is to include technology-based and water quality-based effluent limits. It is the permitting agency's responsibility to include limitations that control all pollutants that it determines are or may be discharged at a level that will cause or contribute an excursion above any water quality standard.

EPA has authorized the Commonwealth of Virginia to administer the NPDES program. Though it has approved the Commonwealth's NPDES program, EPA maintains independent authorities and oversight responsibilities. In its oversight capacity, EPA may review the state's proposed permits to ensure that they conform to federal requirements. If EPA finds that a state's proposed permit does not comply with applicable requirements, then EPA may object to the issuance of such permit. If the state does not resolve the objection in a timely manner, then exclusive authority to issue the permit passes to EPA.

Similarly, EPA reviews state statutes and regulations prior to approving a state NPDES program and as a result of a state NPDES program modification. If, following a public hearing, EPA determines that a state in not administering the NPDES program in accordance with the CWA, then state authorization can be withdrawn if the state fails to take appropriate corrective action within a reasonable time and EPA would be responsible for administering the program in the state.

Proposed Storm Water Regulations and their Relationship to the NPDES Program

EPA regulates municipal stormwater discharges through the permit programs for Stormwater Construction and the Municipal Separate Storm Sewer Systems (MS4). These two permitting programs have specific requirements regarding the utilization of post construction Best Management Practices (BMPs). These BMPs must ensure that water quality is protected. In impaired waters or waters that are tributary to impaired waters, the required BMPs must be sufficiently stringent that the discharge will not cause or contribute to receiving water or down stream water impairment. If the proposed BMPs are inadequate, then a permit cannot be issued.

The Virginia NPDES Construction and MS4 permits require the permittee to meet the requirements of the Virginia Stormwater Regulations. This is particularly true with respect to General Permits. These regulations, therefore, are

the operative requirements of the Construction and MS4 permit programs, and as such, EPA has a responsibility to review these regulations to ensure that they are protective of water quality. If these regulations are not protective of water quality, the Commonwealth cannot rely upon them to meet federal water quality requirements in NPDES permits. This would require the Commonwealth or the permitting agency to develop site specific permits which is a time and resource consuming endeavor.

Specific Comments Regarding Virginia's Proposed Storm Water Regulations

Our review and comments are limited to the proposed regulations that were the subject of our August 21, 2009 letter to the Virginia Department of Conservation and Recreation.

EPA understands that the performance standard of 0.28 lbs/acre of phosphorus has been established by estimating what would be the maximum load allowable from development in order to meet the Chesapeake Bay Tributary Strategy goals after all required BMPs have been employed. This being the case, the 0.28 lbs/acre of phosphorus will be protective of water quality as other required BMPs are put into place. This will facilitate new development, while protecting water quality.

However, EPA would like to offer the following comments:

- **4VAC50-60-65 F and G – Utilization of offsite controls**. Where not feasible, EPA supports the use of off-site controls to meet post-development pollutant loads, provided that the use of off-site controls does not lead to the impairment of local water quality. However, credits for offsite controls can only be generated after the installation of required BMPs necessary to meet water quality objectives. For example, as discussed earlier, the 0.28 lbs/acre of phosphorus assumes that this is the necessary load to meet water quality objectives after all necessary BMPs are put into place. Therefore any credit necessary to achieve the 0.28 lbs/acre can only be earned after all baseline BMPs have been established at the site where the credits are to be generated.
- **4VAC50-60-63 A(2) – Redevelopment Standard**. EPA believes that the 20% redevelopment standard may be inadequate to achieve water quality goals.
- **4VAC50-60-122 Qualifying Local Program Exceptions** - There is need for greater specificity on when an exception is appropriate. Given that the permittee can find relief through the use of offsite controls, the granting of exceptions should be rare. These regulations must establish a more detailed standard so that the local program can be evaluated in the appropriate use of exceptions.
- **Grandfathering Development Activities**: It is EPA's view that projects that are currently operating under existing approved permits should be grandfathered. Those projects that are permitted after promulgation of these regulations should meet the new regulations.

Conclusion

The proposed regulations incorporating the comments above will provide certainty and cost savings to the municipalities, permitting agencies, and the development community.

In the event that these regulations are modified so that they change the underlying water quality requirements to the extent that Construction and MS4 permits will not protect receiving and tributary water quality, the Commonwealth and the permitting agencies may be required to develop and issue site specific permits that would be subject to EPA review and approval. This may result in significant delay and expense to the permittee and the permitting authority.

Furthermore, regulations that do not adequately address water quality issues of today, are merely creating a much more expensive problem for tomorrow. If similarly protective regulations had been in place previously, municipalities of the Mid-Atlantic States would not be faced with billions of dollars of expensive urban retrofits to meet water quality requirements. Quite simply, small investments today by the development community will result in significant cost savings to the public in the future.

Finally, EPA encourages DCR to submit any revision to these regulations for EPA review and comment to ensure that they adequately meet water quality requirements.

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August 12, 2009

Linda S. Campbell, Chair
Soil and Water Conservation Board
2974 Stonyman Road
Luray, Virginia 22835

Madame Chair:

On behalf of the Home Builders Association of Virginia(HBAV), I want to thank the Soil and Water Conservation Board for the opportunity to comment on the proposed stormwater management regulations (4 VAC 50-60 et seq.). HBAV has been an active participant in this regulatory process from the beginning, and looks forward to working with the Department of Conservation and Recreation as the regulation works its way through these final processes. HBAV is committed to being a partner in protecting the Chesapeake Bay and Virginia's other watersheds.

The new proposed regulatory regime contemplated in Soil and Water Conservation Board's proposed stormwater regulations generated significant concern among the development community and the greater business community. The regulations' new technical quality and quantity standards create an undue burden on new development and redevelopment with only minimal benefits provided to the overall environment.

The regulations have been crafted to address nutrient pollution contained in runoff from urban development into the Chesapeake Bay, and the technical criteria are based solely upon the goals outlined in Virginia's Tributary Strategies. HBAV, the development industry, the greater business community, and many in the environmental community have some significant concerns with both the methodology behind the creation of the new technical requirements, and the costs and efficiencies related to those proposed standards.

Despite our long participation, there are a number of problems still contained in the regulation as proposed. This letter will address those problems individually culminating with the overall request that Part II of the regulation (the technical criteria) be rejected by the Board in favor of a pollutant management program that is both more efficient and more effective in protecting the Chesapeake Bay.

I. The Water Quality Standard Contained in the Regulation is Based on Chesapeake Bay Goals and Should Not Be Applied Statewide.

HBAV asserts that the application of a water quality standard based on Chesapeake Bay models is inappropriate for statewide application. The Chesapeake Bay watershed in Virginia covers less than 60% of Virginia's acreage. The other 40% or more drains to the

"southern rivers." HBAV does not feel it is appropriate to base standards for those rivers on problems occurring in the Chesapeake Bay. In no other situation is a waste load allocation applied statewide in order to address a specific problem. For that reason, HBAV feels that any new statewide standard should be based on statewide data, and problems unique to the Chesapeake Bay should be addressed through the Chesapeake Bay Preservation Act.

II. The .28 lbs/acre/yr Phosphorous Standard is Not Based on Sound Science, and Does Not Create Significant Environmental Benefits.

Part II of the proposed regulation (4 VAC 50-60-20 et seq.) is the result of a simple math equation based on the Virginia Tributary Strategies. The Tributary Strategies were created in 2004 as a guideline on how the state can reduce its phosphorous contribution to the Chesapeake Bay based on the allotment assigned by the Chesapeake Bay Program. The goals set forth in the Tributary Strategies never went through any official regulatory process and are based on admittedly flawed data. Furthermore, the data used to calculate current phosphorous loadings from urban runoff are flawed as they incorporate runoff from mining activities, which are permitted individually, and do not give credit for phosphorous reductions from current urban Best Management Practices (BMPs) as evidenced in the 305b report submitted to EPA in 2008.

The .28 standard was derived from target phosphorous loads from undeveloped land, primarily agricultural and forest land. These targets are not current performance levels, but unscientific goals that have been incorporated into the Virginia Tributary Strategies. Even full on-site compliance with the new standard does not even begin to scratch the surface of the Commonwealth's remedial water quality needs. In fact on-site compliance with the .28 standard is actually counterproductive as the incremental improvements will cost the development industry millions of dollars annually, diverting crucial resources away from the real problem. Those resources could be used to help remove current problems in the Chesapeake Bay Watershed.

The reduction in incremental phosphorous increases from new development runoff targets only one percent of the total watershed annually. It does not look retrospectively at the current contributors to the pollutant problems in the Chesapeake Bay which are agriculture, point-source contributors and legacy urban development. Legacy Urban Development is that development that occurred prior to the implementation of stormwater management criteria that began in the late 1980s east of Interstate 95 in Virginia. Under the proposed regulation phosphorous pollution flowing into the Chesapeake Bay will continue to increase, but the cost of the incremental phosphorous removal from new development and redevelopment will cripple the development industry and the Virginias economy.

III. The Water Quantity Standards Contained in the Regulation are Unreasonable and Unattainable in Many Settings.

In evaluating the costs of the proposed stormwater management regulations, a lot of information has been generated with regard to the cost and practicability of designing to the water quality standards, but very little has been said with regard to the water quantity

standard. To date, through all of the examples tested only a very few have been able to meet the water quantity standard. Most projects will not meet the quantity standards. The regulation also makes the assumption that the default design standard is to match the peak flow rate of forest land in good condition, HBAV feels that this should be a last resort approach in circumstances where streams are already badly eroded. In the proposed regulation the burden is placed on the permittee to show that the stream is not unstable. HBAV believes that the burden should be on the permitting authority to show that the stream is unstable before requiring a return to forested conditions.

IV. The Proposed New Technical Criteria will Create a Significant Financial Hardship for the Development Community and the Overall Economy.

Being competitive in a global market is important now more than ever. Likewise environmentally friendly development that incorporates clustering, high density and sustainability are equally more important than ever. The proposed stormwater regulation will move the Commonwealth in a direction that is contradictory to both. While both Virginia Tech's analysis and the Department of Planning and Budget analysis were unable to pinpoint the exact cost of the proposed regulation, the development industry has been able to demonstrate a range of unanticipated costs associated with the regulation.

At the time of the publication of the two economic impact analyses referenced above, information was unavailable as to the true cost of implementation of the proposed regulation. While Drs. Stephenson and Beamer were able to use the information at hand to calculate a price per pound of phosphorous for BMP construction, it should be noted that this cost is reported as the annualized over the life of the BMP in the analysis. The bulk of the cost of construction of a stormwater BMP is incurred at the time of construction paid by the purchaser of the land or building. Annualizing the cost of the construction of the BMP diffuses the appearance of the impact on the economy at the time of construction. Those costs, which are significantly higher than the annualized costs, are borne all at once by the purchaser and in many cases make projects infeasible. Moreover, there are significant maintenance and inspection costs to be borne by homeowners and localities.

Additionally, Dr. Stephenson notes in his analysis that no consideration could be given at the time to the foregone value of the land used for the construction of the required BMPs under the proposed regulations. After further review and application of the new regulations, the foregone cost of the land used will also be significant and overly burdensome. Based on evaluations by engineers throughout the state, the average incremental cost of phosphorous removal under the proposed regulation will be $685,000 per pound of phosphorous. Most of the projects considered were compact mixed use, high density residential or commercial projects. These are the types of development that the Virginia Legislature and the Governor have stated definitively through the 2007 Governor's Acts of Assembly Chapter 896 (HB3202). The cheapest alternative for compliance with the proposed regulations will be large lot development where land is the cheapest resulting in urban sprawl.

V. The Regulation Will Result in Urban Sprawl.

With the increased restrictions on impervious surface created by this regulation, and the requirement to mitigate runoff from pervious surfaces as well, compliance requires additional acres in residential and commercial developments. In urban core areas, that land comes with a premium price attached to it and reduces available densities as more land will be required for stormwater management facilities. This will drive the cost of housing in high density urban areas to unaffordable levels. The unintended effect of this regulation, will be to push development out to where land is cheaper and offers opportunities for large lot developments. This movement away from urban cores is in direct contradiction to the stated policies of the Virginia General Assembly and the Governor evidenced by HB 3202 passed during the 2007 Session.

HB 3202 creates a requirement for Urban Development Areas (UDA) in localities with high growth rates. The goal of the legislation is to compact future development into densely populated communities where home, work, and recreational opportunities are all within walking distance of each other. Development within a UDA under this regulation would be extremely expensive, and would likely eliminate the option for affordable housing.

VI. Redevelopment Provisions Need Modifications.

While new development will struggle under the new regulations, redevelopment will possibly cease. The proposed regulations double the standard for phosphorous reduction for redevelopment from 10% to 20%. This number is based in absolutely no science whatsoever. Furthermore, redevelopment is required to meet the same on-site water quantity requirements as new development. In situations where redevelopment is occurring on nearly 100% impervious sites, it will be absolutely impossible to meet either of these standards. HBAV believes that special consideration needs to be given to redevelopment to keep in concert with the Legislative mandate that encourages redevelopment in urban cores.

VII. Grandfathering, Vesting and Phasing.

Currently, the regulation contains no language for vesting. Moreover, because the existing state vesting language carves out an exception for Chesapeake Bay regulations, there is no vesting for proffered property or property with submitted preliminary plans or even property with final, approved plans. The purchase, design and development of land is an expensive and very long process. Many times design and economic analysis will begin long before applications for permits are ever submitted. In most cases development involves many meetings with local, state and federal officials through many design sessions. When this regulation goes into effect in July, 2010 there will be numerous projects that have already begun this process long before that time. Often financing for projects is obtained and conditioned upon the approval of plans throughout the development process. Changing design standard in the middle of this process can be very expensive and in many cases will void contracts and agreements. For that reason HBAV requests that the proposed regulation include significant protections for projects with submitted preliminary plans. This will provide surety to developers, engineers, local governments and financiers as projects move forward.

Phased developments often occur over a period of twenty years or more. Plans will be developed for large tracts of land, but those plans will be implemented slowly. At times the first phase of a development may have long been completed prior to the beginning of the next phase. The new regulations treat all phases of a project as one continuous land disturbing activity. Which means post-development stormwater facilities for an entire development must be designed and controlled long before most of the construction occurs. This again places a significant economic burden on developers and limits an engineer's ability to make design changes over time to adjust to new technologies and the discovery of new hydrology patterns. HBAV asks for the flexibility to have projects approved and vested as whole projects, and to be able to permit phases individually rather than all at once.

VII. HBAV Alternative Proposal.

HBAV, its members and the greater business community are proposing a logical but new approach to the Chesapeake Bay clean-up model. Recognizing that the proposed regulatory changes will be extremely costly with modest benefit, and that new development contributes to Bay pollution and must pay its fair share, HBAV's member developed approach to reaching the tributary Strategy goals takes an innovative look at the nutrient pollution problem as a whole rather than piecemeal. Our goal with this alternative is to create better water quality in the Bay faster and more efficiently than what is proposed in the regulation.

Under the Tributary Strategies 92% of agricultural land will have a minimal suite of best management practices (BMP) applied to that land, and all Municipal Separate Stormwater System (MS4) systems have mandatory upgrades that must occur to meet water quality goals. Unfortunately, in both cases the funding to reach those goals is in short supply. In addition, farmers may then sell credits to point-source polluters from any activities over and above any Tributary Strategy BMPs creating an opportunity to reduce agricultural pollution beyond what is anticipate in the Tributary Strategies. The new model that HBAV is proposing provides the funding to reach tributary strategy goals and excel beyond them.

HBAV proposes loosening on-site nutrient runoff controls to allow for .60 pounds of phosphorous per acre per year from new development. A payment would then be made by the developer of $15,000 per pound to purchase credits from the state for an additional .15 pounds per acre, bringing nutrient pollution mitigation back to the current standard of .45 pounds per acre. For example, if a developer has a 100 acre site, under current requirements, that site can have no more than 45 pounds of phosphorous annually in its runoff. Under HBAV's proposal that site could now have 60 pounds of phosphorous per year, but the developer would be required to pay into the Water Quality Improvement Fund (WQIF) a sum equal to the difference between 60 pounds and 45 pounds at a cost of $15,000 per pound. So that developer would write a check to the state for $225,000. This money could then be used for grants from the WQIF to implement BMPs on agricultural land, offset the cost of wastewater and separate stormwater system upgrades, or retrofit older development that has no stormwater management controls in place.

This allows for a much more efficient use of the funds from developers, and if properly applied, the statewide Tributary Strategies goal could be met by 2035. This is a broad overview of the alternative plan offered by HBAV. However, this approach has generated interest among much of the regulated community, local governments and the business community. HBAV is not asking for a wholesale adoption of this plan on its face, but is encouraging the Soil and Water Conservation Board to abandon the currently proposed technical requirements in Part II of the regulation, and reconvene a Technical Advisory Committee of stakeholders to discuss this proposal and adopt a regulation that better uses the resources available to provide a clean and safe Chesapeake Bay.

Conclusion.

HBAV again encourages the Soil and Water Conservation Board to reject Part II of the proposed regulation only. The technical criteria contained in Part II are wrought with problems and costs that even the Department of Planning and Budget have determine "will outweigh the benefits." HBAV recommends the SWCB reconvene the Technical Advisory Committee to make sweeping changes to the technical criteria.

Best regards,

Michael B. Hardiman

Barrett Hardiman

Virginia Association of Connties
Statement on proposed Stormwater Regnlations to the
Joint Commission on Administrative Rules
Larry Land, Director of Policy Development
September 16,2009

Mr. Chairman, Commission members, my name is Larry Land, Director of Policy Development for the Virginia Association of Counties.

VACo is a statewide, nonprofit, nonpartisan organization representing and serving Virginia's 95 counties. Our purpose is to support county officials and to effectively represent, promote and protect the interests of counties to better serve the people of Virginia.

V ACo sincerely appreciates the Commission's interest in this issue and we are also appreciative of the invitation we received to provide today' statement.

For the past several years VACo has closely monitored the development of these regulations. Very early in the process we recognized that these amendments would be extremely significant, and expected them to affect local governments in many ways.

On August 21, V ACo submitted a letter to the Department of Conservation and Recreation commenting on the proposed regulations. Time allows for only the most major concerns to be summarized in this statement. I am also distributing copies of the VACo's September 21 letter to all commission members.

V ACo sincerely appreciates efforts by DCR to involve all stakeholders in the process of developing the proposed rule. We are aware of the difficulties involved with these efforts, and recognize and appreciate DCR's inclusion of many representatives from local governments on the Technical Advisory Committee that met many times over the past several years on a regular basis to assist in the process. We look forward to continuing to work with DCR as this process unfolds.

The proposed stormwater rule has generated more interest among local officials than any other rule-making I've witnessed over the past twenty years. I think the interest and concerns have been heightened largely because of the budgetary realities local governments are now facing.

Under the framework proposed by the Soil and Water Conservation Board, 33 counties in Virginia will be required to adopt stormwater management programs. The remaining 62 counties have the option of adopting programs, so any county not exercising this option will have their stormwater programs managed and enforced by DCR. Those counties will have a major stake in DCR's performance in managing their programs.

The proposed regulations need to be considered within the context of very difficult economic conditions affecting local governments. To better understand how localities are responding to these conditions, V ACo and the Virginia Municipal League are reviewing responses to a survey we are jointly conducting.

The information from this survey is now being compiled, but from it we are learning more about

the hard budgetary decisions local governments are currently making. We learned, for example, that:

- 77 percent of the respondents are delaying or cancelling capital outlay/infrastructure projects.

- 63 percent have enacted hiring freezes.

- 43 percent are implementing personnel layoffs.

- When considering the conditions in the out-years beyond FY 20 II, several local officials have expressed anxieties about likely cuts in state financial aid and the inability of a growing number of their residents to pay their taxes.

This is a bleak picture that worries local officials and it has made them less receptive than ever to the imposition of expensive regulatory programs.

VACo's comments on the proposed rule focused on the following concerns:

First, economic and fiscal impacts on local governments and the proposed fee structure;

Second, the effects of the proposed rule on redevelopment;

Third, how local administration, inspection and enforcement programs may be affected; and

Fourth, the Soil and Water Conservation Board's schedule for adopting the new regulations.

With respect to the first concern relating to fiscal/economic impacts and fees ...

V ACo reviewed the "Economic Impact Analysis" by Kurt Stephenson and Bobby Beamer. It states that the "local and state government cost to administer local stormwater programs will increase" and that "rough (not yet final) estimates range between $13 million and $17.5 million."

The report also states "fee revenue would appear sufficient to pay for the majority or all of the incremental costs in an 'average' or typical year. Yet, program revenue will be largely dependent on the level of economic activity in the construction industry." Under the proposed regime, local officials expect that their staffs will need to be bolstered to effectively perform routine

inspections and take enforcement actions. This represents the potential for long-term costs for which revenues under the proposed fee structure may not be available.

The fluctuating nature of fee revenues - if linked to changes in the levels of construction activity - could cause major problems in financing local inspection and enforcement programs. V ACo believes that the fee structure in the regulations needs to be revisited in a manner that will assure a stream on steady and predictable revenues.

Various analyses have reflected major economic impacts stemming from the technical criteria that establish a limit in storm water runoff of .28 pound per year per acre, as opposed to the current standard of .45 pounds. Frederick County has estimated that this requirement would drive storm water compliance costs from $175,000 to $530,000 for the development of a 15-acre school site. I'm not in a position to explain the methodology behind the calculation of this number, but it caught our attention. There are other examples that are equally dramatic.

VACo has expressed concern about how the technical criteria would affect redevelopment situations where (in the words of the proposed rule) the "total phosphorus load of projects occurring on prior developed lands shall be reduced to an amount at least 20 percent below the predevelopment total phosphorus load." Many local officials have voiced concern and - V ACo is also very concerned - that this standard could create a financial disincentive that will discourage redevelopment and encourage sprawl, a development pattern that has been shown to cause environmental problems while increasing the costs of providing many public services and facilities.

These are all very serious considerations, and they have been communicated to DCR, and to their credit, DCR is listening and they are trying to address as many concerns as they can. Over the past few weeks we - along with other concerned stakeholders - have met on two occasions to discuss a number of changes in the technical criteria - but this proposed program is extremely complex and I'm not sure the differences can be worked out in a period of just a few weeks. That's a major reason why VACo's Environment and Agriculture Steering Committee adopted a position last month (reflected in VACo's comments) requesting that the Soil and Water Conservation Board adopt the proposed amendments to the stormwater regulations in two phases. The first phase would be adoption this year of all sections of the proposed rule except Section 2, which contains the technical criteria that act as the major cost driver. Consideration of the technical criteria over the next year would allow for the re-convening ofthe Technical Advisory Committee that met up until September of last year before the regulations received preliminary approval by the Soil and Water Conservation Board prior to their release for public comment.

Out of its concern about the proposed stormwater rule VACo has regularly been in close contact with the Virginia Association of Municipal Stormwater Agencies (VAMSA) and various local stormwater program managers who truly understand - better than anyone else - the local administrative and environmental impacts of the proposed rule. I would encourage you to listen

carefully to what they may say if they feel compelled to speak during the public comment portion ofthis meeting.

VACo has also worked closely with VML, and in the testimony following mine you will receive recommendations from VML with which V ACo concurs.

When the Soil and Water Conservation Board meets tomorrow to consider suggested changes to the proposed regulations, V ACo will be listening very attentively.

As the proposed revisions to the stormwater regulations undergo further evaluation and public comment, please consider V ACo a resource for communicating with, and drawing ideas from, local officials. Many county officials care passionately about the quality of water in Virginia.

We are eager to work as partners with DCR and the Virginia Soil and Water Control Board to improve the effectiveness and efficiency of state and local stormwater management programs.

On behalf of Virginia's county officials, I would again like to thank you for offering this opportunity for V ACo to testify, and I would also like to thank the staff of DCR for the efforts they have made to address the concerns of all stakeholders.

CHESAPEAKE BAY FOUNDATION
Saving a National Treasure

Testimony to the Joint Commission on Administrative Rules

Ann F. Jennings, Virginia Executive Director Chesapeake Bay Foundation

September 16, 2009

Thank you for this opportunity to address the Joint Commission on Administrative Rules on Virginia's proposed enhancement of the Stormwater Management Program.

I wish to take this opportunity to address three concerns regarding the proposed regulations that have been raised during the recent public comment period. These three concerns regard:

1) the water quality benefits of stormwater management;

2) the potential for stormwater regulations to incentivize sprawling development; and

3) the economic impact of stormwater management.

Regarding the water quality benefits of stormwater management:

Stormwater runoff carries with it polluting nutrients, sediment, and toxins that harm our water quality and often, stormwater runoff carries such force as to actively erode our neighborhood streams and creeks. Urban and suburban stormwater runoff contributes 25 percent of the nitrogen, 32 percent of the phosphorus, and 28 percent of the sediment pollution to the Chesapeake Bay and the rivers and streams that feed the Bay.

A recent Environmental Protection Agency (EPA) report concluded that efforts to restore the Chesapeake Bay are losing ground specifically because too little is being done to manage stormwater pollution from developed and developing lands. Virginia's investments in sewage treatment plant upgrades and farmland best management practices—investments by the General Assembly that now exceed $1 billion—have been critical steps forward in addressing Virginia's long-standing commitment to restore the Chesapeake Bay. EPA advises that the progress provided by those significant steps forward will be erased if stormwater runoff from our urban and suburban lands is not better controlled. Further, if land development continues to outpace population growth—as it did by five times in the Bay watershed from 1990 to 2000—this source of pollution will surely continue to grow.

In consideration of the negative impact of stormwater on our regional and local water quality, the Chesapeake Bay Foundation and many organizations across the Commonwealth support Virginia's efforts to reduce pollution running off our city streets, lawns, parking lots, and other developing lands. During the public comment period provided on the proposed stormwater regulations, 62 organizations came together to collectively urge their swift passage. I have

provided you with a copy of that joint letter attached to my comments. These organizations champion clean water across the Commonwealth and represent hundreds of thousands of Virginians concerned about the health of their local waterways—from the Lynnhaven River in Hampton Roads, to the James River in Richmond, to Mossy Creek in the Shenandoah River Valley, to our southern Dan and Roanoke River basins.

Simply put, effective stormwater management provides a means for future development to continue without discharging pollution that harms downstream waterways, property values, industries, and communities that depend on clean water. By effectively managing stormwater in combination with controlling nutrient pollution from other sources, Virginia will have in place a comprehensive program to help turn the tide and deliver improved water quality across the Commonwealth.

Regarding the perceived potential for stormwater regulations to incentivize sprawling development:

The Chesapeake Bay Foundation finds that the proposed regulations specifically include provisions to prevent incentivizing urban sprawl. First, the pollution reduction requirements for redevelopment projects are already significantly less than those required of new development. Further, to help alleviate on-site compliance costs, acquisition of reductions off site will be allowed via several programs, including private market nutrient banks as authorized by the General Assembly in the 2009 session and a state "buy-down" program currently under consideration. And lastly, there are state and federal incentives that can help ease stormwater and other costs associated with redevelopment, revitalization of blighted neighborhoods, creation of affordable housing, and other projects that benefit both urban communities and water quality.

Also provided with my written statement today is a letter from several leading Virginia organizations focused on "smart growth." In their letter of support on the proposed stormwater regulations, these organizations concluded that the regulations will not discourage smart growth development.

Acknowledging this perspective of the "smart growth" community and that special provisions will be in place to foster urban redevelopment, CBF profoundly disagrees with any contention that these regulations will drive sprawl.

Regarding the economic impact of stormwater management:

In regard to the claimed impact of these regulations on the state's economy, I offer two considerations. Postponing or weakening the stormwater management program will either result in saving the Bay and our local streams on the backs of other pollution sources; or, postponing or weakening the stormwater management program will result in increasing economic costs to all from our failure to improve water quality.

With last week's release of EPA's draft response to a call for greater leadership and action from the federal government to restore our national treasure, the Chesapeake Bay, we now know that if reductions of phosphorus and nitrogen pollution are not adequately captured from all sources, EPA will not allow Virginia more time or to set the bar lower. Further, EPA will look to achieve those reductions from other sources, with tougher limits on sewage treatment plants, municipal storm sewer permits, and regulated farming activities. EPA may require individual permits for

all dischargers or even deny permits authorizing new or increased discharges of pollution. Thus, failure by the development community to properly control stormwater runoff could compel EPA to impose more rigorous regulatory requirements and greater costs for other sources of nutrient pollution. Approval of strong stormwater regulations this fall that are consistent with EPA requirements can prevent more aggressive regulatory action in the future.

Alternatively, failure to control stormwater runoff from our developed landscape will itself become an economic burden on many Virginians. Let me provide three brief examples.

In Fairfax County, stormwater runoff has severely eroded and undercut many stream channels. This has lead to localized flooding, exposure of underground infrastructure such as sewer lines, threats to personal property and safety, and prevention of recreation. By one estimate, the County's costs to repair a stormwater damaged stream that flows through a 92-percent urban watershed will exceed $29 million. Those costs will have to be borne by the local taxpayers.

We also know that in some communities home values have declined as a direct result of unhealthy waters. I have included with my comments photos from this summer's rampant algal blooms in the waters surrounding Hampton Roads; algal blooms that are a direct result of excess nitrogen and phosphorus pollution. These aquatic blights devastate important recreational and subsistence fishing, outdoor recreation, and aesthetics in local communities. Studies from across the nation report property values increase from 6 to 30 percent for properties near well-designed stormwater ponds and wetlands, restored streams, and otherwise clean waterways.

Finally, poor water quality will have a direct and lasting impact on Virginia's fishing industry. Each year in Virginia, marine waters generate $1.23 billion in sales and over 13,000 jobs, and freshwaters create nearly $400 million in sales and 6,800 jobs. In 2003 alone, Virginia's blossoming aquaculture industry grossed more than $32.5 million.

This past year, Virginia's watermen bore the brunt of our failures to address water pollution as the Commonwealth imposed critically needed regulatory mandates to reduce their catches of blue crabs. As acknowledged by the General Assembly in its collective call for federal disaster relief for those watermen, the catch reductions were called for in part because of poor water quality and loss of aquatic habitats. Those who farm our waters and are now subject to fishery closures or reduced fishing seasons wonder aloud if their children will be able to follow in their footsteps and whether the culture of their industry will be lost forever.

In conclusion:

We ask that, in its deliberations, the Commission consider the real "lifetime" benefit of stormwater management on our local water quality, the considerable flexibility offered to prevent urban sprawl, and the full costs associated with urban and suburban development—including the costs borne by taxpayers, local governments, watermen, small businesses, and many others—if we do not adequately control stormwater runoff. Furthermore, we urge the Commonwealth to strike the proper balance between facilitating future development and charting its own course for clean water.

August 17, 2009

The Honorable Timothy Kaine
Office of the Governor
Patrick Henry Building, 3rd Floor
1111 East Broad Street
Richmond, Virginia 23219

Dear Governor Kaine:

This summer your Administration released for public notice two new regulatory programs designed to reduce polluted runoff from rooftops, lawns, streets, pastures, and croplands that contributes significant amounts of nitrogen, phosphorus, and sediment pollution to our waters. This pollution is the greatest threat to the health of Virginia's waterways - smothering aquatic life, damaging navigation channels and drinking water supplies, and devastating vital fishery and tourist economies. Polluted runoff is a primary reason more than 9,000 river miles across the state and the entire Chesapeake Bay remain on the official "dirty waters list" of the federal Clean Water Act. The undersigned organizations strongly support the Commonwealth's proactive and balanced approach, through these proposed regulations, to accelerate pollution reductions from urban runoff and agricultural runoff.

In Virginia, urban runoff, or stormwater, contributes 25% of the nitrogen, 32% of the phosphorus, and 28% of the sediment pollution to the Chesapeake Bay and its tributaries. A recent Environmental Protection Agency report concluded that efforts to restore the Chesapeake Bay are losing ground specifically because too little is being done to manage stormwater pollution from developing lands. Stormwater pollution is also a critical concern for our "Southern Rivers" that support a world-renowned assemblage of sensitive fish and freshwater mussels. The Department of Conservation and Recreation's (DCR) proposal to amend Virginia Stormwater Management Program Permit Regulations to include new water quality and water quantity limits will ensure that new development does not further impair Virginia's waterways, stream ecosystems, streamside property, and municipal infrastructure. We urge your approval of these regulations as an innovative and attainable way for the Commonwealth to accommodate future development while ensuring healthy waters.

In a parallel tract, the Virginia Department of Environmental Quality (DEQ) has proposed amendments to the Virginia Pollution Abatement General Permit to address runoff pollution from the storage and land application of poultry litter. Current state regulations require litter used on poultry farms to be land applied according to a nutrient management plan (NMP), yet 80% of litter produced on farms is transferred to "end users" where a NMP is not required. The relative low cost of litter, the current lack of NMP requirements, and the imbalanced nutrient content of poultry litter create the risk of runoff of nitrogen and phosphorus pollution to waterways already impaired by too many nutrients. The proposed regulations place important storage, setback, and land application requirements on the "end users" of poultry litter as fertilizer. We urge you to approve these regulations as a reasonable and appropriate approach for ensuring that poultry litter continues to be used as an effective fertilizer in a manner that safeguards our local waterways.

These proposed regulations represent new tools that are absolutely vital to achieving Virginia's water quality goals. In particular, final adoption of both proposals is critical if Virginia is to meet the "Chesapeake Bay 2011 Milestones for Reducing Nitrogen and Phosphorus" presented at the Chesapeake Bay Executive Council meeting in May. Further, these regulations are integral to the successful implementation of Total Maximum Daily Load (TMDL) clean up plans—including the landmark TMDL under development for the Chesapeake Bay and the over 600 impairments in the "Southern Rivers."

Just as clean water is a basic necessity and a right under the state constitution for every Virginian, every citizen, business, and agency in the Commonwealth has a responsibility to do their part in achieving

Virginia's water quality goals. The programs created by these regulations represent a fair and equitable step forward to achieving necessary pollution reductions from urban, suburban, and agricultural sources and will be important elements in Virginia's overall water quality efforts. We applaud DCR's and DEQ's dedication and commitment to regulations that utilize the best and latest science and innovation and allow Virginia to advance both its economic and environmental needs. We believe these proposed regulations meet that high standard and urge your approval to provide clean water for the enjoyment and prosperity of all Virginians.

Sincerely,

Assateague Coastkeeper
Audubon Naturalist Society
Blackwater Nottoway Riverkeeper Program
Blue Ridge Environmental Defense League
Blue Ridge River Runners
Chesapeake Bay Foundation
Civil & Environmental Services, LLC
Clean Valley Council
Clean Water Action
Coastal Conservation Association Virginia
Dan River Basin Association
Downriver Canoe Company
Eastern Blue Ridge Fly Fishers
Environment Virginia
Falmouth Flats Fly Fishers
Float Fishermen of Virginia
Friends of Accotink Creek
Friends of Bryan Park
Friends of Dyke Marsh
Friends of James River Park
Friends of Stafford Creek
Friends of the New River
Friends of the North Fork of the Shenandoah River
Friends of the Rappahannock
Friends of the Rivers of Virginia
Friends of the Roanoke River
Hands Across the Lake
James River Association
James River Fishing School
Ken Pendrod's Life Outdoors Unlimited
Lands and Water
Lower Susquehanna Riverkeeper
Lynnhaven River NOW
Mark Kovach Fishing Services
Massanutten Chapter of Trout Unlimited
Mid Atlantic Paddlers Association
Mossy Creek Flyfishing Shop & Outfitting Service
National Committee for the New River
Northern VA Trout Unlimited
Occoquan Watershed Coalition
Patuxent Riverkeeper
Poquoson Citizens for the Environment
Potomac Conservancy
Potomac Riverkeeper
Preserve Frederick
Rainwater Management Solutions
Rapidan Chapter of Trout Unlimited
Rivanna Conservation Society
Sassafras Riverkeeper
Scandia USA LivinGreen
Shenandoah Riverkeeper
Shenandoah Valley Network
The Nature Conservancy
Twin River Outfitters
Virginia Association of Biological Farming
Virginia Chapter – Sierra Club
Virginia Conservation Network
Virginia Council of Trout Unlimited
Virginia Eastern Shorekeeper
Virginia League of Conservation Voters
Winchester Trout Unlimited
York County Waterways Alliance

cc: The Honorable L. Preston Bryant, Jr., Secretary of Natural Resources
Nikki Rovner, Deputy Secretary of Natural Resources
Jeff Corbin, Assistant Secretary of Natural Resources
Joseph H. Maroon, Director of the Department of Conservation and Recreation
David K. Paylor, Director of the Department of Environmental Quality
Brian Shepard, Director of Policy, Office of the Governor
Gena Boyle, Policy Analyst, Office of the Governor
Members of the State Water Control Board
Members of the Soil and Water Conservation Board

August 21, 2009

Regulatory Coordinator
Virginia Department of Conservation and Recreation
203 Governor Street, Suite 302
Richmond, Virginia 23219

Re: Comments on Proposed Amendments to Parts I, II, and III of the Virginia Stormwater Management Program Permit Regulations

Dear Regulatory Coordinator:

The undersigned regional and national organizations that advocate for both smart principles and water quality, urge the Commonwealth of Virginia to adopt the proposed amendments to the Virginia Stormwater Management Program Permit Regulations ("amendments"). We find that the amendments are based on extensive public review and scientific study, and represent an attainable and equitable means to prevent future "post-construction" stormwater pollution as forest, farms, and existing development are replaced by new development. We appreciate the opportunity to provide input to the Department of Conservation and Recreation to help complete this regulatory action.

Virginia has already passed tough regulations and committed nearly $1 billion to support wastewater plant upgrades and has dedicated significant resources to the agricultural best management practices (BMP) cost-share program to help stem the nutrient and sediment pollution that causes the impairment of the Chesapeake Bay and local streams. Unfortunately, recent studies tell us that progress reducing pollution from these sources is being offset by increased pollution from our rapidly expanding urban landscapes. These amendments take appropriate action to help halt future development's contribution to this problem by setting phosphorus and water quantity limits that ensure a "no-net impact" on water quality, stream health, and property. The addition of new supporting tools along with the amendments, such as new urban BMPs, a compliance tool that provides clear incentives for green infrastructure techniques, and the flexibility to obtain pollution reductions off site, will help assist compliance with the amendments.

Of particular concern to our organizations when evaluating stormwater regulations is to ensure that they do not drive new development to "greenfields." We find that there are a variety of provisions in place or proposed in the amendments to help ensure that the amendments do not serve as a deterrent for smart growth or redevelopment. These provisions include the more rigorous water quality criterion in the amendments for greenfields development compared to redevelopment, the waiver of water quantity requirements for very small sites in the amendments, and the availability of several ways to obtain pollution reductions off site in the same watershed. Further, we support the minor change to the amendments recommended by the Virginia environmental community that would ease the water quantity criteria for redevelopment projects in Urban Development Areas. With these provisions in place, we find that the amendments will not discourage smart growth developments that enhance both urban communities and water quality.

Evaluation of the amendments by private engineering firms indicates that developers with sufficient training, creativity, and willingness to employ the full range of urban BMPs and site configurations can comply without a significant increase in costs on most sites. Off site reductions were also viewed as a vital means to help mitigate any cost increases that remain. Furthermore, it is critical to remember that the pollution that these amendments and other water quality programs intend to prevent has for years increased public costs for flood control, stream restoration, and clean drinking water and devastated industries and coastal communities that rely upon clean water for their way of life. We find that the amendments embody a fair and appropriate balance between environmental and economic considerations.

Thus, we the undersigned support the proposed amendments as a sustainable approach to help the state meet its commitments to restore the Chesapeake Bay and polluted waters statewide and help ensure that land development and clean water can better coexist in Virginia in the future.

Sincerely,

Stewart Schwartz
Executive Director
Coalition for Smarter Growth

Dan Holmes
Director of State Policy
Piedmont Environmental Council

Glen Besa
Chapter Director
Sierra Club-Virginia Chapter

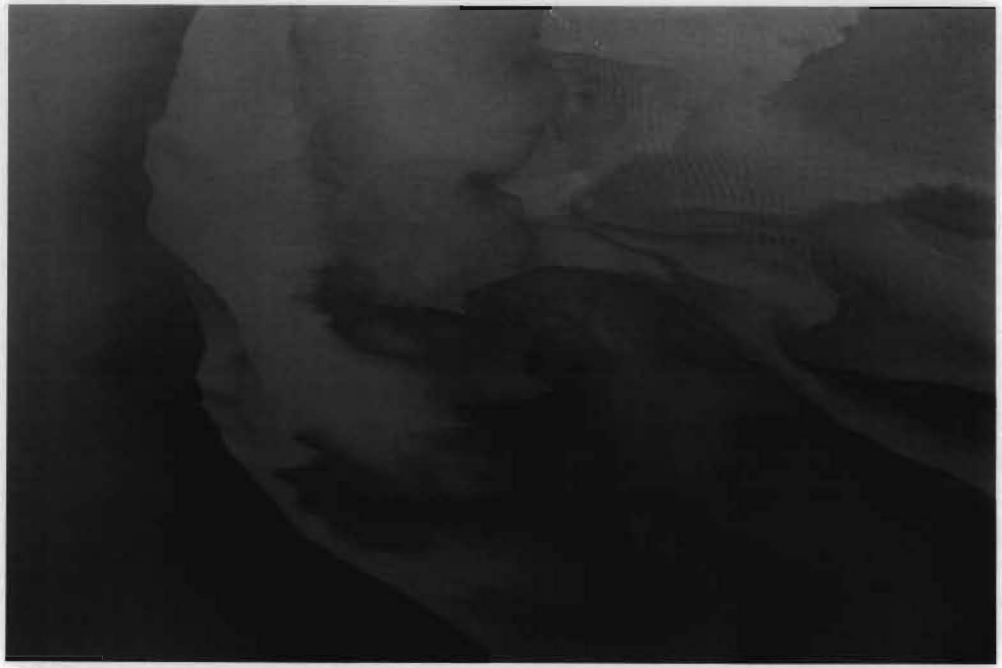
Nathan Lott
Executive Director
Virginia Conservation Network

Lisa M. Guthrie
Executive Director
Virginia League of Conservation Voters

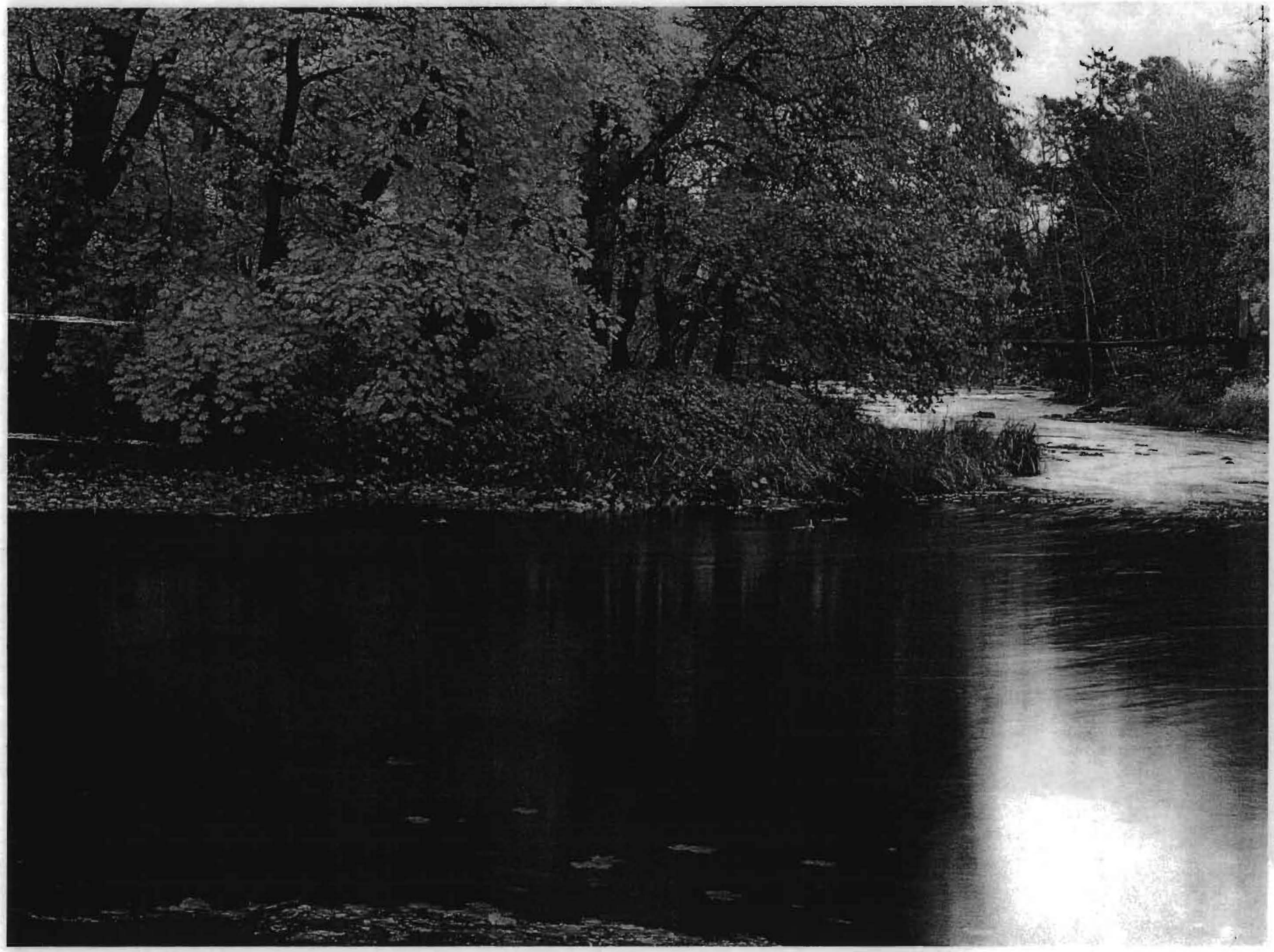
J.R. Tolbert
Advocate
Environment Virginia

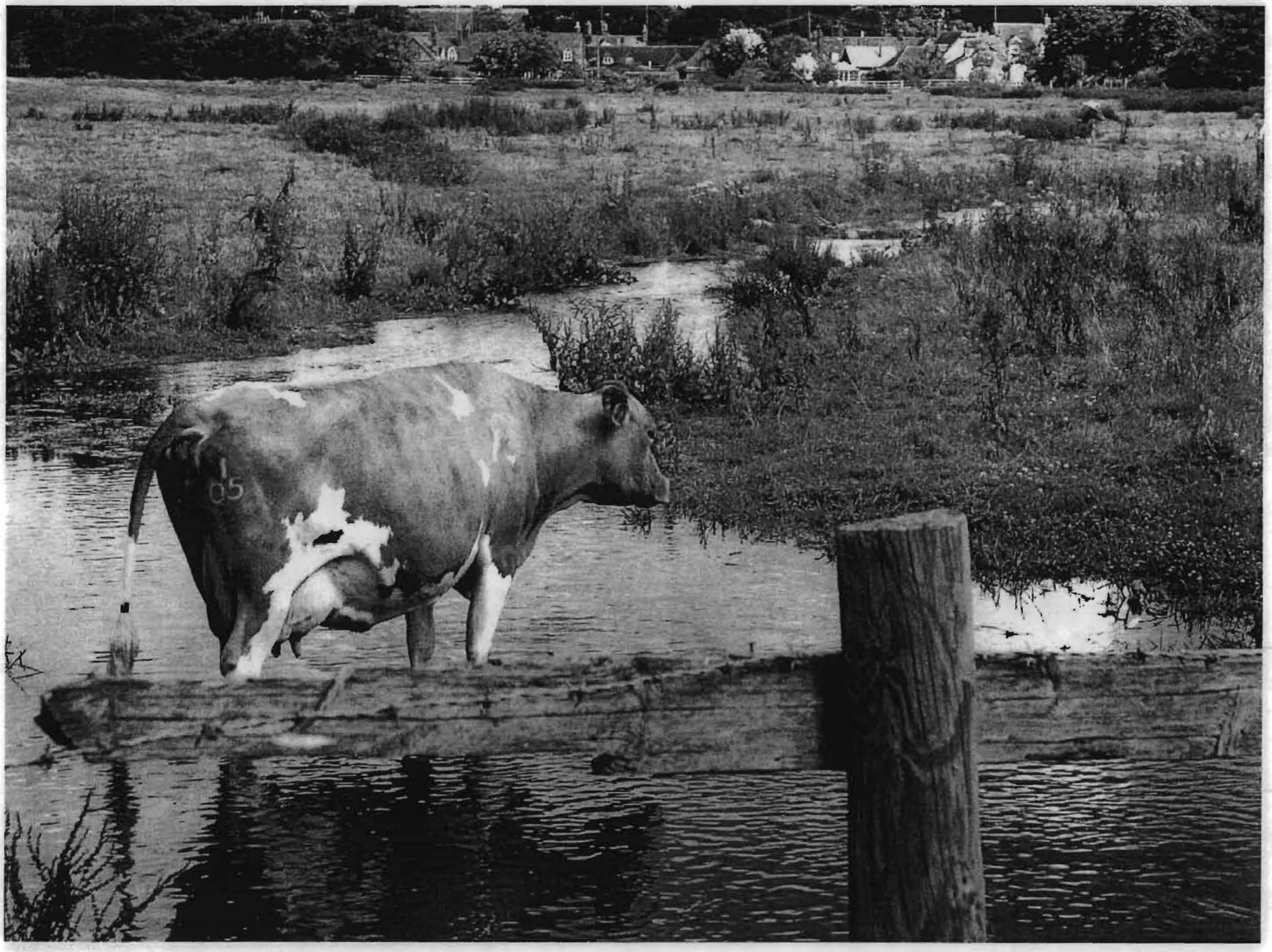
Leighton Powell
Executive Director
Scenic Virginia

Algal blooms in Hampton Roads, August 18, 2009. Photos taken by Ryan C. Henriksen, *The Virginian-Pilot*.



HBAV ?

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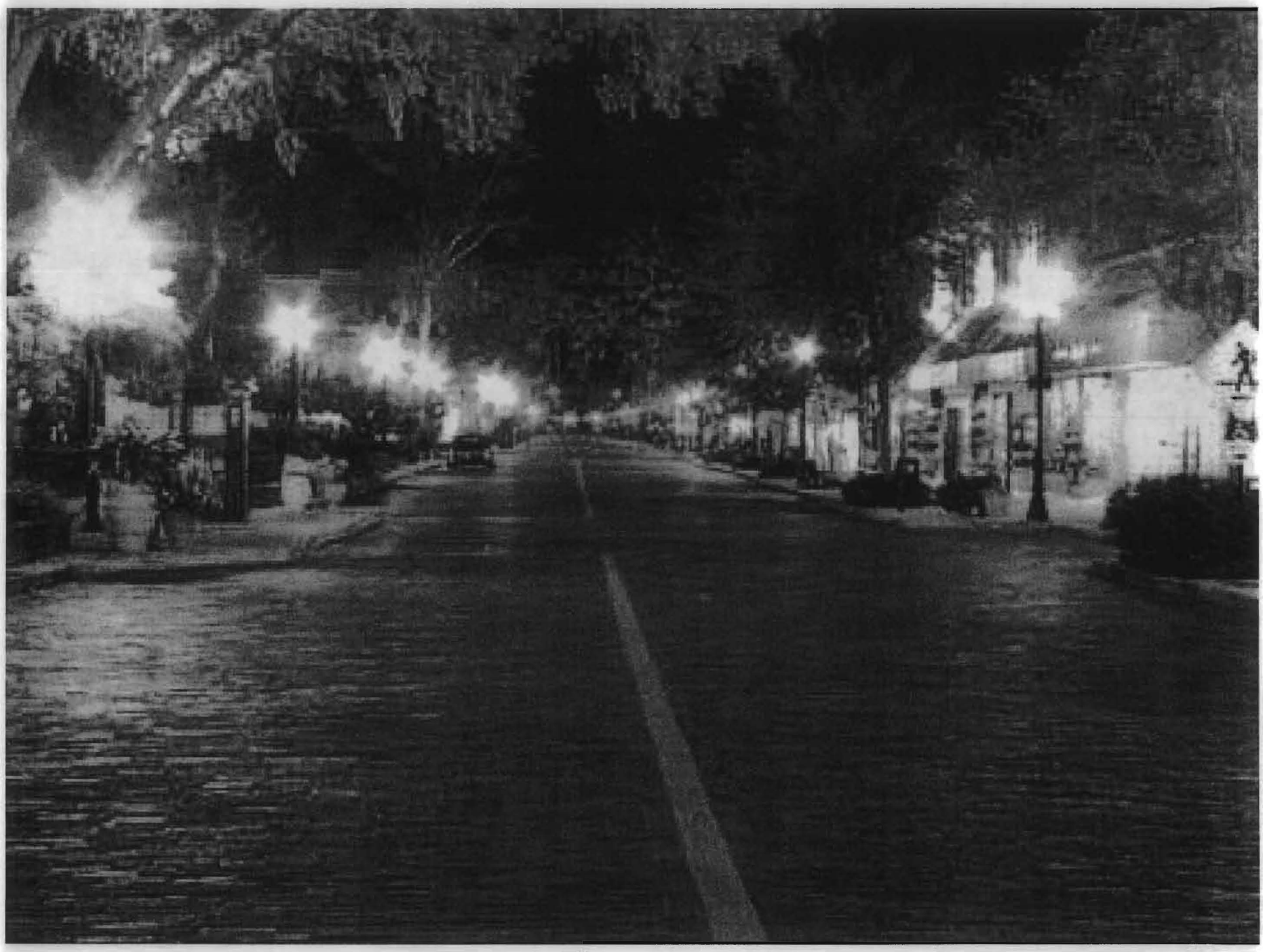


Stormwater Regulation Process Background

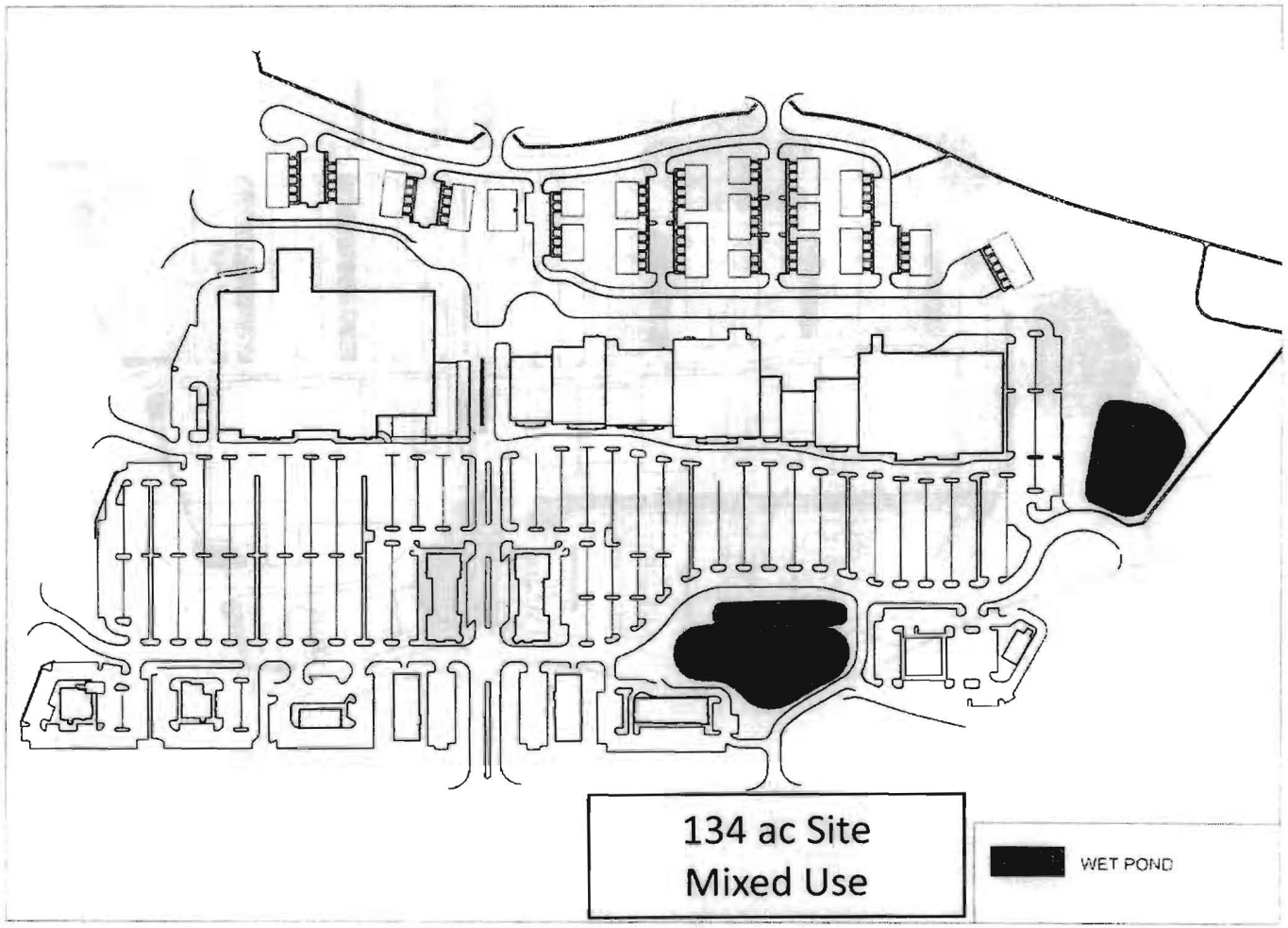
- Regulation began as legislation to simply to consolidate permitting processes during the 2004 General Assembly authored by Preston Bryant.
- It grew from there.
- Two Technical Advisory Committee (TAC) processes have led to current regulation.
- First Regulation was scrapped by Soil and Water Conservation Board (SWCB) because of improper public notice.
- Second TAC was not allowed to address technical components of regulation.
- SWCB approved the version of regulation for publication in the Virginia Register of Regulations September 25, 2008.
- Publication and public comment opened on June 22, 2009.
- Regulation is scheduled to be signed by Governor Kaine this December after the elections.
- Regulation will go into effect July 1, 2010.

Proposed Revisions to State Stormwater Regulations

- Increase standard from 0.45 lbs/ac/yr to 0.28 lbs/ac/yr
- Increase redevelopment standard from 10% to 20% pollutant reduction
- Increase stormwater detention requirements by 100% (from ½" to 1" stormwater detention)
- Require stormwater management for "managed turf"
  - Up to 25% imperviousness assigned
  - Includes Soccer fields, parks, road right-of-way
  - most anything converted from forested condition
- Increases maintenance and inspection burden & fees

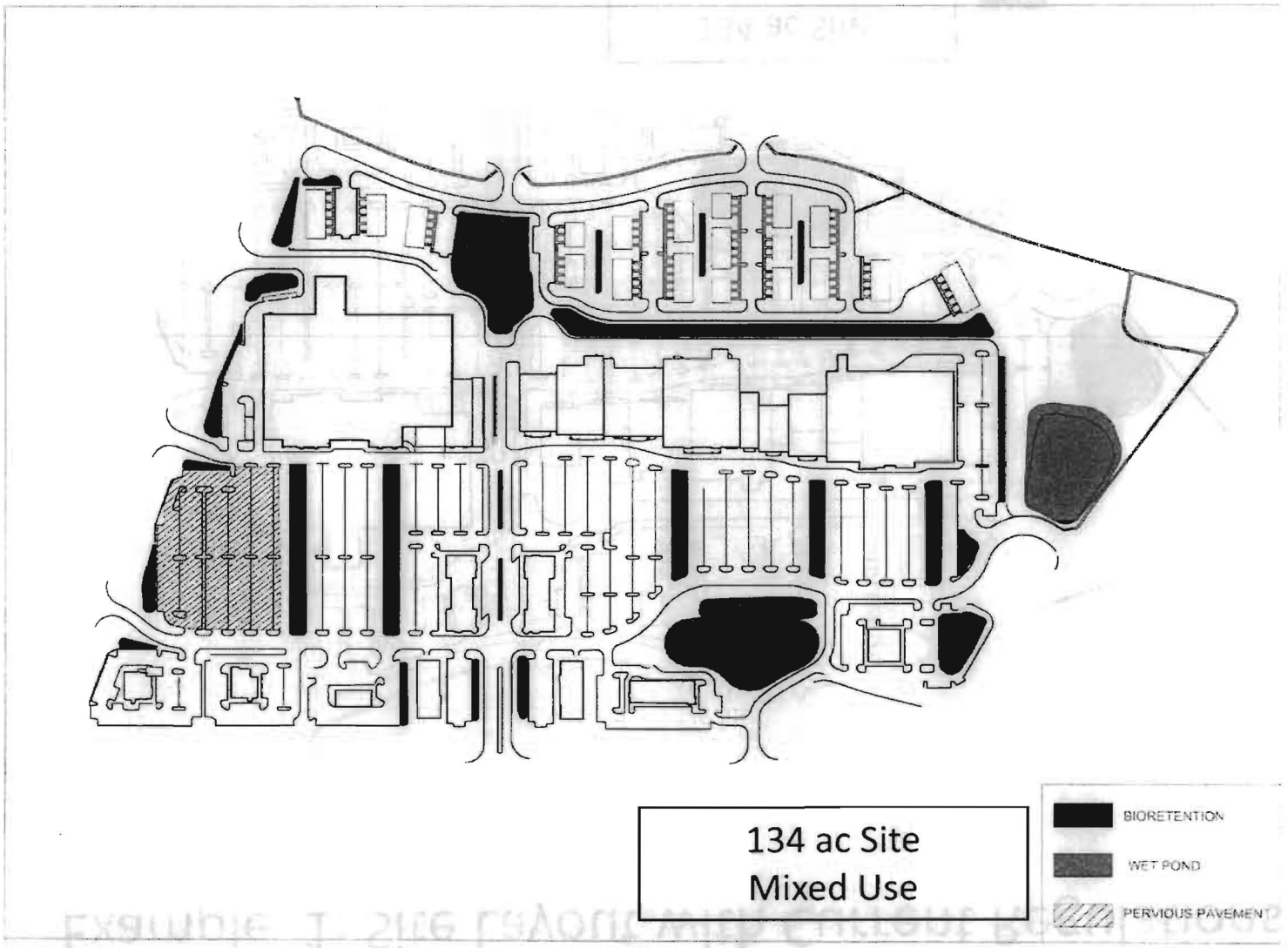
SLIDE COURTESY OF HBAV

Example 1: Site Layout with Current Regulations



SLIDE COURTESY OF TIMMONS GROUP

Example 1: Site Layout with Proposed Regulations



SLIDE COURTESY OF TIMMONS GROUP

Example 1: Summary

Current Regulations

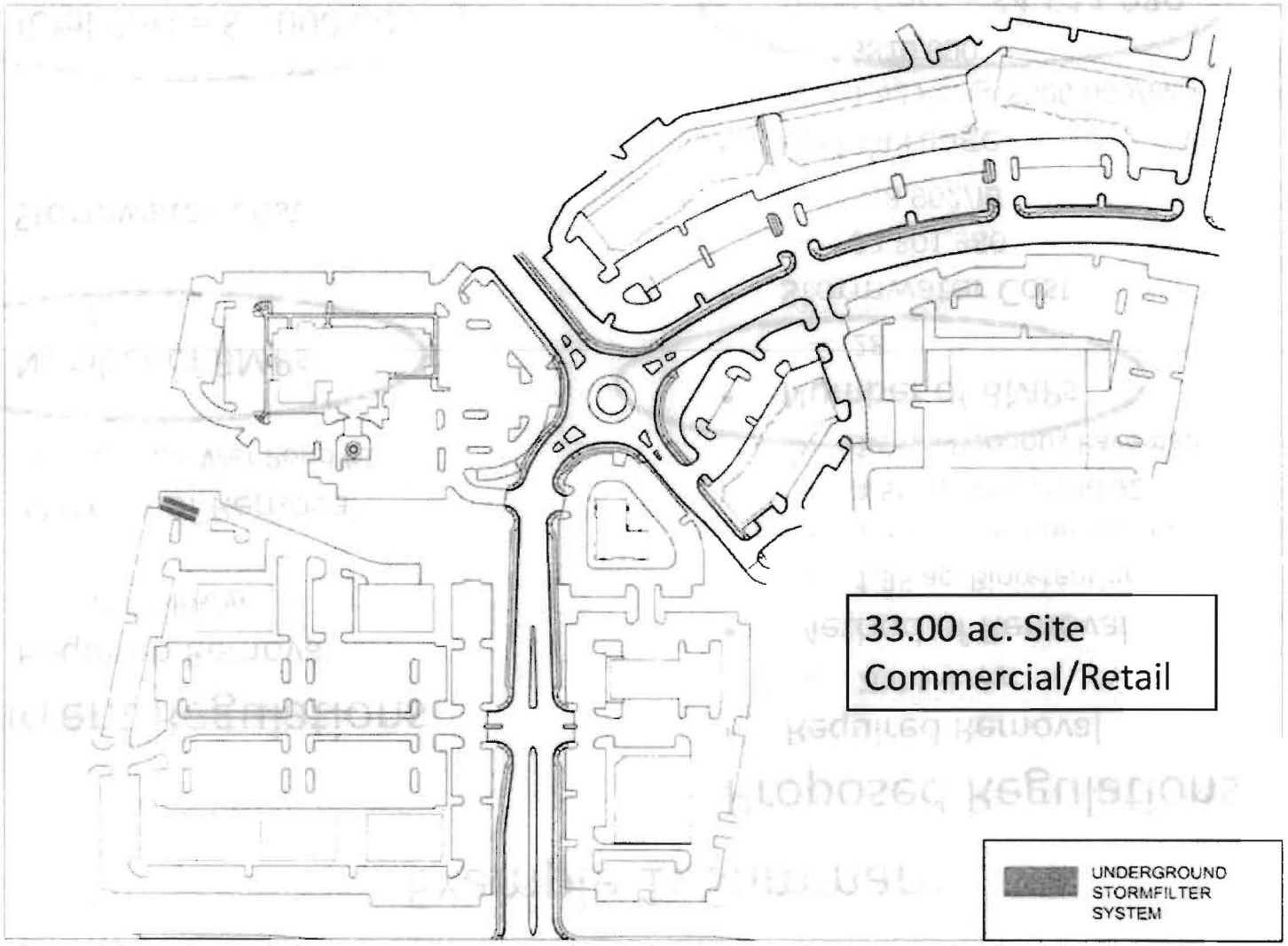
- Required Removal
  - 167.0 lbs/yr
- Method of Removal
  - 3.30 ac. Wet Pond #1
- Number of BMPs
  - 2
- Stormwater Cost
  - $1,000,000
  - $5,988/lb
- Total Cost = $1,000,000

Proposed Regulations

- Required Removal
  - 200.5 lbs/yr
- Method of Removal
  - 1.95 ac. Bioretention #1
  - 1.50 ac. Bioretention #2
  - 4.55 ac. Wet Pond #2
  - 1.0 ac. Pervious Pavement
- Number of BMPs
  - 28
- Stormwater Cost
  - $3,801,980
  - $18,962/lb
- Lost Acreage
  - 1.62 Ac. @ $500,000/ac.
  - $810,000
- Total Cost = $4,611,980

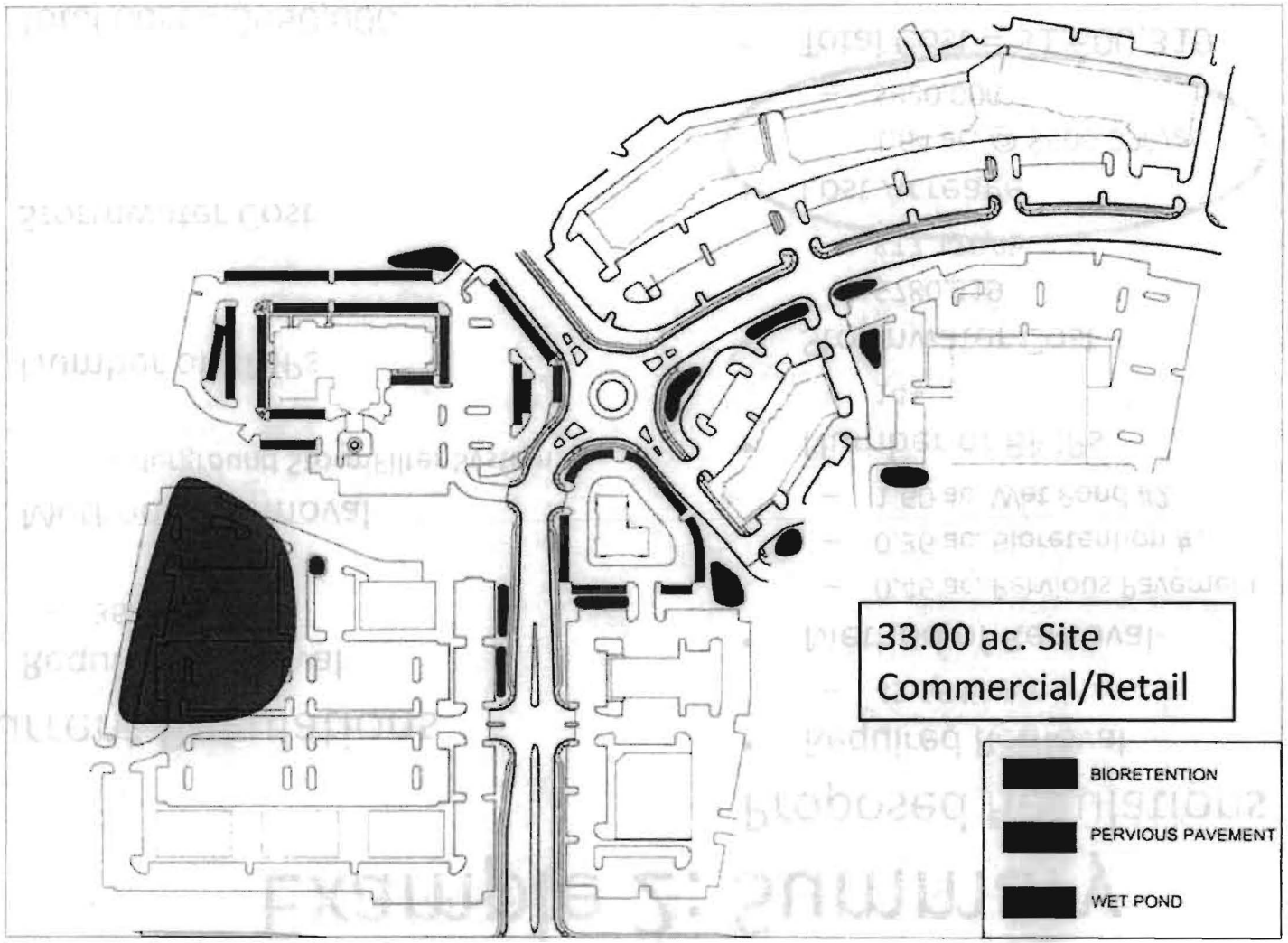
SLIDE COURTESY OF TIMMONS GROUP

Example 2: Site Layout with Current Regulations



SLIDE COURTESY OF TIMMONS GROUP

Example 2: Site Layout with Proposed Regulations



SLIDE COURTESY OF TIMMONS GROUP

Example 2: Summary

Current Regulations

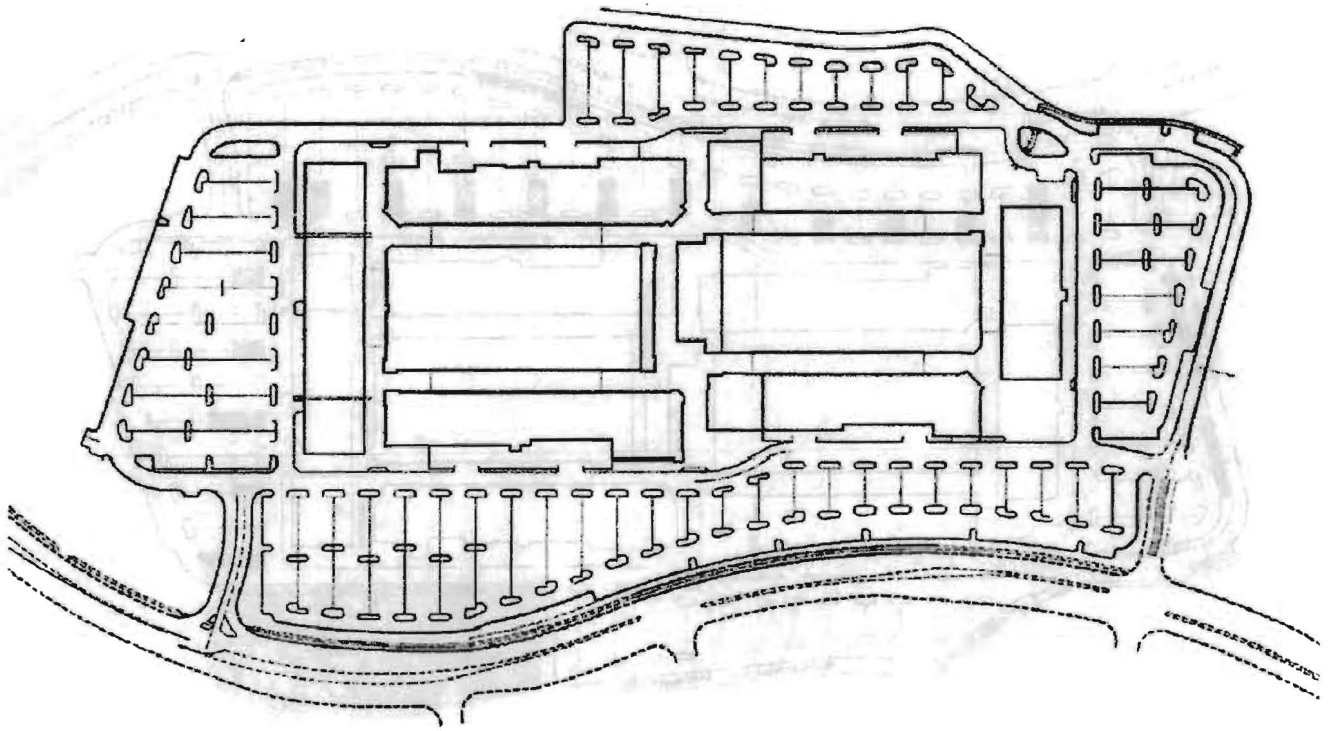
- Required Removal
  - 36.54 lbs/yr
- Method of Removal
  - Underground StormFilter System
- Number of BMPs
  - 2
- Stormwater Cost
  - $650,000
  - $17,789/lb
- Total Cost = $650,000

Proposed Regulations

- Required Removal
  - 45.58 lbs/yr
- Method of Removal
  - 0.46 ac. Pervious Pavement
  - 0.36 ac. Bioretention #1
  - 1.60 ac. Wet Pond #2
- Number of BMPs
  - 14+
- Stormwater Cost
  - $780,319
  - $17,120/lb
- Lost Acreage
  - 1.64 ac. @ $500,000/ac.
  - $820,000
- Total Cost = $1,600,319

SLIDE COURTESY OF TIMMONS GROUP

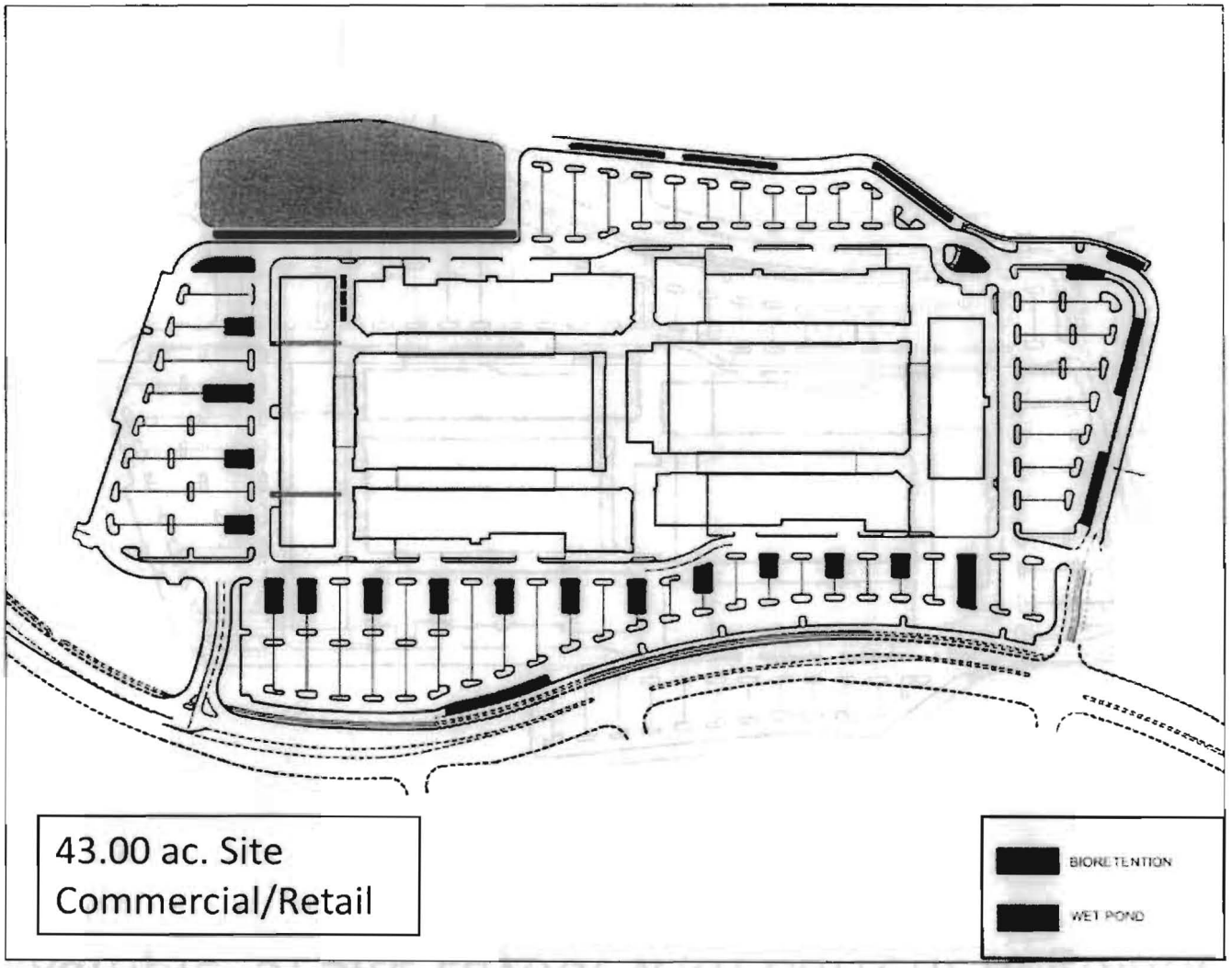
Example 3: Site Layout with Current Regulations



43.00 ac. Site
Commercial/Retail

SLIDE COURTESY OF TIMMONS GROUP

Example 3: Site Layout with Proposed Regulations



SLIDE COURTESY OF TIMMONS GROUP

Example 3: Summary

Current Regulations

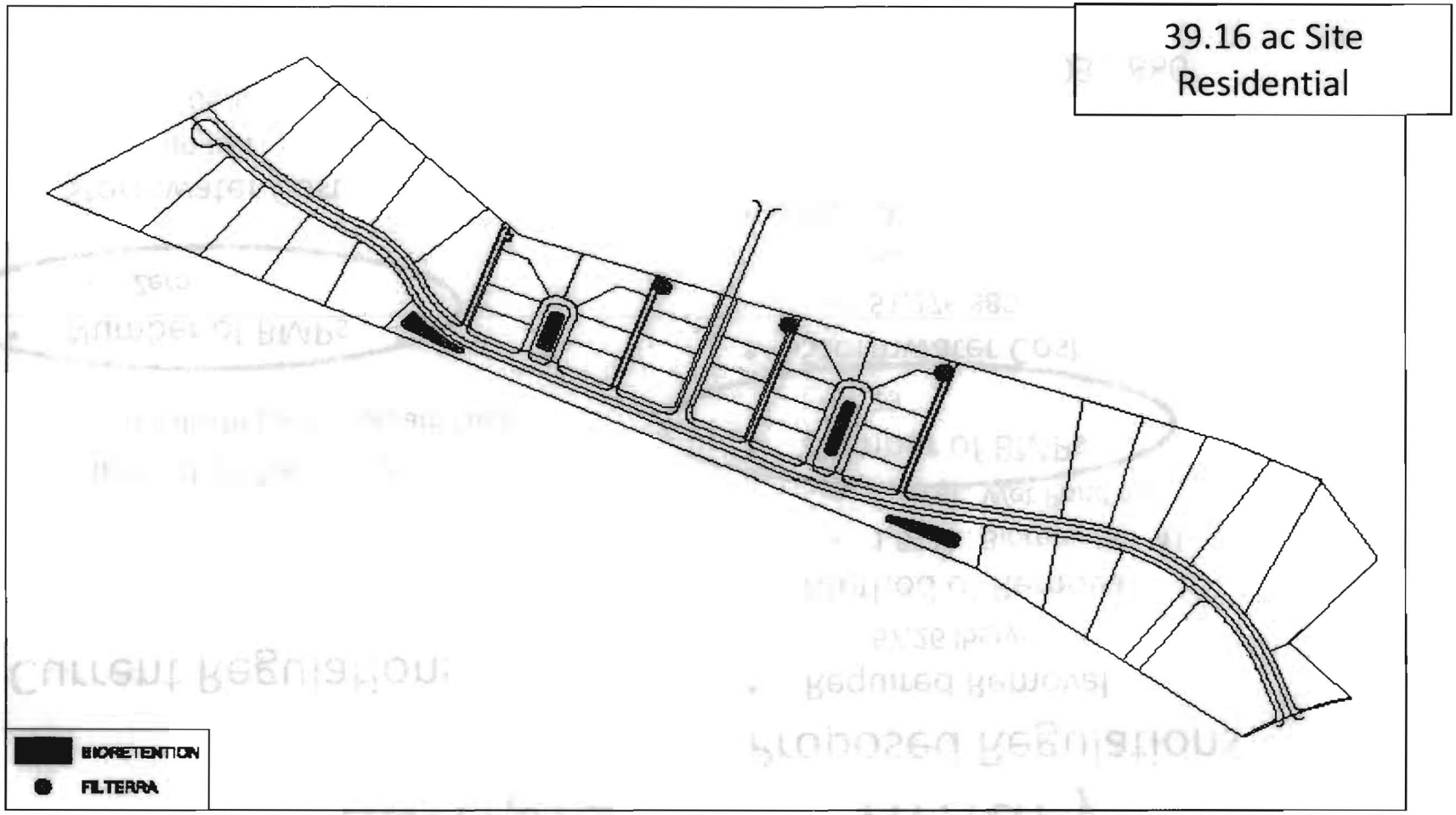
- Required Removal
  - 57.18 lbs/yr
- Method of Removal
  - Paid into Local Program Fund
- Number of BMPs
  - Zero
- Stormwater Cost
  - $349,084
  - $6,105/lb
- Total Cost = $349,084

Proposed Regulations

- Required Removal
  - 67.26 lbs/yr
- Method of Removal
  - 1.51 ac. Bioretention #1
  - 2.16 ac. Wet Pond #2
- Number of BMPs
  - 29
- Stormwater Cost
  - $1,276,880
  - $18,984/lb
- Lost Acreage
  - 1.51 ac. @ $500,000/ac.
  - $755,000
- Total Cost = $2,031,880

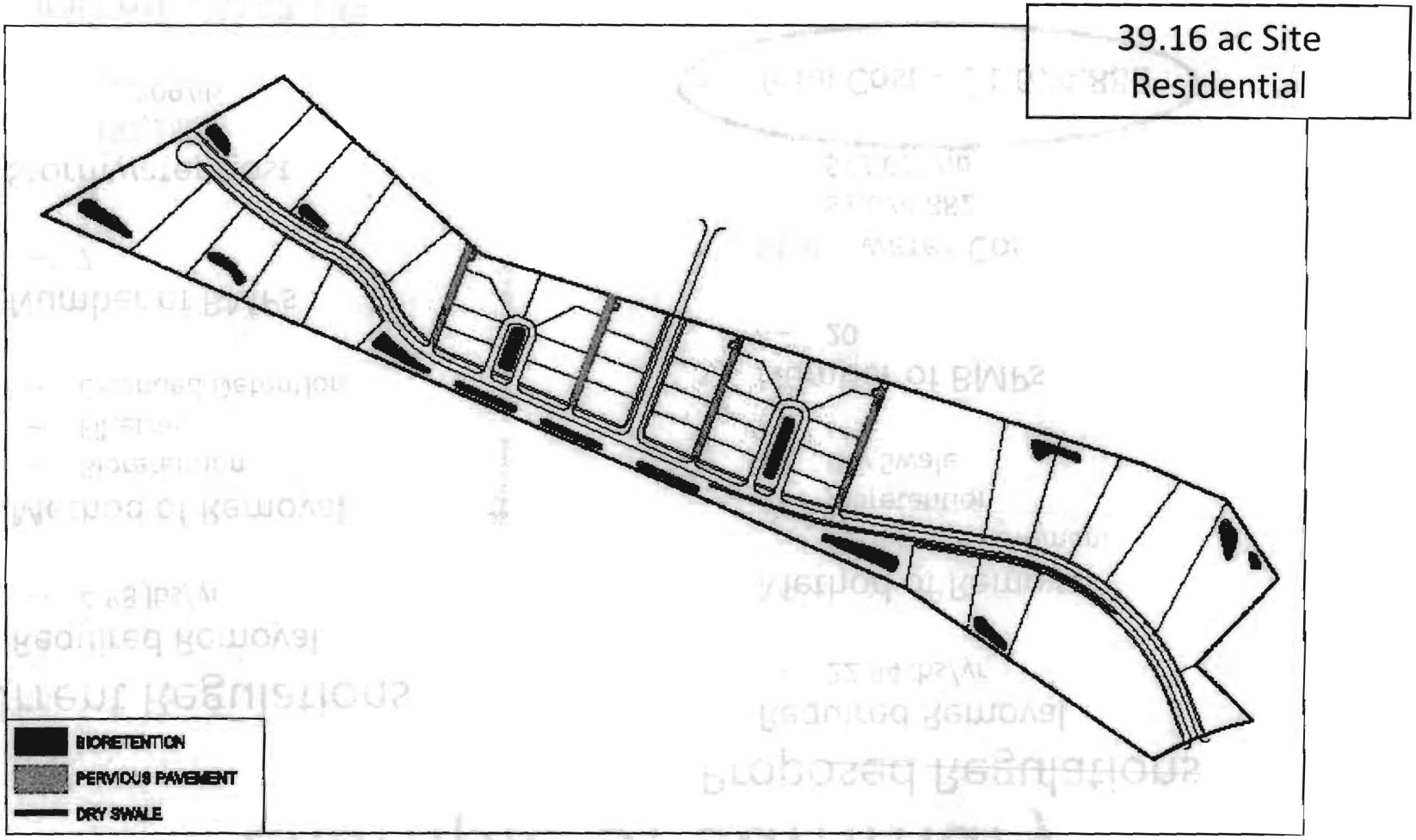
SLIDE COURTESY OF TIMMONS GROUP

Example 5: Site Layout with Current Regulations



SLIDE COURTESY OF TIMMONS GROUP

Example 5: Site Layout with Proposed Regulations



SLIDE COURTESY OF TIMMONS GROUP

Example 5: Summary

Current Regulations

- Required Removal
  - 4.88 lbs/yr
- Method of Removal
  - Bioretention
  - Filterras
  - Extended Detention
- Number of BMPs
  - 7
- Stormwater Cost
  - $157,183
  - $32,209/lb
- Total Cost = $157,183

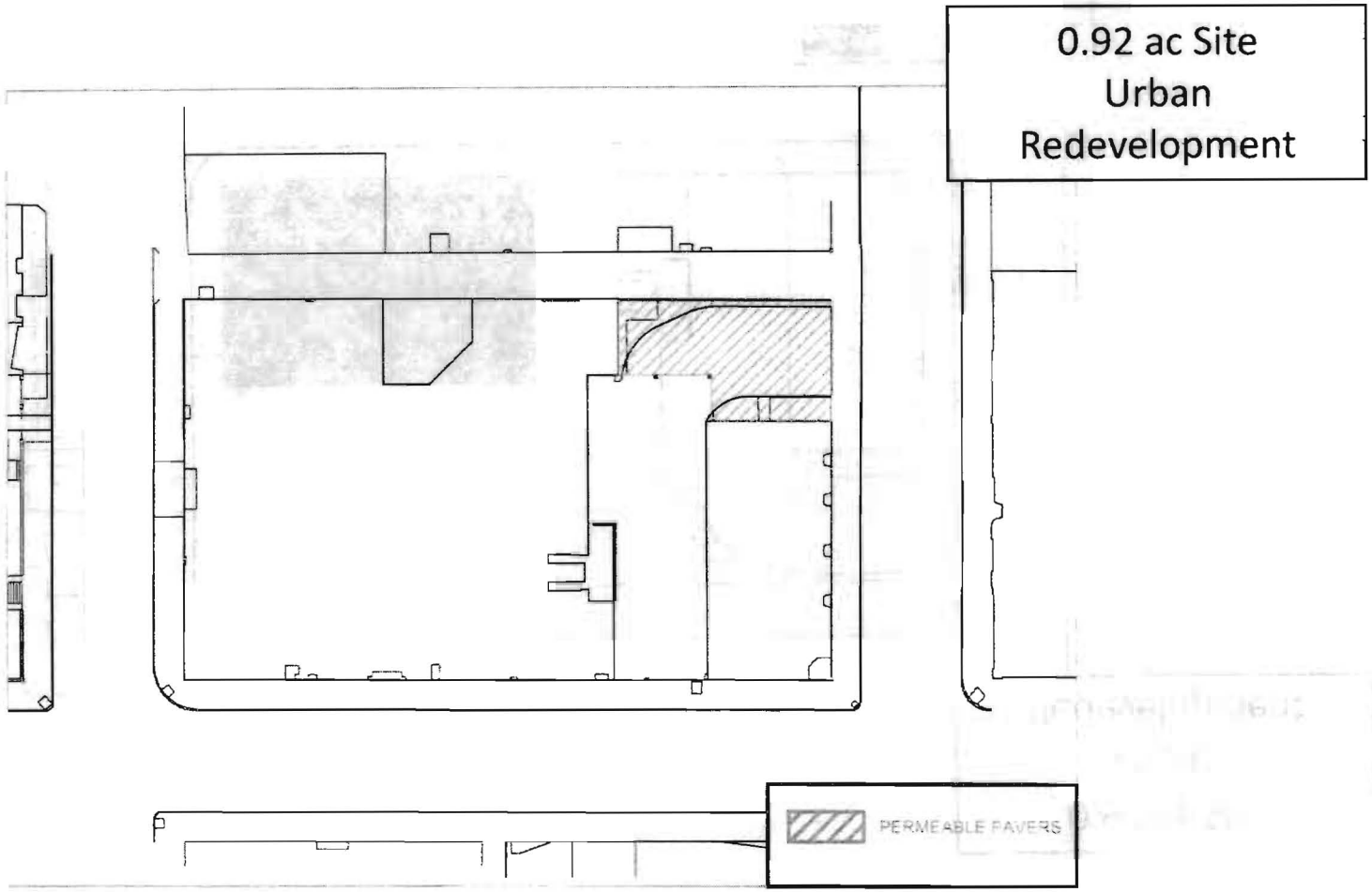
Proposed Regulations

- Required Removal
  - 22.94 lbs/yr
- Method of Removal
  - Permeable Pavement
  - Bioretention
  - Dry Swale
- Number of BMPs
  - 20
- Stormwater Cost
  - $1,674,882
  - $73,011/lb
- Total Cost = $1,674,882

Cost of Stormwater per lot = $38,064

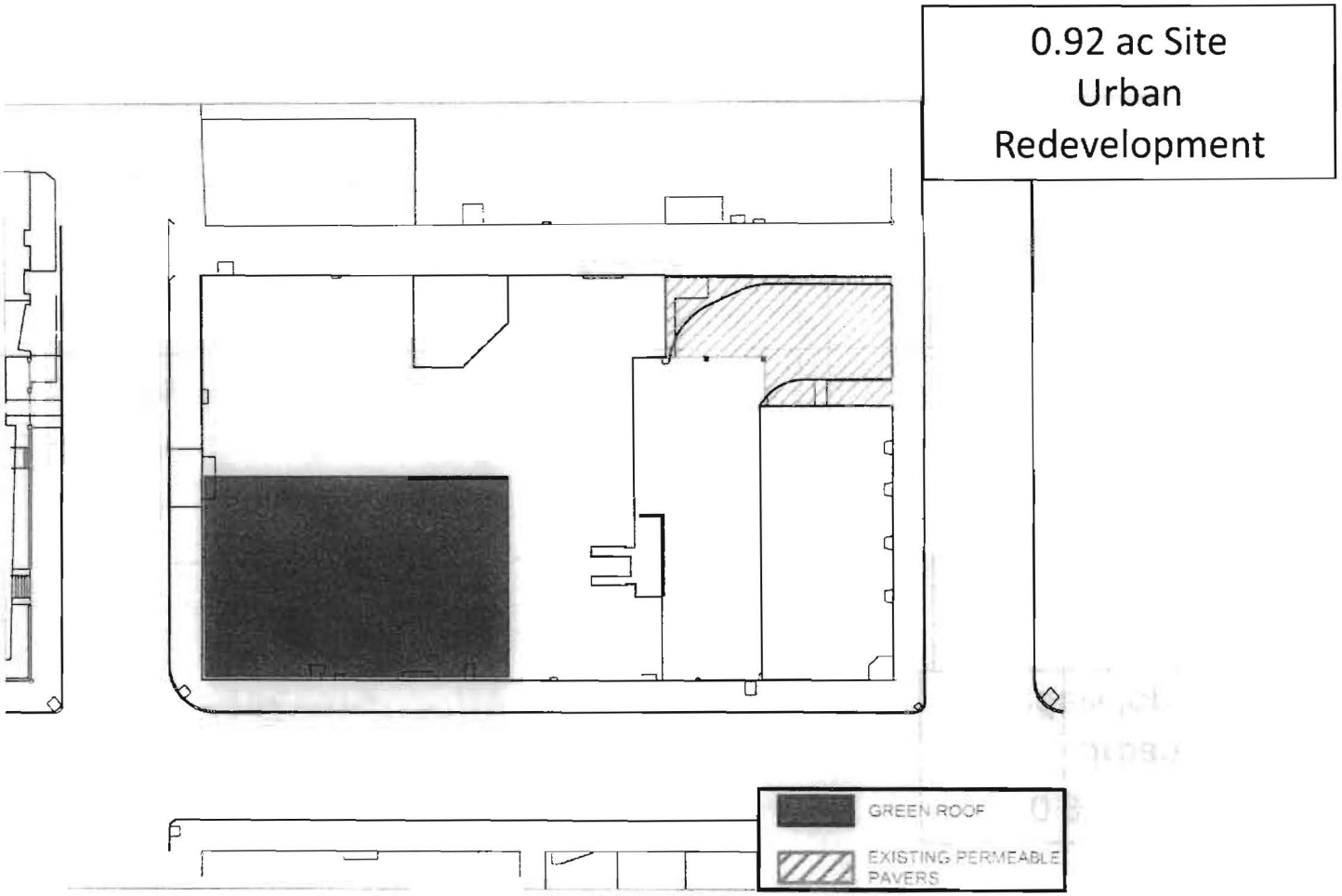
SLIDE COURTESY OF TIMMONS GROUP

Example 4: Site Layout with Current Regulations



SLIDE COURTESY OF TIMMONS GROUP

Example 4: Site Layout with Proposed Regulations



SLIDE COURTESY OF TIMMONS GROUP

Example 4: Summary

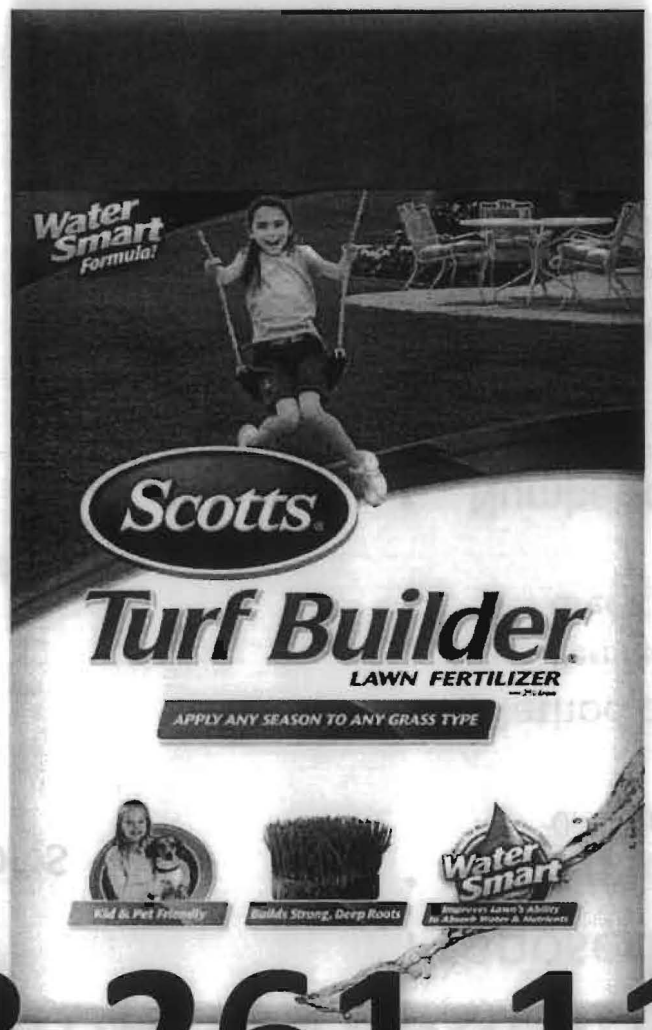
Current Regulations

- Required Removal
  - 0.20 lbs/yr
- Method of Removal
  - Permeable Pavement
- Number of BMPs
  - 1
- Stormwater Cost
  - $80,150
  - $400,752/lb
- Total Cost = $80,150

Proposed Regulations

- Required Removal
  - 0.40 lbs/yr
- Method of Removal
  - Permeable Pavement
  - Green Roof
- Number of BMPs
  - 2
- Stormwater Cost
  - ~~$280,526~~
  - $701,315/lb
- Total Cost = $280,526

SLIDE COURTESY OF TIMMONS GROUP


Water Smart Formula!
Scotts
Turf Builder
LAWN FERTILIZER
APPLY ANY SEASON TO ANY GRASS TYPE
Kid & Pet Friendly
Builds Strong, Deep Roots
Water Smart

$3,261,114

Economic Impact?

Excerpts from the Economic Impact Analysis by Virginia Department of Planning and Budget

May 12, 2009

> *"The costs likely exceed the benefits for one or more proposed changes."*

Economic Impact?

Excerpts from the Economic Impact Analysis by Virginia Department of Planning and Budget

May 12, 2009

> *"Uncertainties exist over the long-term cost and effectiveness of many stormwater control practices."*

Economic Impact?

Excerpts from the Economic Impact Analysis by Virginia Department of Planning and Budget

May 12, 2009

> *"The cost of achieving additional nutrient reductions in highly urban settings and other areas with specific constraints is still uncertain but potentially high."*

Economic Impact?

Excerpts from the Economic Impact Analysis by Virginia Department of Planning and Budget

May 12, 2009

> *"The total costs to the state of implementing additional stormwater control practices to meet the proposed regulatory changes could not be estimated at this time."*

Economic Impact?

Excerpts from the Economic Impact Analysis by Virginia Department of Planning and Budget

May 12, 2009

> *"Economic efficiency of the proposed regulation could be improved by applying differential water quality criteria in watersheds across the state based on the relative water quality benefits that can be achieved."*

Economic Impact?

Excerpts from the Economic Impact Analysis by Virginia Department of Planning and Budget

May 12, 2009

> *"...these changes will also increase the sophistication and resources needed for stormwater design and program administration."*

Economic Impact?

Excerpts from the Economic Impact Analysis by Virginia Department of Planning and Budget

May 12, 2009

"The local and state government cost to administer…will increase, but estimates are not final. These costs are expected to be partially to fully covered by additional fees imposed on land disturbing permit applicants."

Economic Impact?

Excerpts from the Economic Impact Analysis by Virginia Department of Planning and Budget

May 12, 2009

> *"Virginia residents will also likely pay for the higher costs associated with local stormwater program requirements."*

Economic Impact?

Excerpts from the Economic Impact Analysis by Virginia Department of Planning and Budget

May 12, 2009

> *"All Virginia localities are significantly affected by the proposed amendments."*

Economic Impact?

No statement is made anywhere in this document that by driving the costs up, perhaps dramatically, that it will alter the underlying economics of Virginia.

The study in essence assumes business as usual <u>except</u> that higher costs are borne by everyone.

The HBAV Alternative

5 key components.

1. Maintain the current Chesapeake Bay Act standard of .45 pounds of phosphorous per acre per year for new development, and expand that requirement to the rest of Virginia.

2. Allow for acceptance of on-site mitigation designs at .60 pounds of phosphorous per acre per year.

3. Require a payment of $15,000 per pound of phosphorous to the Water Quality Improvement Fund for the difference between the on-site mitigation of .60 and the requisite .45 pounds of phosphorous per acre per year.

4. Use the approximately $170 million generated by development in the fund as grants to assist in the construction of agricultural stormwater management facilities and the retro-fitting of point-source facilities.

5. Return to quantity control measures for the first ½ inch of rain in the one-year, 24 hour storm.

SLIDE COURTESY OF HBAV

On the Horizon

- EPA regulatory changes
- TMDL Standards
- Turbidity Standards

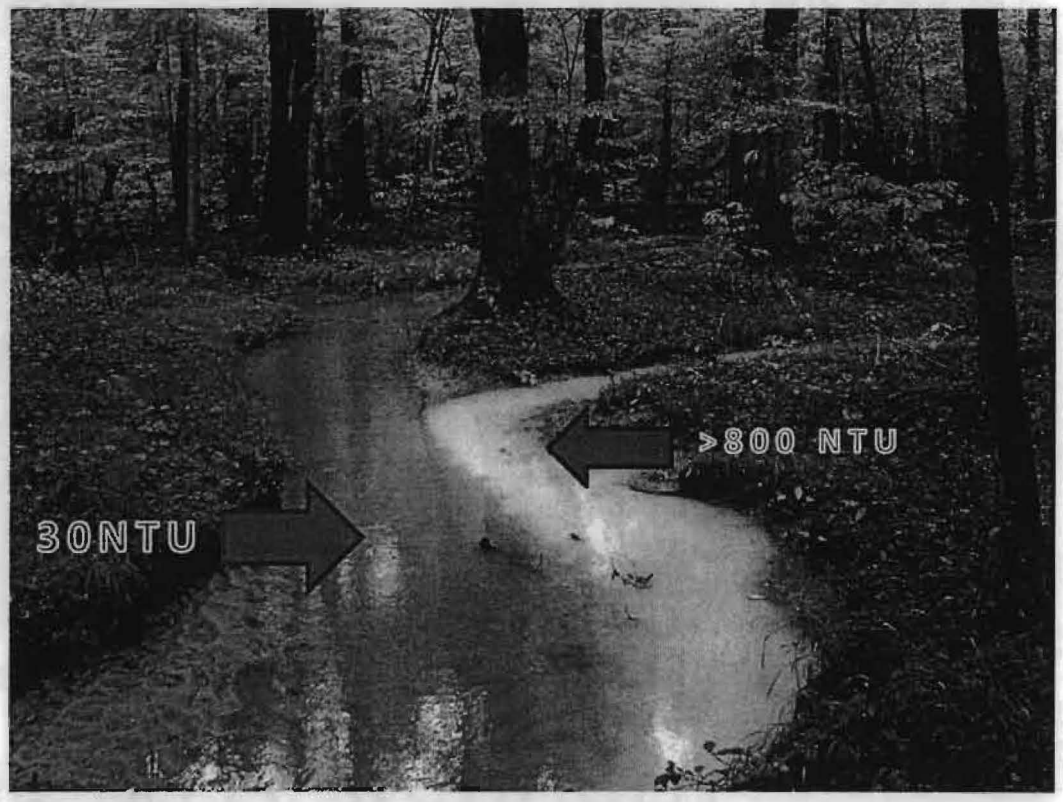
EPA Turbidity Rule Proposal

- Intended to further reduce downstream aquatic impacts from stormwater runoff

- Possible Rule:
  - Use of structural BMPs to control turbidity
  - Mandate sediment basin design for teatment of drainage areas >10 acres
  - Limit of 13 NTU for stormwater runoff
    - Sites > 10 acres
    - Sites with high clay/silt soils
  - Limit of 13 NTU for all sites disturbing > 10 acres

- EPA also requested input on other NTU standards (50-150 NTU Limit)

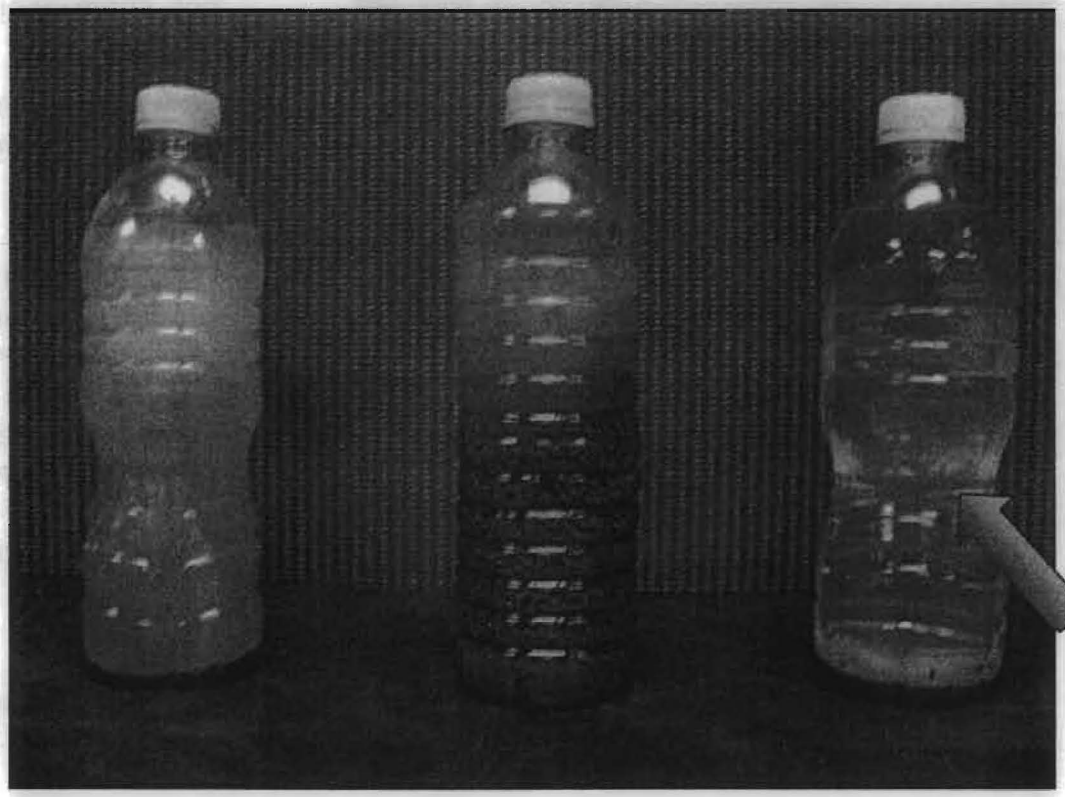
- NTU = nephelometric turbidity unit



SLIDE COURTESY OF KIMLEY-HORN

Achieving NTU Standard

50 – 150 NTU = Passive Treatment (Flocculent use)



This one is 50 NTU

New requirement …13 NTU

SLIDE COURTESY OF KIMLEY-HORN

Achieving NTU Standard

Public Comment Period

Online Public Comments

Final public comment period began on June 22, 2009 – 60 day comment period

Public comment period closes August 21, 2009

Public Hearing – July 14, 2009 7pm

Virginia General Assembly Building
910 Capitol Street, Senate Room B
Richmond, Virginia 23219

Public Comment Period

A sample of Online Public Comments to date…

"…I urge you to adopt the proposed storm water management program, **reject the homebuilders alternative proposal**, and create incentives in the storm water program for new development to occur in towns and cities instead of converting farmland and forestland."

- Sarah Bell

Public Comment Period

A sample of Online Public Comments to date…

"…efforts to improve water quality in streams and rivers in the Chesapeake Bay watershed since 2000 are falling short because of increased run-off from developed lands…

…**Agriculture has made considerable progress in reducing nutrient and sediment runoff.**"

- Kate Giese Wofford

Shenandoah Valley Network

Public Comment Period

A sample of Online Public Comments to date…

"…as a home remodeling contractor, I view building and protecting the environment as equally important and compatible."

- John Mayeux

Public Comment Period

A sample of Online Public Comments to date…

"Any changes that protect our local waters and help clean up the Chesapeake Bay are worthwhile. I hope that steps will be taken, ***however***, to protect Smart Growth policies, such as infill development, if that can be accomplished in and environmentally sensible way."

- Gina Faber

Sustainable Loudoun

Public Comment Period

A sample of Online Public Comments to date…

"Since good storm water regulation is practical and affordable, allowing developers to unnecessarily pollute our rivers should be considered a crime."

- John and Judy Mathwin

Political Realities

- Regulations are the Environmental Crown Jewel for Governor Kaine
- No major changes to the proposed regulations after many technical questions raised
- Obama's Executive Order – Chesapeake Bay

Political Realities

President's Message

Nigel Davis

There is reason to be optimistic. Virginia Governor Tim Kaine is the new Chairman of the Chesapeake Bay Executive Council. Already, he has used his strong relationship with the president to argue for a significantly increased federal presence on the Bay.

I guess one could say that's the trouble with democracy—it allows for all parties to have a voice. Unfortunately, those who do not want government to enforce the law have had a louder voice than we have. It is time to turn the tables.

There is reason to be optimistic. The Obama administration has made a refreshing commitment to environmental protection, and Lisa Jackson, the new EPA Administrator, has repeatedly stated her commitment to the Chesapeake Bay. She has also said her policies will follow science and the law. In addition, Virginia Governor

impaired under the Clean Water Act. Our reading of the Act requires EPA, the lead federal agency, to prohibit any additional levels of pollution to these impaired waters until the impairments are reversed.

Our legal challenge is just part of the Biggest Fight. We have also called on the public to write EPA Administrator Lisa Jackson personal letters urging her to take action. As we go to press, we have received

And we hope that every member of CBF will call or write his or her U.S. Senators and Congressmen urging them to petition President Obama and Administrator Jackson.

With security so high in Washington, we find that letters to the home offices of your Congressional representatives are more likely to get through. For addresses and telephone numbers, visit cbf.org/lookup.

"What we are after is a precise, pollution-reduction budget based on the science,

Discussion

Public Comment Period

Discussions with General Assembly members

Other Thoughts?

"Development" vs. "Jobs"

Important Information for Participation

Online Public Comments

Final public comment period began on June 22, 2009 – 60 day comment period
Public comment period closes August 21, 2009

Website address for leaving public comments:
http://townhall.virginia.gov/L/comments.cfm?stageid=5070

Obama's Executive Order – Chesapeake Bay Protection and Restoration
http://www.whitehouse.gov/the_press_office/Executive-Order-Chesapeake-Bay-Protection-and-Restoration/

Public Hearing – July 14, 2009 7pm

Virginia General Assembly Building
910 Capitol Street, Senate Room B
Richmond, Virginia 23219

Bullet Points of Problems with Regulations

- Current regulations for development already working, agricultural compliance is where the problem is.
- Regulations will mandate sprawl – too expensive to build higher density.
- Effect of regulations is the opposite of what is environmentally good for the Bay.
- Economic Impact Analysis (by VT) doesn't show the program is feasible, only that there are a lot of costs that are not predictable.
- Impossible to achieve pollutant removals economically, even in downtown redevelopments.
- On-size-fits-all approach to pollutants is terrible for economy – treats rural counties like Buckingham County the same as urban Fairfax County.
- HB 3202 Mandates Urban Development Areas – these are impossible to build with new regulations
- Homebuilders have a great solution for cleaning up the Bay while not disabling Virginia's economy, using fees collected from development and redevelopment to help accomplish agricultural BMPs where the biggest pollution is coming from.
- RECOMMENDATION – Do not enact Part II of the regulations – the technical criteria portion, until and unless it can be significantly modified to protect the state's economic future while protecting the Bay.
- Current regulations work if more effort is placed on enforcement of what is on the books.