

**Virginia Department of Conservation and Recreation  
Public Hearing on Proposed Amendments to Parts I, II, III, and XIII of the Virginia  
Stormwater Management Program Permit Regulations  
(4 VAC 50-60-10 et seq.)**

**July 7, 2009 – 7:00 p.m.  
Manassas City Council Chambers, Manassas, Virginia**

**Meeting Officer:** Christine Watlington  
Policy and Budget Analyst  
Department of Conservation and Recreation

**Opening:**

**Ms. Watlington:** Good evening, I would like to call this public hearing on the Virginia Soil and Water Conservation Board's proposed amendments to Parts I, II, III and XIII of the Virginia Stormwater Management Program Permit Regulations to order. I am Christine Watlington, Policy and Budget Analyst for the Department of Conservation and Recreation. I will be serving as the meeting officer this evening. I welcome you to this hearing.

I would like to thank the City of Manassas for allowing us to use this facility.

***Introduce DCR Staff assisting with the meeting.***

With me this evening I have Eric Capps, DCR's Stormwater Permitting Manager; David Dowling, DCR's Policy, Planning and Budget Director, Ryan Brown, our Policy and Planning Assistant Director, who will serve as our technical presenter and Michael Fletcher, DCR Board Liaison who will be compiling the minutes of this meeting.. This meeting will be recorded.

I hope that all of you have registered on our attendance list. If not, please do so. Those wishing to speak should note that on the attendance list. Please also make sure that your contact information, including your name and address, is legible and complete as we will be utilizing it to keep you informed on the status of the regulatory actions.

**Purpose of the public hearing:**

The purpose of this hearing is to receive input from interested citizens on the Board's two proposed regulatory actions during the 60-day public comment period, which closes on August 21<sup>st</sup>, 2009. The first regulatory action proposes amendments to Parts I, II, and III of the Virginia Stormwater Management Program Permit Regulations related to stormwater definitions, water quality and quantity technical criteria, and local program criteria. The second action proposes amendments to Part XIII of those regulations related to stormwater fees.

The Department used the participatory approach to develop the proposals. Following the publication of the Notices of Intended Regulatory Action regarding these regulations and the public comment period on the NOIRAs, the Department formed a Technical Advisory

Committee to assist in the development of the proposed regulations. The TAC included representatives from localities, consulting firms, environmental organizations, state agencies, colleges and universities, planning district commissions, soil and water conservation districts, and federal agencies. The TAC met 17 times over the course of a two and a half year period. Following the completion of the TAC's work, the Soil and Water Conservation Board proposed these regulations at its meeting held on September 25, 2008. Copies of the proposed regulations are located on the table near the attendance list.

Although we have already been considering regulatory solutions to issues with the proposed regulations that we are aware of, it is the Board's approved version that we were required to publish and seek comments on. However, during the regulatory overview, we will share with you a few areas that we already recognize will need further consideration. We do want to note that all public comments received will be carefully considered by the Department and the Board in developing final regulations. The Board's recent regulatory actions demonstrate a history of being responsive.

This concludes my introductory remarks. I would like to introduce Ryan Brown, DCR's Policy and Planning Assistant Director, who will provide information regarding what the proposed regulations do.

**Mr. Brown:** Thank you Ms. Watlington.

Although we know that many of you here this evening are very familiar with these regulatory actions and the proposed regulations, for those who are not, we thought it would be useful to take about 20 minutes to review how these regulatory processes have been conducted to date and what the key portions of the proposed regulations are. This presentation will present information in summary fashion; obviously, you should consult the hard copies of the regulations for specifics. I believe that a copy of this powerpoint is available on the information table with the other materials associated with this hearing.

To give some history, pre-2004, stormwater management requirements in the Commonwealth varied depending on where a project was located in the state. Four different citizen boards (Soil and Water Conservation Board, Board of Conservation and Recreation, Chesapeake Bay Local Assistance Board, and State Water Control Board) and three different state agencies (DCR, Chesapeake Bay Local Assistance Department, and Department of Environmental Quality) all had various stormwater management requirements. This led to inconsistent requirements and uncertainty for the regulated community. During the 2004 General Assembly, this inconsistency and uncertainty was sought to be addressed by House Bill 1177, which created the Virginia Stormwater Management Program, or VSMP, and effectively consolidated stormwater management responsibilities for municipal separate storm sewer systems and construction activities into DCR and the Virginia Soil and Water Conservation Board. Also key to House Bill 1177 was the concept that responsibilities for permitting of construction stormwater be eventually passed down to localities, similar to the way that Erosion and Sediment Control has been administered historically.

Following the enactment of House Bill 1177, the existing stormwater regulations utilized by the Department of Environmental Quality were transferred to the Virginia Soil and Water Conservation Board in order to allow for the administration of the federal Clean Water Act

stormwater permitting program. These regulations are essentially what is on the books today, and are what are utilized in Virginia's stormwater management program at the current time. In order to fully implement House Bill 1177's requirements and to meet Virginia's water quality goals, however, these regulations need to be amended.

The first area that needs to be addressed in the VSMP regulations concerns local administration of stormwater management programs. Allowing construction stormwater management to be implemented on a local level was a key assumption of House Bill 1177, which requires local programs to be adopted by localities located within the area impacted by the Chesapeake Bay Preservation Act, as well as MS4 localities. Other localities may adopt local programs on a voluntary basis or DCR will administer a program in their locality. These changes require amendments to Part III of the VSMP regulations. Complimentary to these amendments are changes to Part XIII of the regulations, which contain the fees that apply to the VSMP program. By law, these fees need to be established at a level that is sufficient to support a stormwater program.

The quality of Virginia's waters, as well, need to be protected from pollutant discharges from regulated construction activities. Enhancing these stormwater regulations is a key part of Virginia's overall approach to improving water quality statewide and restoring the Chesapeake Bay, which includes pollution reductions from sewage treatment plants and farmland runoff. Regulated construction activities generally include those one acre or greater statewide, as well as those 2500 square feet or larger in areas subject to the Chesapeake Bay Preservation Act. Addressing post-development runoff from these sites is a key component of Virginia's water quality goals for rivers, streams, lakes, and the Chesapeake Bay. In fact, EPA's Chesapeake Bay Program has estimated that 32% of phosphorus loads to the Bay can be attributed to urban and suburban runoff sources, of which stormwater runoff from developing lands is a part. While gains are being made in addressing other sources, including agricultural sources, sewage treatment plants, industrial sources, and atmospheric deposition, the loadings for developed lands continue to increase. Water quality criteria are contained in Part II of the VSMP regulations.

The graphic from the EPA's Chesapeake Bay Program illustrates the share of nitrogen, sediment, and phosphorus pollution coming from urban sources to the Chesapeake Bay.

**Mr. Lesser:** What percentage of new construction is that 32%?

**Mr. Brown:** I don't have that off the top of my head David, if you want to talk to me later we can try to get that information.

**Mr. Lesser:** I think it's important because if you're dealing with new construction, if new construction is only 20% or 15% of nitrogen you're attacking the tail and the dog's out there running around.

**Mr. Brown:** I'm happy to discuss this with you later.

The quantity of water leaving developed lands similarly continues to be of concern. The current standards contained in the VSMP regulations and in the Virginia Erosion and Sediment Control Regulations still result in significant flooding and channel erosion, and residents continue to report flooding impacts created by upstream development. It is believed that the current criteria

needs revisions to address these concerns, as well as to allow long term consistency of the VSMP regulations and the Erosion and Sediment Control Regulations for the regulated community (although amendments to the Erosion and Sediment Control Regulations will require a separate regulatory action in the future). As with water quality, the water quantity technical criteria are contained in Part II of the VSMP regulations.

Recognizing all of these needs, in late 2005, DCR and the Board embarked on a regulatory process to amend the VSMP regulations. This was commenced through the publication of Notices of Intended Regulatory Action related to Parts I, II, III, and XIII of the VSMP regulations. A technical advisory committee, or TAC, was formed to assist with the preparation of proposed regulations. The TAC was composed of nearly 30 members representing localities, consulting firms, environmental organizations, state agencies, colleges and universities, planning district commissions, soil and water conservation districts, and federal agencies. Overall, the TAC met 17 times between May of 2006 and August of 2008. Subcommittees held an additional 8 meetings. Numerous other meetings were held related to the regulations. In all, over 50 public meetings have been held to date, along with a series of design charrettes which examine real-world site planning. These charrettes have been held statewide and attended by over 400 individuals. Following the completion of the TAC's work and these other meetings, the Board proposed the amended VSMP regulations on September 25, 2008. As is required by Virginia's administrative process, the regulations as they were proposed on this date are what is now before you for public comment, although we are aware of a number of areas that will additionally need consideration before preparing final revisions to the regulations.

With this background, what do the proposed regulations do? Four different parts of the VSMP regulations are amended by this action. These include the definitions contained in Part I, the technical criteria (including water quality and quantity) contained in Part II, the requirements for local stormwater management programs contained in Part III, and the stormwater permit fees contained in Part XIII.

Turning first to Part II, water quality and quantity, these are the technical criteria that will be employed by a locality when it operates a local stormwater management program and, for those localities that do not adopt their own program, the criteria that will be utilized by DCR in administering a local stormwater management program within a locality.

As it pertains to water quality, the amended Part II maintains the current approach of focusing on phosphorus as an indicator pollutant. By employing practices that remove phosphorus from discharges from a site, it has been demonstrated that other pollutants (such as nitrogen and sediment) will likewise be reduced. Through examination of Virginia's Tributary Strategy goals for the Chesapeake Bay, however, it has been determined that the current 0.45 pounds of phosphorus per acre per year standard for new development projects is continuing to allow degradation. The proposed amendments to Part II amend this standard to 0.28 pounds per acre per year, which is the level indicated by Virginia's Tributary Strategies but more lenient than a forested situation that is 0.11 pounds per acre per year. This is a design standard, meaning that the site will be designed in a manner that is deemed to achieve this standard. It is not a load limit that would require monitoring from the site. The water quality requirements also provide a more lenient standard for redevelopment, which would be required to achieve a load 20% below that present prior to the redevelopment of the site. This is more stringent than today's 10%

requirement, but, with the goal of not creating an obstacle to redevelopment projects, has been established at a level much lower than the 44% that is indicated by the Tributary Strategy goals.

Compliance with water quality requirements would be achieved through utilization of the new Runoff Reduction Method and an expanded set of best management practices contained in the regulations. Implementing BMPs consistent with a plan developed based on the Runoff Reduction Method would achieve compliance with the standard; additionally, the proposed amendments allow for local adoption of other methods, off-site compliance, and participation in regional stormwater management plans and pro-rata fees. DCR is also currently working on guidance related to the new nutrient offsets program, which would allow for another “trading for compliance” option.

The proposed Part II also contains new provisions related to water quantity. A special water quantity workgroup was developed to work specifically on this issue, and section 66 of the proposed regulations is the result of this group’s work. To alleviate stream channel erosion and downstream flooding, section 66 contains requirements related to channel protection and flood protection that vary based upon the condition of stormwater conveyance system that is being discharged into. Sheet flow is also addressed. It is DCR’s long term intention to use this criteria, when finalized, to amend MS19 of the Virginia Erosion and Sediment Control Regulations to bring consistency across the Stormwater and Erosion and Sediment Control programs.

Secondly, the proposed regulations do establish the framework for local stormwater management programs (both locality administered “qualifying local programs” and DCR-administered programs for those localities that do not adopt their own programs). Due to the timeframes established by law for the effective date of these regulations and the timing for local program adoption, local programs are not likely to begin being adopted until between October 2011 and April 2012, with all programs being in place by April of 2013.

Part III requires that all local stormwater management programs implement the new Part II technical criteria. Specific requirements for up-front plan review, permit issuance, inspections (during and post-construction), long term BMP maintenance, and other program components are contained in Part III as well.

Finally, the proposed regulations do include amendments to the permit fee schedule contained in Part XIII. As noted earlier, the law requires that fees be established at a level sufficient to adequately fund the administration and oversight of stormwater management programs. The fees proposed are scaled based upon acreage of the project, and were established based upon the actual work that is projected to be necessitated by the site. Twenty-eight percent of the overall fee is attributed to technical assistance and local program oversight and will go to DCR. In the case of a locality-administered qualifying local program, the remaining 72% is believed to be sufficient to fund the locality’s responsibilities.

The previous slides summarize what is contained in the proposed regulations. As noted earlier, however, since the time of the Board’s proposal of these regulations in September of last year, DCR has become aware of a number of issues that need to be considered going forward. These include grandfathering of existing projects from the requirement to meet the new technical criteria, the effect of the new technical criteria on commercial, redevelopment and infill sites, as

well as sites located in urban development areas; nutrient offsets; and questions as to whether it is appropriate to have a single statewide standard or whether different standards for different regions of the state would be more appropriate. DCR is already considering these concerns. Public comment will undoubtedly produce other issues that need to be considered carefully.

Finally, although these regulatory actions have been ongoing for several years, there are still many important steps remaining. Following the close of the public comment period on August 21, all public comments will be carefully considered as final regulations are developed and forwarded to the Board for approval. By law, they cannot become effective prior to July 1, 2010. Similarly by law, the adoption of local stormwater management programs will follow the effective date of these regulations by 15 to 21 months, placing them at earliest between October 2011 and April 2012.

More information on these regulatory actions can be found on DCR's website or the Virginia Regulatory Townhall at the addresses appearing in this presentation. Public comment information is also included on the final slide of this presentation, as well as in the handout provided.

**Ms. Watlington:** Thank you Mr. Brown.

Before we begin receiving testimony on the proposed regulations, I would like to stress that this is an information-gathering meeting. Everyone wishing to speak will be heard. However, due to the number of individuals present we ask you to limit your comments to 5 minutes and to address information that others may not have already covered. For your information, the timer located at the front of the room will monitor your time. If necessary, we may ask speakers questions concerning their testimony or to request additional information concerning a subject believed to be important to the process in order to help the clarify and properly capture your comments. Staff will be available after this hearing to take any individual questions you may have.

We will now begin the public comment portion of the hearing. When I call your name, please come to the front and use the podium. Please state your name and who you represent. If you have an extra copy of your comments, please provide it to us so that it may be utilized in developing the minutes of this hearing.

*Wendy Hamilton*

My name is Wendy Hamilton, President of Preserve Frederick, a grassroots non-profit organization working to promote compatible development that strengthens our communities, protect our natural and historic resources and preserve our rural character in Frederick County, Virginia. Preserve Frederick represents over 400 members and we strongly support the proposed Stormwater Regulations.

Preserve Frederick applauds DCR's 3-year efforts in the proposed stormwater regulations which we believe have been thoroughly examined to ensure achievability from both an engineering and an economic perspective.

Clean water in our streams and rivers is vitally important in Frederick County. The majority of Frederick County residents obtain drinking water from surface waters. Run-off from poorly planned development makes it more expensive for localities to provide clean drinking water to its citizens.

In 2006, the Shenandoah River was named one of the most endangered rivers in America. A major cause of the problem, according to American Rivers' report, was polluted run-off from poorly-planned development. Frederick County and Winchester residents need to look no further than Opequon Creek and Abrams Creek. Half an inch of rain and these creeks become swollen torrents carrying warm, dirty water from developed areas. This is not simply an urban problem. We're already seeing and measuring impacts in Crooked Run, Redbud Run, Stephens Run and other tributaries.

It is time for the development community to join with farmers, industry, and local governments in taking steps to clean up streams and rivers. In recent years, hundreds of millions of taxpayer dollars have gone to reduce water pollution from sewage treatment plants. Likewise, Virginia farmers are investing their own hard-earned resources to reduce farm runoff in streams and rivers. Yet stormwater from developing areas could already be outpacing these improvements from farms and sewage treatment, according to Bay cleanup experts.

Polluted runoff after storms is an environmental problem; and it's also an economic problem. Failure to responsibly address stormwater runoff will only cost taxpayers more in the future.

The new stormwater problem is designed to be paid for by new development through proposed permit fees. We believe this to be a fair solution which benefits localities and will not place an undue burden on the County. Furthermore, under the proposed regulation, Frederick County would have the option of running its own program or having the Virginia Department of Conservation and Recreation run the program.

Additionally, Preserve Frederick asks that DCR ensures that the proposed regulations do not provide incentives for new development to occur in farmland and forestland. Redevelopment and in-fill development in towns and cities, with land conservation in rural areas, will ultimately provide the best outcome for clean water as well as livable communities. Therefore, if minor changes to the proposed regulations are necessary to encourage responsible growth patterns, we request that those changes are made prior to adopting the final regulation.

Again, we applaud the three-year effort that has led to this proposed program. And we urge DCR and the Virginia Soil and Water Conservation Board to adopt the Virginia Stormwater Management Plan without delay.

*Patsy Gochenour*

I'm Patsy Gochenour, Redbud District, Frederick County and I represent the Caretakers of God's Creation, a mission of the United Methodist Church. As a representative of the stewardship of God's creation, we're commending the Virginia Soil and Water Conservation Board and the Department of Conservation and Recreation for putting forward a balanced package of amendments in order to address this serious problem of urban and suburban stormwater pollution.

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At our recent annual conference in June of the United Methodist Church in Norfolk, Caretakers of Gods Creation had dealings with the Methodists that are in their districts and their watershed. It was exciting to see how each member knew their district but then took great reward in finding their watershed address.

As a Methodist, I live in Winchester District and Abrams Creek is my watershed address. However, I believe I should give you a clearer view of how it deals with tonight's concern of stormwater pollution. Because my little Abrams Creek is constantly flooding, running brown instead of clear.

I want to give you this little picture using George Washington as an icon. Protecting his water source, he was Commander in Chief during the French and Indian War and his headquarters was in Winchester. Then he was elected from Frederick County to the House of Burgesses and he continued with his water protection and the introduction of a law. Livestock, as you know, roamed free in colonial days but not in Winchester. No hogs in the town. Washington made it a law and it is recorded in the House of Burgesses.

The Town runoff flows into Abrams Creek, Abrams Creek into the Opequon Creek and the Opequon in to the Potomac River which flows by his Mount Vernon into the Chesapeake Bay.

There is a sign very close to my home on Route 81 which says now you are entering Abrams Creek in the Chesapeake Bay Watershed. Now, my Abrams creek is impaired. Opequon Creek is impaired and our beautiful Shenandoah River is the fifth most endangered river in America.

So I say to you today. Washington identified his pollutant and he did something about it.

Now, tonight in closing, I would say, the Caretakers of God's creation strongly supports the draft amendments and supports their approval by the Board without any substantial changes.

Thank you for the time. And I would like to share a map. This is what I'm talking about at the conference. Many people came up and they knew their district but it was exciting that they could find their watershed. And then we talked about identifying their water source.

So I thank you for the opportunity.

*Patrick Felling*

Good evening, my name is Patrick Felling. I'm the Virginia policy coordinator for the Potomac Conservancy.

The Potomac Conservancy commends the Board and DCR for putting forward this package of amendments to 4 VAC 50-60-10. We believe that it addresses the basic problem of urban and suburban stormwater pollution. These amendments are especially appropriate given the recent increase in pollutant loads in stormwater runoff, while pollution from other sources, such as agriculture, are decreasing.



Virginia must reduce water pollution from all sources or we will never reach our water quality goals. It is time for urban and suburban development to contribute to the water quality across the Commonwealth.

The proposed phosphorus standard, based on scientific models, strikes an appropriate balance between water quality and the need for future development.

We support the emphasis on low impact development techniques as an alternative to the old practices that have brought us this dire situation. We look forward to the newest and best technologies being brought to bear through the approved list of best management practices.

We also appreciate the extensive and open process of drafting these revisions with multiple stakeholders over three plus years. The robust science behind the standards is leading edge yet has been tempered by economic and social need. The provision for offsets introduces flexibility to provide water quality without causing undue punishment or hardship.

You have heard from various parties expressing concern that the current proposal may have the unintended consequences of discouraging redevelopment. We join with them in requesting that necessary adjustment be made to the rules so that they do not promote sprawl with redevelopment. Yet we still wish for the protection of our waterways through this process.

We also asked that all efforts be made to ensure all localities that choose to administer their own stormwater program have sufficient funding to carry out their responsibilities.

In summary, the Potomac Conservancy strongly supports the draft amendments and supports their approval by the Board without any substantial changes.

Thank you for the opportunity to offer my comments this evening.

*Michael Childs*

Thank you. I'm with the DC chapter of the Surfrider Foundation, a grassroots organization protecting watersheds, the Bay and of course the ocean.

But I really come here more from my experience. I live in Annandale, Virginia. Long Branch Creek is in my back yard, adjacent to that. In addition to that, Lake Accotink which it flows into. I'm an active site volunteer with Fairfax County Park Authority.

Over the last seven years I have noticed immeasurable erosion problems and it's not something that just happened. It's something that's happened over the last seven years.

Most of it was dealing with stormwater runoff. I'm looking at this from the background of growing up on a farm and understanding the agricultural impact and best management practices.

I think in the last couple of years this has been an unbelievable amount of erosion that we've seen.

I participate in one of the stream restoration projects in Fairfax and one of the issues, of course, is stormwater and stormwater runoff. the volume of water. We've actually looked at, some of the engineers have considered, changing their five year stormwater impact to ten year not because of the additional rainfall and climate change, but because of the volume of water that is coming from stormwater.

So these are just a couple of thoughts. One is probably addressed in DCR's work with local governments. It's been some times frustrating dealing with existing issues and that's partly because you're dealing with three to four different parties. So I'm hoping with this new regulation this will give the local enforcement the ability to have a single point of contact and not have to deal with four or five different parties.

I just wanted share my thoughts. I appreciate you letting me speak. Thank you.

*Raymond Kulisch*

How are y'all doing today? I represent a group of volunteers. We do a lot of volunteer work for various organizations in the area, such as the Potomac Conservancy and the Chesapeake Bay Foundation.

We're business owners and employees. We're homeowners and renters. We're blue and white and some green collar workers. We're all Virginians. We're all Virginia voters. We work from both sides of the political aisle. We represent hundreds of volunteers and thousands of hours of volunteer hours. We realize that all of our sweat equity is virtually for nothing if we can't strengthen what the government does to help stop pollution in the Bay and the rivers.

We support these proposals. Thank you.

*Robert Jordan*

Good evening, my name is Robert Jordan. I'm here as an individual, an interested citizen. I've done a lot of work in watershed education activities in Fairfax County.

I would like to commend the Board and DCR for taking the effort to really develop a very thorough revision of the regulations that are based on objective standards and introduce the relatively new concept of runoff reduction. I think this is a very important element that needs to be stressed.

I do have a few comments on the draft proposal. I do support them very strongly, but I would like to point out that on an editorial basis you might want to put in a definition of what the Virginia Runoff Reduction Method is.

On a substantive basis, I think the issue of redevelopment is critically important. I know there is a lot of pressure to reduce the amount of the cap from 20% perhaps to 10% in terms of reduction. However, the tributary strategy pointed out that 44% is what's required. I would like for DCR to consider increasing that 20% to some higher figure. Or, absent that, delete the limit on going below

0.28 lbs. of phosphorous per redevelopment. If you have the 20%, it's going to not go very much below 0.28 lbs.

I really, again, do support these regulations. I would like to see the issue of redevelopment looked at more thoroughly and actually strengthened if possible.

I do have a couple of other issues of concern related to development in karst areas and the coastal plains area. The Chesapeake Stormwater Network has issued a couple of technical bulletins that deal specifically with stormwater issues in these types of terrain. It's not clearly part of these stormwater regulations. I think it is something that needs to be looked at, if not in the current regulatory process, then in the future.

Thank you very much. Congratulations on the work you've done thus far.

*Pete Rigby*

Good evening, my name is Pete Rigby. I'm a partner with Paziulli, Simmons and Associates and a practicing professional engineer in the area of land development, stormwater quality and stormwater quantity design.

I've participated over the years on this particular modification of the regulations and would continue to urge DCR to take into account a lot of the charettes results for which our practicing engineers found it difficult to make sites meet these proposed regulations. Especially as it relates to linear projects.

Generally, the gist of my comments revolves around the inequity of regulating development and agricultural land. As you've indicated in your presentation here, less than a third of sediment and phosphorus comes from developed property. I urge you to make sure that the agricultural lands fall under the same purview as developed lands and that they meet the same requirements as proposed in these regulations.

I would also urge DCR to consider the HBAV alternative method, and some other minor modifications that I would really like you to take a look at. And you've done some of that.

Practicing engineers need to know what the modifications to MS19 will be now. I urge you to marry those two things as quickly as possible.

The definition of state waters continues to contain the term "groundwater". I don't think we're here to regulate groundwater. I urge you to reconsider this definition.

Use limitations are still going to severely hamper the designer, in other words use limitations that the localities are enabled to enact to only allow you to provide one certain type of BMP in a particular area.

I do support the existing regulations in terms of controlling the first half inch of runoff as opposed to the new proposal. That's based on about the average amount of storms we have in the Virginia.

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The variance provision and exception provision are incomplete and difficult to design around if you don't have justification guidelines. So if you don't have those guidelines in place I urge you to work on that.

I would support explicit variance of single lot development in these proposed regulations.

Finally, your comment relative to plan review. There's a lot of development process that's a matter of public hearing. I think it would be impractical for us in dealing with DCR to provide stormwater management back and forth while we're going through the public hearing process.

Thank you.

*Paul Johnson*

I'm Paul Johnson. I'm a professional engineer with Charles P. Johnson and Associates. But I want to talk to you more as a citizen of Fairfax County and a bike rider that goes out after every storm and views what is happening from the hydrology standpoint and the ponds that are along the stream and the bike trails that I ride.

I'm absolutely flabbergasted at the number of ponds that are not functioning. Before the puddles in the bike trail begin to dry, the detention ponds after major rainstorms have already drained themselves dry. They have been undermined by maintenance people who remove BMP plates. They are not functioning. Before we institute draconian measures to try to nail down the last two bits of phosphorus that are coming off a developed site, we might as well make work what we already have in place and then test to see how it is functioning instead of trying to make it so difficult so that everyone is going to try to subvert the system as it goes down.

I'm also absolutely amazed at how much horse manure is allowed to flow into the creek off of every bridge and every crossing that you have. These things need to be regulated. It's in the total system and we're picking on one small group to try to solve the problem of a larger magnitude.

As I travel along the Potomac down through Georgetown you can smell and see the sewage that overflows their combined sewers.

All of this is part of the Chesapeake Bay. We want to save the Bay. The Bay is very important. We're all stakeholders in it. But it does not fall on just one industry or one group to solve all of these problems. We've got to solve this in a global manner. We got into the problem in a global manner. We've got to solve it in a global manner.

It's not just the development industry. We've been doing our part. We've built the facilities we were asked to build. We've maintained them on our part, but it's amazing how many facilities are not being maintained. I think we need to do a better job.

If you want to fix agriculture and tax the horses, or the livestock, we need to do a little bit of everything. This is not just an urban development problem. We need to look at this on a global basis.

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Thank you.

*Nikhil Deshpande*

Good evening. My name is Nikhil Deshpande. I'm with Rinker Design Associates. I am a practicing professional engineer in the field of plan development dealing with water quality and water quantity issues. And I thank you for giving me this opportunity to comment.

Jurisdictions in Northern Virginia currently have stormwater management requirements that are very stringent. All facilities are currently designed with these standards. If these facilities are not serving their intended purposes, more resources should be spent on inspection and maintenance of these facilities as compared to enacting these regulations.

The jurisdictions of the state that currently do not have the strict regulations should be made to adopt these tough standards instead of enacting regulations for everyone.

The TMDL requirement is not clearly stated and therefore will lead to uncertainty and confusion. The phosphorus removal efficiency for several established practices has been reduced significantly. For example the phosphorus removal efficiency of extended detention has been reduced from 40 to 15%. There is no data to show that these practices were ineffective.

A lot of emphasis is given to LID practices in these new regulations and they have high phosphorus removal efficiencies allocated to them. But on some sites, LID practices are just not feasible.

All these added stormwater management requirements will significantly effect and put restrictions on the by-right development of the site.

The cost of implementing this program is based on the fees collected. In view of the current economic climate and that the recovery is predicted to be at a much slower rate, there is a very good possibility that the Department might not obtain the fees required to administer this program.

*Patricia Kurpiel*

Good evening ladies and gentleman. Thank you for all of your work thus far. I am a water quality monitor as a volunteer and the founder of Friends of Stafford Creek. But I'm here today to as just a citizen of the watershed.

I'm asking you to pass this legislation. I live in the tidal waters of Stafford County. Ten years ago we could see fish in waters that were three feet deep. We caught fourteen different species. Frogs sung us to sleep.

Today? Mud, mud, mud and worse. Frogs and their eggs have been buried. This weekend we fished. We caught six, only six of one species, and four of those showed lesions.

The TMDL in the nearby segment for PCBs was mentioned, but there are PCBs in catfish. We used to use these catfish to bait our crab traps until we understood that we were really concentrating that cancer causing material in our bodies by eating those crabs. The crabs are long gone now.

I conduct an annual survey of submerged aquatic vegetation. For the last three years, every single leaf of [inaudible] has been covered with sediment. From my kayak, if you stir up the water, you are sitting in mud. This is not right.

These are public assets and I'm asking you to protect these assets for the public. Thank you.

*Truett Young*

Good evening. My name is Truett Young; I'm with Stanley Martin Companies. As a developer, I'd like to take issue tonight with your new water quality requirements from 0.45 to 0.28. Our concern is that it is going to make property that was once by-right and developable no longer developable which will cause urban sprawl and push it out further to the outer reaches which nobody really wants.

I question the 32% phosphorus source going to the Chesapeake Bay from the slides earlier as how much of that actually comes from actual recent development since these standards and the inspection process and the designs have been used over the past three or four years. And how many are for ponds that are no longer being maintained?

I would like to see the existing stormwater management ponds be maintained. I would also like to see the oversight of agriculture to no longer be voluntary. I would like for them to be held to the same standards as the development community also.

Thank you for your time.

*Cindy Patterson*

I'm speaking on behalf of the citizens of the Davis Ford Quality of Life Civic Association and the Neabsco District speaking about the Neabsco Creek being one of the most impacted and polluted by development in Prince William County.

I was honored to attend a previous presentation of the DCR stormwater management program. We, as a civic association, totally agree with the proposed regulations. We have worked long and hard to preserve water quality and we applaud their efforts.

Please back their efforts 100%. Do not water down their efforts because developers do not want to change. The same criteria of clearing land, leveling it and having taxpayers fix the water quality, pay for the change in the water quality. Fix the water quality devastation when stormwater runs off the roofs the developers make and contributes to flooding the homes downstream, as well as allowing the waters to flow onto impervious surfaces, picking up trash and pollution as the water picks up steam and erodes our stream banks, not letting the water trickle into the ground and ultimately contributing to the dead zone in the Chesapeake Bay.

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If these regulations can be made stronger, please do so. Thank you DCR. Our water quality will improve and the sooner the amendments are implemented the better our water quality will be.

Please watch over developers as they rezone, make special exceptions, build by-right properties and other changes in their development. The developers need to know that we will no longer accept polluting our water. Zero stormwater on each development site would be an even better implementation. No water should be coming off of any property. It can stay right there and it will be a good thing for everyone. But as long as these regulations are amended, they will be good enough for now.

Thank you very much.

*Bruce Reese*

Good evening. My name is Bruce Reese and I am a professional engineer. I'm here representing the Fredericksburg Builders Association. I'm also chairman of their legislative committee.

We have issues with the way some of this information has been presented, including the concept that pollution has increased from urban areas. I think if you look at the statistics, since 1985, urban areas have reduced their pollution by almost 40%.

Agriculture in the same time period reduced their pollution by less than 10%. And that is the problem. This is not just a single industry's issue. It is the state's issue and that includes all of us having the political will to do what we need to do to make sure that agriculture and other industries contribute their fair share.

Three hundred thousand tons of chicken manure is discharged in Maryland every year. As much as that sounds like a lot, Virginia has a million tons of chicken manure every year that is generated by the agricultural businesses.

This program is doomed to fail if it is to ride on the shoulders of one industry. It's just not going to work. Twenty years from now we'll be looking at the Bay and wonder why it is still polluted. And at that time you've got a million and half tons of chicken manure per year.

We recommend highly that the TAC be reconvened in order to review the issues that we don't think were fully vetted in the original process. And although this may have been going on for a long time, it is our opinion that this was pulled together quickly without fully understanding the implications.

You have heard some other people talk about sprawl and the issue or the concept of trying to target future development in redevelopment areas. I'm not sure that the industry is going to be capable of meeting the current requirements in a redevelopment area. That almost guarantees that you are going to have sprawl.

The last thing I want to say very quickly is that by your own admission there's at least one full slide (in the presentation) of remaining issues. Let's get those resolved before we pass any additional legislation.

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Reconvene the TAC. Let them do the job that the experts are capable of doing and bring forth something that is going to be able to spread this burden across all the citizens of the Commonwealth.

Thank you.

*David Lesser*

My name is David Lesser. I am representing myself.

The problems I have with the legislation are many. First, the last page with the grandfathering is not in the proposal yet.

Secondly, the Chesapeake Bay now has about 14,000 lbs. coming from Virginia and we're required to get to, requiring a reduction from 8 million to get to 6 million, the farmers are already over the limit that you're allowed to get to. So unless you go after the farmers you are not going to be able to do it on the backs of developers.

By your own admission on the slide, 32% of it was coming from all urban development. Before 1986, the development that is in Arlington had no stormwater management. So it had nothing. The development after that is at about .45 as you know.

And I dispute the facts from earlier that development is the only thing is going up. The reason development is going up is that the land mass that it's developed on is going up. The farm land is decreasing. Development is going down per acre.

This legislation will promote sprawl. It's easier to make one unit on five acres meet your legislation than a 16-unit condo. It's going to make it harder and create more sprawl. You're not going to be able to do redevelopment. You're not going to get to the .28 on redevelopment. It's just not going to happen.

They want to put 100,000 units in Tyson's Corner. If you put those 100,000 units in Frederick or Winchester or Fauquier at one unit per acre, you have quite a bit of sprawl.

In 1900 this country had 7 million people. We're at 300 million. By the year 2050 we're supposed to be at 350 million. Where are those people going to live?

If you put forth legislation like this you're going to dictate that it goes out to sprawl. I've seen studies that say if we continue the population at the same density as Philadelphia or Atlanta, it will take about nine million additional acres in this country. We've got to do it in transit oriented developments that are close in and are environmentally friendly. Based in redevelopment, but you can't do redevelopment with what you have here.

This also, besides of the substantial costs to the developers which most people seem very happy about, is going to put substantial costs on schools, fire stations, hospitals, airports, roads. The state



doesn't have enough money right now to build the roads. The state is obligated to meet these same criteria. The state doesn't have money. You're going to bankrupt the state.

You're also going to reduce the revenues to cities, because by reducing the amount of development on a site by 20%, the ensuing assessment will be reduced. You're going to reduce all the raw ground in the county. Counties, state and federal government are already broke.

You're going to stop redevelopment and increase sprawl, there's no question. Also, you're having state government dictate land use. In this state, local governments dictate land use. You going to have a lot of comprehensive plans where the localities have mandated they want dense development, but you're not going to be able to do it because you're not going to be able to meet the criteria in an economically feasible way. I think you probably should put in some sort of sliding scale so the higher density could be the higher number.

You've got to be able to push the development closer in. You've got to be able to put some vesting. To be perfectly honest, everyone is saying developers are causing this pollution and nitrates. Where are the nitrates coming from? You know they are coming from the cars that go up in the rain. If you wanted to fix the problem, don't go after developers, mandate everybody drives an electric car. That will fix the problem.

This is so ridiculous I can't even believe it. Most of the problem is agricultural. Someone mentioned the streams in Northern Virginia that are completely built out. I grew up in Accotink Creek. I was there forty years ago. That is not a natural pond. A dam was built and it's been having problems for forty years. I remember when there was a flu epidemic forty years ago and we weren't allowed to swim in it. I grew up there in the 60s.

So I don't see these issues anywhere near the same. I don't think 0.28 is feasible. The only way you're trying to fix the problem is get the developers to develop a piece of ground that is farm ground at 1.5 and change it to 0.28. You're fixing the problem that way.

So basically the only way you're fixing the problem is getting the whole state to develop. Making the whole state become a big subdivision is not an environmentally friendly way to fix this.

We've got to take only the people that have the money, the developers, take some money from them somehow. When it costs about \$15,000 a pound to fix the nitrates on site, move it over to farm land that's about \$168 per pound per the Virginia Tech study that was paid for by DCR. That's Virginia Tech study that comes from your numbers. It's much more efficient. There's a shortage of money and that's where it should be fixed.

Thank you.

*James Patteson*

Good evening. My name is James Patteson. I'm with Fairfax County Department of Public Works.

Fairfax County will be submitting formal comments. We wanted to come tonight and testify but we'll run some formal comments by our Board of Supervisors and we'll submit those written comments as directed.

Fairfax County has a long history of trying to be a leader in protecting streams and protecting the Chesapeake Bay through our RPA mapping. We were the first local jurisdiction to adopt a true preservation ordinance, a stormwater nutrient management plan, adding a penny or two on our tax rate to take care of stormwater.

So, we're very concerned about protecting our streams and protecting the Chesapeake Bay. We do have some concerns, however, with the proposed regulations that I will try and outline for you briefly.

First is the fiscal sustainability. You're proposing a statewide fee. Our concern with that is that is that if you look at the case of Fairfax County vs. Grayson County. One, the fee might be too much in some areas, too little in others. Fairfax County is very complex and often times multiphase, large developments, our cost of doing business is higher. Administering the plan review and inspections, that will require more, and we're worried that we're not going to be able to collect. We have a 90% recovery rate in our costs and we won't be able to collect the fees to cover costs.

The other concern we have of fiscal sustainability is the long term cost. We feel this is going to change at lot of focus to more micro-practices, low impact development practices. The jurisdiction picks up a lot of costs in terms of tracking, monitoring, inspecting and enforcing these very different natures of practices. Long term, how are we going to afford to pay for that?

There were a lot of comments tonight about whether the counties are doing their jobs with inspections and enforcement. On the technical piece of the criteria, we believe there is a need for effective stormwater control on urban development. It's a question of the right tool and making sure the technology is backed up with science.

The regulations you are going to put into effect, it really does change the nature towards more reliance on LID. We've seen recent LID practices that have been put in Fairfax County. It's a change for the building industry in terms of how do we construct it, how do we inspect it, the types of materials that go into it. In terms of the types of soils we have in Fairfax County, we're worried that the science doesn't necessarily back this up, and that we're jumping into it with both feet.

Then we have long term MS4 compliance that we'd have to show. If you are a jurisdiction accountable for meeting monitoring rates on TMDLs, we won't be able to meet those. And then to raise another concern, I won't repeat what's already been said, but we actually have concerns that this will create a disincentive for redevelopment in Fairfax County. Where Tyson's Corner is, where Route 1 is. A lot of our focus is going to be in redevelopment, and we want to make sure that is adequately addressed.

*Dennis Dineen*

I'm Dennis Dineen. I'm a building contractor in Virginia. I have been dealing primarily with infill and renovation kind of construction since 1980.

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It is difficult and expensive and frustrating and aggravating to control runoff water sometimes. It takes a lot of thinking and sometimes really innovative solutions, but it's doable.

There's never been a reason, short of Agnes in the 1970s when you had 10 inches at once, that there should be unfiltered stormwater coming off a site. Keeping that from happening is tough, sometimes really hard. And it's sometimes expensive, but it is possible.

All the engineers you had earlier telling you about how difficult it is, my answer is just for the designer, it's doable.

Several people have commented about how the farmers are guilty. They are. And I think that regulations ought to be placed on them, but that doesn't preclude regulations for the builders too. The builders are guilty, the farmers are guilty, parking lots are guilty. They're all guilty.

So, you say, "okay, we'll wait". If you do the farmers first, farmers will say "do the builders first." Builders will say "work with the farmers." Everybody wants somebody else to take care of it. Everybody take care of it.

This is one solution for a big problem. There should be regulations for the other people. But that doesn't preclude doing these regulations now.

Again, I repeat, it's not impossible. It's difficult and expensive, but not impossible.

*Eleanor Weca*

Thank you. I am Eleanor Weca. I represent a group called Great Falls Trailblazers which obviously is from Great Falls, Virginia in Fairfax County which is a community of 25 square miles, a thousand households, and, we have over a thousand members. Great Falls is bordered by the Potomac River.

So as Trailblazers, our mission has been to make enough trails so people don't have to drive; polluting the air which also pollutes the water. Our trails and sidewalks are made of stone in our natural areas.

We are keenly concerned about the streams and the Potomac River. We are working now with the County to let the NGOs help them maintain these trails so that perhaps within the rest of the County more attention can be made to permeable surface trails and sidewalks.

VDOT's new procedures for streets in developments have asked for narrower streets because they too are concerned about impervious surface runoff into the waters.

The developers, I think, who are concerned about their costs will surely pass their costs on to the people buy the homes. I don't really see that as a problem here.

I think now we are faced with millions of dollars to fix problems that have been caused in the past by developers and others.

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I think we would urge you to pass what you have now and then quickly address the problem of chicken manure and the other problems.

So thank you for listening.

*Alan Ford*

My name is Alan Ford. I'm a citizen of the state and Fairfax County. Thank you for having this hearing and allowing me to speak to you.

I have one specific thing that I'd like to bring up. Generally I'm in agreement with the goal of controlling, as much as possible, stormwater runoff.

I'd like to raise an issue in Section 96A-4 and Section 104-C, which both allow for or speak to state and local organizations not being under your jurisdiction as far as this stormwater legislation is concerned.

I think VDOT is an example of one of the larger problems we have. Large organizations, commercial developments, parking lot developments that cause a large amount of impermeable surface and also have poor failing stormwater retention controls during development.

And without being able to address those organizations, the small developer is not even in the ballpark compared to the damage that VDOT has done to our streams in the past two years with development on the HOT lanes.

So, that's just sort of a specific issue. In general, I think that we do need to do the work you're doing and the issues about agricultural runoff are valid, but I don't think they are applicable to the issue of this legislation.

So I ask you to move forward to enact this legislation, but please try to do something to include controls on state organizations such as VDOT.

Thank you.

*David Sligh*

I am David Sligh. I am the Upper James Riverkeeper and I represent the James River Association. Thank you for letting me speak today. And thank you for your work on these regulations.

I want to say that the Association and I strongly endorse these regulatory amendments. We appreciate the work and the analysis that's gone into them.

You've heard a lot of examples of people's streams and individual places where they see degradation. Working in the upper James River Basin, which for me is about a 7,000 square mile area, I can give you list after list of those places.

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One of the things that I would note is that not only do I work in that large area and see a lot of those examples, but I've seen them developing through the years.

We talked about whether they are existing places, whether they're new places that will be regulated. This is an incremental problem that isn't just starting, and yes, there are old problems that need to be dealt with. But our stream resources, especially headwaters streams, are being gobbled away a piece at a time, as we go forward with developments that have little effective, or little runoff control at all.

The quality issue here, the fact that there are phosphorus standards, as I know from your presentation, that is intended to be a representational standard that helps control a number of pollutants. Sediments, nutrients, nitrogen and other things.

To concentrate as much as some folks have on phosphorus and its role in the Bay and that type thing is to me a little bit misguided. It is important in that context, but all those pollutants are important in a very local context as you've heard from folks who live in specific streams and specific small watersheds. So I think that's one of the most important points about the quality standards.

The quantity standards, that's absolutely vital and frankly something that I applaud you strongest on in taking that on because in my experience other states aren't as far along on that issue. That is going to be so important. So much damage occurs from quantity problems from runoff. That will be incredibly important.

There's been a lot of what I would call pointing fingers. Well, this is falling on developers, it's not falling on agriculture, and it's not falling on other sources. I could agree with some of those things. But if we had said that 30-40 years ago when started to address sewage treatment plants that we would hold up on that until we get all these other things settled, we'd be in lot worse state than we are today. We cannot do that.

I hope all these folks who have talked about agriculture and talked about other sources will be there with me, because I'll be there supporting more stringent regulations on those also. But that's no cause for delay. That's not cause for putting off fixing some very dire problems that are there on the ground and are accelerating as we go forth.

One more word about the cost. Obviously everybody is concerned about the cost. The builders, the buyers, the communities. The fact is that there a lot of costs associated with the water quality problems that have been created and will continue to be created unless these kinds of regulations are put in and enforced.

They're not acknowledged always. But the cost of degradation of streams, the cost of increased infrastructure to handle flooding, to handle higher water volumes. Those are major costs and they get passed on to the citizens. And that needs to be acknowledged. That's a balance for the initial cost here.

I'll just say to end that we as Virginians have a constitution that says we're supposed to look after our water, air and land, and that we have a right to expect those protections to be there. That's a

promise that we haven't kept to ourselves. This is one step towards doing that. I congratulate you and will continue to support it.

Thank you.

*Stella Koch*

My name is Stella Koch and I'm testifying on behalf of Audubon Naturalist Society. I've spent the last 20 years working on local stormwater issues mostly in Northern Virginia and mostly in Fairfax County.

The County has been a good actor and I'd like to commend them for that. The County spent tens of millions of dollars doing planning of all the streams and hundreds of millions of dollars to fix streams because of what wasn't done.

As an example, I believe that it took \$100 million dollars to get one plan done. While I believe the price tag was \$29 million for restoration and stabilization. We're not talking about turning it into a trout stream; we're just talking about fixing it and stabilizing the banks.

I want to talk about Tyson's, because everyone has been bringing it up. I've had the pleasure of serving on the Tyson's Task Force for the last four and a half years. I've been the environmental representative on that Task Force. And I'd like to talk specifically about Scott's Run, which is I think is illustrative of the homes that we see with urban runoff.

There are four streams whose headwaters are in Tyson's. Seventy percent of the water running off Tyson's is not treated. No stormwater treatment at all.

So I would argue, and ask you, to increase the requirements for runoff treatment from developed areas. Because 70% untreated, if you take it down to 65%, doesn't seem to do much for those four particular streams.

But back to Scott's Run. Huge amounts of blowout and huge amounts of erosion because of the volume of water. In most of our urban areas, volume is a significant problem. The changes in hydrology are caused by impervious cover. Scott's Run has large amounts of destabilized stream banks.

Interestingly enough, there was a side feeder stream, lest we think that what we are doing is working, that's an illusion. There was in McLean a development when in called The Reserve. And I watched, and this was within the last 5-6 years. I watched a little tiny stream widen and widen and deepen and deepen to accommodate the changes in hydrology in spite of the requirements we had at the time. This is a little feeder stream that runs into Scott's Run.

Someone brought up the notion of what we're talking about in terms of wanting the people there. One of the deals that was made for Tyson's Corner was the local communities around Tyson's were willing to accept the high density proposed in exchange for amenities. And one of those amenities was to get the streams fixed.

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I think the bottom line is this. We talk about the Bay and the endpoint. But all the way down to the Bay are countless little streams and rivers. Everyone single one of them has the right to clean water. And every single person has the right to clean water in their backyard. And that's what this regulation is all about.

I would urge you to pass these regulatory amendments.

*Robin Rentsch*

I'm Robin Rentsch. I'm from Fairfax County and from Great Falls.

I want to tell you a nice story about what is happening in Great Falls. Three years ago Great Falls was declared the 23<sup>rd</sup> Community Wildlife Habitat by the National Wildlife Federation. That means that all four of our elementary schools have wildlife habitat gardens. It goes in with the SOLs that they are taught about native plants. They are taught about watersheds. They are taught about food for wildlife and shelter. Water being one of the most important things and we know that. Of the four, the most important thing for life altogether.

This is transitioning these kids to understand what is not only good for wildlife but what is good for the whole planet.

We have the four schools, we have our library with our native plant garden, we have three churches, two parks and over 200 homes that are providing food, water and shelter and safe places to raise young.

I'm co-chair of the environment committee of the Great Falls Citizen's Association. What we do as adults to reinforce this also to the children, is that every year we have a stream cleanup that goes along with the Iris Ferguson Foundation.

Difficult Run is Fairfax County's largest watershed. It's 58 square miles. So we clean that up, and along with Stella, we were on the Difficult Run Watershed Advisory Committee for two years. I'm now on the Pine Branch and Nichol Run Watershed Advisory Committee. I've done stream monitoring on Nichol Run and I have a conservation easement on my property, which has a spring fed pond that is one of the tributaries for Nichol Run.

So, we don't just talk the talk, we walk the walk in Great Falls. We are really trying to make a difference and set an example for that community. We're proud of what we've been able to accomplish.

We certainly support your efforts to tighten up these regulations and we commend them. There may be some tweaking you need to do in terms of Fairfax County as opposed to some of the other more rural areas. But we really commend your efforts to help with our watershed issues.

Thank you.

*Mark Trostle*

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Thank you, my name is Mark Trostle. I'm a landscape architect and I work the homebuilding industry in Northern Virginia. My experience has been mostly in Fairfax, Loudoun County, Prince William and so forth.

I don't have a whole lot of answers or comments yet. I'm still trying to grasp what all the ramifications are of these new regulations. But I've been involved in the past with a lot of subcommittees and workshops and so forth involved in the Chesapeake Bay regulations. I'm currently on the Loudoun watershed management committee.

So I'm very interested in these things. Also I'm a recreational boater and fisherman. I certainly want to see the Bay protected. But I have some questions about whether or not we're on the right path here. A lot of them echo some of the sentiments you heard earlier about whether or not we're focusing our attention in the right place.

Yes, developers will pass the cost on to the buyers of the homes. No doubt about it. But how many thousands of dollars can be added to the price of a new home before that's an unfair burden for that purchaser to take on? Meanwhile the residents of these older neighborhoods that have no facilities or substandard stormwater facilities are paying nothing, or in the case Fairfax County they're paying a penny on their real estate tax, which amounts to, I don't know, \$20-30 dollars a year.

This is nothing compared to what we need to be spending, yet none of the counties have been able to raise the money. The state's not able to raise the money. There's only one source of money that they always seem to be able to go to and that's the new home buyer or the new development.

This is all this effects, and I hope everyone understands. This is only new construction activity. It won't help us at all with the existing parking lots. It won't do anything.

So I look at questions. I want to know why the existing areas are ignored. I want to know why the costs aren't considered. I saw what Virginia Tech said and they didn't begin to address the actual costs of this.

The costs are the diminished value of the land. The loss of property value because of lack of density or development potential.

All these things, these LID practices take up land. They take up use of the land and you have to have wet swales and larger facilities. It also diminishes the value of the land because the homeowners associations don't want these facilities.

I constantly deal with homeowners who want to know why they have a bio-retention facility that holds water after a rain. Why they're going to have mosquitoes and West Nile virus introduced into their homes. Why the wet swales that will dry up immediately as soon as the water's done falling from the sky. There's no effort to address those kinds of issues.

I'm curious about whether or not the existing fees, which actually I think seem reasonable, whether or not the new fees will be added onto the existing fees we're already paying. I wasn't clear on that.



I believe that Fairfax County made a good point that I think the fees probably should be higher in certain urban areas than other suburban and rural areas. But are they going to add these fees to the ones we already pay for erosion and sediment control and inspections? What we already pay for pro rata fee share? I'm not clear on that at all.

I don't know why we're not enforcing the existing regulations, as someone else said. I think if we'd enforce the existing regulations, we'd be in much better shape.

The thing is only certain developers in certain sophisticated jurisdictions are actually complying with the regulations as they are written today. Most people don't have to.

You have Winchester, where one lady spoke up, you're lucky to even see a silt fence on a site. Whereas I'm putting up super silt fence, double-thick, all around every house no matter what. It's just a waste of money.

I'd also like to know why certain projects are exempt. There's a provision in these regulations that the local authority can adopt more stringent requirements, but the state, if they do a road project or a municipal project, they can consider whether or not they want to apply those more stringent requirements. That hardly seems fair.

I guess the industry was consulted. I'm sure HBAV had something to say. But I'm wondering if any of our comments were listened to, it sure doesn't look like it when I read the regulations. It looks as if it was written entirely from an environmental standpoint. I'd be curious to know about some of the charettes that were done, whether or not there were any sample projects designed and what those sample projects looked like. If that could be shared or put on the website or something that would be very useful to know what a site looks like that has the full compliance of these regulations.

I've done lots of sites with LID. I'm perfectly willing to keep doing it. But I can't do it if it's undoable. It's got to be an achievable goal. From what I'm hearing from these engineers that may not be the case.

Lastly, I had the fortune of working on a site in Tyson's Corner where we retrofitted a regional stormwater detention pond, a BMP facility that serviced a lot of the un-detained areas of Tyson's Corner that had been overlooked in previous development. I want you to know that under these regs, I wouldn't be able to do that. Because of the very stringent requirements to not be affecting wetlands and perennial streams and so forth. It's very difficult to get that kind of detention you need to do those facilities.

Thank you.

*Kim Hosen*

My name is Kim Hosen; I'm representing the Prince William Conservation Alliance. Thank you for the opportunity to speak to you today and thank you for the presentation which I thought was excellent.

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It's clear generally that the degradation of the Chesapeake Bay, the growing number of impaired streams, certainly in Northern Virginia and the really huge and growing number of drainage and flooding problems that I see in the area that I work with demonstrate that the current rules aren't working. And in addition in Northern Virginia, a significant portion of Northern Virginia, places where people live drain directly into our public water supply so we have an additional concern about clean water.

In our view, your proposed rules take a step forward in the right direction while generally striking a good balance. One comment that I would have, in your presentation, you talked about measuring nutrient caps through design criteria which was disconnected from what would actually be happening on the ground. I would just suggest that perhaps that if the design criteria is totally disconnected from what actually happens that perhaps is a slippery slope. We've certainly seen plans that look great on paper, but that resulted in huge downstream flooding issues which then were almost impossible to deal with. Certainly very difficult and cost taxpayer dollars because the developer was really off the hook.

I have a question about upfront planning, as to whether that means that if targeted towards the other part of the state and would require developers to submit stormwater plans before they start construction or would it be at the time of rezoning, which is what the gentleman here thought, which would be quite good and help take care of some problems that result from overlapping authorities by having that information right up front before any permitting processes begin.

In general, I think that everybody is always concerned about the cost, but in some ways this reminds me of the old, old discussion of back when we going to eliminate leaded gasoline. And just like then, we could choose to pay a little bit now or we could pay a huge amount later.

So we do support your rules. We would appreciate hearing more information on the questions.

Thank you for taking the step in the right direction.

*Chris Unger*

Hi, my name is Chris Unger, and I'm speaking for Lands and Waters, a local environmental non profit focused on environmental education and restoration.

I support the stronger stormwater controls. I believe they're necessary and that the current standards aren't adequate for protecting streams and watersheds.

Over the last nine months I've been documenting and reporting sediment control failures along the 495 HOT construction project in Fairfax County. This is a VDOT project, and I was reassured by VDOT representatives that their controls met and often exceeded the requirements. One went so far as to claim that no sediment from the construction project would enter the watershed.

After each significant rain event in the last nine months--I believe I've documented five of those--I saw significant failures in the stormwater controls including silt fence failures, overwhelmed stormwater ponds, and collapsed silt fences.

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This resulted in tributaries choked with sediment up to a foot deep. Silt smothered course floors and large amounts of mud being deposited into Accotink Creek. By large amounts I mean several tons.

I've been hiking and kayaking this area for years. I grew up playing in local streams.

I've seen the negative impacts of development on the local watersheds and I feel that it is essential to preserve and protect the environment for the benefit of future generations.

I feel the proposed regulations are an important step forward and I support their implementation.

Thank you.

*Jeff Kelbe*

Thank you for allowing me to stand in front of you. It's very refreshing to be supporting an agency action. Some people know some of the things we've been involved in.

I am the Shenandoah Riverkeeper, you all know that. I am your Shenandoah Riverkeeper. I run a nonprofit organization that protects the Shenandoah Valley and its tributaries.

I didn't prepare a speech, although I will be submitting official comments for the record. I guess I wanted to get a feel for what was being said tonight and respond to it.

I feel like there's a need to backtrack a little bit, maybe talk about who our streams belong to. Maybe for the benefit of the folks of the room. I imagine you guys already know that.

These are public streams. Our streams have been public in this country since before we declared independence. They were public under English common law. They were public under native law. The body of law that protects public streams passes back to the Roman times. The Roman code of Justinian protected the coasts and the streams, navigable and non-navigable streams, and the rights of the public to use them.

It's our property. We give the right to manage our property to the state. And the state has the obligation to protect it on behalf of the people.

I think generally the state with, a few notable exceptions, I been very pleased with what I'm seeing in Virginia. I'm very pleased by this action. I support it fully with the caveat that, I was not involved with the development of the regulation, and I will support some of the meaningful changes that I think are required to prevent the backfill issues that maybe have been highlighted by the building industry.

I think that there's going to be some suggestions from the environmental community on how to address that in a meaningful way.

I guess the rest of my time, I want to represent my members. We have 2,300 members who use probably every tributary of the streams of the Potomac watershed, and the Shenandoah Watershed.

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They've asked me to come tell you what stormwater pollution looks like, but I imagine you all know what that looks like, so I don't want to bother you with that.

I spent ten years in Arlington. There isn't a stream in that county that's useful anymore for recreational purposes. And if you don't believe that I'll take you there and show you. I've traveled every inch of Four Mile Run, Cameron Run. I've been in Difficult Run Watershed. I've been in Accotink Creek from top to bottom, and they have been ruined by stormwater. By volume issues, the banks are gutted, the stream bottom is gutted. You have to put fish into it if you want to have fish in it. The sediment, the silt bottom, the streams have been channelized. They really don't resemble what they were before we developed the area. And I'm seeing evidence of that in the Shenandoah Valley, in the developed areas.

So I believe we need to push this regulation through in order to protect the areas that have been undeveloped.

I want to offer a couple of words of encouragement to the development community. I really do, actually.

I want to be collecting if I can, if it's appropriate, I'd like to collect the sign in sheets. I'll be contacting all of the developers, because right now, overlapping this regulatory action, is a regulatory action that will put every poultry litter user under a regulation. DCR's sister agency is spearheading that, and the public comment is in August. I'll be expecting all of you to comment in favor of it. It's going to require all land uses of poultry litter to go under nutrient management planning, soil testing. It's going to require setbacks, 100 ft. from environmental features. There's going to be quite a bit of cost to an industry that doesn't have very much money, meaning the farms. So, I will be contacting you with that.

I suppose I'm also going to be sending you a bill. The bill that I'm going to be sending you is the bill for the back cost of all the damage that the development has done to our public streams in the Commonwealth of Virginia.

**Mr. Lesser:** Do you live in a tent?

**Mr. Dowling:** Jeff, please address us.

**Mr. Kelbe:** Okay, I'm sorry.

I will be sending them a bill for all the back costs for the amount of use that they've taken away from the public, and the public streams. I will send the same bill to the agriculture industry, just so that we're being fair.

Finally, I want to point out that under the tributary strategies, Virginia has required all significant discharges over half a million gallons a day to reduce their nutrient input through a sewage treatment facility. The Potomac watershed has to decrease their nutrient input by 85% by January 1, 2011.

Virginia taxpayers have put 600 million dollars into that through grant applications that our state government has paid for and localities are putting an additional 400 million dollars into those upgrades.

So, I'm here to contend that the burden is not falling on the development community, it's falling relatively evenly among all the communities in the state, including me, who is a taxpayer.

Thank you.

**Ms. Watlington:** That completes the list of those individuals who signed up to speak. Are there any other individuals who would like to speak or leave written comments?

*Mike Gerel*

Hi, I'm Mike Gerel from the Chesapeake Bay Foundation. I served on the TAC and went to most of those 50 meetings that were used to develop this regulation.

CBF strongly supports these regs and we'll be putting in much more formal comments in writing and will be speaking with much more formal testimony in the Hampton meeting on Thursday.

But I just wanted to respond to a few things that were said here today and make a couple of quick points.

It was mentioned that the pounds per acre pollution from development has gone down. That's true. That should be applauded. But that's not really relevant to this action here.

It's the loading that's the concern. It's the loading of nutrients to the tidal waters to the Chesapeake Bay that result in low DO, damage to fisheries, damage to crabs. The aggregate loading has increased.

That's what we're looking at. Again, the pounds per acre reduction should be lauded, but it's the loading we're looking at.

Jeff kind of stole my fire on this a little bit. I just wanted to make the point that new development is not the only sector facing more regulation recently. All large wastewater treatment plants have to meet state of the art requirements by 2011. Over a billion dollars is going to be spent on that.

As Jeff mentioned, the poultry regs. Everyone here who has mentioned agriculture should comment favorably about those regs. Any farm that uses litter as fertilizer is going to be required to meet these new management requirements.

Some of the local governments here, existing communities that operate their MS4s are going to have to meet, on their existing developed lands, more stringent requirements in their MS4s. EPA has made a whole host of comments about what they are going to require. No net increase in pollution, all kinds of things. We don't know what's going to result.

Existing developments are on the list too. There are local communities requiring septic pumpout. So again, this isn't just the new development. It's everyone, all the time.

The gentleman earlier said it very well. We're all involved in this. If you own a house, if you drive a car, if you go to the bathroom. We're part of this.

Just a comment on the science basis for these numbers. The Bay model has been around for 20 years. It's probably the most sophisticated model in the country. Whether you like it or agree with it or not, it's the best we've got. It's better than anything else probably in the world looking at estuaries.

DCR also hired national experts at the Center for Watershed Protection. Tom Shuler, who invented a lot of the terminology around stormwater, was hired to look at the BMP efficiencies to develop this runoff reduction method that I would argue most states are going to start to use. Revised the standards and specs to determine when in karts areas or in surface water areas you can't use LID. And also developed a Clearinghouse to come in and say if there's a new BMP, does it actually work. If a local community has a smart growth idea that they might want to propose as a BMP, they can bring it in via this Clearinghouse.

This is as tight a science as we can get on what is a very complicated subject.

And I just kind of wanted to finally offer just a word of caution about any sort of wholesale shifting of the requirements for reduction out to rural areas, out to the agricultural community. Some are fine. Some of the revisions of the existing regulations that came out this year via pro rata in lieu fee programs that try to move them around.

But if you talk about wholesale shifts, very few farms right now, even though they are improving, meet a baseline, meet a level of performance that would even allow them to accept money to get plus-baseline, plus-tributary strategy benefits. So we're going to have potentially a lot of money accumulating and no one to implement it.

We also lose other pollutant reductions if we shift them all out of an urban environment out to a rural environment. Total phosphorus is our keystone pollutant here, but we also get nitrogen, bacteria, sediment, all kinds of other reductions that if you start moving them out to rural communities, expect an inequity here that I don't think anybody wants. Yes, some shifting within a watershed as appropriate is envisioned and allowed in these regulations.

But the idea of moving it and allowing one regulated community to increase their discharge locally, which has a whole host of backsliding issues under the Clean Water Act, and those are above my head, not being a lawyer, I think is a bad idea.

Just a final point. There's been a lot of talk about costs. There will be some cost increase on some sites. I think the Virginia Tech study and the James River Association/Williamsburg Environmental Group study tried to look at this. It was very thoughtful. It's very site-specific. But I think I can say with confidence that this program does a better job of capturing the lifetime costs of development activity. It doesn't just look at the focus of the developer and the builder and then they're gone. It tries to better look for the communities' sake and be proactive. And it's going to be

cheaper to prevent these things than it is to clean up lost livelihoods, clean up Difficult Run, and fix these streams.

So I think this is a more balanced equitable approach across the board.

Thanks.

**Ms. Watlington:** Is there anyone else who would like to speak?

*Bryan Stevenson*

I'm Bryan Stevenson, I'm a land development engineer, a professional engineer in the State of Virginia. I really hadn't intended to speak.

I do think that at some point the land development community is a bit of an easy target. And as an example of that, I'll say everybody should be aware of this, the Chesapeake Bay Foundation sued the Department of Environmental Quality and the Water Control Board and Merck, the pharmaceutical plant. They were allowed to discharge an additional 3,200 pounds of phosphorus into the Shenandoah River. That is equivalent to under the new regulations to 1.7 times the size of Fredericksburg in development.

That's one single point of discharge.

Under current regulations it's the size of Fredericksburg. The whole city limits.

I just want to say that I understand that all parties are being affected. But I do want to point out that point source discharge is a major point. This is not, I'm not even talking about farms. I'm talking about point source discharge.

I'm also concerned that the current regulations may not solve some of the issues that are of concern here as far as the local tributaries. Especially during construction because this, as far as I know, of everything I've read so far the regulations don't indicate anything during construction. That's an erosion and sediment control issue.

Until things are maintained and inspected, that's not going to get any better. I encourage you all, if you have a problem with that, to encourage maintenance and inspection of those facilities.

Also I was going to start with this, I want to thank everybody who has put in a lot of time and effort into this. I really want to thank all the volunteers that have been involved in the Technical Advisory Committee. None of this has been easy. I've talked to a lot of people who have been on the TAC and I understand that and I appreciate the time.

I would ask that DCR look at some alternative methods or reconvene the TAC to into consideration some of these other things.

I know we want to deal with wastewater treatment plants, but I'm not sure that's even a funded thing yet.

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I'm not anti-environment by saying this. I just want to point out that it's an overall picture. And I'll have additional comments I'll send with AES Consulting comments.

*Richard Jacobs*

My name is Richard Jacobs, I work for the Culpeper Soil and Water Conservation District. Many of you may not know what a conservation district is, but we deal with, we're an independent subdivision of the state government. We get our funding from local government, DCR as well as some grants.

My role in our conservation district is that I provide plan review services for five counties in the upper Rappahannock River basin. Those are Rappahannock, Culpeper, Greene, Madison and Orange.

I mainly just want to make a couple of comments about how I do agree with many things that have been said tonight. Most importantly, I do think that a lot of the engineering components of the technical standards are doable. They're not impossible. You just have to put a little more effort into it.

I feel that a lot of the engineers need more education.

So two things that I think should be addressed should be education and more communication.

With education, I was just thinking how interesting it is to think of how many are living in places like Northern Virginia, Richmond, and Southeast Virginia. There's well over 2 million people living in each of those areas. But how many of those people are providing training opportunities for inspectors, HOAs, and engineers for maintaining, constructing and designing these BMP facilities?

Secondly, with communication, a lot of people seemed to look at the regulations and think that's its very static and rigid. From my experience, there are some sites out there that are difficult to get practices installed. Some of it might be due to a lack of scientific research and other information that might be out there.

So in those situations it's always good to communicate with your county administrator, your DCR inspector, and see what type of alternatives there are for your site. The way I look at it when I review site plans is that the regulations aren't static and rigid, as there are flexibilities built in.

I appreciate that being there as a tool for engineers and for plan reviewers.

Maybe there just needs to be more education in pointing out the flexibility in the regulations.

The last thing I would like to comment on is HB2168, I'm not too familiar with it. I just read the information that was on the legislative page. I do see that as another opportunity, another way for the regulations to be more flexible, when DCR provides guidance on that material for builders and developers to provide those stormwater offsets. That's what HB 2168 was dealing with, stormwater trading basically, offsite.

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I look forward to seeing your guidance material when you guys develop it.

Thanks.

**Ms. Watlington:** That completes the list of those individuals who signed up to speak. Are there other individuals who would wish to comment or leave written remarks?

**Closing:**

**Ms. Watlington:** A handout is provided on the table outlining the public comment submittal procedures I am about to cover and the dates and locations of the remaining public meetings.

Persons desiring to submit written comments pertaining to this notice and this meeting may do by mail, by the internet, or by facsimile. Comments should be sent to the Regulatory Coordinator at: Virginia Department of Conservation and Recreation, 203 Governor Street, Suite 302, Richmond, Virginia 23219. Comments also may be submitted electronically to the Regulatory Town Hall. Or comments may be faxed to the Regulatory Coordinator at: (804) 786-6141. All written comments must include the name and address or email address of the commenter. In order to be considered, comments must be received by 5:00 PM on August 21, 2009.

I hope that everyone has a safe trip home.

DCR Staff Present

Ryan J. Brown  
Eric R. Capps  
David C. Dowling  
Michael R. Fletcher  
Larry Gavan  
Gary Switzer  
Kelly Vanover  
Christine Watlington

Members of the Public Present

Michelle Brickner, Fairfax County  
Marian Carroll  
Michael Childs, Surfrider Foundation, DC Chapter  
Coleen Collins, VHB  
Jon Dearth, Angler Environmental  
Nikhil Deshpande, Rinker Design Associates  
Dennis Dineen, Arlington  
Alan Ford, Virginia Native Plant Society  
Patrick Felling, Potomac Conservancy  
Ned Foster, Clifton

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John Friedman, Fairfax County DPWES  
Mike Gerel, Chesapeake Bay Foundation  
Patsy Gochenour, Virginia Conference of the UMC Caretakers of God's Creation  
Normand Goulet, NVRC  
Thomas J. Grizzard, Virginia Tech Occoquan Lab  
Dale R. Guthiel  
Wendy Hamilton, Preserve Frederick  
Jeff Hancock, WEG  
Barrett Hardiman, Homebuilder's Association of Virginia  
Kim Hosen, Prince William Conservation Alliance  
Richard Jacobs, Culpeper Soil and Water Conservation District  
Paul Johnson, CPJ  
Paul B. Johnson, Fairfax  
Robert Jordan, McLean  
Jeff Kelbe, Shenandoah Riverkeeper  
Daun Klarevas, Christopher Consultants  
Stella Koch, Great Falls  
Raymond Kulisch, Lorton  
Patricia Kurpiel, Stafford  
David Lesser, Fairfax  
Dick Marzolf, Lord Fairfax Soil and Water Conservation District  
John Matusik, The Engineering Groupe  
Ann Merwin, Potomac Conservancy  
Laura Miller, Odesty, LLC  
Bill Missell, Rinker Design Associates  
Kathryn Moore, City of Manassas Park  
Doug Moseley, GKY & Associates  
Bill Nell, WSSI  
Cindy Patterson  
James Patteson, Fairfax County  
Bruce Reese, FABA  
Robin Rentsch, Great Falls Citizen Association  
Pete Rigby, Paziulli, Simmons & Associates, Ltd.  
Glynn Rountree, National Association of Homebuilders  
Dave Sligh, James River Association  
Basant Sood, FLDS  
Bryan Stevenson, AES Consulting Engineering  
Debra Switzer  
Mark Trostle, R.A.H.V.  
Kris Unger, Lands and Waters  
Sean Van Demark, Angler Environmental  
Michael Webb, The Engineering Groups  
Wayne Webb, Berryville, VA  
Eleanor Weca, Great Falls Trail Blazer  
Zhongyan Xu, RDA  
Truett Young, Stanley Martin Companies