



MCPB
July 8, 2010
Item # 2

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Mark Pfefferle, Acting Chief, Environmental Planning *MP*

FROM: Stephen Federline, Master Planner, Environmental Planning¹
Mark Symborski, Planner Coordinator

DATE: July 1, 2010

SUBJECT: Bill 40-10, Stormwater Management- Revisions to Chapter 19 of the Code

RECOMMENDATIONS

Support Changes to Chapter 19: Revisions to County SWM Law (CB # 40-10), and recommend clarifications and refinements for County Council consideration.

OVERVIEW

The Maryland Stormwater Management Act was first passed by the Maryland General Assembly in 1982. In 1984, the State required all counties and municipalities to have a stormwater management program, including local ordinances, plan review and approval processes, and inspection and enforcement capabilities. With the Maryland Stormwater Management Act of 2007, significant changes in the types of stormwater management strategies that are acceptable in land development projects are being defined, as well as new processes for the review of stormwater management plans.

In the past, requirements for treating stormwater runoff from land development projects emphasized a strategy that included a combination of centralized structural practices for pollutant removal (e.g., infiltration trenches) with channel erosion or flood control impoundments (e.g., stormwater management ponds).

With the new state stormwater management requirements, the emphasis has shifted to a comprehensive land development design strategy to more closely replicate pre-development stormwater runoff characteristics and to better protect natural resources. The state requirements now focus on the implementation of "Environmental Site Design" (or ESD) to the "Maximum Extent Practicable" (or "MEP"). The Stormwater

¹ Since the publication of this report, Mr. Federline has retired

Management Act of 2007 defines ESD as a design strategy that uses “small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources.” ESD incorporates the following principles in the design of a site development project: conservation of natural features (including vegetation) and pre-development drainage patterns; minimization of impervious surfaces; maximizing the infiltration of stormwater runoff to help the recharge of groundwater supplies and nearby stream baseflow; and minimizing surface stormwater runoff velocities.

The state Act requires developers, designers, and plan review agencies to consider stormwater runoff control methods for land development projects from the beginning of the regulatory review process. Since land use and site layout are required components in the new ESD strategy, local stormwater regulatory agencies are required to more closely coordinate with land use and land planning agencies in the review of land development projects.

PURPOSE

This memo contains recommendations from MNCPPC Planning staff regarding development and implementation of the revised County’s SWM Regulations. (Article II, Chapter 19-20 of the County Code) in response to the directives of the State’s Stormwater Management Act of 2007. The Act establishes Environmental Site Design (ESD) as the priority method in controlling stormwater runoff and providing groundwater recharge *in situ*. This memo addresses issues of policy, process, and recommended changes to the proposed text to improve the legislative clarity in the County’s effort to actively and efficiently implement the State’s directive.

The Annotated Code of Maryland governing the implementation of the Stormwater Management Act of 2007 has recently been amended by the General Assembly of Maryland to address several concerns raised by interested parties. House Bill HB 1125 (passed March, 2010) provides a mechanism to **grandfather** certain projects currently under review, guidance on the impact of ESD requirements on **redevelopment**, and further, addresses the perception that ESD will have an adverse effect on **Smart Growth initiatives**. An attached MDE guidance document was provided in March 2010 to clarify the flexibility inherent in the state regulations, with illustrative examples as to how such flexibility may be used.

REVISIONS TO THE PROPOSED LEGISLATION:

Attachment B contains the legislative language changes and comments on proposed Council Bill #40-10. The changes and comments are imbedded in the margin, while certain major policy considerations and issues are highlighted below for detailed discussion with Board.

MAJOR POLICY ISSUES:

1) DPS' Proposed SWM Review Process: Need for Early, Intense Coordination

The State Stormwater Management Act of 2007 and the updated Chapter V of the Design Manual prescribe a three- stage process of review in taking the initial ESD concept through to final design. The first stage or “concept plan” requires local stormwater authorities to have a comprehensive review process in place for all aspects of development planning, and to collaborate to provide coordinated feedback to the designer. This stage necessarily involves both a planning and technical exercise to integrate/weave the use of ESD measures and techniques into a plan while assuring that it works with all other necessary elements of a development plan.

This process will require intense coordination between the technical review staff at DPS and the Planning staff. The Planning staff will contribute several vital functions to the effort:

- i. Environmental Planning staff is directly responsible for mapping natural resources, protecting identified resources through sensitive designs which explore all planning, zoning, and subdivision options, and implementing the forest conservation law.
- ii. Development Review staff brings its broad based knowledge of the comprehensive review process and all elements which together make up an approved plan, and all regulations which affect the ultimate design.
- iii. Community Planning brings its knowledge of the master and sector plan dictates, and the wishes of the community.

Accordingly, Staff comments on Section 19.24 (a) are as follows:

- a) Proposal to “refer” plan to MNCPPC does not reflect the need for intense coordination with MNCPPC at earliest stage to maximize implementation of preferred ESD options:
 - Environmental Planning staff has been responsible for implementing many “better site design techniques” for decades; and
 - Development Review staff is intimately familiar with all requirements controlling and options for development, and can identify those options and opportunities for examination at the earliest stage.
- b) Identifies timing for concept plan approval (preliminary plan) which is too late in the process to maximize ESD; and identifies site plan as the benchmark for site development stormwater management plan approval. However, many development proposals do not go through site plan review.
- c) Identifies only preliminary subdivisions and site plans as the types of land development projects that are subject to the new SWM law requirements.

The law needs to reference other types of projects, such as mandatory referrals and special exceptions that may not require subdivision or site plan approvals.

- Staff recommends use of same timelines for concept plan and site development stormwater management plan approval, as is used for approval of the preliminary and final forest conservation plan as identified in Chapter 22A-11 of the County Code and COMCOR 22A.00.01.09 A-1 and B-1 of the Forest Conservation Regulations.
- Concept Plan process should be reviewed for consistency with the evolving single Planning Board approval process.

2) Impervious Surface: Continue Support of Board's Position

The Maryland SWM Act of 2007 requires minimization/reduction of impervious surface as the initial step in Environmental Site Design, together with protecting and enhancing natural resources. MNCPPC has carried out these objectives through implementation of the Planning Board's Environmental Guidelines since 1983, and application of impervious limits in certain areas as designated by the County Council since 1995.

Staff Recommendations:

- Continue to encourage the use of engineered pervious surfaces and other alternative surfaces (green roofs, reinforced turf) where pavement is necessary to maximize the achievement of SWM requirements through ESD practices, and credit their use against stormwater management requirements as such surfaces serve to reduce the effects of traditional impervious surfaces on quantity, quality and recharge requirements.*
- Reiterate the Board's support for the consensus definition of "Impervious Area" included in Section 19.21. (All relevant county agencies have concurred in this definition)*
- Reinforce the Board's based on the Summary Rationale in Attachment C of not granting credit against imperviousness for use of extra or enhanced porous stormwater management BMPs. The principal finding in the supporting rationale is that the additional stormwater management benefits afforded by such systems are insufficient to counterbalance the additional negative environmental impacts that are associated with installation and operation of such measures, particularly over time.*

Although many arguments are convincing in support of this position, this most telling is Maryland Department of Natural Resources' (DNR) real-life experience in implementing the State "Critical Areas" Program. After initial approval of such surfaces as a credit towards impervious area limits in the Bay's Critical Areas, DNR reversed that decision after experience showed the cumulative impacts were unacceptable and not in keeping with the fullest measure of protection needed in the State's Critical Areas. The same rationale applies to this county's Council-defined critical areas: the special protection

areas and the Patuxent Primary Management Area.

3) Grandfathering of Projects in Process: Fair, but Too Fixed for Plans still in Process

The state legislature, via HB1125, made several changes to address the effects of the original law on projects already well within the development approval process, but still short of approval of final permits, or start of construction. These changes included:

- i. Allow local agencies (Department of Permitting Services – DPS) to grant an **administrative waiver “for good cause shown”** to allow projects which have received local SWM concept approval by the May 4, 2010 deadline to move forward.
- ii. Counties can allow phased developments to utilize traditional (pre-ESD) SWM facilities, but under condition that phased developments make “**reasonable attempts**” to follow the new rules.
- iii. Allows grandfathered plans up to three years (no later than May 4, 2013) to secure final SWM design approval.
- iv. **Staff Recommendation:** *Support the State’s recommended ESD grandfathering provisions for local use, but condition the grant of a three year window for implementation on “reasonable attempts” to achieve ESD. The grant of the administrative waiver by the county “for good cause shown” should be conditioned on a staff-level pre-submission review to explore what “reasonable attempts” could be made to implement ESD without significant changes to the approved plan. This condition should apply only to plans that are subject to one or more subsequent review(s) by the Planning Board.*

4) Review/Approval of Natural Resource Inventory (NRI) Plans: Budget/Staffing Issues

The state requires approval of a “natural resources inventory”, adding additional requirements which provide critical information for “site fingerprinting” which guides the location and type (s) of ESD measures which fit the site. Environmental Planning (EP) staff currently reviews all NRI plans (often combined with the Forest Stand Delineation, or FSD) and acts within 30 days, per Chapter 22A- the County code.

Staff Recommendation: *Staff believes the best and most efficient course of action is to expand MNCPPC staff’s current review and to incorporate information required by County DPS as needed per the new law. However, that decision depends on resolution on certain critical factors not yet resolved that may create obstacles to implementation:*

- i. **Nature of Additional ESD Information:** if the county specifies use of commonly-available information from published documents, EP staff can go

alone in assuring it is included on the NRI. If more complex information and/or analysis is required, DPS review would be necessary, but within the 30 day window.

- ii. **Adequate funding, cost recovery and staffing** are major issues if MNCPPC EP were to conduct the complete NRI review, including the additional DPS' specifications. Doing all NRI reviews, even those which do not have Board involvement, will dramatically increase the number of NRI reviews.
- iii. The current definition of NRI in Chapter 22A would need to be amended to include the expanded ESD components.

5) Redevelopment: Fair Solution, but Needs Aggressive Effort by County in Urban Areas

The concern was that the new regulations would discourage on redevelopment. The issue is addressed directly in the March, 2010 Guidance document from MDE (Attachment A).

Montgomery County has long applied a stricter standard for water quality control than the State for redevelopment, requiring 100% water quality control for both new development and redevelopment. The county law proposes use of ESD planning techniques and treatment practices to the maximum extent practicable (MEP) before structural SWM practices are allowed After ESD to the MEP is achieved, on and offsite structural SWM measures can be used.

Staff Recommendation:

- i. *Support the County's continued use of the higher water quality standard for redevelopment which shall be provided via ESD to the MEP consistent with the state law's prioritized use of onsite ESD.*
- ii. *Recommend the legislation or any follow-up regulations promote a more aggressive and proactive posture by the County to identify, secure land, and fund construction of offsite alternative measures which will serve multiple sites in high density urban areas consistent with approved watershed management plans.* While staff recognizes that this approach may appear contrary to fundamental ESD philosophy of replicating natural pre-development conditions onsite, it may also provide for more effective, opportunistic and accelerated improvement in redeveloping urban and smart growth areas to the benefit of the receiving waters.

**Maryland Department of the Environment
Stormwater Management Regulations
Guidance for Implementation of Local Stormwater Management Programs
March 2010**

Introduction

The Stormwater Management Act of 2007 requires that environmental site design (ESD), previously optional under regulations issued in 2000, now be used to the maximum extent practicable (MEP) to control runoff. Implementation of Maryland's stormwater requirements occurs at the State and local level. The State establishes technical requirements and provides a Model Ordinance, and county governments are required to adopt an ordinance that meets these regulatory requirements. A municipality may either adopt its own local ordinance or rely on the county program. In each case, the Maryland Department of the Environment (MDE or the Department) must review and approve the local stormwater management ordinances.

The new State regulations implementing the Stormwater Management Act of 2007 became effective on May 4, 2009. They appear in the Code of Maryland Regulations at 26.17.02. These regulations state that, unless final approval for erosion and sediment control and stormwater management plans for a project (Final Approval) was granted by May 4, 2010, the project will be required to comply with the new regulatory requirements.

Drafts of local ordinances from counties and those municipalities electing to implement the program were due to MDE for review by November 11, 2009 and must be adopted by May 4, 2010. To date, all counties and 31 municipalities have submitted proposed code changes for MDE review. The Department provided comments on 54 proposed local stormwater management ordinances and approved 22 as of March 5, 2010.

It became apparent that local jurisdictions and the development community perceived that the regulations and provisions of the Model Ordinance were not sufficient to assure fair application of the new regulatory requirements in some circumstances. The Department, after discussions with stakeholders, determined to amend the regulations and provide additional guidance to address concerns in three general categories:

- Grandfathering - the impact of the new requirements on projects that have advanced partially through the development approval process, but that will not receive Final Approval by May 4, 2010.
- Redevelopment - the impact of the new requirements on redevelopment projects and the feasibility of using ESD for redevelopment projects.
- Smart Growth - a perception that the stormwater regulations will have an adverse impact on Smart Growth, whether new development or redevelopment.

This guidance addresses a new regulation, illustrates how certain projects could qualify for waivers, and provides criteria applicable to other aspects of the regulations. It will help guide local governments as they adopt or amend their ordinances and exercise the flexibility inherent in

the State regulations. The examples listed in this guidance are for illustrative purposes only and are not intended to limit the flexibility available to local governments.

With the issuance of this guidance, MDE will submit a proposed emergency regulation to the Joint Committee on Administrative, Executive, and Legislative Review. The emergency regulation will allow a local jurisdiction to incorporate into its ordinance, waiver provisions to address grandfathering of projects under certain conditions or when circumstances prevent the reasonable implementation of ESD to the MEP.

These proposed changes will not affect the requirement for local jurisdictions to adopt modified ordinances by May 4, 2010. The Department acknowledges that some local jurisdictions may wish to incorporate into their local ordinances provisions that reflect the emergency regulations and this guidance. The Department will develop Model Ordinance language and work with local jurisdictions to accommodate these new grandfathering and waiver provisions.

The Department will exercise discretion during its review of local stormwater programs who are making a good faith effort to reach the May 4, 2010 deadline.

Grandfathering Provisions

The emergency regulation will allow a local jurisdiction to incorporate into its ordinance a waiver provision for projects that had completed part of the development review process but had not received Final Approval by May 4, 2010.

Upon the effective date of the emergency regulations and incorporation of consistent provisions into local ordinances, local jurisdictions will be able to issue a waiver that will “grandfather” certain projects. Eligible projects will be those that have cleared an appropriate stage in the development process before May 4, 2010, even though they will not have received Final Approval by that date. Because local jurisdictions have different development review procedures and use various terms for the steps in their processes, the State regulations will identify the appropriate stage of the development process by defining the terms “Approval”, “Preliminary Project Approval”, “Final Project Approval” and “Administrative Waiver”.

“Approval” means a documented action by a local jurisdiction following local review to determine and acknowledge the sufficiency of submitted materials to meet the requirements of a specified stage in a development process. “Approval” does not mean an acknowledgement by the jurisdiction that submitted materials have been received for review.

“Preliminary Project Approval” means a plan approval or completed review by a local jurisdiction that includes the following as part of the a local jurisdiction’s preliminary planning approval process at a minimum: 1) the number of planned dwelling units or lots and proposed density; 2) the proposed size and location of all land uses in the project; 3) a plan that identifies the proposed drainage patterns, locations of all points of discharge from the site, and the type, location and size of all stormwater management controls based upon site-specific computations of stormwater management requirements.

Additionally, a “Preliminary Project Approval” may include the following items if currently required as part of a local jurisdiction’s preliminary planning approval process: 4) the proposed alignment, location and construction type and standard for all proposed roads, access ways and areas of vehicular travel; 5) the proposed method and adequacy of wastewater disposal and provisions of potable water; 6) the general location size and type of all infrastructure proposed for water and wastewater systems; and 7) any other information deemed necessary by the local jurisdiction to adequately review the proposal.

“Final Project Approval” means that the appropriate local authority has approved the final erosion and sediment control plan for the project’s stormwater facilities ,and approved the final stormwater management plan, and, if applicable, bonding and/or financing has been secured based on the final plans for the development.

“Administrative Waiver” means a waiver that allows the construction of the development to be governed by the stormwater management ordinance in effect in the local jurisdiction where the project will be located as of May 4, 2009. The Administrative Waiver is to remain in effect for the time described below. Any construction after expiration of the Administrative Waiver must follow the local ordinance in force at the time of expiration. Phased projects which have been granted an administrative waiver, and have constructed stormwater facilities designed to meet local requirements in place as of May 4, 2009, shall use reasonable efforts to incorporate ESD.

A project that received Preliminary Project Approval before May 4, 2010 will be eligible for an "Administrative Waiver." If the local jurisdiction grants the Administrative Waiver, the project will not be required to meet the new regulations; instead, construction of the project will be governed by the stormwater ordinance in effect as of May 4, 2009, in the jurisdiction where the project will be located. This local ordinance will include the design criteria established in the 2000 Design Manual prior to May 2009. The regulation will also address the expiration of the Administrative Waiver if the project does not obtain Final Approval by May 4, 2013, or begin construction before May 4, 2017. Lastly, a local jurisdiction may extend the deadline for Final Project Approval for the expiration of the Administrative Waiver only if by May 4, 2010, the development had received a “Preliminary Project Approval” and was subject to a Development Rights and Responsibilities Agreement, a Tax Increment Financing approval or an Annexation Agreement. Any extension granted under this paragraph shall expire when the Development Rights and Responsibilities Agreement, the Tax Increment Financing approval or Annexation Agreement expires.

The following examples illustrate circumstances where an Administrative Waiver may be appropriate:

Example 1:

A proposed development project received Preliminary Plan Approval before May 4, 2010, but will not receive Final Approval by that date. The local jurisdiction may grant an Administrative Waiver, but the final approved project plans must meet the 2000 stormwater regulatory requirements, and the waiver will be subject to expiration as stated in the State regulations.

Example 2:

In 2008, a local government gave a project Preliminary Plan Approval and executed a DRRA with a term of ten years (expiring in 2018). The project will not be able to obtain Final Approval by May 4, 2010, and the local jurisdiction decides to grant an Administrative Waiver. The project experiences further delay due to the economic downturn and will not be able to obtain Final Approval by May 4, 2013. As that date approaches, because the project is subject to a DRRA, the local approving authority could extend the deadline. If it does, the local approving authority could, in 2014 or later, approve final erosion and sediment control plan and stormwater management plans that meets the 2000 regulatory requirements and allow the project to move forward without requiring a redesign to meet 2009 requirements.

Example 3:

A project is granted an Administrative Waiver, but does not receive Final Approval by May 4, 2013. In the absence of special circumstances such as a DRRA, the local jurisdiction cannot extend the Administrative Waiver and the project must meet the stormwater requirements of the local jurisdiction that are in effect as of May 4, 2013.

Example 4:

A proposed development project received Final Approval prior to May 4, 2010, but the project experiences delay due to the economic downturn and will not be able to proceed to construction. When the approved erosion and sediment control plan expires, the local authority could issue a waiver of the 2009 requirements and approve a new stormwater management plan provided the project meets, at a minimum, the stormwater regulatory requirements that were in effect at the time of Final Approval. In the absence of special circumstances such as a DRRA, the waiver cannot extend beyond May 4, 2017.

Other Waiver Provisions

The regulations that became effective on May 4, 2009, authorized a local government to include in its ordinances provisions for waivers of the quantitative and qualitative control requirements if it determined that circumstances exist that prevent the reasonable implementation of those control practices. For example, although projects with less than 40% existing imperviousness would normally require full implementation of ESD to the MEP, the regulations acknowledge that circumstances might exist that prevent the reasonable implementation of these requirements.

For these projects, provided that the project meets the applicable local stormwater requirements as of May 4, 2009, the local jurisdiction may grant a waiver of the 2009 stormwater requirements under the following conditions: 1) phased projects that have already constructed stormwater management facilities that are designed to meet 2000 regulatory requirements, and implementation of ESD to the MEP cannot be met, as long as reasonable efforts to incorporate ESD have been demonstrated; and, 2) infill development projects that are located in Priority Funding Areas with existing stormwater conveyance, and public water and sewer, and where the economic feasibility of the project is tied to the planned density.

If implementation of the 2009 regulatory requirements would result in a loss of the planned development density, a quantitative waiver may be applied to the project for the impervious cover that previously existed on the project site. ESD to the MEP shall be provided to meet the full water quality treatment requirements for the entire development. ESD to the MEP shall be utilized to provide full quantity control for all new impervious surfaces.

The Department will review each jurisdiction's waiver policies in the course of its regular triennial evaluations of the local stormwater programs. In order to assess the initial implementation of the 2009 regulatory requirements, the Department intends to monitor local government's review and approval processes, including the issuance of waivers. Therefore, local approving authorities shall provide to MDE a copy of all approved waivers within 30 days of the approval.

The following examples illustrate circumstances where a waiver may be appropriate.

Example 5:

A developer planned a phased project for a site. Before May 4, 2010, stormwater management facilities designed to meet 2000 regulatory requirements for multiple phases were approved and constructed. If the developer demonstrates that reasonable efforts to incorporate ESD in future phases have been made, and the project meets local stormwater requirements that were in effect as of May 4, 2009, the local jurisdiction may grant a waiver of the 2009 stormwater requirements for the future phases.

Example 6:

An infill development project is planned on a site with existing impervious surface, although less than 40%. It is in a Priority Funding Area (PFA) with existing stormwater conveyance and public water and sewer. The economic feasibility of the project is tied to the planned density. If implementation of the 2009 regulatory requirements would result in a loss of the planned development density, a quantitative waiver may be applied to the project for the impervious cover that previously existed on the project site. ESD to the MEP shall be provided to meet the full water-quality treatment requirements for the entire development. ESD to the MEP shall be utilized to provide full quantity control for all new impervious surfaces.

Redevelopment

The regulations for redevelopment are applicable only to projects that meet the definition of "redevelopment." Sites that do not meet the definition are considered "development." State regulations define redevelopment as *"any construction, alteration, or improvement performed on sites where existing land use is commercial, industrial, institutional, or multifamily residential and the existing site impervious area exceeds 40 percent."* MDE adopted this definition only after considering comments and suggestions from the regulators, engineers, homebuilders, and environmental organizations that comprised MDE's redevelopment committee. While the recommendations from this group varied widely, there were areas of consensus. For example, the committee agreed that the regulations should require more management on less densely developed sites, encourage redevelopment by imposing reduced requirements, and allow greater flexibility compared to new development requirements.

There is precedent for requiring greater management for redevelopment on less densely developed sites in other state and national programs. For example, the policy in the western portion of Washington State defines redevelopment as sites with greater than 35% impervious area. The United States Green Building Council provides different standards for stormwater management on previously developed sites with greater than 50% impervious area in order to meet LEED™ certification standards.

For all redevelopment projects, the primary goal is to achieve water quality improvements on existing developed lands. To accomplish this, the stormwater regulations require reducing imperviousness, implementing ESD to the MEP to provide water quality treatment for one-inch of rainfall, or using some combination of these for at least 50% of the existing impervious area. This standard is significantly less stringent than the requirements for new development, which require the use of ESD to the MEP to treat up to 2.7 inches of rainfall.

The Department recognizes that designers, developers, engineers and reviewers need significant flexibility as they consider stormwater management in a redevelopment context. For this reason, both the Model Ordinance and the regulations describe several alternative stormwater management measures that may be considered if addressing 50% of the site's impervious area cannot be accomplished. These include a combination of ESD and on-site or off-site structural Best Management Practices (BMPs), or any of the following options:

- Other types of retrofitting (BMP upgrades, filtering practices, implementing ESD off-site)
- Participation in a stream restoration project
- Pollution trading with another entity
- Watershed Management Plans
- Payment of a fee-in-lieu
- Partial Waiver of the treatment requirement to the extent that ESD is not practicable.

The determination of what alternative stormwater management measures will be available may be made by the local government at the appropriate point in the development review process. The local government shall consider the prioritization of alternative measures outlined above, after ESD to the MEP has been determined to be impracticable. In deciding what alternatives measures may be required, a local government may use considerations including, but not limited to the following:

1. whether the project is in an area targeted for development incentives, such as a PFA, a designated Transit Oriented Development (TOD) area, or a designated BRAC Revitalization and Incentive Zone;
2. whether the project is necessary to accommodate growth consistent with comprehensive plans; and
3. whether bonding and/or financing has already been secured based on an approved development plan.

These options provide developers significant flexibility with which to address the State's new stormwater requirements. Local governments exercised this same flexibility in implementing the 2000 regulatory requirements.

The following examples illustrate the application of these principles to redevelopment projects.

Example 7:

A redevelopment project in a highly urbanized area plans to match or increase existing density. Opportunities to reduce imperviousness are limited or non-existent and site constraints limit the ability to use ESD practices. Upon a determination by the local authority that it is not practicable to achieve the 50% treatment level, the remaining volume requirement could be addressed with on-site or off-site BMPs, such as underground storage, a pond, or some other traditional practice.

Example 8:

Site constraints on a redevelopment site limit options for ESD, and reductions to imperviousness are not practicable. Reconstruction of a nearby school site offers opportunities for mitigation of stormwater. A local reviewer could allow the developer to perform or fund the installation or upgrade of BMPs at the school to satisfy the regulatory requirements.

Example 9:

A redevelopment site cannot practicably meet ESD requirements and there are no reasonable opportunities for installing on-site or off-site BMPs. The local jurisdiction has a stream restoration project planned but unfunded. The restoration project could be completed or funded by the developer to compensate for the redevelopment project.

Example 10:

Site constraints on a redevelopment project limit options for ESD and reductions to imperviousness are not practicable. The developer may propose to use an innovative approach to stormwater management such as storage and potential reuse of stormwater. In this case, the local reviewer could allow the developer to use alternative approach as long as the practice was consistent with local codes, and opportunities to either reduce imperviousness or practicably implement ESD to the MEP had been exhausted.

Example 11:

A local jurisdiction has identified a developed area where zoning allows more dense development and where it wants to encourage redevelopment. The local jurisdiction has the option of developing a Watershed Management Plan, using the guidelines described in State regulations, and implementing a watershed-based approach to stormwater management. This approach would allow implementation of less stringent stormwater management within the redevelopment area provided that the local jurisdiction targeted restoration activities to other parts of the watershed management area to compensate for the less stringent controls in the targeted area.

Example 12:

A local jurisdiction is heavily urbanized and has encountered many development scenarios where stormwater requirements cannot practicably be met. The local jurisdiction has developed a fee-in-lieu program to streamline the process of identifying off-site mitigation opportunities. Developers who cannot practicably meet requirements using on-site or off-site practices could pay a fee set by the locality based on criteria outlined in the ordinance. Many jurisdictions currently use a fee-in-lieu option to fund a wide range of stormwater projects.

Example 13:

A project is proposed for a reclaimed mine site with an impervious cap to prevent the infiltration of water into the fill material. In this case, the local approving authority may allow alternative management options to meet the unique constraints of the site.

Example 14:

A proposed redevelopment project in a TOD has been designed to achieve the overall density necessary to support transit and mixed uses. Because of the important public benefit and the public investment in the transportation infrastructure, a local jurisdiction could grant a waiver of the 2009 regulatory requirements if meeting the requirements adversely affects the larger goal of the TOD, and approve the project under the 2000 regulatory requirements.

Example 15:

A local government has approved a development plan for a redevelopment project that is located within a designated growth area. Financing for a portion of the project has been secured based on an approved build-out plan yielding a certain density and rate of return. A redesign of the project to meet the new requirements for stormwater management would adversely affect the project's economic viability, resulting in a loss of financing or bonding for the project. In this case, the local approving authority could grant a partial waiver from the new requirements and approve the project under the 2000 regulatory requirements, after ESD to the MEP has been determined to be impracticable.

Example 16:

A local government has approved a redevelopment plan for a project that is located within a designated growth area. The local jurisdiction took a loan or issued bonds to finance infrastructure to serve the project; the financing has been premised on an approved build-out plan yielding a certain density. A redesign of the project to meet the new requirements for stormwater management would result in reduced density or affect the project's economic viability. In this case, the local approving authority could grant a partial waiver from the new requirements and approve the project under the 2000 regulatory requirements, after ESD to the MEP has been determined to be impracticable.

Smart Growth and Stormwater Management

MDE regulations and programs support the principles of Smart Growth, which are critical to achieving federal and State air pollution and water quality standards. Since 1997, the

Department has specifically considered whether every new regulation or program supports Smart Growth. In the case of the stormwater regulations, the standard for redevelopment projects is significantly less stringent than the standard for new development. In addition, the definition of redevelopment was carefully analyzed to establish a definition that reasonably enables ESD to be implemented. To the extent ESD cannot be implemented, due to site constraints, the regulations provide the necessary flexibility to allow a project to reasonably proceed. The guidance recognizes that the local jurisdiction can take into account whether the project is in an area targeted for development incentives, such as a PFA, a TOD, or a designated BRAC Revitalization and Incentive Zone.

Smart Growth projects that are already in the development pipeline can proceed to completion under the new regulations by taking advantage of the available flexibility and waivers. Future Smart Growth projects may comply with the new regulations either by incorporating ESD from the initial concept stage or by using the flexibility described above.

In order to assure that the stormwater regulations do not disproportionately affect Smart Growth, MDE will develop a system for tracking future developments and, if necessary, consider adjustments to the regulations. Local jurisdictions are encouraged to notify MDE if they encounter instances where the new requirements prevent or significantly discourage Smart Growth projects.

Other Provisions

At the request of the Critical Area Commission, a clarifying amendment will be made to the regulations by adding the following:

The provisions of these regulations may not be construed to affect the requirements for a project located in an Intensely Developed Area of the Chesapeake and Atlantic Coastal Bays Critical Area to comply with the 10% Pollution Reduction Requirement under COMAR 27.01.02.03 D (3).

Attachment "B"

Expedited Bill No. "[Click - type number]"
Concerning: Stormwater Management --
-- Revisions
Revised: [date] Draft No. [#]
Introduced: [date]
Expires: [18 mos. after intro]
Enacted: [date]
Executive: [date signed]
Effective: [date takes effect]
Sunset Date: None
Ch. [#], Laws of Mont. Co. [year]

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND

By: Council President at the Request of the County Executive

AN EXPEDITED ACT to:

- (1) require management of stormwater runoff through the use of nonstructural best management practices to the maximum extent practicable for new development and redevelopment projects approved by the Department of Permitting Services;
- (2) bring local stormwater management requirements into compliance with the Maryland Stormwater Management Act of 2007; and
- (3) generally amend County law regarding stormwater management.

By amending

Montgomery County Code
Chapter 19, Erosion, Sediment Control and Storm Water Management
Sections 19-20, 19-21, 19-22, 19-23, 19-24, 19-25, 19-26, 19-27, 19-28, 19-29, 19-30, 19-31, 19-32, 19-33, 19-34, 19-35

By adding

Montgomery County Code
Chapter 19, Erosion, Sediment Control and Storm Water Management
Sections 19-21A, 19-23A

Boldface	<i>Heading or defined term.</i>
<u>Underlining</u>	<i>Added to existing law by original bill.</i>
[Single boldface brackets]	<i>Deleted from existing law by original bill.</i>
<u>Double underlining</u>	<i>Added by amendment.</i>
[[Double boldface brackets]]	<i>Deleted from existing law or the bill by amendment.</i>
* * *	<i>Existing law unaffected by bill.</i>

¹ Includes Montgomery County Planning Staff comments of June 30, 2010.

"S" 10/10/10

BILL NO. [CLICK - TYPE NUMBER]

The County Council for Montgomery County, Maryland approves the following Act:

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Approval: A documented action by the Department after a review to determine and acknowledge the sufficiency of submitted material to meet the requirements of a specified stage in the County's development review process. Approval does not mean an acknowledgement by the Department that submitted material has been received-accepted as complete for review.

* * *

Best management practice: A structural device or nonstructural practice designed to temporarily store or treat stormwater runoff to mitigate flooding, reduce pollution, recharge groundwater, and provide other amenities related to the management of stormwater runoff.

* * *

Channel protection storage volume: The volume used to design structural best management practices to control stream channel erosion.

* * *

Concept plan: The first of three required plan approvals that includes the information necessary to allow an initial evaluation of a proposed project.

* * *

Design Manual: The [applicable] 2000 Maryland Stormwater Design Manual, as revised from time to time, which serves as the official guide for stormwater management principles, methods, and practices in Maryland.

* * *

Drainage area: That area ~~[, which is enclosed by a ridge line,]~~ that contributes runoff to a single point, measured in a horizontal plane.

Environmental site design or ESD: Using small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of development on

Comment [S1]: Wording change clarifies difference between plan approval and submission adequacy.

Comment [S2]: A) The timing for the submission and approval of this plan should follow the process-based timeline for approval of a preliminary forest conservation plan, per Chapter 22A-11 and COMCOR22A.00.01.09A.1 of the Forest Conservation Regulations.

B) A detailed flow chart of the new SWM process within context of the overall DR process should be prepared for the Board's and Council's review.

55 water resources. Methods for designing ESD practices are specified in the Design
56 Manual

57 * * *

58 **Final project approval:** Approval of the final stormwater management
59 design plan and erosion and sediment control plan required to construct a project's
60 stormwater management facilities. Final project approval also includes securing
61 bonding or financing for final development plans if either is required as a prerequisite
62 for approval.

63 **Final stormwater management design plan:** The last of three required plan
64 approvals that includes the information necessary to allow all approvals and permits
65 to be issued by the appropriate authority.

66 * * *

67 **Impervious area:** Any surface that prevents or significantly impedes the
68 infiltration of water into the underlying soil, including structures, buildings, patios,
69 decks, sidewalks, compacted gravel, pavement, asphalt, concrete, stone, brick, tile,
70 swimming pools, and artificial turf. Impervious surface also includes all areas used
71 by or for motor vehicles or heavy commercial equipment, regardless of surface type
72 or material, including roads, road shoulders, driveways, and parking areas.

73 **Infiltration:** The passage or movement of water into the soil surface.

74 **Maximum extent practicable or MEP:** Designing stormwater management
75 systems so that all reasonable opportunities for using environmental site design
76 planning techniques and treatment practices are exhausted and, only where absolutely
77 necessary, a structural best management practice is implemented.

78 **Nonstructural maintenance:** Grass cutting; removal of litter and debris, tree
79 limbs, algae and aquatic plants; tree and shrub trimming and removal; maintenance
80 of fences; aesthetic improvements such as graffiti removal, and any other

Comment [S3]: Avoids confusion with definition of "development plan" from Chapter 59. All references anywhere within SWM legislation or followup regulations will create the same problem.

Comment [S4]: NOTE: This definition is fully supported by DPS, DEP, and MNCPPC.

Comment [S5]: This definition would be more comprehensive by losing this word in its definition. The purpose of infiltration is well beyond just moving water "into the surface".

Comment [S6]: The methods of defining the specific measures to be examined, and documenting a MEP finding specific to each method in writing should be defined in regulation.

81 enhancements in and around a stormwater management facility that are not
82 necessarily essential for ensuring that the facility continues to function properly.

83 * * *

84 **On-site stormwater management:** The design and construction of [a facility]
85 stormwater practices to control [all] stormwater runoff in a development.

86 **Overbank flood protection volume:** The volume controlled by structural
87 practices to prevent an increase in the frequency of out of bank flooding generated by
88 development.

89 * * *

90 **Planning techniques:** A combination of strategies employed early in project
91 design to reduce the impact from development and to incorporate natural features
92 into a stormwater management plan.

93 * * *

94 **Preliminary project approval submission:** At the approval finding of a
95 submission as complete as part of the Department's preliminary development or
96 planning review process. The submission that shall include, at a minimum:

- 97 (a) The number of planned dwelling units or lots;
98 (b) The proposed project density;
99 (c) The proposed size and location of all land uses for the project;
100 (d) A plan that identifies:
101 (1) The proposed drainage patterns;
102 (2) The location of all points of discharge from the site; and
103 (3) The type, location, and size of all stormwater management
104 measures based on site-specific stormwater management
105 requirement computations; and
106 (e) Any other information required by the Department including:

- 107 (1) The proposed alignment, location, and construction type and
- 108 standard for all roads, access ways, and areas of vehicular traffic;
- 109 (2) A demonstration that the methods by which the development will
- 110 be supplied with water and wastewater service are adequate; and
- 111 (3) The size, type, and general location of all proposed wastewater
- 112 and water system infrastructure.

12 * * *

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14 **Redevelopment:** Any construction, alteration, or improvement [which] that:

- 115 (a) exceeds or equals 5,000 square feet of land disturbance; and
- 116 (b) is performed on a site where the existing land use is commercial,
- 117 industrial, institutional, or multifamily residential and existing
- 118 imperviousness is greater than 40 percent.

119 * * *

120 **Site development stormwater management plan:** The second of three
121 required plan approvals that include information necessary to allow detailed
122 evaluation of a proposed project.

123 **Stabilization:** the prevention of soil movement by any of various vegetative
124 or structural means

125 **Stormwater:** [That precipitation which travels over natural, altered, or
126 impervious surfaces to the nearest stream, channel, conduit, or impoundment and
127 appears in surface waters. Stormwater also includes snow melt] Water that originates
128 from a precipitation event.

129 **Stormwater management:** The collection, conveyance, storage, treatment,
130 and control of stormwater [runoff] as needed to reduce accelerated channel erosion,
131 increased flood damages, or water pollution.

132 **Stormwater management facility:** An infiltration device, [~~vegetative filter,~~]
133 filtering device, stormwater pond, stormwater wetland, hydrodynamic structure,

Comment [S7]: The use of the term "project approval" is improperly used in this context. The contents of the definition are more of a checklist for the adequacy and completeness of a submission. Use of the word "approval" in this context is both misleading and confusing, and should properly not be included in the legislation.

Comment [S8]: A) See Comment S2. The "site development stormwater management plan should follow the process-based timeline for approval of a final forest conservation plan, per Chapter 22A-11 and COMCOR22A.00.01.09B.1 of the Forest Conservation Regulations.

134 [channel, pipe, weir, orifice, or combination of those measures,] or other best
135 management practice designed and constructed to control stormwater [runoff] to
136 reduce accelerated stream channel erosion and pollution of surface waters. A
137 stormwater management facility does not include environmental site design practices
38 or any nonstructural stormwater management system.

Comment [S9]: This new language, in combination with the "structural maintenance" definition below, removes County DEP from any responsibility for long term maintenance of the advocated ESD and non-structural measures. Staff is concerned about the function, maintenance, protection, and sustainability of these measures over time.

39 * * *

40 **Stormwater management system:** Natural areas, environmental site design
41 practices, stormwater management measures, and any structure through which
42 stormwater flows, infiltrates, or discharges from a site.

43 **Structural maintenance:** The inspection, construction, reconstruction,
44 modification, [or] repair, and cleaning of any part of a stormwater management
45 facility undertaken to assure that the facility remains in the proper working condition
46 to serve its intended purpose and prevent [structural] failure. Structural maintenance
47 does not include landscaping, grass cutting, or trash removal.

48 * * *

49 **19-21A. Grandfathering.**

150 (a) The Director may, for good cause shown, grant an administrative
151 waiver to a development that received a preliminary project approval
152 before May 4, 2010. Administrative waivers expire as provided under
153 subsection (b) and may be extended as provided under subsection (c).

154 (b) Expiration of administrative waivers.

155 (1) Except as provided in subsection (c), an administrative waiver
156 must expire on:

157 (A) May 4, 2013, if the development does not receive final
158 project approval before that date; or

159 (B) May 4, 2017, if the development receives final project
160 approval before May 4, 2013.

161 (2) All construction authorized under an administrative waiver must
162 be completed by May 4, 2017 or, if the waiver is extended as
163 provided in subsection (c), by the expiration date of the waiver
164 extension.

165 (c) Extension of administrative waivers.

166 (1) Except as provided in paragraph (2), an administrative waiver
167 must not be extended.

168 (2) An administrative waiver may only be extended if, by May 4,
169 2010 the development:

170 (A) Has received a preliminary project approval; and

171 (B) Was subject to a development rights and responsibilities
172 agreement or a tax increment financing approval.

173 (3) Administrative waivers extended under paragraph (2) expire
174 when the development rights and responsibilities agreement, the
175 tax increment financing approval, or the annexation agreement
176 expires.

177 **19-22. Watershed management plans.**

178 (a) The Department of Environmental Protection, in cooperation with the
179 Department, the Board, and other appropriate agencies, may develop
180 watershed management plans to implement stormwater management
181 policies that apply individually to specific watersheds in the County.
182 Each watershed management plan should:

* * *

184 (5) specify the types of [quantitative] stormwater management,
185 stream restoration and wetlands protection practices to be
186 implemented;

* * *

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Comment [S10]: Staff supports the recommended ESD grandfathering provisions handed down from the state to local authority. However, the three year window to receive final approval is generous and may miss many opportunities to integrate ESD techniques without undoing a plan's basic construction. Staff recommends that the grant of the administrative waiver by the county "for good cause shown" should be conditioned on a staff-level pre-submission review at a pre-application meeting for "reasonable attempts" to implement ESD (i.e. without significant changes to the approved plan). This condition should apply only to plans that are subject to one or more subsequent review(s) by the Planning Board.

188 (7) specify where the [Department] Director may grant waivers of
189 on-site stormwater management controls;

190 * * *

191 **19-23. Stormwater management ~~[plans]~~ measures.**

192 ~~[(a) Concept plan. Before the Board may approve a preliminary plan of~~
193 ~~subdivision, an applicant must submit a stormwater management~~
194 ~~concept plan to the Department for review and approval. If a~~
195 ~~preliminary plan of subdivision or site plan is not required, the applicant~~
196 ~~must submit a stormwater management concept plan to the Department~~
197 ~~for review and approval before submitting an application for a sediment~~
198 ~~control permit. Each concept plan is subject to the following conditions~~
199 ~~and requirements:~~

200 ~~(1) The plan must indicate how the stormwater management criteria will be~~
201 ~~applied to each proposed development or redevelopment project. The~~
202 ~~Department may require a plan to analyze the downstream effects of~~
203 ~~any proposed development or redevelopment project. The plan must~~
204 ~~indicate how the development will minimize any interference with or~~
205 ~~addition to the current flow of water onto adjacent properties. The~~
206 ~~applicant may include structural and nonstructural stormwater~~
207 ~~management measures in the plan. The design criteria and~~
208 ~~methodologies used in developing the plan must be consistent with~~
209 ~~criteria specified in the Design Manual and any other criteria established~~
210 ~~by regulation.~~

211 ~~(2) Any stormwater management plan must be consistent with any~~
212 ~~watershed management plan that the Department of Environmental~~
213 ~~Protection has approved or any flood management plan that the~~

- 214 Maryland Department of the Environment has approved involving the
 215 site of the proposed development or redevelopment project.
- 216 ~~(3) The Department must refer the concept plan back to the Board for~~
 217 ~~comment before approving the plan if the Board so requests.~~
- 218 ~~(4) The Department may require incrementally more specific submittals at~~
 219 ~~each stage of the approval process for a project which requires site plan~~
 220 ~~or development plan review.~~
- 221 ~~(b) Design plan. Any person required under this Chapter to obtain a~~
 222 ~~sediment control permit must include a stormwater management design~~
 223 ~~plan as part of the permit application. The design plan must conform to~~
 224 ~~the stormwater management concept plan and serve as the basis for all~~
 225 ~~later construction. All construction specifications must adhere to the~~
 226 ~~requirements in the Design Manual and any applicable regulations.~~
- 227 ~~(c) Plan preparation. The Director may require the stormwater~~
 228 ~~management concept and design plans to be prepared by a professional~~
 229 ~~engineer, professional land surveyor, landscape architect licensed in~~
 230 ~~Maryland, or any other individual whose qualifications are acceptable to~~
 231 ~~the Department. If a stormwater best management practice requires~~
 232 ~~either a dam safety permit from the Maryland Department of the~~
 233 ~~Environment or a small pond approval from the District, the Director~~
 234 ~~must require the design plan to be prepared by a professional engineer~~
 235 ~~licensed by the State of Maryland.]~~
- 236 (a) The ESD planning techniques and practices and structural stormwater
 237 management measures established in this Article and the Design
 238 Manual must be used, either alone or in combination, in a stormwater
 239 management plan. A developer must demonstrate that environmental
 240 site design has been implemented to the maximum extent practicable

241 before the use of a structural best management practice is considered in
242 developing the stormwater management plan.

243 (b) ESD planning techniques and practices.

244 (1) The following planning techniques must be applied according to
245 the Design Manual to satisfy the on-site stormwater management
246 requirements of Section 19-25:

247 (A) Preserving and protecting natural resources;

248 (B) Conserving natural drainage patterns;

249 (C) Minimizing impervious area;

250 (D) Reducing runoff volume;

251 (E) Using ESD practices to maintain 100 percent of the
252 average annual predevelopment groundwater recharge
253 volume for the site;

254 (F) Using green roofs, permeable pavement, reinforced turf,
255 and other alternative surfaces;

256 (G) Limiting soil disturbance, mass grading, and compaction;

257 (H) Maximizing use of available planning and zoning options
258 to provide compact (Clustering) development;

259 (I) Any practices approved by the Administration.

260 (2) The following ESD treatment practices must be designed
261 according to the Design Manual to satisfy the on-site stormwater
262 management requirements of Section 19-25:

263 (A) Disconnection of rooftop runoff;

264 (B) Disconnection of nonrooftop runoff;

265 (C) Sheetflow to conservation areas;

266 (D) Rainwater harvesting;

267 (E) Submerged gravel wetlands;

Comment [S11]: Use of the terms "clustering development" may inadvertently limit the use of this ESD planning technique by restricting its use to the few zones which allow "cluster".

Comment [S12]: This listing fails to assert the "stepwise" priority established in the state's Design Manual (Chapter 5, ESD, Figure 5.1) to first use better design alternatives (A,B,C,G,H) before formalizing the manner of mitigating through use of ESD methods and strategies (D,E,F).

- 268 (F) Landscape infiltration;
269 (G) Infiltration berms;
270 (H) Dry wells;
271 (I) Micro-bioretenion;
272 (J) Rain gardens;
273 (K) Swales;
274 (L) Enhanced filters; and
275 (M) Any practices approved by the Administration.
276 (3) The use of ESD planning techniques and treatment practices
277 specified in this Seciton must not conflict with existing State or
278 County laws.
279 (c) Structural stormwater management measures.
280 (1) The following structural stormwater management practices must
281 be designed according to the Design Manual to satisfy the on-site
282 stormwater management requirements of Section 19-25:
283 (A) Stormwater management ponds;
284 (B) Stormwater management wetlands;
285 (C) Stormwater management infiltration;
286 (D) Stormwater management filtering systems; and
287 (E) Stormwater management open channel systems.
288 (2) The performance criteria specified in the Design Manual with
289 regard to general feasibility, conveyance, pretreatment, treatment
290 and geometry, environment and landscaping, and maintenance
291 must be considered when selecting structural stormwater
292 management practices.

293 (3) Structural stormwater management practices shall be selected to
294 accommodate the unique hydrologic or geologic regions of the
295 County.

296 (d) Alternative ESD planning techniques and treatment practices and
297 structural stormwater management measures may be used for new
298 development runoff control if they meet the performance criteria
299 established in the Design Manual and are approved by the
300 Administration. Practices used for redevelopment projects must be
301 approved by the Department.

302 (e) For purposes of modifying the on-site stormwater control requirements
303 or design criteria, the property owner/developer must submit to the
304 Department an analysis of the impacts of stormwater flows downstream
305 in the watershed. The analysis must include hydrologic and hydraulic
306 calculations necessary to determine the impact of hydrograph timing
307 modifications of the proposed development upon a dam, highway,
308 structure, or natural point of restricted streamflow, established with the
309 concurrence of the Department, downstream of the first downstream
310 tributary whose drainage area equals or exceeds the contributing area to
311 the project or stormwater management facility.

312 **19-23A. Specific design criteria.**

313 The basis design criteria, methodologies, and construction specifications,
314 subject to the approval of the Department and the Administration, must be those of
315 the Design Manual.

316 **19-24. [On-site requirements; County participation; waivers] Review and**
317 **approval of stormwater management plans.**

- 318 ~~[(a) On site stormwater management. A person that receives a building~~
319 ~~permit or a sediment control permit must provide on site stormwater~~
320 ~~management unless the Director waives this requirement.~~
- 321 ~~(b) County participation. If the Director of Environmental Protection finds~~
322 ~~that additional storage capacity in an on site facility would correct an~~
323 ~~existing problem or provide sufficient capacity for future development~~
324 ~~or redevelopment projects, the County may participate financially in the~~
325 ~~construction of a stormwater management facility. The amount of~~
326 ~~participation must be determined by the extent to which the facility~~
327 ~~exceeds on site stormwater management requirements.~~
- 328 ~~(c) Waiver.~~
- 329 ~~(1) An applicant seeking a waiver of any on site stormwater~~
330 ~~management requirement must submit a request to the~~
331 ~~Department in writing in a form acceptable to the Director. The~~
332 ~~applicant must submit a separate written request for each later~~
333 ~~addition, extension, or modification to a development that has~~
334 ~~received a waiver.~~
- 335 ~~(2) The Director may grant a waiver if the applicant shows that~~
336 ~~existing physical conditions prevent full compliance with any on~~
337 ~~site stormwater management requirement.~~
- 338 ~~(3) If a site is an infill development or redevelopment site, the~~
339 ~~Director may waive channel protection requirements, if:~~
- 340 ~~(A) the planned development or redevelopment project will not~~
341 ~~increase the impervious surface area on the site; or~~
- 342 ~~(B) runoff from the site will drain through an adequately sized~~
343 ~~existing improved storm drain system before discharging~~
344 ~~into a natural stream channel, without adversely affecting~~

345 the receiving channel, and the discharge to the storm drain
346 system will not increase erosion in the receiving waters.

347 ~~(4) The Director may also waive channel protection requirements if:~~

348 ~~(A) an off site facility was designed and constructed to provide
349 the necessary runoff controls for the site; and~~

350 ~~(B) the facility's design assures non-erosive conveyance of
351 runoff from the site to the facility.~~

352 ~~(5) The Director may grant a waiver only if:~~

353 ~~(A) the applicant satisfies criteria established by regulation;
354 and~~

355 ~~(B) the waiver is consistent with an applicable watershed
356 management plan approved by the Department of
357 Environmental Protection.~~

358 ~~(6) The Director may grant each waiver only on a case-by-case basis.
359 The Director must consider the cumulative effects of all waivers
360 granted in a drainage area or watershed.~~

361 ~~(7) When a waiver is granted, the Director must require the applicant
362 to:~~

363 ~~(A) provide a monetary contribution;~~

364 ~~(B) grant an easement or dedicate land for the County to
365 construct a stormwater management facility; or~~

366 ~~(C) take specific stream or wetland restoration measures.]~~

67 **Comment [S13]:** Some projects do not go
68 through preliminary plan review (e.g. some special
exceptions, mandatory referrals).

69 **Comment [S14]:** The timing for the submission
70 and approval of this plan should follow the process-
71 based timeline for approval of a preliminary forest
conservation plan, per Chapter 22A-11. This timing
may be as early as zoning or special exception, but
no later than preliminary plan. This timing is critical
to avoid foreclosure of ESD opportunities.

(a) Concept plan. Before the Board may approve a preliminary plan of subdivision, an applicant must submit a stormwater management and sediment control concept plan to the Department for review and approval. All plans submitted for concept approval must provide sufficient information for the Department to make an initial assessment

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of the proposed project and determine whether stormwater management can be provided according to this Article and the Design Manual. Each concept plan is subject to the following conditions and requirements:

Comment [S15]: Definition? Current definition in Forest Conservation requirements (COMCOR 22A.00.01) does not appear to meet ESD requirements.

(1) A natural resources inventory must be reviewed and approved by the Department or the Board before the applicant submits a concept plan as required under this Section.

Comment [S16]: ** More information will be required with the NRI to meet the new ESD requirements. Discussions are still ongoing as to whether and how MNCPPC's current responsibility for NRI approvals will accommodate new information required by DPS. All extra or expanded reviews by MNCPPC as a result of this change shall be fully covered by increased fees.

(2) The plan must indicate how the stormwater management and sediment control criteria will be applied to each proposed development or redevelopment project. The Department may require a plan to analyze the downstream effects of any proposed development or redevelopment project. The design criteria and methodologies used in developing the plan must be consistent with criteria specified in the Design Manual and any other criteria established by regulation.

(3) The plan must describe how environmental site design practices will be implemented to the maximum extent practicable and provide for use of structural best management practices only where the applicant is able to demonstrate to the satisfaction of the Director that environmental site design or other nonstructural best management practices are not a viable option.

Comment [S17]: **ROSE KRASNOW et al, how does this schematic plan compare with your blob plan concept ????????

(4) The plan must include the following:

(A) A map at a scale specified by the Department showing site location, existing natural features, water and other sensitive resources, topography, and natural drainage patterns;

(B) The anticipated location of all proposed impervious areas, buildings, roadways, parking, sidewalks, utilities, and other site improvements;

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(C) The location of the proposed limit of disturbance, erodible soils, steep slopes, and areas to be protected during construction;

(D) Preliminary estimates of stormwater management requirements, the selection and location of ESD practices to be used, and the location of all points of discharge from the site; and

(E) Any other information required by the Director.

(5) Any stormwater management plan must be consistent with any watershed management plan that the Department of Environmental Protection has approved or any flood management plan that the Administration has approved involving the site of the proposed development or redevelopment project.

(6) The Department must refer the concept plan to the Department of Environmental Protection, the Department of Transportation, and the Board for comment before approving the plan.

(b) Site development stormwater management plan. Before the Board may approve a site plan, the applicant must submit a site development stormwater management plan to the Department for review and approval. The applicant may combine the site development stormwater management plans with the concept plans required under subsection (a) if acceptable to the Director. Any site development stormwater management plan submitted for review and approval must include the following:

- (1) All information provided during the concept plan review phase;
- (2) Final site layout, exact impervious area locations and acreages, proposed topography, delineated drainage areas at all points of

Comment [S18]: The listing here is more of a checklist for the adequacy and completeness of a submission.

Comment [S19]: ... Where can any existing watershed management plans be found? What is the schedule for preparation of these plans in the future? Priority should be placed on watersheds where its urban areas are experiencing significant redevelopment (e.g., Wheaton CBD)

Comment [S20]: See Topic #1 in 7.1.10 cover memo. The language dramatically understates the importance of early and very direct coordination with MNCPPC on how best to implement ESD to the MEP. The Planning Board, based on recommendations from staff, is responsible for approval of the entire plan, and its staff, working with DPS, is best able to identify opportunities for ESD within the broader context of the entire plan. A simple "referral" misses the best opportunity at the critical first stage to incorporate and integrate ESD into a plan.

Comment [S21]: If there is no site plan, when does the site development SWM plan get approved in the overall DR process?

426 discharge from the site, and stormwater volume computations for
427 ESD practices and structural measures;

428 (3) A proposed erosion and sediment control plan that contains the
429 construction sequence, any phasing necessary to limit earth
430 disturbances and impacts to natural resources, and an overlay
431 plan showing the types and locations of ESD and erosion and
432 sediment control practices to be used;

433 (4) A narrative that supports the site development design, describes
434 how ESD will be used to meet the minimum control
435 requirements, and justifies any proposed structural stormwater
436 management measure; and

437 (5) Any other information required by the Director.

438 (c) Final stormwater management design plan.

439 (1) Any person required under this Chapter to obtain a sediment
440 control permit must include a final stormwater management
441 design plan as part of the permit application. The final
442 stormwater management design plan must conform to both the
443 concept plan and site development stormwater management plan
444 and serve as the basis for all later construction. The applicant
445 must submit final stormwater management design plans for
446 approval in the form of construction drawings accompanied by a
447 report that includes sufficient information to evaluate the
448 effectiveness of the proposed runoff control design. The
449 applicant must also submit final erosion and sediment control
450 plans in accordance with Section 26.17.01.05 of the Maryland
451 Code of Regulations, as amended. Any plans submitted under
452 this paragraph must all of the requirements of the Design Manual.

- 453 (2) Reports submitted for final stormwater management design plan
- 454 approval must include, but are not limited to:
- 455 (A) Geotechnical investigations including soil maps, borings,
- 456 site-specific recommendations, and any additional
- 457 information necessary for the final stormwater
- 458 management design;
- 459 (B) Drainage area maps depicting predevelopment and post-
- 460 development runoff flow path segmentation and land use;
- 461 (C) Hydrologic computations of the applicable ESD and
- 462 unified sizing criteria according to the Design Manual for
- 463 all points of discharge from the site;
- 464 (D) Hydraulic and structural computations for all ESD
- 465 practices and structural stormwater management measures
- 466 to be used; and
- 467 (E) A narrative that supports the final stormwater management
- 468 design.
- 469 (3) Construction drawings submitted for final stormwater
- 470 management design plan approval must include, but are not
- 471 limited to:
- 472 (A) A vicinity map;
- 473 (B) Existing and proposed topography and proposed drainage
- 474 areas, including areas necessary to determine downstream
- 475 analysis for the proposed stormwater management
- 476 facilities;
- 477 (C) Any proposed improvements including the location of
- 478 buildings or other structures, impervious surfaces, storm
- 479 drainage facilities, and all grading;

- 480 (D) The location of existing and proposed structures;
- 481 (E) Any easements and rights-of-way;
- 482 (F) The delineation, if applicable, of the 100-year floodplain
- 483 and any on-site wetlands;
- 484 (G) Structural and construction details including representative
- 485 cross sections for all components of the proposed drainage
- 486 system or systems and stormwater management facilities;
- 487 (H) All necessary construction specifications;
- 488 (I) A sequence of construction;
- 489 (J) Data for total site area, disturbed area, new impervious
- 490 area, and total impervious area;
- 491 (K) A table showing the ESD and unified sizing criteria
- 492 volumes required in the Design Manual;
- 493 (L) A table of materials to be used for stormwater management
- 494 facility planting;
- 495 (M) All soil boring logs and locations;
- 496 (N) An inspection and maintenance schedule;
- 497 (O) Certification by the owner/developer that all stormwater
- 498 management construction will be done according to this
- 499 plan; and
- 500 (P) An as-built certification signature block to be executed
- 501 after project completion.

Comment [S22]: The contents of the definition are more of a checklist for the adequacy and completeness of a submission.

- 502 (4) The maintenance schedule required under this Section must cover
- 503 the life of any structural stormwater management facility or
- 504 system of ESD practices and must specify the maintenance to be
- 505 completed, the time period for completion, and the responsible
- 506 party that will perform the maintenance. The maintenance

507 schedule must be printed on the approved final stormwater
508 management plan.

509 (d) Plan preparation. The Director may require the stormwater
510 management concept, site development stormwater management and
511 final stormwater management design plans to be prepared by a
512 professional engineer, professional land surveyor, registered architect or
513 landscape architect licensed in Maryland, or any other individual whose
514 qualifications are acceptable to the Department. If a stormwater best
515 management practice requires either a dam safety permit from the
516 Administration or a small pond approval from the District, the Director
517 must require the design plan to be prepared by a professional engineer
518 licensed by the State of Maryland.

519 (e) If a stormwater management plan involves direction of some or all
520 runoff off of the site, it is the responsibility of the developer to obtain
521 from adjacent property owners any easements or other necessary
522 property interests concerning water flowage of water. Approval of a
523 stormwater management plan does not create or affect any right to
524 direct runoff onto adjacent property without that property owner's
525 permission.

526 **19-25. On-site requirements; County participation; waivers.**

527 (a) On-site stormwater management. A person that receives a sediment
528 control permit must provide on-site stormwater management unless the
529 Director waives this requirement. The Director may waive the on-site
530 stormwater management requirement if the Director finds that
531 environmental site design has been implemented to the maximum extent
532 practicable and stormwater from the site is safely conveyed to a
533 Department approved off-site facility that has been constructed to

534 provide stormwater management for the site or that on-site stormwater
535 management is not required under applicable State law. The use of
536 ESD planning techniques and treatment practices must be exhausted to
537 the maximum extent practicable in accordance with the Design Manual
538 before any structural best management practice may be implemented.
539 Stormwater management plans for development projects subject to this
540 Article must be designed using the ESD sizing criteria, recharge
541 volume, water quality volume, and channel protection storage volume
542 criteria according to the Design Manual. The MEP standard is met when
543 channel stability is maintained, predevelopment groundwater recharge is
544 replicated, nonpoint source pollution is minimized, and structural
545 stormwater management practices are used only if determined to be
546 absolutely necessary.

547 (b) County participation. If the Director of Environmental Protection finds
548 that additional storage capacity in an on-site facility would correct an
549 existing problem or provide sufficient capacity for future development
550 or redevelopment projects, the County may participate financially in the
551 construction of a stormwater management facility. The amount of
552 participation must be determined by the extent to which the facility
553 exceeds on-site stormwater management requirements.

554 (c) Waiver.

555 (1) An applicant seeking a waiver of any on-site stormwater
556 management requirement must submit a request to the
557 Department in writing in a form acceptable to the Director.

558 (2) A request for quantitative stormwater control waivers must
559 contain sufficient descriptions, drawings, and any other
560 information that is necessary to demonstrate that environmental

561 site design has been implemented to the maximum extent
562 practicable. The applicant must submit a separate written request
563 for each later addition, extension, or modification to a
564 development that has received a waiver.

565 (3) Except as provided in paragraph (4), stormwater management
566 qualitative control waivers apply only to:

567 (A) Infill development projects where environmental site
568 design is not feasible;

569 (B) Redevelopment projects if the applicable requirements of
570 this Article are satisfied; or

571 (C) Sites where the Director determines that circumstances
572 exist that prevent the reasonable implementation of
573 environmental site design.

574 (4) The Director may grant stormwater management quantitative and
575 qualitative control waivers for phased development projects if a
576 system designed to meet the 2000 regulatory requirements under
577 State and County law for multiple phases has been constructed by
578 May 4, 2010. If the 2009 regulatory requirements cannot be met
579 for future phases constructed after May 4, 2010, the applicant
580 must demonstrate all reasonable efforts to incorporate
581 environmental site design in future phases.

582 (5) The Director may grant a waiver if the applicant shows that
583 existing physical conditions prevent full compliance with any on-
584 site stormwater management requirement. However, the
585 applicant must still demonstrate that environmental site design
586 has been implemented to the maximum extent practicable.

Comment [S23]: SEE Grandfathering discussion in cover memo dated 7/1/10. This same "reasonable effort" criteria should be applied to all plans administratively waived but are subject to subsequent Board approval(s).

- 587 (6) If a site is an infill development or redevelopment site, the
588 Director may waive channel protection requirements if all
589 reasonable options for implementing environmental site design to
590 the maximum extent practicable have been exhausted and:
591 (A) the planned development or redevelopment project will not
592 increase the impervious surface area on the site; or
593 (B) runoff from the site will drain through an adequately-sized
594 existing improved storm drain system before discharging
595 into a natural stream channel, without adversely affecting
596 the receiving channel, and the discharge to the storm drain
597 system will not increase erosion in the receiving waters.
598 (7) The Director must not grant a waiver unless:
599 (A) the applicant satisfies criteria established by regulation;
600 and
601 (B) the waiver is consistent with the applicable watershed
602 management plan, if any, prepared by the applicant and
603 approved by the Department of Environmental Protection.
604 (8) The Director may grant each waiver only on a case-by-case basis.
605 The Director must consider the cumulative effects of all waivers
606 granted in a drainage area or watershed. The waiver must
607 reasonably ensure that the proposed development will not
608 adversely ~~impact~~ affect stream quality.
609 (9) When a waiver is granted, the Director must require the applicant
610 to:
611 (A) provide a monetary contribution;
612 (B) grant an easement or dedicate land for the County to
613 construct a stormwater management facility; or

614 (C) take specific stream or wetland restoration measures.

615 **[19-25] 19-26. Contributions, dedications, and stream restoration.**

616 (a) Contributions. Each monetary contribution required under Section 19-
617 24 must comply with a fee schedule set by Executive regulation. The
618 County must credit each contribution to a capital improvement program
619 project for planning and implementation of stormwater management
620 and stream or wetland restoration.

621 (b) Dedications. The County may agree with an applicant to accept an
622 easement or dedicate land to build a stormwater management facility. If
623 the Department consents in writing for a facility to be located on
624 parkland, the Board must also agree before the applicant may dedicate
625 land to build a stormwater management facility.

626 (c) Stream and wetlands restoration measures. ~~[The] For redevelopment~~
627 only, the Department may allow an applicant to construct stream or
628 wetland restoration measures instead of ~~[on-site stormwater~~
629 ~~management controls]~~ monetary contributions or dedications if:

630 (1) the Director of Permitting Services and the Director of
631 Environmental Protection both find that it is in the County's best
632 interest for the applicant to provide stream or wetland restoration
633 measures; and

634 (2) ~~the estimated cost of the stream or wetland restoration measures~~
635 ~~do not exceed the estimated cost of on-site stormwater~~
636 ~~management controls that the applicant would otherwise be~~
637 ~~required to [construct] provide for new development.~~

638 **[19-26]19-27. Stormwater management design criteria.**

639 (a) ~~[Each applicant must use recharge volume, water quality volume, and~~
640 ~~channel protection storage volume sizing criteria to design a stormwater~~

Comment [S24]: Compensation limit appears low given the value-added to the site which benefits from the waiver by transferring maintenance responsibility to others.

641 management facility for new development as required by the Design
642 Manual and any applicable regulation. Each applicant must also use
643 water quality volume and channel protection storage criteria for any
644 redevelopment project.] Unless otherwise indicated, redevelopment is
645 subject to the same requirements that are applicable to new development
646 under this Article. Each applicant must use planning techniques,
647 nonstructural practices, and design methods to implement
648 environmental site design to the MEP standard. The use of
649 environmental site design must be exhausted before structural best
650 management practices are used. Stormwater management plans must be
651 designed using ESD sizing criteria, recharge volume, water quality
652 volume, and channel protection storage volume sizing criteria according
653 to the Design Manual and any applicable regulation. If the Department
654 finds that historical flooding problems exist at the site of a new
655 development or redevelopment project, the Director may require the use
656 of overbank flood protection volume [and], extreme flood volume
657 criteria, or both.

658 (b) ~~[The Director may reduce the minimum control requirements if the~~
659 ~~applicant incorporates nonstructural stormwater management measures~~
660 ~~into the site design plans in accordance with the Design Manual and any~~
661 ~~applicable regulations.] In the case of redevelopment, the applicant may~~
662 ~~use alternative stormwater management measures to satisfy the~~
663 ~~requirements in subsection (a) if the applicant satisfactorily~~
664 ~~demonstrates to the Director that impervious area reduction and~~
665 ~~environmental site design have been implemented to the maximum~~
666 ~~extent practicable. The use application of environmental site design~~
667 ~~planning techniques and treatment practices for redevelopment projects~~

Comment [S25]: ****ROSE KRASNOW: please review our suggested changes and revise as necessary for consistency with Smart Growth and master plan objectives and zoning expectations????? HELP*****

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~~must reduce the density~~ recognize development objectives as established in approved master plans under the County Zoning Code, ~~master plans, and sector plans.~~ Alternative stormwater management measures include, but are not limited to:

- (1) An on-site structural best management practice;
- (2) An off-site structural best management practice to provide water quality treatment; or
- (3) A combination of impervious area reduction, environmental site design implementation, and an on-site or off-site structural best management practice within the limit of disturbance.

~~[(e) The applicant may use alternative structural and nonstructural practices to satisfy water quality volume requirements if the Director finds that those practices satisfy the criteria in the Design Manual and any additional criteria established by regulation. The Department must approve any alternative practice used for either a new development or redevelopment project. The Administration must also approve any alternative practice used for a new development project.]~~

[19-27] 19-28. Financial security.

- (a) Required.
 - (1) Before issuing a ~~[building]~~ sediment control permit for a development which requires a stormwater management ~~[facility]~~ system, the Director must require the applicant or owner to furnish a performance or cash bond, irrevocable letter of credit, certificate of guarantee, or other instrument from a financial institution or issuing person satisfactory to the Director and the County Attorney, for construction of the on-site stormwater

694 | management-[facility] system in an amount equal to the estimated
695 | cost of the construction.

696 | * * *

697 | (3) The bond, letter of credit, certificate of guarantee, or other
698 | instrument must be conditioned on the faithful performance of the
699 | terms and conditions of an approved stormwater management
700 | plan and construction of the [facility] system as provided in that
701 | plan and under this Article. The bond, letter of credit, certificate
702 | of guarantee, or other instrument must inure to the benefit of the
703 | County if the applicant or owner does not comply with the
704 | conditions of the bond, letter of credit, certificate of guarantee, or
705 | other instrument.

706 | (b) Release.

707 | (1) The Director must not release a bond, letter of credit, certificate
708 | of guarantee, or other instrument until the [Department, after a
709 | final inspection,] applicant has [found] submitted "as-built" plans
710 | and the Department has issued a certification of completion based
711 | on the Director's finding, after having performed a final
712 | inspection, that the stormwater management [facility] system
713 | complies with the approved plan and this Article.

714 | (2) The Department may agree with an applicant regarding the stages
715 | of the work to be done on the [facility] system. After completing
716 | each stage, the applicant must notify the Department that the
717 | applicant is ready for an inspection and, after the Director
718 | certifies that the applicant has completed that stage of work under
719 | the approved plan and this Article, the Director may reduce the
720 | bond, letter of credit, certificate of guarantee, or other instrument

721 pro rata, or may direct the Director of Finance to refund to the
722 applicant a prorated share of the amount that the applicant
723 deposited with the County.

724 * * *

725 **[19-28] 19-29. Inspection and maintenance of stormwater management**
726 **[~~facilities~~ systems].**

727 (a) Installation inspections.

728 (1) The ~~[Department]~~ Director, or ~~[an individual]~~ a person designated
729 by the applicant that is also qualified and approved by the
730 Department to supervise construction, must inspect each
731 ~~[stormwater]~~ best management ~~[facility]~~ practice under
732 construction as needed to certify the ~~[facility's]~~ system's
733 compliance with approved plans. The inspector must conduct
734 each inspection as provided in a checklist or in any other manner
735 that the Department has approved for each type of stormwater
736 management ~~[facility]~~ system. The inspector must prepare a
737 written inspection report that includes the following information:

- 738 (A) the date and location of the inspection;
739 (B) whether construction ~~[complied]~~ complies with the
740 approved stormwater management plan;
741 (C) any variation from approved construction specifications;
742 and
743 (D) any violations of law or regulations that the inspector
744 observes.

745 (2) The Department must notify the applicant in writing if the
746 inspector observes any violations of this Article during the

747 inspection. The written notice must describe the nature of the
 748 violation and prescribe any corrective action needed.

749 (3) Construction work on a stormwater management ~~[facility]~~ system
 750 must not proceed until the Department:

751 (A) inspects and approves the work previously completed or
 752 the plans and certifications previously submitted; and

753 (B) furnishes the inspection reports to the applicant after each
 754 inspection.

755 (4) Once construction is complete, the applicant must submit as-built
 756 plan certification to the Department to ensure that ESD planning
 757 techniques, treatment practices, and structural stormwater
 758 management measures and conveyance systems comply with the
 759 specifications contained in approved plans. At a minimum, as-
 760 built certification must include a set of drawings comparing the
 761 approved stormwater management plan with what was
 762 constructed. The Director may require additional information if
 763 needed.

764 (5) All as-built plans submitted to the Department under this
 765 subsection must be prepared by a design professional or other
 766 person qualified and approved by the Department.

767 ~~[(b) Inspection and maintenance of off site facilities. The Department of~~
 768 ~~Environmental Protection must inspect and approve each off site stormwater~~
 769 ~~management facility for acceptance for County maintenance. After a facility is~~
 770 ~~accepted, the Department of Environmental Protection must inspect each~~
 771 ~~underground facility at least once each year and each above ground facility at least~~
 772 ~~once every 3 years, and must maintain each accepted facility in good working~~
 773 ~~condition.]~~

- 774 | ~~[(c)]~~(b) | ~~[Inspection and maintenance]~~ Maintenance of new ~~[on-site~~
775 | ~~facilities]~~ stormwater management systems.
- 776 | (1) Before issuing a ~~[building]~~ sediment control permit to develop
777 | any property that requires ~~[an on-site stormwater management~~
778 | ~~facility]~~ implementation of best management practices, the
779 | Department must require the property owner to execute an
780 | easement and an inspection and maintenance agreement that is
781 | binding on all ~~[later]~~ subsequent owners of the land to be served
782 | by any private stormwater management system.
- 783 | (2) The easement ~~[and agreement]~~ must give the County a perpetual
784 | right of access to the ~~[facility]~~ stormwater management system at
785 | all reasonable times, to inspect, operate, monitor, install,
786 | construct, reconstruct, modify, maintain, clean, or repair any part
787 | of the stormwater management ~~[facility]~~ system within the area
788 | covered by the easement as needed to assure that the ~~[facility]~~
789 | system remains in proper working condition under approved
790 | design and environmental standards. The inspection and
791 | maintenance agreement must require the owner to be responsible
792 | for all maintenance of any completed ESD treatment system and
793 | nonstructural maintenance of [the] any on-site stormwater
794 | management facility if the development consists of residential
795 | property or associated nonresidential property. Otherwise, the
796 | inspection and maintenance agreement must require the owner to
797 | be responsible for all maintenance of the ~~[facility]~~ entire on-site
798 | stormwater management system, including ~~[structural~~
799 | ~~maintenance]~~ maintaining in good condition, and promptly
800 | repairing and restoring, all ESD practices, grade surfaces, walls,

801 drains, dams and structures, vegetation, erosion and sediment
802 control measures, and other protective devices in perpetuity.

803 * * *

804 (5) ~~[The Department of Environmental Protection must inspect each~~
805 ~~County maintained underground facility at least once every year~~
806 ~~and each County maintained above ground facility at least once~~
807 ~~every 3 years.] Any repairs or restoration and maintenance~~
808 ~~performed under this Section must be in accordance with~~
809 ~~previously approved or newly submitted plans and any~~
810 ~~reasonable corrective measures specified by the Director of~~
811 ~~Environmental Protection.~~

812 [(d)] (c) ~~[Inspection and maintenance]~~ Maintenance of existing ~~[on-site]~~
813 stormwater management facilities.

814 (1) The owner of [an on-site] a stormwater management facility that
815 is not subject to subsection [(c)] (b) must perform all structural
816 maintenance needed to keep the facility in [property] proper
817 working condition. The owner of a residential property or
818 associated nonresidential property, or a homeowners' association
819 [which] that includes the residential property, may execute a
820 stormwater management easement granting the County a
821 perpetual right of access to inspect, operate, monitor, install,
822 construct, reconstruct, modify, maintain, clean, or repair any part
823 of the stormwater management facility within the easement as
824 needed to assure that the facility remains in proper working
825 condition under approved design standards.

826 (2) If the owner of a stormwater management facility grants a
827 stormwater management easement to the County, the owner must

828 make any structural repairs needed to place the facility in proper
 829 working condition, as determined by the Department of
 830 Environmental Protection, before the County enters into an
 831 inspection and maintenance agreement with the owner that
 832 obligates the County to assume responsibility for structural
 833 maintenance of the facility. After the owner and the County have
 834 agreed that the County will assume responsibility for structural
 835 maintenance of the facility, the owner must record in the County
 836 land records the easement and any other agreements executed in
 837 conjunction with the easement that are binding on later owners of
 838 the land. The owner must deliver a certified copy of each
 839 recorded document to the Department of Environmental
 840 Protection.

841 (3) After the Department of Environmental Protection receives a
 842 certified copy of the easement and agreements, the County must
 843 structurally maintain and inspect the facility as provided in
 844 subsection [c] (b).

845 ~~[(e) Abandonment instead of repair.]~~ (d) Maintenance inspections.

846 (1) The Department of Environmental Protection must ~~[inspect each]~~
 847 ensure preventive maintenance through inspection of all
 848 stormwater management ~~[facility to see what repairs, if any, are~~
 849 ~~needed to restore the facility to proper working condition. If the~~
 850 ~~Director of Environmental Protection finds that the stormwater~~
 851 ~~management facility is no longer needed to control stormwater~~
 852 ~~runoff or that the benefits of a repaired stormwater management~~
 853 ~~facility are not justified by the cost of repair, the owner of the~~
 854 ~~stormwater management facility must abandon the use of the~~

855 facility for stormwater functions as the Director of Environmental
856 Protection orders. ~~Any order issued under this subsection must~~
857 ~~not restrict the facility from being used for recreational or other~~
858 ~~purposes not related to stormwater control.] systems. The
859 inspection must occur during the first year of operation and then
860 at least once every 3 years.~~

861 (2) Inspection reports must be maintained by the Department of
862 Environmental Protection for all stormwater management
863 systems and must include the following:

864 (A) The date of inspection;

865 (B) Name of inspector;

866 (C) The condition of:

867 (i) Vegetation or filter media;

868 (ii) Fences or other safety devices;

869 (iii) Spillways, valves, or other control structures;

870 (iv) Embankments, slopes, and safety benches;

871 (v) Reservoir or treatment areas;

872 (vi) Inlet and outlet channels or structures;

873 (vii) Underground drainage;

874 (viii) Sediment and debris accumulation in storage and
875 forebay areas;

876 (ix) Any nonstructural practices to the extent
877 practicable; and

878 (x) Any other item that could affect the proper function
879 of the stormwater management system;

880 (D) Description of needed maintenance.

- 881 (3) The owner of any privately maintained stormwater management
882 system must correct the deficiencies discovered during the
883 inspection within the time period specified in any written notice
884 issued by the Director of Environmental Protection.
- 885 (e) Abandonment instead of repair. If the Director of Environmental
886 Protection finds that the stormwater management facility is no longer
887 needed to control stormwater runoff or that the benefits of a repaired
888 stormwater management facility are not justified by the cost of repair,
889 the owner of the stormwater management facility must abandon the use
890 of the facility for stormwater functions as the Director of Environmental
891 Protection orders. Any order issued under this subsection must not
892 restrict the facility from being used for recreational or other purposes
893 not related to stormwater control.
- 894 (f) Nonstructural maintenance of [~~on-site~~] stormwater management
895 facilities. The owner of [~~an on-site~~] a stormwater management facility
896 must [~~provide landscaping and~~] perform [~~any other~~] routine inspection
897 and nonstructural maintenance that impacts the effectiveness of routine
898 structural maintenance, performed either privately or publicly. Among
899 other actions, the owner must:
- 900 (1) prevent the accumulation of solid waste on the property and the
901 generalized growth of weeds or plants in violation of Section 58-
902 3;
- 903 (2) clear any woody vegetation, including trees and brush along with
904 their root systems, within 25 feet of the facility's control structure
905 and within 15 feet of an upstream or downstream dam
906 embankment; and

907 (3) abate any other condition on the property that the Department of
908 Environmental Protection reasonably finds may adversely affect
909 the facility's proper functioning.

910 * * *

911 (h) ~~[Emergency authority. If, after inspection, the Director of~~
912 ~~Environmental Protection finds that the condition of a privately~~
913 ~~maintained stormwater management facility presents an immediate~~
914 ~~danger to the public health or safety because of an unsafe condition or~~
915 ~~improper maintenance, the Director of Environmental Protection may~~
916 ~~take needed actions to protect the public and make the facility safe,~~
917 ~~including entering the property to make needed repairs. The County~~
918 ~~must assess any costs incurred as a result of the Director of~~
919 ~~Environmental Protection's actions against each owner of the facility.~~
920 ~~The County may collect the costs in the same manner as real property~~
921 ~~taxes are collected against the property where the facility is located. In~~
922 ~~addition, the County may seek reimbursement under any other method~~
923 ~~legally available to collect debts owned to the County.] Stop work~~
924 ~~orders.~~

925 (1) If a maintenance inspection reveals that the maintenance, repair,
926 or restoration of a stormwater management facility is being
927 performed in a manner that is hazardous, creates a nuisance, or
928 endangers human life or the property of others, or is otherwise
929 being performed in an unauthorized manner, the Director of
930 Environmental Protection may, without advance warning, post
931 the site with a stop work order directing that all maintenance,
932 repair, or restoration activity cease immediately.

933 (2) The Director of Environmental Protection must provide written
934 notice to the property owner, any designated representative of the
935 property owner, or any on-site person in charge of the work when
936 a stop work order is issued. That notice must specify the extent
937 to which work is stopped and the conditions under which work
938 may resume.

939 (3) A person must not continue, or allow the continuance of, work on
940 a stormwater management facility covered by a stop work order,
941 except for work necessary to abate the nuisance, or hazardous
942 conditions as identified by the Director.

943 (i) Emergency authority. If, after inspection, the Director of
944 Environmental Protection finds that the condition of a privately
945 maintained stormwater management facility presents an immediate
946 danger to the public health or safety because of an unsafe condition,
947 improper construction, or poor maintenance, the Director of
948 Environmental Protection may take needed actions to protect the public
949 and make the facility safe, including entering the property to make
950 needed repairs. The County must assess any costs incurred as a result of
951 the Director of Environmental Protection's actions against each owner
952 of the facility. The County may collect the costs in the same manner as
953 real property taxes are collected against the property where the facility
954 is located. In addition, the County may seek reimbursement under any
955 other method legally available to collect debts owned to the County.

956 **[19-29.] 19-30. Stormwater management loan program.**

* * *

958 **[19-30.] 19-31. Regulations.**

* * *

960 **[19-31.] 19-32. Exemptions.**

961 The following development activities are exempt from the stormwater
962 management requirements under this Article:

Comment [S26]: Will upcoming sediment controls/TMDL's cover agricultural uses ??

963 (a) agricultural land management [activities] practices;

964 * * *

965 **[19-32] 19-33. Transition for approved plans.**

966 Each new development or redevelopment project must comply with this
967 Article, except [that:

968 (a) ~~A previously approved] when the Department issues final sediment~~
969 control and stormwater management [concept] design plan [remains
970 valid if the Department issues a sediment control permit] approval for
971 the property covered by the plan before [July 1, 2003. The applicant
972 must construct the stormwater management system within 2 years after
973 the Department issues the sediment control permit.

974 ~~(b) A residential lot containing 2 or more acres is exempt from any on-site~~
975 ~~stormwater management requirement if the preliminary plan creating~~
976 ~~the lot was approved before July 1, 2002 and the Department issues the~~
977 ~~sediment control permit before July 1, 2003.] May 4, 2010.~~

978 **[19-33] 19-34. Agreements between the County and municipalities.**

979 * * *

980 (c) If a municipality operates a stormwater management program that
981 serves substantially the entire municipality and meets all applicable
982 federal and [state] State standards, the County must reimburse the
983 municipality, subject to appropriation, for the cost of operating the
984 program, limited to the amount the Director of Environmental
985 Protection estimates the County would spend for that municipality if it

986 were operating the program, by means of a cooperative agreement under
987 subsection (b).

988 **[19-34. Reserved.]**

989 **19-35. Water Quality Protection Charge.**

990 (a) As authorized by [state] State law (Maryland Code, Environment Art., §
991 4-204), the Director of Finance must annually impose and collect a
992 Water Quality Protection Charge, as provided in this Section. The
993 Director must collect the Charge in the same manner as County real
994 property taxes, apply the same interest, penalties, and other remedies
995 (including tax sale) if the Charge is not paid, and generally treat the
996 Charge for collection and administration purposes as if it were a County
997 real property tax. The Director may treat any unpaid Charge as a lien
998 on the property to which the charge applies.

999 (b) The Charge must be imposed on each residential property and
1000 associated nonresidential property, as specified in regulations adopted
1001 by the Executive under Method (1) to administer this Section. The
1002 regulations may define different classes of real property, depending on
1003 the amount of impervious surface on the property, stormwater runoff
1004 from the property, and other relevant characteristics, for purposes of
1005 applying the [charge] Charge.

Field Code Changed

1006 (c) The Council must set the rate or rates for the Charge by a resolution
1007 adopted each year after holding a public hearing with at least 15 days'
1008 notice. The resolution must be adopted no later than the date the
1009 Council approves the annual operating budget and presented to the
1010 Executive within 3 days after the Council adopts it. If the Executive
1011 disapproves a resolution adopted under this Section within 10 days after
1012 the Council adopts it and the Council readopts it by a vote of six

1013 | [~~Councilmembers~~] Council members, or if the Executive does not act
1014 | within 10 days after the Council adopts it, the resolution takes effect.
1015 | Unless the resolution specifies otherwise, the rates must take effect on
1016 | the July 1 after the resolution is adopted.

1017 | * * *

1018 | (e) The regulations may allow credits against and exemptions from the
1019 | Charge:

- 1020 | (1) to the extent that credits and exemptions are not prohibited by
1021 | [~~state~~] State law; and
1022 | (2) if each credit or exemption will enhance water quality or
1023 | otherwise promote the purposes of this Article.

1024 | * * *

1025 | (g) This Charge does not apply to any property located in a municipality in
1026 | the County which:

- 1027 | (1) operates a stormwater management program that meets all
1028 | applicable federal, [~~state~~] State, and County requirements and has
1029 | received any necessary federal or [~~state~~] State permit; and
1030 | (2) imposes a similar charge or other means of funding its
1031 | stormwater management program in that municipality.

1032 | (h) A person that believes that the Director of Environmental Protection has
1033 | mistakenly assigned a Charge to the person's property or computed the
1034 | Charge incorrectly may apply to the Director of Environmental
1035 | Protection in writing for a review of the Charge, and request an
1036 | adjustment to correct any error, [within 21 days after receiving a bill
1037 | for] not later than September 30 of the year that payment of the Charge
1038 | is due. [If] An aggrieved property owner may appeal the Director's

1039 decision to the County Board of Appeals within 10 days after the
1040 Director issues the decision.

1041 (i) A person that believes that the Director of Environmental Protection
1042 ~~[denies any requested adjustment, the applicant may]~~ has incorrectly
1043 denied the person's request ~~[reconsideration of the Director's denial in~~
1044 ~~writing within 10 days after the date of the denial. An aggrieved~~
1045 ~~property owner]~~ for a credit under subsection (b) may appeal the
1046 Director's [final] decision to the County Board of Appeals within 10
1047 days after the Director issues the decision.

1048 (j) The Board of Appeals may hear and decide all appeals taken from a
1049 [final] decision of the Director of Environmental Protection under this
1050 ~~[subsection.]~~ Section as provided in Article I of Chapter 2A.

1051 *Approved:*

1052

Nancy M. Floreen, President, County Council

Date

1053 *Approved:*

1054

Isiah Leggett, County Executive

Date

1055 *This is a correct copy of Council action.*

1056

Linda M. Lauer, Clerk of the Council

Date

ATTACHMENT "C"

**Summary Rationale for Defining and Limiting Impervious Area
As a Basic Watershed Protection Technique**

1. **Areas developed with pervious pavement systems or green roofs become permanent parts of the stormwater management system. Depending on the system, they can provide a certain amount of infiltration, storage, and limited treatment.** Because of this the County encourages their use and credits them against stormwater management requirements in all locations.
2. **However, credit is not given for ground covered by pervious pavement systems or green roofs in excess of an imperviousness cap because their use results in the permanent loss of other environmental functions** due to the removal of the upper soil profile, loss of natural vegetation, and compaction—**functions that imperviousness caps are intended to safeguard for watershed protection.** Some important features and functions significantly reduced or lost include:
 - Treatment and pollutant uptake by natural vegetation and soils;
 - Return of water to the atmosphere by evapotranspiration;
 - Sequestration of carbon by vegetative growth;
 - Release of oxygen into the atmosphere;
 - Infiltration of rainwater to naturally recharge aquifers;
 - Moderation of air and water temperatures; and
 - Preservation of habitat and food sources for plant and animals.
3. **Maryland DNR originally approved use of pervious systems as a credit towards impervious area limits in the Chesapeake Bay Critical Area, but reversed this position** after experience showed overall cumulative environmental impacts that were unacceptable. This experience should provide practical guidance towards continuing to provide maximum protection in the Council's designated areas with imperviousness limits.
4. **The County Council has designated specific areas for special efforts to protect the environmentally sensitive features.** These efforts include numeric impervious limitations, additional stormwater management, and enhanced forest conservation practices. The designated areas include: the Upper Paint Branch, Upper Rock Creek, and part of the Clarksburg Special Protection Areas (SPA's), the Patuxent Primary Management Area (PMA), and a watershed within the Germantown Master Plan.
5. **Environmental Site Design, required by State law, gives first priority to minimizing the development footprint and associated impervious area and maximizing vegetated area.** After this has occurred, small-scale stormwater management practices and permeable pavement systems are used to minimize environmental impacts due to runoff.
6. **All County agencies involved with water quality (DPS, DEP and MNCPPC) concur with the definition of "impervious area" in the proposed DPS revisions to Chapter 19.**

Impervious Area: *Any surface that prevents or significantly impedes the infiltration of water into the underlying soil, including structures, buildings, patios, decks, sidewalks, compacted gravel, pavement, asphalt, concrete, stone, brick, tile, swimming pools, and artificial turf. Impervious surface also includes all areas used by or for motor vehicles or heavy commercial equipment, regardless of surface type or material, including roads, driveways, and parking areas.*