

MEMORANDUM

November 27, 2012

TO: Planning, Housing, and Economic Development Committee
FROM: Jeff Zyontz, Legislative Attorney *JZ*
SUBJECT: Zoning Text Amendment 12-13, Rural Cluster Zone - Impervious Surface Limits

This worksession on ZTA 12-13 will include the opportunity to hear representatives from DPS, DEP, and the Planning Department on the relationship between impervious surface limits and new stormwater management requirements.

Staff recommends approval of ZTA 12-13 as introduced.

Zoning Text Amendment (ZTA) 12-13, sponsored by the District Council at the request of the Planning Board, was introduced on September 11, 2012. ZTA 12-13 would impose impervious surface area limits in the Rural Cluster (RC) zone under certain circumstances. It was recommended to the Council in the course of the Planning Board's work on the Burtonsville Crossroads Neighborhood Plan. That plan, which is currently before the Council, recommended an 8 percent impervious surface area limit for the RC zoned area within the plan area.

Planning Staff recommended approval as introduced. The Planning Board recommended a revision to the grandfathering provision.

The Council held a public hearing on October 23, 2012. In addition to the testimony from the Planning Board representative, one person spoke in opposition to ZTA 12-13. In the opponent's view, both the zoning and the impervious surface area limit were inappropriate for area bounded by Route 29 and split by Old Columbia Pike.

After the public hearing, the Planning, Housing, and Economic Development Committee recommended approval of the zoning and the limit of impervious surfaces as recommended by the Planning Board in the draft Burtonsville Crossroads Neighborhood Plan.

Issues

Why is impervious surface an issue for a low density agricultural zone?

The RC zone allows residential development with one dwelling unit for every 5 acres of land. Land development with residential uses at this density would generally result in a percentage of impervious surfaces less than 8 percent. The zone allows other uses by special exception that could require more than 8 percent impervious surface:

- large group homes;
- housing and related facilities for senior adults or persons with disabilities;
- animal boarding places;
- domiciliary care home for more than 16 residents;
- private educational institutions;
- hospice care facilities;
- sanitariums; and
- community swimming pools.

Some non-residential uses that have the potential to have impervious surfaces that exceed 8 percent of the land area are permitted without a special exception:

- publicly supported ambulance, rescue squad, fire stations or publicly operated use;
- churches or other places of worship;
- convents or monasteries; and
- libraries and museums.

Are impervious surface area limits needed to maintain water quality with the new state required stormwater management requirements?

Impervious surface area is regarded as a challenge to the natural environment:

The increasing imperviousness of the bay's landscapes has five broad, interrelated impacts: 1) alteration of local and regional hydrological cycles (changes in water quantity); 2) changes in water quality; 3) changes to local energy balances and microclimates; 4) habitat degradation, loss, and fragmentation; and 5) changes to stream and landscape aesthetics. Imperviousness directly affects stormwater runoff and water quality. Moreover, the temperature response and reflective properties of impervious surfaces are linked to the "urban heat island" effect, which affects human comfort and health because of changes in sensible heat fluxes and the concentration of atmospheric pollutants.

The measurement of imperviousness provides a succinct, straightforward indicator of stream degradation and terrestrial habitat loss and degradation (Arnold and Gibbons, 1996; Schueler, 1994). Increasing imperviousness can also result in dramatic changes to the aesthetic character of streams and landscapes within the bay's watershed, indicating a shift from forested and rural landscapes to more suburban and urban settings, and is a measure of both directed and undirected (sprawl) urban development. These changes

profoundly affect the quality of life for millions of residents within the Chesapeake Bay watershed.¹

At the risk of being corrected by the experts invited to attend the Committee's meeting,² a summary of the scientific literature concerning the need for impervious surface area limits to protect water quality, in addition to new state stormwater management requirements, follows.

Stormwater management Best Management Practices (BMPs) reduce the negative effect of impervious surfaces at any impervious surface area level, but it is not clear in the environmental literature the extent to which Environmental Site Design (ESD) or Low Impact Development (LID) techniques will reduce those negative effects when compared with conventional BMPs. Zoning based on impervious surface coverage is an effective, measurable, and scientifically defensible technique to protect stream water quality.³ Some researchers are emphatic about the need for impervious surface area limits to safeguard the integrity of aquatic resources.⁴ The degree to which low impact development can reduce pollutant concentrations and loads is stated as an untested hypothesis.⁵

To date, studies of watershed ecological health impacts from development using ESD or LID are very limited in number and scope. Much more data are needed for an accurate assessment of how much better ESD/LID protects environmental health on a watershed scale as compared to traditional BMPs. The limited data that have been reported suggest that, even using LID techniques, there are still negative impacts to stream quality, as indicated by biological monitoring results.⁶

The Maryland Department of the Environment (MDE) uses impervious surface area limits to protect ecological functions in sensitive areas that are important to the health of the Chesapeake Bay. MDE recognizes that ESD cannot provide all the ecological functions of forested land, and encourages local

¹ Kent B. Barnes, John M. Morgan III, and Martin C. Roberge, "Impervious Surfaces and the Quality of Natural and Built Environments", Towson University, Department of Geography and Environmental Planning (2002).

² The author of this memorandum lacks the formal scientific background to be an expert in the field of water quality. A scientific expert might write a paper entitled "The Effect of Hydro-Carbon concentrations from Atmospheric Deposition on Amphibian Populations"; this author would be more inclined to write a paper entitled "Our Friend the Frog".

³ Gerald Kaufman and Tammy Brant, "The Role of Impervious Cover as a Watershed-based Zoning Tool to Protect Water Quality in the Christina River Basin of Delaware, Pennsylvania, and Maryland", Proceedings of the Water Environment Federation, Watershed 2000, pp. 1656-1667(12).

⁴ Derek B. Booth, David Hartley, Rhett Jackson, "Forest Cover, Impervious-Surface Area, and The Mitigation Of Stormwater Impacts", JAWRA Journal of the American Water Resources Association, Volume 38, Issue 3, pages 835-845, (2002):

Preservation of aquatic resources in developing areas will require integrated mitigation, which must include impervious-surface limits, forest-retention policies, stormwater retention, riparian-buffer maintenance, and protection of wetlands and unstable slopes.

⁵ Belinda E. Hatt, Tim D. Fletcher, Christopher J. Walsh and Sally L. Taylor, "The Influence of Urban Density and Drainage Infrastructure on the Concentrations and Loads of Pollutants in Small Streams", Environmental Management, Volume 34, Number 1 (2004):

Our hypothesis that the widespread application of LID across basins will result in much-reduced pollutant concentrations and loads could be tested by experimental assessment of basin developments with and without low impact development, monitoring water quality before and after development.

⁶ Although ESD is expected to perform better than earlier approaches, even with the best technologies, all development causes impacts to a wide range of ecosystem functions, of which infiltration is but one. Because even ESD cannot compensate for all of the natural functions and benefits lost to development, and because the purpose of imperviousness limits is to maximize all of those functions, the Planning Department Staff believes that limiting impervious cover in sensitive watersheds will continue to be an important tool to reduce environmental impacts by reducing the development footprint and helping to retain more of the full range of functions and benefits afforded by undisturbed vegetation and soils.

jurisdictions to use additional land use management tools, such as imperviousness limits, to provide extra protection for special or sensitive natural resources and watersheds.⁷

The Council limited the area of impervious surface in the Upper Rock Creek and Paint Branch Special Protection Areas to 8 percent of any subdivision. In those areas and before the state's mandate for low impact development techniques, the Council was convinced that impervious surface area limits were necessary to protect water quality.

How would ZTA 12-13 avoid unintended consequences?

ZTA 12-13 would only have an effect when the Council approves a Master Plan with an impervious surface area limit in the RC zone. If the Council does not approve any such limit, ZTA 12-13 will not reduce impervious surfaces in the RC zone.

The following issues were raised by the Executive's comments.

Should master plan recommendations on impervious surface area limits be elevated to mandates?

ZTA 12-13 would allow the impervious surface area limit recommendations of a master plan to become a zoning standard. Master plans are currently more than unenforceable recommendations in the zoning, subdivision, and water quality approval processes. Subdivisions are required to substantially conform to adopted master plans.⁸ Project plans in CBD zones must be consistent with the appropriate sector plan.⁹ Site plans in the CR family of zones must be substantially consistent with sector plans.¹⁰ Special exception approvals must be consistent with the recommendations of master plans.¹¹ In Special Protection Areas, the Planning Board must find conformity with any policy or requirement for Special Protection Areas, including limits on impervious area, in a land use plan, watershed plan, or the Comprehensive Water Supply and Sewer System Plan.¹²

By elevating a master plan to an enforceable recommendation, ZTA 12-13 is in line with previous Council actions. The Maryland courts have upheld the enforcement of master plan recommendations in the regulatory process when mandated by an ordinance.¹³

There are clearly other ways to accomplish the same outcome. The Council could designate Patuxent as a Special Protection Area with an 8 percent limit on impervious surfaces. The Council could establish and map a new overlay zone (although Planning Staff drafts of the Zoning Ordinance Rewrite do not

⁷It is instructive that MDE's advice on its website to reduce the environmental impact of stormwater lists reducing impervious surfaces first:

<http://www.mde.state.md.us/programs/Water/StormwaterManagementProgram/SedimentandStormwaterHome/Pages/programs/waterprograms/sedimentandstormwater/home/index.aspx>

⁸ §50-35(k)(l).

⁹ §59-D-4.42(b).

¹⁰ §59-C-15.61.

¹¹ §59-G1.21(a)(3).

¹² §19-65(a)(2)(A)(ii).

¹³ M-NCPPC v. Greater Baden-Aquasco Citizen's Association, 412 Md. 73 (2009).

In subdivision matters it is well established that the recommendations of a master plan may be binding to the extent that there is a statute, ordinance, or regulation requiring that a proposed subdivision conform to a master plan. It is an error to ignore numeric limits in a master plan when master plan conformance is required.

Coffey v. M-NCPPC, 293 Md. 24 (1982):

Master plan recommendations are binding of subdivisions because of a regulation that makes them binding.

favor overlay zones). One method of imposing an impervious surface area limit is not preferable over any other, although a consistent approach is an admirable objective.

What is a Special Protection Area?

A Special Protection Area is a geographic area where:

- (1) existing water resources, or other environmental features directly relating to those water resources, are of high quality or unusually sensitive; and
- (2) proposed land uses would threaten the quality or preservation of those resources or features in the absence of special water quality protection measures which are closely coordinated with appropriate land use controls.¹⁴

A Special Protection Area (SPA) implements the impervious surface area limits of a master plan or can impose those limits in environmental guidelines.¹⁵

Only within these areas, development in a new subdivision is required to get an approved water quality plan before proceeding. Applicants are required to produce a water quality inventory.¹⁶ DPS is also required to approve the water quality plan in the subdivision process.¹⁷

How can the Council create a new Special Protection Area?

The Council may designate a geographic area as a Special Protection Area by identifying the area in:

- (1) a land use plan;
- (2) the Comprehensive Water Supply and Sewer System Plan;
- (3) a watershed plan; or
- (4) a resolution adopted after at least 15 days notice and a public hearing.¹⁸

Should an impervious surface area limit be adopted by creating a Special Protection Area?

The Burtonsville Crossroads Neighborhood Plan is currently before the Council. The Council could amend the Plan to create a Special Protection Area, but it would be imposing regulatory burdens (the need for a water quality plan) beyond an impervious surface area limit. Generally, a Special Protection Area is established on a watershed or subwatershed basis. The Council would have to decide the geographic limits of the SPA. A SPA could exceed the geographic limits of the Burtonsville Crossroads Neighborhood Plan, but then it must be established by resolution and not by amending the Plan.

¹⁴ Montgomery County Code, §19-61 Definitions.

¹⁵ 19-65(a)(2)(A):

In acting on a preliminary or final water quality plan, the Planning Board has lead agency responsibility for:

- (i) Conformity with all policies in the Planning Board's Environmental Guidelines which apply to special protection areas;
- (ii) Conformity with any policy or requirement for special protection areas, including limits on impervious area, in a land use plan, watershed plan, or the Comprehensive Water Supply and Sewer System Plan; and
- (iii) Any other element of the plan in which the Planning Board has primary lead agency design, review, and approval responsibility.

¹⁶ §19-64(a).

¹⁷ §19-65(d)(3)(A).

¹⁸ Montgomery County Code, §19-62 Applicability.

The Executive questioned whether using a ZTA to mandate an 8 percent impervious surface area limit in a master plan was an appropriate approach. By only amending the master plan to create a Special Protection Area, the Council could mandate a master plan recommended 8 percent impervious surface area limit without a ZTA. *Staff believes that adopting the ZTA is a better, less burdensome approach.*

Should an impervious surface area limit be adopted by an overlay zone?

Impervious surface area limits are imposed in Paint Branch and Upper Rock Creek by overlay zones. The Patuxent Watershed Functional Plan recommends adherence to the Environmental Guidelines that established a Primary Management Area with a 10 percent impervious surface area limit. That recommendation is enforced through the subdivision ordinance that requires conformance to master plans.

The Council could amend the Burtonsville Crossroads Neighborhood Plan to recommend an overlay zone and then apply the overlay zone when approving the sectional map amendment. The Planning Staff recommended Zoning Ordinance Rewrite has a single overlay zone for all areas with impervious surface area limits. If the Council were to approve that approach, the Burtonsville Crossroads Neighborhood Plan would be amended to establish a new Special Protection Area and recommend an overlay zone. The overlay zone would be mapped when the Sectional Map Amendment for Burtonsville was approved. The area would be limited to the scope of the Burtonsville Crossroads Neighborhood Plan.

An overlay zone could accomplish the same objective as ZTA 12-13; however, it would be the only overlay zone area that affected a single zone.

Planning Staff will be available at the joint Committee meeting to respond to the idea of using an overlay zone.

| <u>This Packet Contains</u> | <u>© number</u> |
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| Planning Staff Recommendation | 10 |
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| Planning Staff comments on water quality | 12 – 16 |

Zoning Text Amendment No.: 12-13
Concerning: RC Zone - Impervious
Surface Limits
Draft No. & Date: 2 – 8/27/12
Introduced: September 11, 2012
Public Hearing:
Adopted:
Effective:
Ordinance No.:

**COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND
SITTING AS THE DISTRICT COUNCIL FOR THAT PORTION OF
THE MARYLAND-WASHINGTON REGIONAL DISTRICT WITHIN
MONTGOMERY COUNTY, MARYLAND**

By: The District Council at the Request of the Planning Board

AN AMENDMENT to the Montgomery County Zoning Ordinance to:

- amend the RC zone to establish impervious surface limits where specifically recommended in the area master or sector plan

By amending the following sections of the Montgomery County Zoning Ordinance, Chapter 59 of the Montgomery County Code:

DIVISION 59-C-9. “AGRICULTURAL ZONES.”

Section 59-C-9.4. “Development standards.”

Section 59-C-9.5. “Cluster development--Option in Rural Cluster zone and Low Density Rural Cluster zone.”

Section 59-C-9.54. “Development standards.”

EXPLANATION: ***Boldface** indicates a Heading or a defined term.*

Underlining indicates text that is added to existing law by the original text amendment.

[Single boldface brackets] indicate that text is deleted from existing law by original text amendment.

Double underlining indicates text that is added to the text amendment by amendment.

[[Double boldface brackets]] indicate text that is deleted from the text amendment by amendment.

** * * indicates existing law unaffected by the text amendment.*

ORDINANCE

The County Council for Montgomery County, Maryland, sitting as the District Council for that portion of the Maryland-Washington Regional District in Montgomery County, Maryland, approves the following ordinance:

Sec. 1. DIVISION 59-C-9 is amended as follows:

Division 59-C-9. AGRICULTURAL ZONES.

* * *

Sec. 59-C-9.4. Development standards.

The following requirements apply in all cases, except as specified in the optional standards for cluster development [set forth] in [sections] Sections 59-C-9.5 and 59-C-9.57 and the exemption provisions of [section] Section 59-C-9.7.

* * *

| | Rural | RC | LDRC | RDT | RS | RNC | RNC/ TDR |
|---------------------------------------------------------------------------------------------------------------------------|-------|-----------------|------|-----|----|-----|-------------|
| * * * | | | | | | | |
| 59-C-9.46. Maximum Lot Coverage. | | | | | | | |
| No more than this percentage of the net lot area may be covered by buildings, including accessory buildings. ² | 10 | 10 ⁺ | 10 | 10 | 10 | 10 | 10 |
| * * * | | | | | | | |

* * *

* The total impervious surface area of any proposed preliminary plan must not exceed 8% of the land area of the preliminary plan if such a limit is recommended by the approved and adopted master or sector plan. A preliminary plan approved before {the effective date of the ZTA} may be built or altered if the building coverage of any lot is 10% of the lot or less, without a limit on total impervious surface area.

* * *

Sec. 59-C-9.5. Cluster development--Option in Rural Cluster zone and Low Density Rural Cluster zone.

* * *

59-C-9.54. Development standards.

The density under the cluster development option must not exceed one unit per 5 acres.

24 * * *

25 (b) **Lot coverage, percentage of.** A maximum of 10 percent of the net area of
26 the lot is to be covered by buildings, including accessory buildings.

27 * * *

28 (j) **Impervious surface.** In the RC zone, the total impervious surface area of
29 any proposed preliminary plan must not exceed 8% of the land area of the
30 preliminary plan if such a limit is recommended by the approved and
31 adopted master or sector plan. A project which has had a preliminary plan
32 approved before {the effective date of the ZTA} may be built or altered
33 without a limit on impervious surface area.

34 * * *

35 **Sec. 2. Effective Date.** This ordinance takes effect 20 days after the date of
36 Council adoption.

37 This is a correct copy of Council action.

38

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Linda M. Lauer, Clerk of the Council



MONTGOMERY COUNTY PLANNING BOARD
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

OFFICE OF THE CHAIR

MONTGOMERY COUNTY PLANNING BOARD

The Maryland-National Capital Park and Planning Commission

October 23, 2012

TO: The County Council for Montgomery County, Maryland, sitting as the District Council for the Maryland-Washington Regional District in Montgomery County, Maryland

FROM: Montgomery County Planning Board

SUBJECT: Zoning Text Amendment No. 12-13

BOARD RECOMMENDATION

The Montgomery County Planning Board of The Maryland–National Capital Park and Planning Commission reviewed Zoning Text Amendment No. 12-13 at our regular meeting on October 11, 2012. By a vote of 4:0, the Planning Board recommends approval of the text amendment as modified by the Board to clarify the grandfathering provision of the ZTA. The clarification would ensure that a project, which has had a preliminary plan approved before the effective date of approval of the ZTA would not be subject to the eight percent impervious cap. The text amendment language as modified by the Board is included as an attachment to this memorandum, separate from the technical staff report.

ZTA No. 12-13 amends the RC zone to establish impervious surface limits where specifically recommended in an area master or sector plan. Specifically, the total impervious surface area of any proposed preliminary plan must not exceed 8% of the land area of the preliminary plan if such a limit is recommended for the property in the approved and adopted master or sector plan. As stated above, the ZTA also provides a grandfather provision for a project, which has had a preliminary plan approved before the effective date of approval of the ZTA.

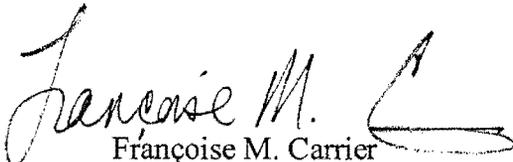
A primary purpose of the RC Zone is to protect environmentally sensitive areas. The Burtonsville Crossroads Neighborhood Plan (“The Plan”) recommends that development within designated tributary headwaters of the Patuxent River Watershed be limited to eight

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percent imperviousness instead of the 10 percent established in the Functional Master Plan for the Patuxent River Watershed and in the Environmental Guidelines. The Plan area is in the sensitive tributary headwaters of the Patuxent River and the existing 10 percent limit is not adequate to preserve these sensitive areas. The Plan's recommendation for eight percent imperviousness matches the existing limit in the Upper Paint Branch and Upper Rock Creek Special Protection Areas and is currently our most stringent standard in preserving sensitive stream resources. Currently, the RC zone is limited only by a lot coverage requirement for buildings of 10 percent and does not limit paving. ZTA No. 12-13 will allow the recommendations for eight percent imperviousness limits in the Plan to be implemented, assuming the Council adopts the Plan with those recommendations. It will also allow implementation of similar recommendations that may be made in future master plans.

CERTIFICATION

This is to certify that the attached report is a true and correct copy of the technical staff report and the foregoing is the recommendation adopted by the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission, at its regular meeting held in Silver Spring, Maryland, on Thursday, October 11, 2012.


Françoise M. Carrier
Chair

FC:GR/am

As Modified by the Planning Board on October 11, 2012

Zoning Text Amendment No.: 12-13
Concerning: RC Zone --Impervious
Surface Limits
Draft No. & Date: 2 – 8/27/12
Introduced: September 11, 2012
Adopted:
Effective:
Ordinance No.:

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND
SITTING AS THE DISTRICT COUNCIL FOR THAT PORTION OF
THE MARYLAND-WASHINGTON REGIONAL DISTRICT WITHIN
MONTGOMERY COUNTY, MARYLAND

By: The District Council at the request of the Planning Board

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Sec. 1. DIVISION 59-C-9 is amended as follows:

Division 59-C-9. AGRICULTURAL ZONES.

* * *

Sec. 59-C-9.4. Development standards.

The following requirements apply in all cases, except as specified in the optional standards for cluster development [set forth] in [sections] Sections 59-C-9.5 and 59-C-9.57 and the exemption provisions of [section] Section 59-C-9.7.

* * *

| | Rural | RC | LDRC | RDT | RS | RNC | RNC/ TDR |
|---------------------------------------------------------------------------------------------------------------------------|-------|-----------------|------|-----|----|-----|-------------|
| * * * | | | | | | | |
| 59-C-9.46. Maximum Lot Coverage. | | | | | | | |
| No more than this percentage of the net lot area may be covered by buildings, including accessory buildings. ² | 10 | 10 [*] | 10 | 10 | 10 | 10 | 10 |
| * * * | | | | | | | |

* * *

* The total impervious surface area of any proposed preliminary plan must not exceed 8% of the land area of the preliminary plan if such a limit is recommended by the approved and adopted master or sector plan. This provision does not apply to any project with a preliminary plan approved before {the effective date of the ZTA} [[A preliminary plan approved before {the effective date of the ZTA} may be built or altered if the building coverage of any lot is 10% of the lot or less, without a limit on total impervious surface area]].

* * *

Sec. 59-C-9.5. Cluster development--Option in Rural Cluster zone and Low Density Rural Cluster zone.

* * *

59-C-9.54. Development standards.

23 The density under the cluster development option must not exceed one unit per 5
24 acres.

25 * * *

26 (b) **Lot coverage, percentage of.** A maximum of 10 percent of the net area of
27 the lot is to be covered by buildings, including accessory buildings.

28 * * *

29 (j) **Impervious surface.** In the RC zone, the total impervious surface area of
30 any proposed preliminary plan must not exceed 8% of the land area of the
31 preliminary plan if such a limit is recommended by the approved and
32 adopted master or sector plan. This provision does not apply to a[[A]]
33 project which has had a preliminary plan approved before {the effective date
34 of the ZTA}[[may be built or altered without a limit on impervious surface
35 area]].

36 * * *

37 **Sec. 2. Effective Date.** This ordinance takes effect 20 days after the date of
38 Council adoption.

39 This is a correct copy of Council action.

40

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Linda M. Lauer, Clerk of the Council



Zoning Text Amendment No. 12-13, Establishing impervious surface limits in RC zone

ADR

Gregory Russ, Planner Coordinator, gregory.russ@montgomeryplanning.org, 301-495-2174

MD

Mary Dolan, Chief, mary.dolan@montgomeryplanning.org, 301-495-4552

Completed: 10/04/12

Description

Zoning Text Amendment (ZTA) No. 12-13 amends the RC zone to establish impervious surface limits where specifically recommended in an area master or sector plan. Specifically, the total impervious surface area of any proposed preliminary plan must not exceed 8% of the land area of the preliminary plan if such a limit is recommended for the property in the approved and adopted master or sector plan. The ZTA provides a grandfather provision for a project, which has had a preliminary plan approved before the effective date of approval of the ZTA.

Summary/Analysis

Staff recommends approval of ZTA No. 12-13 as introduced. On July 12, 2012, by a vote of 5-0, the Planning Board recommended amending the RC zone to establish impervious surface limits where specifically recommended in the area master or sector plan. ZTA No. 12-13 was introduced by the County Council reflecting the recommendation of the Planning Board.

A primary purpose of the RC Zone is to protect environmentally sensitive areas. The Burtonsville Crossroads Neighborhood Plan ("The Plan") recommends that development within designated tributary headwaters of the Patuxent River Watershed be limited to eight percent imperviousness instead of the 10 percent established in the Functional Master Plan for the Patuxent River Watershed and in the Environmental Guidelines.

The Plan area is in the sensitive tributary headwaters of the Patuxent River and the existing 10 percent limit is not adequate to preserve these sensitive areas. The Plan's recommendation for eight percent imperviousness matches the existing limit in the Upper Paint Branch Special Protection Area and is currently our most stringent standard in preserving sensitive stream resources. Currently, the RC zone is limited only by a lot coverage requirement for buildings of 10 percent and does not limit paving. Zoning Text Amendment No. 12-13 implements the recommendation for properties zoned RC and designated in the plan for the eight percent imperviousness limit based on their location within the tributary headwaters of the Patuxent River Watershed. The ZTA accomplishes this by requiring any new preliminary plan to adhere to the impervious surface limits specifically recommended in the area master or sector plan.

ATTACHMENTS

1. Zoning Text Amendment No. 12-13 as introduced

GR/MD/am



OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Isiah Leggett
County Executive

MEMORANDUM

November 19, 2012

To: Nancy Floreen, PHED Chair

From: Isiah Leggett, County Executive 

Subject: ZTA 12-13 Rural Cluster (RC) Zone – Impervious Surface Limits

I am writing to share with you my position on proposed ZTA 12-13.

I appreciate the Planning Board's recommendation to lower impervious surface limits in the Burtonsville Commercial Crossroads Neighborhood Plan. However, I question whether utilizing a zoning text amendment to mandate an 8% impervious surface limit in a Master Plan or sector plan is an appropriate approach. In both the Upper Rock Creek and Paint Branch Master Plans, impervious surface limits were achieved with overlay zones.

Maintaining low impervious levels is an important strategy to protect environmentally sensitive areas, but additional protective measures may be required or utilized to achieve maximum pollutant reductions and improve local streams. Specific actions to protect our high quality aquatic resources should be set independently of the master plan process.

Special Protection Areas (SPA) and Conservation Overlay Zones can provide the desired protections for the County's watersheds without elevating master plan recommendations to mandates.

If you have any questions, please contact Greg Ossont, Deputy Director, Department of General Services at 240-777-6192 or greg.ossont@montgomerycountymd.gov

cc: Roger Berliner, Council President
Francoise Carrier, Planning Board Chair



MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

November 26, 2012

MEMORANDUM

TO: Jeff Zyontz , Legislative Attorney
Montgomery County Council

VIA: John Carter, Chief, Area 3
Montgomery County Planning Department

Mary Dolan, Chief, Functional Planning
Montgomery County Planning Department

FROM: Kristin O'Connor, Lead Planner, Burtonsville Crossroads Neighborhood Plan
Montgomery County Planning Department

Katherine Nelson, Planner Coordinator, Area 3
Montgomery County Planning Department

Greg Russ, Planner Coordinator, Functional Planning
Montgomery County Planning Department

SUBJECT: Burtonsville Crossroads Neighborhood Plan and the RC Zone ZTA

Recommendation

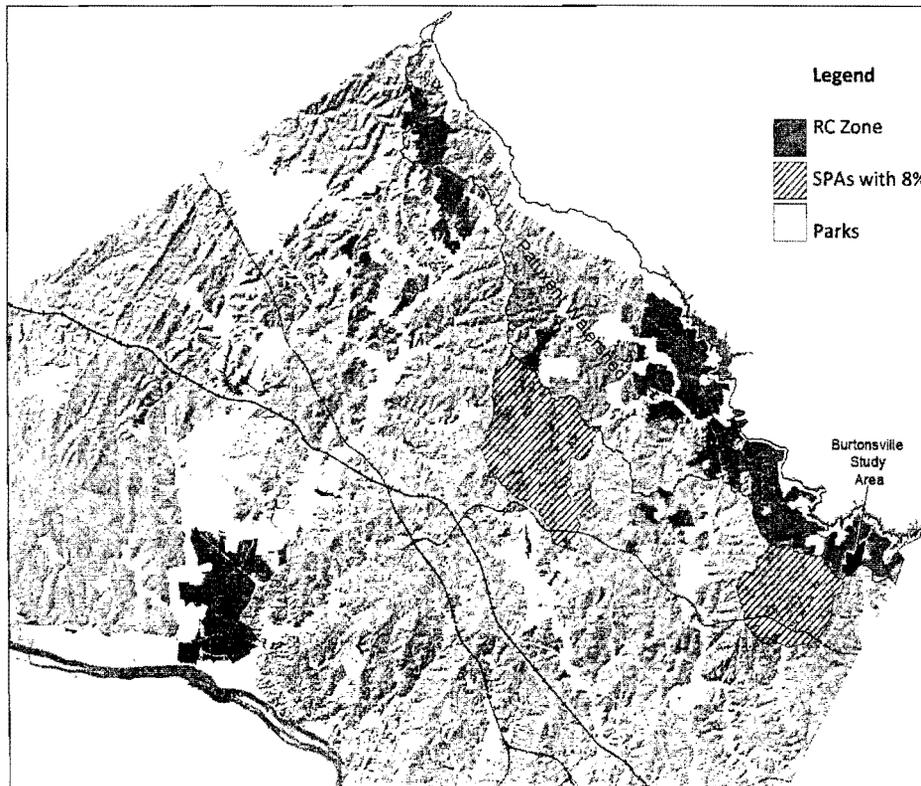
The Burtonsville Crossroads Neighborhood Plan recommends that development in the rural areas be limited to eight percent imperviousness. A zoning text amendment (ZTA) for areas designated in the Plan is recommended to establish the eight percent imperviousness limit in the RC Zone in this Plan for the following reasons:

1. A small change to the existing RC Zone is preferable rather than creating an entirely new overlay zone.
2. Special Protection Areas (SPAs) are designated for areas with multiple zones.
3. SPAs are created for entire sub-watersheds.

Analysis

The headwaters in Burtonsville are unique in Montgomery County because these areas directly impact our drinking water supply. This water, with Washington Suburban Sanitary Commission (WSSC) filtration and treatment, is directly used in Montgomery, Prince Georges and Howard County for drinking water. Montgomery County is a partner in the multi-jurisdictional agreement to protect this water resource.

Map 1. Location of RC-Zoned Land in the County



To protect this unique water resource, a ZTA to establish the eight percent imperviousness limit in the RC Zone is recommended to address the following:

1. Decline in water quality
2. Imperviousness in the tributary headwaters
3. RC Zone in the Lower Patuxent Watershed
4. Comparison to Paint Branch and Upper Rock Creek Area

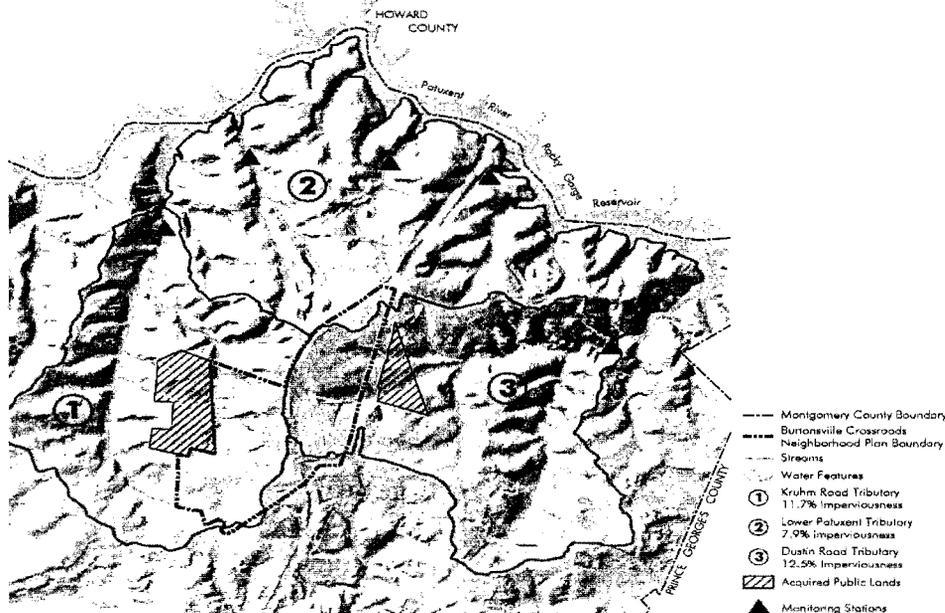
Decline in Water Quality

The Plan recognizes that the existing measures to protect the sensitive environmental resources that surround Burtonsville have not been strong enough to maintain the quality of the drinking water. Protecting the headwaters of three tributaries in the Plan

area is necessary to maintain the water quality in the Patuxent River, particularly within the Rocky Gorge reservoir.

Data collected from monitoring stations in the vicinity of Burtonsville indicate that water quality has declined. Pollutant limits have been set for the Rocky Gorge Reservoir by the Maryland Department of the Environment (MDE) because it does not meet current water quality standards. WSSC is quoted in the Plan, stating that “development and other land use disturbing activities have the potential to continue to decrease water quality by adding sediments, nutrients and other pollutants that are carried from construction activity, paved areas and lawns to the reservoirs through runoff” (p. 31). The existing policies protecting the Patuxent River, including the 10 percent imperviousness cap, have not been strong enough to protect stream aquatic life and water quality of the Rocky Gorge Reservoir. There are numerous examples of residential, industrial and agricultural development that have taken place in spite of existing policies. As development pressure increases in this area of the Patuxent watershed, stronger measures are needed to supplement existing policies.

Map 2. Subwatershed Imperviousness Percentages



Imperviousness in Tributary Headwaters

Although Environmental Site Design (ESD) is now required by law, and is expected to perform better than earlier approaches, even with the best technologies development causes impacts to a wide range of ecosystem functions provided by natural land, of which infiltration is but one. Because even ESD cannot compensate for all of the natural functions and benefits lost to development, and because the purpose of imperviousness limits is to maximize all of those functions, limiting impervious cover in sensitive watersheds will continue to be an important tool to reduce environmental impacts by

reducing the development footprint, and helping to retain more of the full range of functions and benefits afforded by undisturbed vegetation and soils.

The headwaters of three tributaries to the Patuxent River begin in the Plan area. Within the three subwatersheds, two have impervious levels over 10% (11.9% and 12.5%). Public lands were strategically acquired within the three sub-watersheds to increase protection of water quality within the reservoir and reduce imperviousness.

The MDE uses impervious limits to protect ecological functions in sensitive areas that are important to the health of the Chesapeake Bay. The MDE recognizes that environmentally sensitive design cannot provide all the ecological functions of forested land, and encourages local jurisdictions to use additional land use management tools, such as imperviousness limits, to provide extra protection for special or sensitive natural resources and watersheds.

Map 3. RC Zoned Land Surrounding Burtonsville



RC Zone Distinctively Used in Lower Patuxent Watershed

The use of the RC zone is uniquely designed to protect the drinking water supply in the Patuxent Watershed. The RC zone is used in the lower Patuxent River watershed for low density residential development to protect scenic and environmentally sensitive areas. Countywide, residential development in this zone has averaged less than eight percent imperviousness.

Comparison to the Paint Branch and Upper Rock Creek Areas

The eight percent figure recommended in the Plan matches the existing limit in the Paint Branch and Upper Rock Creek Special Protection Areas. The level of eight percent imperviousness has been established to protect environmentally sensitive areas by limiting additional imperviousness.

Summary

Headwaters are unique in Montgomery County. The Plan recommends that development within designated headwaters of the Patuxent Watershed be limited to eight percent imperviousness instead of the 10 percent established in the *Functional Master Plan for the Patuxent River Watershed* and in the Environmental Guidelines. A zoning text amendment is recommended for areas designated in the Plan to establish the eight percent imperviousness limit in the RC Zone.