



**Zoning Text Amendment No. 14-10, Upper Paint Branch Overlay Zone – Exemptions**

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**Completed: 09/4/2014**

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**Description**

Currently, impervious area or surface is defined in the Montgomery County Code, Chapter 19, Erosion, Sediment Control, and Storm Water Management, Sec. 19-21. This definition does not prevent permeable pavements from receiving full credit under the County’s Stormwater Management Regulations, but prevents permeable pavements from being credited towards impervious limits set by the County zoning ordinance.

ZTA 14-10 proposes to exempt permeable pavement (pervious concrete) at places of public assembly in the Upper Paint Branch Overlay zone from impervious surface area limits where there is evidence that the unimproved ground being covered by pervious concrete has been used for parking vehicles on a regular basis. Impervious surfaces are restricted to a maximum of 8% of the tract of any application for development.

**Summary**

**Staff recommends denial of ZTA 14-10 to exempt permeable pavement from impervious surface area limits at places of “public assembly” in the Upper Paint Branch Special Protection Area Environmental Overlay Zone.** Creation of an exemption category to allow a type of concrete surface to be excluded from the zone-imposed imperviousness limits is contrary to the intent of this environmental overlay zone. The ZTA would open the door to allow the effective impervious cover of a development site to be approved beyond the regulatory limit. It would be a first step in weakening an important environmental land use tool to help preserve high quality aquatic resources in the County: the ability to limit artificial land cover on a new development site.

**Analysis**

Purpose of limiting impervious surfaces

The purpose of limiting impervious surfaces on a development site is to minimize the amount of engineered, artificial land surfaces in sensitive watersheds and maximize the preservation of natural soils and vegetation, and their functions in fostering high quality conditions of a watershed’s aquatic

resources. Vegetation cover provides important functions that are not present in engineered, artificial land surfaces, such as the following:

- Treatment and pollutant uptake by natural vegetation and soils
- Infiltration of precipitation into soils and groundwater systems
- Sequestration of carbon by vegetative growth
- Release of oxygen
- Moderation of air and water temperatures
- Preservation of habitat and food sources for plant and animals

Pervious concrete or other forms of pervious pavements are identified by state and local stormwater management regulatory agencies as a stormwater management best management practice. These pavement types are designed to allow the infiltration of water through these surfaces and into the natural groundwater system underneath. Although such surfaces may possess one of the beneficial characteristics of a natural vegetated surface (i.e., infiltration of precipitation), other environmental benefits are not present. ***Replacing vegetated surfaces with pervious concrete will result in the loss of most beneficial environmental characteristics found in vegetated surfaces.*** In addition, ***pervious pavements can create environmental impacts themselves, such as increasing the level of pollutant-generating activities on a property*** (i.e., providing additional area that motor vehicles may park on; such vehicles may drip oil or grease onto the pavement, which may then infiltrate into underlying groundwater); or, creating reflective surfaces that may contribute to the heat island effect of the immediate area. Therefore, in those areas of the County where there are regulatory impervious surface limits applied to new development projects, pervious pavements should not be excluded from the category of impervious surfaces. All pervious pavements, including pervious concrete, need to remain in the category of an impervious surface cover that is subject to the regulatory limit.

#### Places of Assembly Limitation

Although the new exemption created by ZTA 14-10 would apply to only a very limited situation, staff is very concerned that, if adopted, this new exemption could be expanded to allow pervious concrete to be excluded from an impervious surface limit in many other situations:

- The ZTA proposes to limit the exclusion of pervious pavement to sites that are “places of public assembly”. What is the definition of a “place of public assembly” that would apply in the Zoning Ordinance? Does it include religious institutions, libraries, community centers, private and public schools, and parkland? It should be noted that in Chapter 57 (“Weapons”) of the County Code, a “place of public assembly is defined as:

“... a government owned park identified by the Maryland-National Capital Park and Planning Commission; place of worship; elementary or secondary school; public library; government-owned or -operated recreational facility; or multipurpose exhibition facility, such as a fairgrounds or conference center. A place of public assembly includes all property associated with the place, such as a parking lot or grounds of a building.”

- If it is acceptable to add pervious concrete in the specific situation described in ZTA 14-10, then, what is to keep other ZTAs from being introduced and adopted that would allow

pervious concrete to be included in any new project in the Upper Paint Branch SPA without being subject to a limit?

- If pervious concrete is allowed to be exempt from the regulatory impervious cover limits in the Upper Paint Branch SPA, what is to prevent this exemption category from being added to other SPAs or other watersheds with regulatory imperviousness caps?

### Impervious Surface Limitations-Practices

The Upper Paint Branch Watershed is recognized by the County as a stream system that has a high quality aquatic resource. Land use recommendations have been crafted to help preserve the high quality aquatic conditions since the 1981 Eastern Montgomery County Master Plan. With the long history and extensive efforts by the County to protect this natural resource, the impervious surface limitation has continued to remain a priority and been recognized as a critical tool in protecting this resource. In addition, the County has strengthened the limitations of impervious cover for new developments in this watershed: the Environmental Overlay Zone for this SPA was originally created (in 1997) with a 10 percent imperviousness limit; in 2007, the overlay was amended to lower the limit to 8 percent. ZTA 14-10 to exempt pervious concrete from being counted as part of a project's impervious cover limit "loosens" the control of impervious cover within the watershed and is counter to the County's long history of using the strict impervious cover limitation as a watershed protection tool.

It should be noted that over the past several years, there have been requests made by applicants of different types of projects in watersheds to allow either regulatory impervious surface limits to be exceeded or to allow "offsets" of proposed exceedances of impervious surface limits with stormwater management practices. In response, at several Planning Board roundtable sessions (December 13, 2007, November 20, 2008, March 25, 2010, and September 15, 2011), staff have presented the applicants' requests and their rationale, as well as information on the environmental benefits of limiting impervious surface cover in a watershed. At each of these sessions, the Planning Board has agreed with staff on the following points:

- Impervious surface coverage in a watershed is a well-documented indicator of general watershed health.
- For the purposes of limiting impervious surface coverage in a new development project, pervious pavement is considered to be an impervious surface.
- Pervious pavement, including pervious concrete, cannot be given "credits" to offset or reduce a project's impervious surface coverage amount, for purposes of determining whether the project conforms to an impervious surface limitation.

The Planning Board and County Council continue to use limitations on impervious surfaces as a land use tool in sensitive watersheds with high quality aquatic resources. In the recently adopted Ten Mile Creek Limited Amendment to the Clarksburg Master Plan, imperviousness limits have been placed on properties that previously did not have one to provide better protection of the high quality aquatic resources of Ten Mile Creek.

It should be noted that at the state level, the Chesapeake Bay Critical Area program is designed to help protect the natural resources of the Chesapeake Bay through land use controls along the bay's

shoreline. Several years ago, the critical area program was faced with issues related to pervious pavements that were similar to those associated with ZTA 14-10. The original definition of imperviousness in the Critical Area law allowed perviousness credits for the use of pervious pavements. Although the program has an imperviousness limit on new development within the Bay's Critical Area, *the allowance of credits for pervious pavements resulted in negative impacts to the receiving aquatic resources*. As a result, in 2008, Maryland House Bill 1253 was passed to redefine imperviousness as "lot coverage". "Lot coverage" includes pervious pavements, as well as other man-made, impervious surfaces, and there are limits (without the use of "credits") on the "lot coverage" that can occur in certain types of new development projects.

#### Impervious Surface Limitations-Locations in the County

The County has enacted regulatory imperviousness limits for new development projects in specific parts of specific watersheds as a tool to aid in the preservation of high quality water resources of these watersheds. The inverse link between the health and quality of a watershed's aquatic resources and the extent of impervious surface coverage in the watershed is recognized in the natural resources field as a primary basis for using impervious cover limitations as a land use tool to help protect high quality aquatic resources.

Specific imperviousness limits have been put in place in certain areas of the County. Such limits occur in the following watersheds:

##### A. Portions of Little Seneca Watershed:

- The streams that flow into and out of Little Seneca Lake and the lake itself exhibit high water quality conditions. To help protect these streams and the lake, the 1989 Germantown Master Plan recommended that two analysis areas, KI-2 (771 acres) and NE-1 (378 acres), be subject to specific watershed development guidelines to aid in preserving the high water quality conditions. One of the master plan recommendations for these two areas is an imperviousness limit of 20%.
- The 1994 Clarksburg Master Plan recommended an imperviousness limit of 15 percent for two employment sites (CLV Property) and the County-owned Site 30, all lying within the Ten Mile Creek watershed.
- The Council's April 1, 2014 approval of the Ten Mile Creek Area Limited Amendment to the Clarksburg Master Plan and Hyattstown Special Study Area recommends the approval of floating zones for the Ten Mile Creek area. The County Council is in the process of creating overlay zones to establish a 15 percent imperviousness limit on new development in the Town Center portion of the watershed, a 6 percent limit on the Pulte-King properties, and no additional imperviousness on the County-owned land.

##### B. Upper Watershed of Paint Branch

- New development in the headwaters portion (north of Fairland Road) of the Paint Branch watershed is currently subject to an 8 percent imperviousness limit. This limit is part of the Upper Paint Branch Special Protection Area Environmental Overlay Zone. Attachment 2 of the staff report provides specific history of the Paint Branch Watershed in Montgomery County.

C. Upper Watershed of Rock Creek

- Certain types of new development in the headwaters portion (north of Muncaster Mill Road) of the Rock Creek watershed that lie within the Upper Rock Creek Master Plan boundary are subject to an 8 percent imperviousness limit. This limit is set by the Upper Rock Creek Special Protection Area Environmental Overlay Zone.

D. Patuxent River

- The Planning Board's Environmental Guidelines has a 10 percent imperviousness limit on land development projects that develop within certain zones and lie within a property covered by a Primary Management Area, as defined in the Guidelines.
- The Burtonsville Crossroads Neighborhood Plan (adopted December 2012) recommends that new development lying within the Rural Edge of the Patuxent River watershed be limited to 8 percent imperviousness.

For each of these specific areas, in the creation of a regulatory impervious cover limit that is applied as part of the review of new development projects, the County and Planning Board have carefully reviewed and determined that the impervious limit is a necessary watershed protection measure that complements, but does not replace, other, more standard environmental protection measures (e.g., sediment and erosion control and stormwater management measures). Similarly, "extra" stormwater management or sediment and erosion control measures cannot replace, either partly or entirely, limits on impervious surface coverage.

**Conclusion:**

Staff recommends denial of ZTA 14-10. The benefits provided by permeable pavements are already recognized and appropriately credited under the Stormwater Manual and County regulations.

Creation of an exemption category to allow a type of concrete surface to be excluded from the zone-imposed imperviousness limits is contrary to the intent of this environmental overlay zone. The ZTA would open the door to allow the effective impervious cover of a development site to be approved beyond the regulatory limit. It would be a first step in weakening an important environmental land use tool to help preserve high quality aquatic resources in the County: the ability to limit artificial land cover on a new development site.

**ATTACHMENTS**

1. Zoning Text Amendment 14-10, as introduced
2. History of the Paint Branch Watershed

PD/GR/CB/am

# ATTACHMENT 1

Zoning Text Amendment No.: 14-10  
Concerning: Upper Paint Branch  
Overlay Zone –  
Exemptions  
Draft No. & Date: 1 – 7/29/14  
Introduced: July 29, 2014  
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**

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By Councilmembers Leventhal

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**AN AMENDMENT** to the Montgomery County Zoning Ordinance to:

- exempt permeable pavement at places of public assembly in the Upper Paint Branch Overlay zone from impervious surface area limits under certain circumstances; and
- generally amend the exemption in the Upper Paint Branch Overlay zone.

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

DIVISION 59-4.9. “Overlay Zones.”  
Section 59-4.9.15. “Upper Paint Branch (UPB) Overlay Zone.”

**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 text that 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.*

1           **Sec. 1. DIVISION 59-4.9 is amended as follows:**

2           **DIVISION 59-4.9. Overlay Zones.**

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4           **Section [4.9.15.] 4.9.17. Upper Paint Branch (UPB) Overlay Zone**

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6           **B. Exemptions**

7           The following are exempt from Section [4.9.15] 4.9.17:

- 8           1.    Any [impervious surface] lawfully existing impervious surface  
9                allowed by a building permit issued before July 1, 2007 may continue  
10              or be reconstructed under the development standards in effect when  
11              the building permit was issued.
- 12           2.    Any impervious surface that results from construction under a  
13                building permit may be constructed or reconstructed under the  
14                development standards in effect on July 31, 2007 if:
  - 15              a.    the building permit application was pending before DPS on July  
16                     31, 2007; or
  - 17              b.    the building permit is for a lot in a subdivision approved before  
18                     July 31, 2007, if the subdivision was approved for fewer than  
19                     20 housing units.
- 20           3.    Any impervious surface resulting from an addition or accessory  
21                structure to an existing detached house must not be counted against  
22                any calculation of the 8% impervious surface restriction.
- 23           4.    Any impervious surface resulting from the use of pervious concrete  
24                where there is evidence that the unimproved ground being covered by  
25                pervious concrete has been used for parking vehicles on a regular  
26                basis at a place of public assembly.

27           \*   \*   \*

28           **Sec. 2. Effective date.** This ordinance becomes effective on October 30,  
29 2014.

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31 This is a correct copy of Council action.

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34 Linda M. Lauer, Clerk of the Council



### History of the Paint Branch Watershed in Montgomery County

The Paint Branch watershed is part of the Anacostia River system. Its headwaters occur in Montgomery County (the portion designated as a Special Protection Area). Its streams flow into Prince Georges County. The Upper Paint Branch watershed has been recognized as a unique, high-quality, cold-water fisheries resource for almost 40 years:

- The first watershed in Montgomery County to be designated as Use III waters (natural trout waters, which are the highest quality waters) by the State of Maryland (1974).
- The first watershed in the State of Maryland to be designated as a “Special Trout Management Area” (1980). The designation applied to the watershed upstream of Fairland Road (the same area covered by the current SPA). It was designed to give the streams in this watershed special status and maximum protection afforded by state regulations.
- Home to the only viable and self-sustaining trout population in the Washington, D.C. metropolitan area.

Brown trout was stocked by the State of Maryland in Montgomery County in the 1930’s. It is believed that by the late 1930’s, the trout population in the County portion of Paint Branch was naturally reproducing. The presence of a naturally-reproducing trout population in a stream system of Montgomery County is an indicator that the stream resources have very high water quality conditions. Over the years, Montgomery County has implemented many environmental protection measures to preserve this high quality stream resource and related environmental features of the upper Paint Branch watershed:

- The 1981 Eastern Montgomery County Master Plan recognized the environmental sensitivity of Paint Branch, particularly its headwaters. The plan included recommendations on land uses, zoning (including downzoning), park acquisition, and development guidelines (including a 10 percent imperviousness limit) to help protect the high quality characteristics of the upper watershed.
- In 1987, the Anacostia Restoration Agreement established formal cooperation between Federal, State, and local government agencies to oversee the restoration of the Anacostia River. Paint Branch is one of 10 major watersheds that make up the Anacostia River basin. Extensive studies and work done under this agreement allowed technical expertise and other resources beyond those available in Montgomery County to be applied towards the preservation efforts in Paint Branch, as well as the other watersheds of the Anacostia River.
- A 1988 inventory developed by the Metropolitan Washington Council of Governments (COG) for possible stormwater management retrofit projects in the Anacostia River basin, including the Paint Branch. Over the years, these and other projects have been implemented in Paint Branch by COG, Montgomery County, and MNCPPC.

## ATTACHMENT 2

- Two working groups (in 1993-94), under different programs (the interjurisdictional Anacostia Watershed Restoration Committee Upper Paint Branch Work Group and the Montgomery County Planning Board Upper Paint Branch Technical Work Group), were formed to identify specific measures that should be implemented to stop and reverse the trend of deteriorating aquatic habitat and resource conditions that were documented by Maryland Department of Natural Resources.
- The Montgomery County Council designated upper Paint Branch watershed (upstream of Fairland Road) as a Special Protection Area in 1995.
- In 1996, the County Council adopted the Limited Amendment to the Master Plan for the Eastern Montgomery County Planning Area. Consistent with the Upper Paint Branch Technical Work Group recommendations, the amendment recommends expanding acquisition of parkland in the Good Hope and Gum Springs tributaries for resource management and protection of the Paint Branch watershed. The expansion of park acquisition limits future increases of impervious surfaces in the upper watershed.
- In 1997, the Council adoption of the master plans for Cloverly, Fairland, and White Oak reconfirmed the value and uniqueness of the upper Paint Branch aquatic resource. These master plans include recommendations for land uses and expanded park acquisition which reinforce and refine the recommendations for aquatic resource protection of the 1981 Eastern Montgomery County Master Plan.
- Also in 1997, the Upper Paint Branch SPA Environmental Overlay Zone was adopted. It set a 10 percent imperviousness limit on new land development projects in the SPA.
- In 2007, the imperviousness limit in the overlay zone was reduced from 10 to 8 percent.