



## **Society for Conservation Biology Comments on the Proposed Revision of the Montgomery County Maryland Zoning Ordinance**

Date: December 6, 2013

To: Councilmember Phil Andrews  
Councilmember Roger Berliner  
Councilmember Marc Elrich  
Councilmember Valerie Ervin  
Councilmember Nancy Floreen  
Councilmember George Leventhal  
Councilmember Nancy Navarro  
Councilmember Craig Rice  
Councilmember Hans Riemer  
Montgomery County Council  
100 Maryland Avenue, Rockville, MD 20850

Re: **Pause Zoning Rewrite and District Map Amendment, and Revise the Sequence and Substance to Maximize the Benefits of the County and Region's Ecosystems and Their Services**

Dear Councilmembers,

We are writing to you on behalf of the Society for Conservation Biology (SCB) North America Section. Two of us are also residents of Montgomery County. Our analysis is founded on the principles set out in the Society for Conservation Biology's (SCB) Forest Declaration and other policy statements and publications (Appendix).

**The stated purposes of Montgomery County's zoning ordinance include the protection of the environment. However, a look at the proposed draft "Zoning Rewrite" suggests that this Rewrite has turned into a missed opportunity of major proportions, for several reasons.**

Maryland and specifically Montgomery County are seeking to foster "smart, green" growth<sup>1</sup>. The County's "Zoning Rewrite" document itself features environmental protection in its statement of Purpose<sup>2</sup> and states that such Purpose is to:

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<sup>1</sup> MD. ANN. CODE, art. 66B, § 3.05(a)(4)(ix) (2009)

<sup>2</sup> <http://www.montgomeryplanning.org/development/zoning/> (Article 59-1 Division 1.2 Purpose)



“provide zoning requirements designed to:

- A. control street congestion;
- B. promote health, public safety, and general welfare;
- C. provide adequate light and air;
- D. promote the conservation of natural resources;
- E. prevent environmental pollution;
- F. avoid an undue concentration of population; and
- G. promote or facilitate adequate transportation, water, sewerage, schools, recreation, parks, and other public facilities.”

This Statement of Purpose should drive all the requirements and provisions of the “Zoning Rewrite.” The County has long protected agricultural lands and forests in its rural reaches through flagship programs such as the Agricultural Reserve/Tradable Development Rights. Now that the County intends to focus more development in its southern reaches nearest Washington, D.C. the “Zoning Rewrite” needs to ensure that this Purpose is fully carried out throughout the County, including in its rapidly urbanizing southern reaches. Moreover, as Washington, D.C. also moves ahead with its own comprehensive zoning revision it is essential that these two jurisdictions conserve the forested areas and other green spaces in these more urban settings.

In addition, the important role of local jurisdictions in managing climate risk has also been emphasized by the President of the United States. In his Executive Order of November 1, 2013 on *Preparing the United States for the Impacts of Climate Change*<sup>3</sup> President Obama not only addresses federal agencies but also seeks “to support and encourage smarter, more climate-resilient investments by States, local communities, and tribes, including by providing incentives through agency guidance, grants, technical assistance, performance measures, safety considerations, and other programs.”

However, the “Zoning Rewrite” seems to have turned into a missed opportunity of major proportions for several reasons:

- Far from offering streamlined guidance for smart, green growth, the proposed Rewrite is likely to undermine truly smart growth in Montgomery County, through “floating zones” that enable individual property owners in any zone to request their property be rezoned to allow for commercial uses in some cases, and other forms of more intense development; provisions for “by-right” development of nonresidential buildings in residential neighborhoods; and weakened or inadequate requirements for public amenities and green spaces.

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<sup>3</sup> <http://www.whitehouse.gov/the-press-office/2013/11/01/executive-order-preparing-united-states-impacts-climate-change>



- The proposed “Zoning Rewrite” flips the relationship between planning and zoning and would put this weakened zoning ordinance in the drivers’s seat. This means that planning for necessary public services and infrastructure (such as schools, parks, pedestrian and biking networks as well as longer-distance transportation) will be much harder to secure. Zoning is traditionally considered a tool for implementing the comprehensive plan to help ensure that the location and types of land uses outlined in the plan come to realization, not the other way around.
- The proposed “Zoning Rewrite” provisions and process largely ignore the vital role of green infrastructure<sup>4</sup> in supporting the zoning Purpose and providing vital air and water purification and other ecosystem services, ensuring quality of life for the people who will live and work in Montgomery County, and cost-effectively boosting resilience over time against increasingly extreme weather events. Green infrastructure, because it is the most easily lost and hardest to secure when land is being rapidly developed, and because it “promotes both smart growth and smart conservation,” (Benedict, McMahon) should be a leading consideration in the County’s planning and the zoning processes, not an afterthought.

**Smart Growth is not Smart unless it includes Green Infrastructure. Whether it is in the form of forests and wetlands, or as biodiverse backyards, tree-lined bike paths and green rooftops woven into the urban fabric, green infrastructure serves as a form of “natural capital” that is recognized and valued in Maryland’s Genuine Progress Indicator (GPI) and that smart zoning should foster.**

The proposed “Zoning Rewrite” does not offer sufficient provisions for protection of and investment in open green space, urban forests, and other forms of green infrastructure. Such green infrastructure is essential in modern-day planning and, as the literature and zoning and planning experience amply demonstrate, in its many forms whether they are backyards, urban gardens and forests, or larger swaths of green space and corridors, green infrastructure provides many “compounding” economic, environmental, and social benefits over time. Indeed, what would New York be without its Central Park?

Conservation is not limited to the protection of distant ‘pristine’ ecosystems and rural areas. It is important to recognise that green infrastructure that is integrated into the County’s rapidly growing urban areas can also provide important services, from stormwater management and adaptation to climate change, to quality of life. For example, ‘Even small urban green spaces can help tackle the urban heat island effect’ is

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<sup>4</sup> In these comments green infrastructure is defined as “an interconnected network of green space that conserves natural ecosystem values and functions and provides associated benefits to human populations,” (Benedict, McMahon). This includes large wetlands, woodlands, waterways and other natural areas; greenways, parks and other conservation spaces and corridors; working farms, ranches, and forests that are sustainably managed; as well as smaller units such as urban forests, parks, green roofs and swales.



the conclusion from a case study examining how a small neighbourhood garden can provide significant cooling to the surrounding area, helping offset the effects of the increased frequency and severity of urban heat waves expected under climate change (Berry 2013).

The State of Maryland recognizes some of the values of natural capital in its Genuine Progress Indicator (GPI), which Maryland established in 2010 to provide a more accurate picture of genuine prosperity in the state. The GPI consolidates critical economic, environmental and social factors at the state level into a single framework. Some of the environmental indicators factored into the GPI include forests, wetlands, and the costs of air, water, and noise pollution. These and many of the other indicators in the GPI make it a relevant tool with which to assess progress in Maryland including Montgomery County.<sup>5</sup>

At the local level, some municipalities recognize the need to protect canopy. In its own Tree Ordinance<sup>6</sup>, the Town of Chevy Chase, here in Montgomery County, finds that a mature tree canopy:

- “-contributes significant aesthetic value,
- measurably increases property worth,
- fosters a cherished quality of life,
- recycles the air we breathe by absorbing carbon dioxide and producing oxygen, absorbs air pollutants,
- moderates climate extremes and reduces wind speed, thus conserving energy otherwise used for increased air conditioning and heating,
- provides food and shelter for innumerable plant and animal species,
- forms an interrelated part of the regional forest ecosystem, connecting with adjoining forest communities,
- muffles noise,
- stabilizes soils, reducing soil erosion and stormwater runoff.”

Assessment and valuation tools, such as the “i-Tree” suite of tools developed by the US Forest Service,<sup>7</sup> now make it possible to quantify and value some of these services, whether they are for individual trees or for a given canopy area, based on current scientific research.

**We therefore focus our comments on urban forests and green infrastructure in particular, and urge the Planning, Housing, and Economic Development (PHED)**

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<sup>5</sup> The Society for Conservation Biology featured a symposium on Maryland’s Genuine Progress Indicator and other measures and tools to value the environment for decision-makers at its International Congress for Conservation Biology (ICCB 2013) in Baltimore in July.

<sup>6</sup> <http://www.townofchevy Chase.org/assets/documents/pdfs/trees/treeordfinal.pdf>

<sup>7</sup> <http://www.itreetools.org/>



**committee and the County Council to strengthen planning and zoning provisions for public amenities, for protection and creation of green space, including the creation of a Green Infrastructure Reserve.**

A variety of planning and zoning provisions can help protect and create green space and green infrastructure, and in so doing ensure that the County reap the full economic, environmental, and social value of the services they provide. In particular, we recommend that the County:

- (1) Increase the amount of open space and environmental services required under the Optional Method and under any other method for new commercial development, not eliminate or reduce that requirement.
- (2) Create a Green Infrastructure Reserve (GIR) zoning category that expands or is modeled on the existing Agricultural Reserve (AR) zoning category, and includes green spaces and corridors in urban areas, public parks, and private green space in residential zones that meet certain eligibility standards. Green infrastructure qualifying as Green Infrastructure Reserve would include “micro” units such as urban community gardens, certain residential green backyards, and linear parks, which, in the aggregate, can constitute an effective and resilient green infrastructure network.
- (3) Extend the existing Tradable Development Rights mechanism to include the Green Infrastructure Reserve so that it incentivizes protection of and investment in green infrastructure. To this effect, enable property owners including residential, commercial, government and otherwise who have green space or would like to convert an area to green space and green infrastructure, to make that space voluntarily available for easement and designation as a Protected Overlay Area or Green Infrastructure Reserve zone that becomes qualified for Points Under the Optional Method, provided that green space meets certain green infrastructure qualifications. Such a designation would make it possible for those property owners to benefit from incentives generated through Tradable Development Rights.
- (4) Facilitate the establishment and valuation of green infrastructure, through easement programs and land acquisition for urban forests, parks and corridors, including but not limited to the programs described above.
- (5) Emphasize protection of urban forests in planning and zoning and in doing so, establish a Tree Canopy Goal for the County that includes urban forests in conjunction with the County’s implementation of the County’s new Tree Canopy Bills, including Bill 35-12 which calls for the establishment of such a goal.



- (6) This Tree Canopy goal and other provisions listed above could begin with the principle of no net loss of tree canopy, and of native biological diversity, rewarding and conserving contiguous or connected green spaces, and identifying measures for rewarding spaces as small as "backyard habitats" that host an array of birds and wildlife and especially those that avoid the use of pesticides, herbicides and invasive ornamentals.
- (7) Tighten and strengthen the public amenity process to ensure that, in return for high density, public benefits reflect the views of the communities who are supposed to benefit from them, and accrue locally.
- (8) Pause the current zoning revision and focus on getting the current process right, putting the planning process first as it is intended by all best practice to be.

We urge that the County pause its “Zoning Rewrite” and District Map Amendment and revise the sequence and substance to maximize the benefits of the County and region’s ecosystems and their services.

Respectfully,

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## Appendix:

### Society for Conservation Biology Forest Principles

The Society for Conservation Biology has developed and published many relevant statements and articles. We re-state here portions of its Forest Declaration of 2011<sup>8</sup>. The following SCB Forest principles are applicable here:

- Acknowledge that additional net loss of quality or quantity of forests or its associated biodiversity cannot occur without long-term loss of the array of ecosystem services that forests provide.
- Enhance the conservation of critical forest ecosystems and the services and products they provide. These include habitat for wildlife that provide food, clothing, medicines, and pollination services; genetic reservoirs of plant and animal life; carbon uptake and long-term storage that is at a premium in intact forests; and the maintenance of water resources, among other ecosystem services.
- Establish a representative and functionally connected network of conservation areas with responsible management in the surrounding matrix for maintaining biodiversity in the face of climate change.
- Adopt science-based carbon accounting methods to provide basic metrics that compensate landowners for avoiding deforestation and forest degradation.

### References and Resources

Bengston, et al, "Public policies for managing urban growth and protecting open space: policy instruments and lessons learned in the United States," *Landscape and Urban Planning*, Elsevier, 2004.

Benedict, Mark A., and Edward T. McMahon, *Green infrastructure: linking landscapes and communities*, Island Press, 2006.

Berry, Pam, "Ecosystem-based Adaptation," *Science for Environment Policy Thematic Issue*, 2013, <http://ec.europa.eu/environment/integration/research/newsalert/pdf/37si.pdf>

Elmendorf WF, and Luloff AE, "Using ecosystem-based and traditional land-use planning to conserve greenspace," *Journal of Arboriculture*, 1999, [archive.treelink.org](http://archive.treelink.org)

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<sup>8</sup>[http://www.conbio.org/images/content\\_policy/SCB\\_Forest\\_Declaration\\_2011\\_International\\_Year\\_of\\_the\\_Forest\\_1.pdf](http://www.conbio.org/images/content_policy/SCB_Forest_Declaration_2011_International_Year_of_the_Forest_1.pdf)



## References and Resources, continued

Thorsnes, Paul, and Simons, Gerald P.W., "Letting the Market Preserve Land: The Case for a Market-Driven Transfer of Development Rights Program," *Contemporary Economic Policy*, April 1999.

Dunn, Alexandra Dapolito, "Siting Green Infrastructure: Legal and Policy Solutions to Alleviate Urban Poverty and Promote Healthy Communities" (2010). Pace Law Faculty Publications. Paper 559. <http://digitalcommons.pace.edu/lawfaculty/559>

Nowak, Heisler, "Air Quality Effects of Urban Trees and Parks," National Recreation and Park Association, 2010.

Schilling, Logan, "Greening the Rust Belt," *American Planning Association. Journal of the American Planning Association*; Autumn 2008.

Society for Conservation Biology, *Mitigating and Preparing for Climate Change: Eleven Conservation Principles For Decision-Makers*, 2009.  
[http://www.conbio.org/images/content\\_policy/2009-11-17\\_Mitigating\\_and\\_Preparing\\_for\\_Climate\\_Change-Eleven\\_Conservation\\_Principles.pdf](http://www.conbio.org/images/content_policy/2009-11-17_Mitigating_and_Preparing_for_Climate_Change-Eleven_Conservation_Principles.pdf)

Society for Conservation Biology, *Declaration on Sustainable Forest Management for the International Year of Forests*, 2011,  
[http://www.conbio.org/images/content\\_policy/SCB\\_Forest\\_Declaration\\_2011\\_International\\_Year\\_of\\_the\\_Forest\\_1.pdf](http://www.conbio.org/images/content_policy/SCB_Forest_Declaration_2011_International_Year_of_the_Forest_1.pdf)

USDA Forest Service, i-Tree Tools for Assessing and Managing Community Forests,  
<http://www.itreetools.org/>

Weber, Sloan, Wolf, "Maryland's Green Infrastructure Assessment: Development of a comprehensive approach to land conservation," *Landscape and Urban Planning, Elsevier*, 2006.

Wise et al, "Integrating Valuation Methods to Recognize Green Infrastructure's Multiple Benefits," Center for Neighborhood Technology, Chicago, April 2010  
<http://www.cnt.org/repository/CNT-LID-paper.pdf>