





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

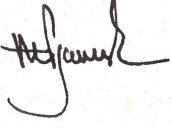
MCPB
Item #
January 8, 2009

MEMORANDUM

DATE: December 24, 2008

TO: Montgomery County Planning Board

VIA: Jorge Valladares, P.E., Chief 
Green/Environmental Planning Division
Mary Dolan, Master Planner/Supervisor 
Green/Environmental Planning Division

FROM: Michael Zamore, Planner Coordinator (301-495-2106) 
Green/Environmental Planning Division

SUBJECT: Briefing: Update on the Progress and Purpose of the Green Infrastructure
Functional Master Plan

RECOMMENDATION: Information and Discussion

Description/Scope of the Plan

This plan will map and evaluate a network of sensitive and important environmental features throughout Montgomery County that function to protect natural resources and sustain environmental processes. The plan will develop strategies and recommendations to protect and expand interconnected natural areas of countywide significance. The plan will provide priorities for green infrastructure protection and restoration to assist development reviews, master planning, park acquisition, and budgeting.

The plan will be implemented through the existing regulatory review process and during sector and master plans. The plan also recommends legislative changes to appropriate ordinances and to existing environmental guidelines to ensure more comprehensive protection of the green infrastructure. As applications for land development are submitted they will be evaluated for opportunities to protect or restore portions of the green infrastructure. We anticipate that eventually, development applications will be evaluated for conformance with the green infrastructure plan in the same manner as they are currently evaluated for conformance with area and master sector plans.

Progress to Date

Data Collection and Analysis

We identified and evaluated relevant GIS layers of the County's natural resources, and combined these with Stakeholder Focus Group, Plan Development Workgroup, and public input to create a draft green infrastructure network. The network map was edited and refined for growth and development. The green infrastructure network covers approximately 123,000 acres or 38 percent of the County. The network is made up of the following four categories:

Regulated Areas are environmentally sensitive features such as streams, wetlands, 100-year floodplain, and severe slopes with their associated buffers that are protected during the land development process by guidelines or regulations at the County, state or federal level. In these areas preservation is the main focus and development is not permitted. These areas will continue to be preserved and impacts to them will be limited to necessary construction of road crossings and installation of public utilities.

Evaluation Areas are areas outside the regulated areas that must be reviewed during the development review process. This review would determine if any resources need protection or if there are areas where mitigation should be directed to expand existing or adjacent resources. Evaluation areas may contain environmentally sensitive features such as interior forests, upland forest, and unique habitats and, if present, will be given high priority for onsite forest and habitat conservation during the planning and development processes. Properties containing evaluation areas will be developed according to applicable zoning and other regulatory requirements but with an added emphasis on preserving and permanently protecting their natural resources. Projects affecting these areas should prioritize protection of environmentally sensitive features and use materials that reduce the environmental impacts of development.

Network Gaps are in the green infrastructure network without existing resources that have the potential to connect regulated and evaluation areas. If protected and restored, network gaps can significantly expand the network and should be targeted as mitigation sites to restore ecological functionality. During the development review process Environmental Planning Division staff will evaluate these areas to determine the potential to improve green infrastructure network connectivity, restore portions of the network, or enhance its ecological functions.

Other Core Areas include Category One forest conservation easements and forest banks that are legally protected. In addition, Legacy Open Space sites, Rural Legacy areas with natural resources, and WSSC-owned water supply protection lands. Golf courses are included because, as relatively large open spaces, they can provide some natural resource functions and, if redeveloped can be enhanced to protect green infrastructure connectivity.

Public Outreach

We continued to use interagency, public and private participation in the green infrastructure planning process. We held a public meeting at the Agricultural History Farm Park on June 7, 2008 to present draft mapping scenarios to the public for their comments and feedback. Similar meetings were held with Stakeholder Focus Groups in July and August 2008. At these meetings stakeholders selected the

scenario that was most inclusive as their preferred choice among the five scenarios presented. Some of the key ideas we heard at these meeting included:

- Place added significance on acquiring upland forest to connect the green infrastructure across watershed boundaries.
- Consider small properties (¼ acre) in highly developed areas because even these small areas have significance as wildlife habitat and for biodiversity conservation. How did we do this?
- Exclude all TDR receiving areas from the green infrastructure network because increased density is the priority for these areas.

A second public meeting will be held at the MRO Auditorium on Tuesday January 13, 2009 to present the draft green infrastructure map and draft strategies and recommendations for public comment.

Youth Outreach

During the second half of 2008 we expanded the plan's public outreach focus to include youth. We initiated a pilot program to raise awareness among youth as to the importance of green infrastructure and to get youth perspective on green infrastructure. For now the program is a pilot project involving a Middle School (Forest Oak) and a High School (Poolesville). Staff will provide class lectures with before and after surveys to determine if key concepts are communicated and to solicit input on the importance of protecting the green infrastructure network. We hope to expand this to the wider Montgomery County Public Schools population in the long-term.

Green Infrastructure Plan

We developed the following objectives for the plan. We will measure success by the degree to which these objectives are achieved. The objectives are based on input from the public outreach process, trends in the County's natural resources, and the Environmental goals of the General Plan Refinement:

1. Each year, target **100 percent** of off-site forest and other natural resource mitigation acreage to the green infrastructure network and/or adjacent to streams outside the green infrastructure network. At least half of the mitigation acreage should contribute to improved water quality by establishing, enhancing and/or restoring riparian buffers.
2. For new development in the Agricultural Reserve, and outside of approved growth centers and corridors, ensure that **100 percent** of impacts to Regulated Areas are limited to unavoidable impacts, such as those for road and utility crossings
3. Each year, **90 percent** of the land purchased for environmental preservation using public funds should protect resources within the green infrastructure network or regulated areas outside the network.
4. By 2030, ensure that **75 percent** of the green infrastructure network gaps are mitigated through restoration and protected.
5. By 2030, no more than **25 percent** of countywide net losses of forest cover should occur within the green infrastructure network.

We have developed policies and strategies to reach these plan objectives. Some of the plan's key recommendations to reach the above objectives and to facilitate plan implementation are summarized below:

- Revise the Forest Conservation Regulations to:
 - facilitate offsite planting for the development community in the green infrastructure network
 - reduce forest fragmentation and minimize forest edge
 - prioritize upland forest for retention and protection
 - develop long-term management guidelines for forest conservation easements and forest banks
 - increase planting requirements for avoidable impacts to the green infrastructure network
- Enhance the Environmental Guidelines to increase the buffers around certain headwater streams
- Support the revision and strengthening of existing legislation to further control the use of nonnative invasive species in landscape planting, through the development review process
- Support changes to the Zoning Ordinance and Subdivision Guidelines that facilitate:
 - creating or expanding nature preserves and greenways.
 - reducing network gaps and enhancing connectivity
 - reducing fragmentation of existing forest habitat.
- Recommend incentives to promote project designs that:
 - utilize the green infrastructure network as an amenity
 - maximize the preservation of Evaluation Areas
 - retain forest cover and/or expand forest riparian buffers

MZ:ss
Attachments

ATTACHMENT 1

GREEN INFRASTRUCTURE NETWORK

Mapping the proposed Green Infrastructure Network was conducted with existing information on the MNCPPC Geographic Information System and the advice of Planning Department, Department of Parks, and Department of Environmental Protection staff with input from stakeholders at a series of focus group meetings, interagency meetings and workshops. The results are as follows.

INCLUDE:

- Parks (Stream Valley Parks, Conservation Parks)
- Conservation Easements
- Forest Banks (Planted and Unplanted)
- Legacy Open Space natural resources sites
- Sensitive Species Protection Areas
- WSSC Water Supply Protection Lands
- Zones with open space requirements and those that allow Clustering - optional method of development (*Cluster options generally allow for a smaller lot size that results in a smaller building envelope to reduce environmental impact. They must meet forest conservation requirements onsite.*)

Other Open Space

- WSSC Lands
- Utility Rights-of-Way
- Undeveloped portions of Local, Neighborhood, and Recreational Parks

EXCLUDE

- Existing developed property
- Platted Properties 2 acres or less in area
- Preliminary Plans approved 3 years or less
- Properties not zoned for optional method of development
- TDR Receiving areas
- Non-cluster, Mixed-use or higher zoning
- ICC Right of Way

INCLUDE (During Smoothing Process)

- Portions of Non-cluster, Mixed-use or higher zoning that contain parkland (e.g. Fairland Regional Park), interior forest habitat (Montgomery College, Germantown Campus), significant upland forest or forested stream valleys (Dungan Property on Muncaster Mill Road), or large areas of contiguous forest adjacent to parkland or the green infrastructure network.
- Portions of Preliminary Plans approved less than 3 years that contain forested stream buffers, or interior forest adjacent to parkland or the green infrastructure network.

- Forests on fully developed platted properties less than 2 acres in area (because these forests are likely to be protected e.g. on Homeowners Association easements, etc.).
- Portions of municipalities that contain parkland, interior forest habitat, significant upland forest or forested stream valleys, or large areas of contiguous forest adjoining parkland or the green infrastructure network.
- Non-cluster mixed use zones that contain significant open space requirements (on sites with contiguous forest or forested stream valleys, or adjoin parkland and the green infrastructure network).
- Golf courses