

V. THE ENVIRONMENT

Glenmont is a developed community. As such, the natural features and systems within the community today have been altered from their original condition by human activity. Most efforts to improve the environmental quality of the Glenmont area either take place outside of its physical boundaries or are the responsibility of implementing or enforcement agencies. In such established communities, environmental concerns deal primarily with preserving those natural resources which remain and investigating opportunities to improve those resources that have been degraded.

Water quality continues to be an important issue in Montgomery County. The Montgomery County Department of Environmental Protection (DEP) has programs underway that are investigating ways to improve urban streams as directed by the Clean Water Act. A County-wide Stream Protection Strategy (CSPS) is currently under development to assess stream quality throughout all the County watersheds to develop management categories and tools, and set priorities for watershed preservation, protection, and restoration. The CSPS will define watershed management categories based on the existing stream resource conditions existing and planned land uses in the watersheds and the types of management tools available to protect or restore each watershed. The CSPS will provide a consistent process for identifying stream preservation, protection, and restoration needs County-wide.

The Montgomery County Department of Environmental Protection and the M-NCPPC are cooperating to draft the initial CSPS and will continue to refine the report and the priority rankings as new stream quality data becomes available. This strategy is closely tied to the County's biological monitoring program and will be updated on a regular basis to incorporate new monitoring results. A staff draft of the CSPS categorization of subwatersheds and related management tools has been released. Recommendations, if any, for new management tools, such as the designation of Special Protection Areas, should await completion of the initial CSPS. This Sector Plan will discuss the characteristics of each subwatershed within the planning area, but final management recommendations will be made after the CSPS is completed. The County has also passed laws that will attempt to curb the loss of forests and trees to development. Planning Board Regulation 1-92 and the Montgomery County Forest Conservation Law require that a certain threshold of forest retention or re-planting be established on all properties that are subject to the subdivision requirements of the Montgomery County Zoning Ordinance.

Other environmental concerns in the Sector Plan area are noise associated with vehicular traffic and air quality. These two issues are closely related since motor vehicle use is the major contributor of these two pollutants.

This Plan recommends goals and objectives for the following environmental concerns:

1) protection of sensitive environmental features and areas, 2) protection of water quality and restoration of stream systems, 3) protection from excessive noise, and 4) efforts to improve air quality.

A. SENSITIVE ENVIRONMENTAL FEATURES AND AREAS

The Glenmont Sector Plan area possesses a number of environmental features worthy of note. The Sector Plan area has many large, mature, deciduous trees and some significant areas of forest cover. Some of the forested land is protected within parkland, but the majority is located on land that is subject to some type of development pressure, including property in public ownership. The Metro storage yard, now under construction, was designed to minimize its impact on the wetlands and water quality of two headwater streams in the Northwest Branch. Once the streams exit the Metro property they enter existing storm drains and lose much of their ecological value. The streams do, however, emerge from a single pipe and flow in an open channel at the northern terminus of Wilton Oaks Drive immediately before exiting the Sector Plan area. Once in the open channel, the stream begins to exhibit aquatic life typical of other streams in the area.

A small wetland system exists at the terminus of Flack Street near the intersection with Urbana Drive on property that is referred to as the WMATA Triangle. The wetlands were field identified as part of the WMATA Metro construction and were not included in the disturbance area. The wetlands have been degraded by the effects of urbanization and are now confined to small, intermittent channels which receive street runoff and have been adversely affected by dumping of household and yard waste. The ecological value of this wetland has been severely compromised.

The Maryland Planning Act of 1992 set forth seven visions to protect the Chesapeake Bay while fostering economic development. The Act defines sensitive areas to include steep slopes, streams, and their buffers; 100-year flood plains; and habitats of rare, threatened, or endangered species. Glenmont contains no known habitat for rare, threatened, or endangered species. Vision 2, "Protection of Sensitive Areas," and Vision 4, "Stewardship for the Chesapeake Bay," are addressed in this chapter.

Within the Glenmont Sector Plan, all streams and associated sensitive areas are located on the Metro site and private property. These areas are and would be afforded adequate protection from development impacts consistent with the *Environmental Management of Development in Montgomery County*. State and County government agencies have also enacted laws forbidding the misuse of sensitive areas and have created telephone hotline numbers for citizens to report suspected violations.

This Plan encourages parcels that may develop or redevelop to protect environmentally sensitive features and to avoid environmentally sensitive areas.

Objective 1: *Protect sensitive environmental features and areas.*

- In accordance with Planning Board guidelines, development of environmentally sensitive areas, including those defined by the State Planning Act of 1992, should be prohibited.
- State and County laws and efforts by citizens to reduce illegal dumping, filling, vandalism, and erosion within environmentally sensitive areas should be supported.

B. WATER QUALITY

Glenmont is situated on a watershed divide separating Rock Creek, a Use I stream, and the Northwest Branch of the Anacostia River. The Northwest Branch in Montgomery County is a Use IV stream. Use I streams are generally suitable for human contact and recreation opportunities; however, they are often degraded by development impacts that can include erosion, sedimentation, nutrient loading, pollution, and thermal impacts. Use IV streams exhibit higher water quality than Use I streams. They are suitable for seasonal stocking of trout for put-and-take fishing since the in-stream temperatures remain cooler in the summer months. Cool temperatures are critical for trout survival. Both of these streams have been adversely affected by development.

The mainstem of the Northwest Branch is east of the Sector Plan area and is in park ownership; however, runoff from the surrounding development continues to adversely affect its quality. Many of the tributaries to the Rock Creek system which once existed within the Sector Plan area have been routed through pipes to provide safe conveyance. The practice of piping flowing streams is no longer allowed except in special cases. State and County laws provide for the protection of water quality and the prevention of channel erosion in streams receiving runoff from developing properties.

Much of Glenmont was developed prior to the requirement to address stormwater runoff and to protect stream buffers. Rock Creek, and, to a lesser extent, Northwest Branch, are presently suffering from degraded water quality and channel erosion due mainly to the substantial existing development within their respective watersheds. Some of this damage is being reversed through the restoration efforts undertaken by the County and M-NCPPC. Currently, DEP is undertaking a study of the Rock Creek system to identify potential sites for stormwater management retrofit projects, stream channel restoration, and aquatic habitat enhancements. Since there are no free flowing tributaries to Rock Creek within the Sector Plan area, it is unlikely that specific programs would be proposed within Glenmont.

In the Anacostia River watershed a similar program is underway and some of the retrofit projects have been completed. One project in Sligo Creek, a tributary of the Northwest Branch, included the creation of vernal pools and a large multi-basin stormwater management facility on Wheaton Branch at Dennis Avenue. The stream below this area has been stocked with native fish species, many of which are now reproducing. A substantial increase in species diversity within this stream has been realized. Other projects include the construction of shallow wetland systems in Sligo Creek Park, which will help filter runoff entering the stream. The Anacostia project is ongoing and continues to be funded as part of the effort to clean up the Chesapeake Bay. The maintenance of these and other projects will require continued public funding and efforts of citizens and non-profit groups.

Developers are now required as part of the subdivision approval process to submit stormwater management plans to DEP for approval. Stormwater management addresses both the quantity and quality impacts of increased runoff on downstream properties and stream channels. All property subject to subdivision requirements must control the runoff which is generated either on-site or at a larger, regional stormwater pond downstream if one exists. Waivers of stormwater

requirements are granted only if there are no options available and the developer would be required to pay a fee-in-lieu that could be used for retrofit projects.

Additionally, new development must now respect stream buffer setbacks which create natural vegetated strips along streams to filter out additional pollutants, shade the stream, and provide animal and plant habitat. Stream buffers (which include the floodplain, wetlands, and adjacent steep slopes) are required by the Planning Board when a property is subdivided.

This Plan recognizes the need to protect and improve water quality in the Rock Creek and Northwest Branch watersheds.

Objective 1: *Protect existing water quality from the effects of new development.*

- The requirements outlined in the Planning Board's adopted document, *Environmental Management of Development in Montgomery County, Maryland*, as well as Executive Regulations for stormwater management, should be applied to all new development and redevelopment.

Objective 2: *Improve existing water quality within Rock Creek and Northwest Branch.*

- This Plan supports DEP's ongoing study to identify ways to address stormwater management and enhance stream channel habitat within Rock Creek and Northwest Branch.

C. NOISE

Glenmont is located at the intersection of three heavily traveled roads: Georgia Avenue, Randolph Road, and Layhill Road. The noise associated with traffic in this area is a major concern. Additionally, the Glenmont Metro storage yard is in the northeast portion of the Sector Plan area. There has been considerable attention given to the design of the storage yard in an effort to minimize noise.

Extended exposure to noise levels at or above 70 dBA Ldn have been shown to have adverse psychological effects on humans. ("dBA" is a measure of decibel levels, weighted for sounds that affect the human ear. "Ldn" reflects decibel levels measured over a 24-hour period, with nighttime noise weighted more heavily.)

A goal of this Plan is to protect the residents of Glenmont from exposure to harmful noise levels. The Montgomery County Department of Park and Planning has developed guidelines which set 65 dBA Ldn as a more conservative and attainable goal for residential noise exposure.

Objective 1: *Avoid exposure of new residential development to outdoor noise levels higher than 65 dBA Ldn.*

- Noise compatible (i.e., nonresidential) land uses are recommended along Georgia Avenue, Randolph Road, and Layhill Road for vacant and re-developable parcels in high noise areas.
- If residential uses are desirable in high noise areas, land should be set aside by the developer for the construction of noise attenuation devices consistent with the Green Corridors Policy.
- If other means of attenuating noise are infeasible, acoustically treated windows and noise sensitive site design standards should be incorporated into new residential development in high noise areas.

Objective 2: *Reduce excessive noise levels affecting existing residential units.*

- If road improvements occur, sufficient area should be set aside for the construction of noise attenuation devices, keeping in mind terrain and community safety concerns.
- DPWT and SHA should investigate the use of pavements that can reduce noise levels, where appropriate.

Objective 3: *Minimize human exposure to noise associated with the Glenmont Metro storage yard.*

- DEP should monitor the as-built conditions to ensure compliance with all applicable Montgomery County noise regulations.

D. AIR QUALITY

The Clean Air Act Amendments of 1990 require regional consideration of air quality. The Washington Metropolitan Statistical Area, which includes Montgomery County, does not meet the federal standards for ozone and is considered a non-attainment area. Ozone is formed in the atmosphere when exhaust emissions and sunlight react under certain conditions.

The 1978 Sector Plan for the Glenmont Transit Impact Area and Vicinity cited carbon monoxide “hot spots” at the intersections of Layhill and Randolph Roads with Georgia Avenue. Carbon monoxide pollution has been substantially reduced due to cleaner burning fuels. The major approach to better air quality is now shifting to reducing ozone on a regional level.

Reduction of emissions from single occupancy vehicle travel is a major focus of the County’s ozone control efforts in regard to land use. The General Plan clearly recognizes the need to reduce travel by concentrating development in areas served by public infrastructure and transit, and the land use pattern of Glenmont reflects this direction. Other policies include promotion of

mass transit, trip reduction measures, mixed use developments, and high occupancy vehicle lanes. A key approach taken in this Sector Plan will be to emphasize access to transit, bikeways, and sidewalks. When new development or redevelopment is proposed, consideration should be given to the placement of public spaces and building ambient air intakes.

Air pollutants that may result from the operation of the Metro storage yard are restricted by State and local air quality codes and regulations. Under these laws, permits may be required for certain aspects of the operation if emissions are anticipated to exceed regulated levels. DEP will work with WMATA to prepare a compliance plan to assure that all applicable codes and regulations are met. DEP is responsible for determining if the compliance plan is followed and updated, if necessary, to accommodate changes in the air quality laws.

This Plan recognizes the intent of the Clean Air Act Amendments of 1990 and the need to protect the residents of Glenmont from degraded air quality.

Objective A: *Support regional air quality objectives.*

- This Plan seeks to reduce the use of single occupancy vehicles by encouraging alternative forms of transportation (e.g., transit, bicycling, walking).
- This Plan supports land use patterns intended to facilitate the use of transit.
- This Plan recommends transportation improvements that reduce idle-time at traffic signals and reduce traffic flow obstructions.
- This Plan recommends that public spaces and ambient air intakes be located away from heavily traveled intersections.