December 1, 2008

COMPREHENSIVE PLAN - ENVIRONMENTAL SECTION

The environment is what's all around us. We have both a natural environment and a man-made or built environment. The one most in need of protection is the natural environment – the water, land, air, vegetation, etc., which is very fragile and vulnerable to permanent damage from uncontrolled exploitation. The man-made or built environment often comes into conflict with the natural one and competes with it for resources. Some characteristics of the man-made environment that degrade the natural environment are: impervious surfaces in watersheds; radon contamination of indoor air; changes in soil properties due to construction; depletion of water in aquifers; pollutants introduced into waterways; carbon pollution in the atmosphere contributing to global climate change. Environmental protection must focus on the reduction or elimination of these and other attributes of the man-made environment and the protection, sustainability, and, where required, restoration of the natural environment.

Flooding.
Technical Report. A clear definition of what constitutes "developable" land needs to be formulated in the Comprehensive Plan. Presently, the Environmental Technical Report contains maps depicting

- National Wetlands Inventory (Map 6)
- Resource Protection Areas (Map7)
- Watersheds (Map 8)
- Flood Zones (Map 10)

It is recognized that these maps provide some guidance as to which land is "developable" and which is not, but they do not provide a comprehensive demarcation. Some combination of these maps, together with those of the zoning districts within the Land Use Section, would provide greater clarity for citizens and developers alike.
ACTION: (Under Strategy 2.1) Develop a map overlay of the County depicting areas considered suitable for development within various zoning districts, based on environmental considerations. Required completion date: Within one year of Comprehensive Plan publication.

As an example, where man-made environments have been substituted for the natural environment, flooding occurs in certain localized areas due to inadequate drainage and water conveyance systems. In past hurricane and northeasters, flooding areas have been studied, often resulting in a determination that it would be too costly to undertake the steps necessary to solve the drainage problems. This obviously penalizes some property owners while it benefits others – those who have been permitted to disrupt the natural environment for personal profit – and requires mitigation at the expense of all citizens of the County.

Government measures designed to solve the current economic crisis are pumping more funding into infrastructure and other long term initiatives. This situation, together with current low interest rates makes the offering of a bond issue a very appropriate means of

correcting existing flood problems, especially in the heaviest hit areas, and paying for it over a number of years. **ACTION 5.2.2**: Take steps necessary for the issuance of bonds specific to flooding and stormwater management. Eliminate conditions leading to flooding in at least three heavily impacted areas by 2010; with pay-off of bonds within 20 years of their issue.

Streams.
Protection of streams in the County is essential to water quality, reduction of flooding, and restoration of the natural environment. The impact of impervious cover in the man-made or built environment has been established in County sponsored Watershed Management reports. Exceptions for the amount of impervious cover created by any development must be prohibited to protect and restore the natural environment (including habitat).

Headwater streams, which are often intermittent, drain up to 90 percent of the land area in eastern North America. Such streams are conventionally described as having defined beds and watersheds of less than about a square mile. They are often fed by ground water. Stream buffers, particularly in the headwater streams, must be extended to ensure the protection of the stream from erosion and sedimentation, to increase water quality, to protect habitat and to reduce the potential for flooding downstream.

> **ACTION**: (2.1.2j) Amend Section 23-9 of the Chesapeake Bay ordinance as follows: *(a) Intermittent streams and non-RPA wetlands shall have a fifty foot buffer. The fifty foot buffer shall begin from the edge of the resource.*

More generally, current ordinances require 100' stream buffers. A more suitable requirement would be for **up to** 300' buffers on main stems of streams; 200' for already impacted streams, and the minimum of 100' for those streams that are considered to be in relatively good condition.