Part C

Preservation, Restoration, and Enhancement of Regulated Environmental Features

1.0 INTRODUCTION

Regulated environmental features in Prince George's County include the following features as defined in Subtitle 24, the Subdivision Ordinance.

Regulated Environmental Features: Regulated streams, nontidal wetlands, and their associated buffers.

Regulated Stream: Streams that have water flowing year-round during a typical year and streams that have water flowing during certain times of the year when groundwater provides for stream flow. Water flow can be identified by a defined channel and movement of leaf litter and debris by the movement of water. During dry periods some regulated streams may not have flowing water. This definition includes "perennial" and "intermittent" streams. Streams that only have water flowing during, or for a short duration after, precipitation events in a typical year are "ephemeral" streams and are not regulated. The use of the term "stream" in this or other sections of the County Code shall refer to a regulated stream, unless the provisions of that section define a stream otherwise.

Primary Management Area: A vegetated buffer preserved or restored along all regulated streams outside the Chesapeake Bay Critical Area Overlay Zones, which at a minimum includes:

1. All regulated streams and associated minimum stream buffers.
2. The 100-year floodplain as defined by Section 27-124.01.
3. All wetlands and associated wetland buffers that are adjacent to the regulated stream, stream buffer, or the 100-year floodplain.
4. All areas having slopes of 15 percent or greater adjacent to the regulated stream or stream buffer, the 100-year floodplain, or adjacent wetlands or wetland buffers.
5. Adjacent critical habitat areas.

Nontidal Wetland: An area which:

1. Is inundated or saturated by surface or ground water at a frequency and duration sufficient to support and, under normal circumstances, supports a prevalence of vegetation typically adapted for life in saturated soil conditions.
2. Is identified as a "wetland" in accordance with the federal manual.

Wetland Buffer: Where a wetland or a portion of a property containing a wetland is located outside the Chesapeake Bay Critical Areas Overlay Zones, a minimum of 25 feet in width measured from the edge of the wetland and expanded to 100 feet in width due to the presence of steep slopes 15 percent or greater, highly erodible soils, other soils with development constraints, or the presence of nontidal wetlands of special state concern as defined by COMAR.

These areas are required to be survey located and shown on engineered drawings. Refer to other parts of the technical manual for the provisions regarding how these areas are to be depicted on the plans.

The protection, restoration, and enhancement of these features are vital to the long-term health of County citizens. These features provide extensive social and economic benefits to both the natural and built environments. Known as "ecosystem services," the benefits of their conservation cannot be overstated. For example, currently, the County's woodlands provide an estimated $1.4 billion of cost savings annually with regard to stormwater management.

2.0 Regulations Regarding Impacts to Regulated Environmental Features

Streams and nontidal wetlands and their associated buffers, and isolated nontidal wetlands and their associated buffers (collectively referred to as "regulated environmental features"), are required by the Zoning Ordinance and the Subdivision Ordinance to be preserved in, or restored to, a natural state to the fullest extent possible.

The determination of "fullest extent possible" is a three-step process that starts with avoidance of impacts. Then, if the impacts are unavoidable and necessary to the overall development of the site (as defined below), the impacts must be minimized. In the third step, if the cumulative, minimized impacts are above the designated threshold, then mitigation is required for the impacts proposed.

Necessary impacts are those that are directly attributable to infrastructure required for the reasonable use and orderly and efficient development of the subject property or are those that are required by County Code for reasons of health, safety, or welfare. Necessary impacts include, but are not limited to, adequate sanitary sewerage lines and water lines, road crossings for required street connections, and outfalls for stormwater management facilities. Road crossings of streams and/or wetlands may be appropriate if placed at the location of an existing crossing or at the point of least impact to the regulated environmental features.

Stormwater management outfalls may also be considered necessary impacts if the site has been designed to place the outfall at a point of least impact.

The types of impacts that can be avoided include those for site grading, building placement, parking, stormwater management facilities (not including outfalls), and road crossings where reasonable alternatives exist. The cumulative impacts for the development of a property should be the fewest necessary and sufficient to reasonably develop the site in conformance with County Code.

Where properties are located in the Developed Tier or a designated center or corridor, impacts to regulated environmental features may be considered where needed to accommodate planned development on constrained sites. Such impacts may include allowing impervious surfaces to remain within the buffer or the placement of structures within a currently unvegetated buffer. Preservation of existing vegetated buffers will be a priority.

Where regulated environmental features are not currently in a natural state, they are to be restored through replanting of native vegetation, restoration of the natural hydrology, and stabilization of the stream bed and banks.

Isolated nontidal wetlands and their associated buffers are also required to be preserved in and/or restored to a natural state to the fullest extent possible. Impacts to isolated nontidal wetlands will be evaluated on a case-by-case basis. High-quality wetlands that provide an infiltration function shall be preserved and, as determined by the Department of Public Works and Transportation, integrated into the site design as part of the stormwater management concept.

The proper sequence for preparing a design for a site that has regulated environmental features is as follows: (1) avoidance, (2) minimization, and (3) mitigation (if the threshold is met). This sequence will be used to evaluate the appropriateness of the proposed impacts during the review of applications that contain impacts to regulated environmental features.

1. **AVOIDANCE: Can the impacts be avoided by another design? Are the road crossings as shown necessary for the reasonable development of the property? Is it necessary to place the utilities within the boundaries of the regulated environmental features?**

   When designing a site, the first step is to prepare a natural resource inventory (NRI) to determine the locations of regulated environmental features. The NRI is then used as the base map to start laying out the proposed development. The next step is to prepare a draft plan that shows no impacts to regulated environmental features.

   If this design does not result in a development plan that allows for the reasonable use and orderly and efficient development of the subject property, or does not adequately provide for the health, safety, and welfare of County citizens, then impacts can be considered.

2. **MINIMIZATION: Have the impacts been minimized? Are road crossings placed at the point of least impact? Are the utilities placed in locations where they can be paired or grouped to reduce the number of different locations of impacts? Are there alternative designs that could reduce the proposed impacts?**

   Minimization of impacts to regulated environmental features may include placing a road crossing or utility at the narrowest point of the PMA; the use of retaining walls instead of extending the grading; bridging instead of constructing a culvert; placing required infrastructure elements together in one location instead of placing each one individually; and, where appropriate, obtaining waivers from County Code with regard to required side slopes or road cross-sections as appropriate and as approved by the regulating agency.

   Temporary impacts to regulated environmental features may be necessary for certain temporary erosion and sediment controls that cannot be designed in any other way. These impacts may be supported if the area is restored. All erosion and sediment control structures, such as ponds and collecting basins, shall be placed outside regulated environmental features. Temporary impacts and the proposed restoration must be shown on the associated tree conservation plan.

3. **MITIGATION: For areas of significant impacts, has a mitigation package been proposed to provide an equal or better trade-off for the impacts proposed?**

   "Mitigation" means the design and installation of measures to enhance, restore, or stabilize existing environmentally degraded streams and/or wetlands to compensate for proposed impacts. Mitigation shall be required for significant impacts to regulated streams, wetlands, and 100-year floodplains. Significant impacts are defined as the cumulative impacts that result in the disturbance on one site of 200 or more linear feet of stream beds or one-half acre of wetland and wetland buffer area. Stream or wetland restoration, wetland creation, or retrofitting of existing stormwater management facilities that are not required by some other section of County Code may be considered credit as mitigation. The amount and type of mitigation shall be at least generally equivalent to, or a greater benefit than, the total of all impacts proposed, as determined by the Planning Board.

   Priority shall first be given to mitigation within the impacted stream system. If the mitigation cannot be done on-site, mitigation should be focused in the following areas, in the stated order of priority: within the drainage area, subwatershed, watershed, or river basin in Prince George's County.

3.0 Mitigation Opportunities and Sources

Between 2006 and 2009, almost half of the existing streams have been walked, and stream corridor assessments have been conducted. During the coming years, the remainder of the existing streams will be walked and assessed. The stream corridor assessments are being prepared using the Maryland Department of Natural Resources protocol. The assessments are simply visual and do not provide proposed mitigation measures to restore the degraded conditions that are noted. The assessments that have been completed have been compiled into a database so that, as development proposals are analyzed, restoration opportunities on the existing streams can be more fully explored.

As noted above, if mitigation is required for proposed impacts, the countywide database of mitigation sites should be used as a starting point of identified sites. Applicants will be requested to conduct field assessments of the current conditions of the affected stream systems and propose mitigation packages.

The Maryland Department of the Environment approves state wetland mitigation banks where credits can be secured for wetland impacts. County mitigation banks are also an option and can be created in coordination with M-NCPPC staff.

Other opportunities for mitigation sites include land owned by the Department of Parks and Recreation (DPR), land trusts, and other nongovernmental organizations. As the owner of many stream valley parks, DPR manages many of the larger stream systems in the County. There may be opportunities to access parkland to provide much needed restoration. Land trusts and other nongovernmental organizations, such as the Anacostia Watershed Society, Potomac Conservancy, and the Riverkeepers, should be contacted as needed to identify areas in need of restoration.