

KEEDYSVILLE COMPREHENSIVE PLAN ENVIRONMENTAL ELEMENT

INTRODUCTION

The Maryland Economic Growth Resource Protection and Planning Act of 1992 requires all comprehensive plans in the State to include a Sensitive Areas element that describes goals and polices that will protect steams and their buffers; the 100-year flood plain; habitats of threatened and endangered species; and steep slopes. These areas perform vital functions that can affect the Town's quality of life. Disturbance of natural and sensitive areas degrades or eliminates natural processes that provide clean air and water, wildlife habitat; and provides for stormwater management and flooding,

Keedysville is located in the Potomac River Basin and Antietam Creek watershed in the Hagerstown physiographic province. The Little Antietam Creek flows into the Antietam Creek approximately 2200 feet to the south west. After emptying into the Potomac River the flow continues into the Chesapeake Bay which is significant to the Town and to the State. Although water does have the ability to cleanse it self over distance, the cumulative effect of all pollutants is of concern in these water ways and the quality of life in the Bay.

Protection of this stream is important to the citizens of Keedysville, also, because the Little Antietam Creek provides recreational opportunities, habitat to animals, and beauty to the Town. Since there are some steep slopes along the banks, pollutants and sediment can easily make its way into the creek. Development along the banks and land that is in close proximity should be avoided to reduce sediment and erosion. In addition, periodically the creek over flows its banks and can cause flooding of properties especially if there is disturbance in the floodplain or adjacent nontidal wetlands. The floodplain that threatens a large part of town should be considered for parking areas and parkland, especially if any buildings constructed in this area cannot be flood proofed. A buffer zone should be placed adjacent to the banks of the stream and all sensitive areas; and, development plans should be in compliance with this buffer zone.

In addition, well head protection should be incorporated into the development regulations and land uses that may reduce the potential for pollutants in the zone of influence of the Town spring and Keedysville water supply. Once the zone of influence overlay is established, the Town may need to coordinate its efforts with the County if the overlay includes County properties. Protecting water quality is a goal that is achievable and should always be included in review and approval of development projects and any construction conducted in Town.

The soils that are located in Keedysville are those of the Hagerstown-Duffield-Urban and Hagerstown Silty Clay Loam soils that are associated with limestone or Karst topography. These soils are found through out Town; the difference between the two soil's series is the percentage of slope found with each series. Combs Silt Loam is a floodplain soil that occurs adjacent to and associated with the Little Antietam Creek.

Streetscape improvements was one of the most requested items in the recent Town citizen survey that was completed in the autumn of 2008. Although, Main Street is a State owned and maintained roadway (845A), the Town should continue to pursue upgrading of the streetscape by applying to SHA for grants. Street trees have many environmental as well as aesthetic benefits. Trees are capable of up taking storm water, clean, and cool the environment. The Town should, also, adopt a street tree list that would be required to be followed for development or infrastructure improvements in the right of way or on public property. Private developers should be encouraged to use the tree list for their projects and to use a variety of vegetation to avoid mass destruction of vegetation during an outbreak of disease of a particular species. The Town should entertain adopting a Tree City program that encourages planting of street trees for their aesthetic and environmental benefit.

A recent letter from the Department of Natural Resources Wildlife and Heritage Service indicated that DNR's database had a record of one endangered species within the Town's limits. The Biggers' Cave Amphipod (*Stygobromus biggersi*) had been found when there was reduced flow to a large spring that feeds into Little Antietam Creek off of Spring Road on the east side of Town. The department has encouraged the Town to disallow any activities that might impact the catchment basin to this spring system, or to the spring itself, in order to reduce the likelihood of adverse impacts to this important native species.

Keedysville does have a number of existing policies and regulations that are designed to protect the environment and sensitive areas. When reviewing a development application, Town officials consult and apply regulations from their existing Forest Conservation, Stormwater Management and Flood Plain Management Ordinances that were approved by the State through adoption of Washington County Ordinances. Although the Town has minimal setbacks from the centerline of a perennial waterway, and intermittent stream, often there are nontidal wetlands associated with those water features. Therefore, the Town should consider identifying the areas where there are sensitive areas and increase the setbacks to increase the buffer area from the stream to adjacent development. As the Town grows, it will be more difficult to meet the challenge of providing green areas; however, doing so will provide a most appreciated sustainable community.

Future paths, trails, and observation areas of the natural environment and its wildlife would be of benefit to the Town and would provide additional recreational opportunities and attract environmentalists to the area. The Town owns a portion of the abandoned B & O railway right of way that runs from east to west that could be used for a recreation trail if there could be some agreement and grant funding to bridge the ravine that is exposed on the east side of Main Street along this railway right of way. The alignment of this potential rail trail is shown on Map 52: Special Project Areas of the County's 2002 Comprehensive Plan in Appendix A. It may be possible to work with the County and State to see if there is any grant funding that would help to support the construction of the bridge. Although a costly endeavor, if the County is interested in this recreational possibility as well, it may be feasible to enter in to a cooperative effort to make this a reality.

Many of the goals and policies that were featured in the 1997 Comprehensive Plan can be found in the 2009 Comprehensive Plan with new goals and policies that are in conjunction with newly

adopted State requirements and Washington County Comprehensive Plan since House Bill 1141 recommends that jurisdictions coordinate their efforts for all elements of the Plan.

ENVIRONMENTAL AND SENSITIVE AREAS GOALS

1. Establish a comprehensive environmental effort that encourages protection, preservation, and conservation of the Town's sensitive areas and ensures continuance of a healthy and pleasant place for current and future residents to live. Through education and interaction with nature, promote stewardship of the land and water as an ethic that guides public and private actions in Town.
2. Land use regulations must be updated to reflect the adoption of this Comprehensive Plan and minimize impacts to the natural environment. Well head protection should be included in development regulations.
3. Continue to practice land planning that focuses on good site design and public works operations that protect natural resources and minimizes detrimental effects to the environment.
4. Research and identify areas that flood and pose a threat to adjacent development and establish an appropriate buffer distance that will protect properties in future development.
5. Continue to encourage resource recovery and techniques to save water inside and outside the homes and encourage practices that reduce erosion in Keedysville. Provide educational information on the Town's web page.
6. Encourage regeneration of lost or damaged natural and man-made environmental features.
7. Pursue grants for funding environmentally sound public projects.
8. Forest Conservation should always be planted on a larger vacant tract of land to be developed especially if there are environmental features on the property. Establish a Tree City Program and a Town tree list.
9. Encourage the County to enter into a cooperative effort to acquire funding to enable use of the B & O rail right of way for a possible shared pathway.

POLICIES AND IMPLEMENTATION STRATEGIES

Policy EN.1: Encourage protection and minimize adverse impacts of public and privately owned wetlands and the 100 year floodplain, nontidal wetlands, and well heads.

Implementation Strategies

1. Identify areas that flood and pose a threat to adjacent development and establish a greater buffer from the stream bank than is in the current Zoning Ordinance.
2. Promote appreciation of the natural environment by capitalizing on the educational and recreational values and opportunities in the natural area at the north end of Town
3. Establish development regulations to protect well heads by establishing a zone of influence overlay which prohibits certain land uses that could result in pollution of the spring and the Town's water source. This action may include County and Town properties and coordination with the County Planning Department.

Policy EN.2: Encourage regeneration of lost or damaged natural and man-made environmental features.

Implementation Strategies

1. Establish a Tree City program to enhance streetscapes that provide shade and reduces stormwater. A tree list should be used that lists trees in public areas that are indigenous to the area, survives during storms, and does not break up concrete and macadam in the streetscape. Private land owners should be encouraged to use the tree lists for plantings during development review.
2. Establish a tree species list for planting within the Town public right of way and public lands so that trees are not of the type to damage side walks and species are mixed to avoid loss of major tree stands due to blight, disease or storm damage.
3. Identify properties within the 100 year flood plain and discourage any expansion of existing buildings that are flood prone and encourage land uses like parking lots with permeable paving surfaces and park land in these areas.
4. Protect steep slopes and require landscaping and trees to be part of the site planning process.
5. Identify sites available for tree planting and off-site mitigation.
6. Require forest conservation plantings to be placed on a parcel that is developing if the tract is vacant and over 40,000 square feet in size unless it is in the downtown area and there is impervious surface already on the parcel. Modifications and fee in lieu of forest conservation should only be used in areas where they are appropriate.

Policy EN.3: Promote and plan educational programs to foster and provide a greater public awareness of the importance for conserving and sustaining natural and man-made resources.

Implementation Strategies

1. Encourage citizens to use techniques to save water, properly dispose of pollutants, and to recycle household waste.
2. Establish a public education campaign for recycling solid waste and reduce the waste stream taken to the landfill.
3. Encourage voluntary cooperation by the Town's citizens, businesses, and landowners in conserving as much of the natural vegetation as is feasible.
4. Encourage and educate Town residents to voluntarily use rain barrels to collect water from their roof drains for their yards; and, to compost and mulch their own yard waste such as grass clipping, leaves, and twigs to reduce the waste stream and to improve the saturation rate in their yard.
5. When reviewing final site plans, consider the use of pervious surface materials for parking if there will not be much traffic or impact on the lot. This application is not appropriate for heavy parking usage.

Policy EN.4: Continue to maintain a sufficient and potable water supply for consumption and fire-protection. Coordinate efforts with the town of Boonsboro to maintain adequate water taps to support necessary future development.

Implementation Strategies

1. Continue meeting with the Town of Boonsboro relative to potable water issues.

Policy EN.5: Maintain a safe and efficient collection and treatment of sewerage, and continue to provide for efficient and innovative storm water management.

Implementation Strategies

1. During development review, establish pocket parks to provide passive recreation and bio-retention (rain gardens) to absorb, clean, and reduce storm water management.

Policy EN. 6: Coordinate implementation of new and existing environment protection programs and regulations in partnership with Washington County and the State.

Implementation Strategies

1. Encourage State Highway Administration to make planned public improvement to Main Street and to underground utility lines.

Policy EN.7: Resolve unavoidable competitions between economic and environmental policy through the use of flexible regulations and innovative development techniques.

Implementation Strategies

1. Periodically review updates to any Environmental regulations and update land use regulations for compliance.
2. Continue to improve and streamline development regulations.
3. Promote green building and low impact development.

Policy EN.8: Protect rare, threatened and endangered species.

Implementation Strategies

1. Establish standards in the development review process to require evaluation of the presence of rare, threatened and endangered species on development sites.

Policy EN.9: Evaluate and seek funding for the Town's storm management water facilities and provide for upgrades for the benefits of all citizens.

Implementation Strategies

1. Continue to eliminate or control storm water problems by enforcing the Town's storm water management ordinance and identify any innovative ways to reduce storm water.
2. Require storm filters in new and reconstructed parking lots to treat storm water.
3. Strive to reduce impervious cover and promote best practices for storm water management.
4. Incorporate Low Impact Development (LID) techniques into the Land Use Regulations.