

Managing Maryland's Growth Models and Guidelines

Flexible and Innovative Zoning Series: Clustering for Resource Protection

- Rural Resource Models
- Sensitive Areas Model
- Open Space Easement Agreement (by Maryland Environmental Trust)

This document may not reflect current law and practice and may be inconsistent with current regulations.

The Maryland Economic Growth, Resource Protection, and Planning Act of 1992

Maryland Office of Planning

The Maryland Office of Planning

State of Maryland William Donald Schaefer, *Governor*

Maryland Office of Planning Ronald M. Kreitner, Director

October, 1994



MARYLAND Office of Planning

This booklet was written and designed by the Local Planning Assistance and Planning Design Units of the Maryland Office of Planning as a service to local governments and planning officials. The principal author is Larry Duket. Writing, research and materials were prepared by William Atkinson, Vivian Marsh, and Robert Rosenbush. Original drawings prepared by Larry Duket using *Canvas for Windows*. Graphic design, production and photography by Ruth Powell and Mark Praetorius. Word processing and other valuable support services by Betsy Zentz.

Additional copies are available from the Maryland Office of Planning, 301 West Preston Street, Baltimore, Maryland 21201-2365. Phone: (410) 225-4550 FAX: (410) 225-4480

Publication #94-10

Price \$5.00

Table of Contents

INTRODUCTION
CLUSTERING FOR RESOURCE PROTECTION
Cluster Development Defined 3
The New Planning Act 4
Cluster Development and the Planning Act 5
Suburban Clustering 5
Clustering for Resource Protection7
Clustering and Growth Management
Comprehensive Planning for Cluster Development
Sprawl Potential 10
Sewage Treatment 10
Identifying Protected Open Space and Ensuring Long-Term Protection 10
Mandatory or Optional
Achieving Quality Design 13
Density Bonuses
CLUSTER MODELS TO PROTECT RESOURCES
Model One:
Rural Clustering in the Comprehensive Plan
Model Two:
Legislative Findings for a Rural Cluster Ordinance
Model Three:
Mandatory Rural Cluster Ordinance
Model Four:
Density Incentives to Encourage Rural Enclave Development (Kent County) 33
Model Five:
Clustering for Protection of Sensitive Areas
Appendix: Model Conservation Easement

and the second second

INTRODUCTION

A New "Models and Guidelines" Series This booklet is the first in a special series of "Models and Guidelines" that will address *Innovative and Flexible Planning and Zoning Techniques*. Models and Guidelines are prepared by the Maryland Office of Planning to assist local governments in achieving the goals of the Economic Growth, Resource Protection, and Planning Act of 1992 (the Planning Act).

Flexible and innovative techniques alter some of the short-comings of traditional (i.e., *euclidean*) zoning. For example, traditional zoning often equates "density" with "minimum lot size," and requires that both standards be met. This results in a loss of development potential where, for example, sensitive areas cannot be disturbed. It also discourages good site design. Traditional zoning places priority on the separation of land uses, making it difficult to create places we call neighborhoods, but easy to produce repetitious bedroom communities. Traditional zoning places little focus on community design or character, and is cumbersome for creating sustainable communities.

There are other ways in which traditional zoning can frustrate the Comprehensive Plan and growth management objectives. This series of booklets will address alternatives to traditional zoning techniques. Some of these alternative techniques are of recent origin, although many have been in use for 20 years or more. Maryland's local jurisdictions have been among the first and foremost practitioners of zoning innovation. However, traditional zoning and development practices are still prevalent.

Flexible and innovative techniques can have a significant role in meeting the goals of the Planning Act. This series of booklets examines the relationship between techniques and the Planning Act, promotes an understanding of basic concepts, and shares ideas and information with Maryland's planning community. This booklet examines "cluster development" as a tool for the protection of rural and environmental resources.

Clustering for Resource Protection Clustering is a method of land development that can be used to protect certain resources because it allows the concentration of development on a small portion of the project site, while the undeveloped portion becomes permanently protected open space. Clustering, for example, can help protect environmentally sensitive areas, forests, rural character, visual quality, and historic sites. Where zoning density is very low, clustering can aid in the protection of agricultural soils and farming activities by minimizing the intrusiveness of development. This booklet features several models for cluster development including: rural guidelines for the Comprehensive Plan, mandatory clustering for rural resources, incentive zoning to encourage clustering, clustering for sensitive areas, and a conservation easement agreement for protection of cluster "open space."



A conceptual cluster development

Clustering for Resource Protection

Cluster Development Defined Clustering is a form of development where the buildings in a project are grouped together into compact arrangements, or clusters, while portions of the site are preserved as permanent open space. (In this context, the term "open space" refers to land permanently protected in an undeveloped state as part of a cluster development project.) Because development is compact, clustering makes "resource protection" more likely. The challenge is to identify, and then protect over the long term, the portions of the site which are critical as resources and should therefore be designated as open space.

Instead of subdividing an entire site (or most of it) into large, uniformlysized residential lots, the lots are permitted to be much smaller under clustering. Uniformity of size and regularity of shape are not required. This flexibility enables increased open space and resource protection, while permitting development. The open space land is often held in common ownership by the residents, acting as a homeowners' association pursuant to covenants in each deed. Additional options are available, such as requiring conservation easements that are held by local government, nonprofit land trusts, or other qualified and approved organizations.



A cluster ordinance should require a certain level of permanent open space protection. It should also specify the land and water features which are to be included as protected open space, and specify the means for protecting the open space over the long term. The ordinance should establish the means for determining the allowable number of dwelling units and include procedures for reviewing development proposals. The particular qualities and characteristics of the open space land, and the amount needed, will depend on the particular planning and growth management goals of the jurisdiction. For example, the goal of protecting rural character will require relatively low density zoning, a high degree of open space protection, and site design criteria.

The ordinance should require that open space designations account for conditions and resources on adjacent properties. Ideally, it should encourage protection, over multiple properties, of a larger resource network, such as forest corridors, stream valleys, or agricultural soils.

The New Planning Act

By July 1, 1997, all local Comprehensive Plans must incorporate seven vision statements; steps must be taken to implement those visions with regulations that are consistent with the local Plan. The seven visions are: (1) *development is concentrated in suitable areas;* (2) *sensitive areas are protected;* (3) *in rural areas, growth is directed to existing population centers and resource areas are protected;* (4) *stewardship of the Chesapeake Bay and the land is a universal ethic;* (5) *conservation of resources, including a reduction in resource consumption, is practiced;* (6) *... economic growth is encouraged and regulatory mechanisms are streamlined; and* (7) *funding mechanisms are ad-dressed to achieve these visions."* (Section 3.06(b), Article 66B, Annotated Code of Maryland).

By July 1, 1997, local governments must also incorporate a "Sensitive Areas Element" within their Comprehensive Plans and have regulations that will protect the following from the adverse effects of development: streams and their buffers, 100 year floodplains, steep slopes, and habitats of threatened and endangered species. The law permits local governments to identify and protect other types of sensitive areas.

The Act also requires local governments to amend the Implementation Element of their Comprehensive Plan to encourage regulatory streamlining, flexibility, and innovation. These regulatory changes are to accomplish a variety of goals including reductions in site development costs, improved environmental protection on developing sites, and economic growth in Plan-designated areas.

Cluster Development and the Planning Act

In the context of the new Planning Act, cluster development is suited for protecting sensitive areas and the Chesapeake Bay because of the required incorporation and protection of open space. Cluster development is compact, thus making it easier to avoid disturbance of those parts of the site responsible for protecting water quality and providing valuable habitat. Resources such as recharge and wellhead areas, prime soils, farmland, forests, steep slopes, wetlands, and floodplains can be included within the protected open space.

Clustering reflects regulatory innovation and flexibility when compared to traditional zoning. The concept of grouping smaller and varied sizes of lots together to save large open spaces reflects a departure from the routine practice of carving up land into large uniform lots. Clustering works by severing the traditional connection between density and minimum lot size. Another notable difference about clustering - at least in its resource protection form - is that it preserves much of the project site as open space, and thus enhances the potential to design a project that protects the resources.

While minimum standards are necessary, clustering requires regulations which are more flexible in the treatment of minimum lot sizes, setbacks, road standards, and other development criteria.

Cluster development is not a tool for directing growth. Clustering is a tool for sensitive site design. The important issue of directing growth and development should be addressed through the Comprehensive Plan, effective zoning, and other tools.

All local governments in Maryland that exercise planning and zoning powers are authorized by State law to enact clustering ordinances. Many local governments already have some form of clustering. These tools should be reviewed in the context of the Planning Act to ensure that growth is directed to suitable areas and that rural resources are protected.

Suburban Clustering

Suburban clustering is the original paradigm for cluster development in the United States. Clustering first appeared during the 1930's in Radburn, New Jersey and was later incorporated into the site design for Columbia, Maryland and Reston, Virginia. These projects were large planned unit developments that featured clustering principles in terms of both the overall site design for the project, as well as within specific parts of the project.





Clustering was promoted during the explosive growth of the suburbs in the 1960's and 1970's as a way to achieve environmental and community open space protection, while reducing developer costs. Prince George's and Carroll Counties were among the first jurisdictions in Maryland to adopt this early form of clustering.

The National Association of Homebuilders studied cluster development in the 1976 report, *Cost-Effective Site Planning: Single-Family Development*. The report compared development costs and open space features for conventional and cluster site designs for a 166-acre site; both designs contained the same number of lots. The cluster method required less ground clearing, less paving, shorter utility lines, and created over three times as much open space as conventional design. Costs (in 1976) were more than \$2,000 less per unit for the cluster design.

The intent of suburban clustering was to provide both a means and an incentive to the development community to provide a level of environmental protection, create open space, and alleviate visual monotony. Suburban clustering continues today as an optional method of development in numerous Maryland counties and towns.

Clustering for Resource Protection In recognition of the need to protect or properly manage an increasing number of environmental, economic, and man-made resources, clustering began to assume an expanded role by the latter half of the 1980's. Planners recognized clustering as a flexible form of development that could be used to address a number of resource protection goals of the local Comprehensive Plan.

Protection of rural resources, in particular, is a relatively new adaptation of the clustering concept. With this type of clustering, most of the project site remains in open space and development is sited to minimize and mitigate impacts on rural character and natural resources. Land use regulations, design criteria, and standards for roads and sewage disposal should guide and facilitate the placement of houses on grouped, small lots and in unobtrusive ways. In some instances, a few large estate lots can be permitted as part of a cluster project. Estate lots can be permitted, for example, to incorporate historic residential structures into a project; easements and other protective design measures should be required.



An historic farm house is incorporated into a cluster project as a five-acre estate lot having four acres of private open space under easement

Ideally, a cluster ordinance intended for the protection of rural character should require 80 percent or more of the site to be permanently protected as open space. A high level of open space is needed to minimize visual impacts of development and to protect character. Design guidelines should ensure that intensive and routine activities of residents are separated from those rural-based land uses, economies, and natural resources that contribute to the character of the area.

Clustering can also assist in protecting farming economies and farmland, if the number of dwelling units is kept very low within the agricultural community, and if the design of development minimizes interference with farming and its many related activities.

A cluster ordinance that has the primary goal of protecting certain environmental features, such as forest, floodplains, streams, and buffers, could be effective with much less than 80 percent open space. Here, clustering works by allowing the flexibility to place homesites in areas where impacts to the natural environment will be minimal. Environmental features usually become part of the protected open space and best management practices are used to minimize impacts during and after construction. Calculation of open space acreage and the number of dwelling units is often handled with a formula. A cluster ordinance that guides development in rural villages should achieve compatibility with defined community character, protect sensitive areas, and identify land for public squares and parks. Cluster open space requirements in towns and villages should not be excessive. Open space in the traditional neighborhood functions as an element of design, especially in creating public places. "Traditional neighborhood design" and "village and hamlet" zoning offer alternative models for guiding development in rural villages and towns. (Readers wanting more information about traditional neighborhood design should consult Publication No. 94-05; see inside rear cover.)

Clustering and Growth Management Comprehensive Planning for Cluster Development The following discusses growth management issues that should be addressed as part of the planning and policy formulation needed for a cluster ordinance.

Under Maryland case law, land use regulations based on the Comprehensive Plan enjoy a strong presumption of validity. Thus, policies and recommendations for clustering should be incorporated into the Plan to provide a sound legal, as well as planning, basis for the Plan's subsequent implementation of cluster development regulations.

Clustering should be studied early in the planning process and, if selected as a viable tool, be supported by goals, policies, objectives, and land use recommendations in the local Comprehensive Plan. The Comprehensive Plan should also recommend the methods that are needed to direct development and growth away from rural areas. Under the Planning Act, growth is to be channelled to suitable, Plan-designated growth areas and to existing rural population centers.

One effective approach for developing rural land use policy is through a Rural Land Use component in the Comprehensive Plan. This component can be part of the required Land Use Element, or stand as a separate Plan element. The component would establish policy and guidance on the nature of rural development, rural economies, and rural resources. This component could also be used to plan in advance for protection of large rural resource networks which are spread over numerous properties.

The Comprehensive Plan can establish a variety of protection objectives to be accomplished through "open space" designation. These objectives can then be prioritized in the Plan, depending on the most important resource qualities of the area. This, in turn, would lead to an ordinance which establishes a "protection theme" for particular parts of the jurisdiction. The Plan should also identify important resource networks in need of protection, such as stream valleys and floodplains. These networks, when affected by development plans, can be considered for protection as designated open space within cluster development projects. Finally, the Plan should consider how recreational planning goals can be furthered by cluster development.

Sprawl Potential

Aside from its flexibility to guide growth on a particular site, and in the larger context, clustering does not channel growth to suitable areas. And in that respect, clustering is a tool that needs a complement of protective zoning and other methods to channel growth towards appropriate areas. Under the Act, each local government will determine the methods for protecting rural resources, and this should include methods to limit rural residential sprawl.

The approach reflected in the Planning Act is to use certain rural population centers to absorb rural growth pressures. Clustering, traditional neighborhood design, and other types of "permissive" zoning regulations are needed to accommodate growth and create attractive neighborhoods in these rural centers.

Sewage Treatment

Limitations for on-site treatment of sewerage may affect minimum lot sizes and site design. Some local cluster ordinances permit the use of the common open space, under strict conditions, for replacement septic fields that may be required by law. Laws and regulations pertaining to water and sewer have the primary purpose of protecting public health, thus these rules often leave little room for flexibility that might otherwise be warranted to achieve a good cluster design. However, certain State regulations which have been identified as out-dated and which unnecessarily frustrate good cluster design are expected to be revised.

Identifying Protected Open Space and Ensuring Long-Term Protection The proper identification and permanent protection of open space is critical for ensuring that cluster development truly protects valuable resource lands from development. The Comprehensive Plan is useful for setting cluster and open space goals and objectives.

Open space within a cluster development can be used to provide protection to numerous resources including historic sites and structures, rural villages, scenic views, rural character, animal habitats, feeding corridors, biodiversity, mineral resources, sensitive areas, prime agricultural soils, and forests. It can also be used to provide appropriately scaled and sited recreational areas including pedestrian pathways and waterfront access. For example, in areas where protection of rural "character" is a primary concern, houses would be sited so as to minimize impact on the area's visual qualities. Afforestation and forest retention could be used to screen homesites from public views. Homesites can be clustered in forest edges to soften their impact. Preventing construction on ridge lines is helpful for protecting both near and more distant views.



Homes are clustered below the ridge line to preserve both near and distant views from the road.

In rural areas, protection of "farming" could warrant a site design that protects important local farm roads from traffic, provides substantial buffers between homesites and farming activities, and minimizes development on prime and productive farming soils. The ordinance should also require specific notice to prospective residents about right-to-farm laws.

In terms of "rural village" clustering, open space lands are determined by sensitive areas and by the need to protect, enhance, reflect, or create certain community character. This includes the use of open space for public places such as squares, green areas, and parks. Open space in a village cluster can also be used to create a separation buffer between village development and nearby agricultural activities. Guidelines for site planning, design, and architecture should complement the cluster ordinance. Important "networks" of resource land, such as masses of agricultural soils, large forests, and stream valleys, when in private ownership, can be preserved through designation as open space within development projects. Landowner coordination and cooperation for protecting networks within cluster plans could possibly be stimulated with regulatory incentives. Clustered open space on private property can be linked with public parklands, greenways, and wildlife areas to give homeowners access to a variety of open space and recreational opportunities.



Centennial Park in Howard County

Some cluster development proposals will require a sorting-out of competing protection policies. For example, there may be a particular resource on a site that demands such a degree of protection that other clustering protection objectives cannot be achieved if the site is to be developed at all. The Plan should provide policy guidance on this and other foreseeable issues, and the ordinance should include a method for resolving them.

Finally, effective legal mechanisms are needed to ensure that the designated open space remains undeveloped. Several tools are available, each with its own strenghts and weaknesses. The Appendix provides additional information.

Mandatory or Optional

Achieving Quality Design

Another important issue is whether rural clustering will be mandatory, optional, or encouraged through incentives (usually density bonuses). The ordinance could employ a combination of approaches which are linked to, and dependent on specific geographic and policy recommendations of the Comprehensive Plan.

The use of Design Manuals or Guidelines is also very important. These tools are used to ensure that views and character are protected, that development on resource-bearing land is minimized, and that placement of houses, roads, and other infrastructure have minimal impact. For village clustering, site design usually focuses on issues of community character, efficiency of land use, and architectural design.



An example of community character in Chestertown

The Comprehensive Plan and the cluster ordinance should provide guidance on design priorities. For example, in certain areas it may be important to duplicate town character and provide continuity of place. In other areas, maximum efforts to create permanent open space and hide homes from public view may be paramount.

Density Bonuses

Clustering is often adopted as an optional method of development under the scope of current zoning. A density bonus is sometimes used as an incentive to encourage clustering where the local ordinance does not mandate it (see page 32). The number of residential lots allowed under clustering should be consistent with the policies and recommendations of the Comprehensive Plan.

Cluster Models to Protect Resources

Following are several models for cluster development. Models One through Four are useful for incorporating "**rural clustering**" into the local planning and zoning program. The rural cluster models are a tool to guide the design of residential development in rural areas, where the local Plan determines that assets such as rural character, farming, and environmental quality must be protected. Model Five is useful for "**sensitive areas**" protection.

Model One is a brief set of Guidelines, Goals, Objectives, and Policies for incorporating rural clustering into the Comprehensive Plan.

Model Two is a hypothetical set of legislative findings. These findings are included to illustrate important substantive and procedural steps for adopting a rural cluster ordinance as part of the local planning and zoning program.

Model Three offers a method for incorporating rural clustering into the local zoning ordinance. It uses the concept of an "overlay zone."

Model Four uses bonus density and design standards to encourage a specialized form of rural cluster zoning called "enclave" development.

Model Five focuses on protection of sensitive areas, uses bonus density, provides a formula for calculating open space requirements and allowable density, and is generally intended for areas having water and sewer.

The **Appendix** contains a model conservation easement agreement that can be used in conjunction with the cluster zoning models .

Model One: Rural Clustering in the Comprehensive Plan A "Rural Land Use" component or element can be prepared for the Comprehensive Plan. A rural land use element is used by several Maryland counties as an approach for addressing a wide array of rural issues.

The element would establish rural land use policy, including the role of clustering and the issue of rural sprawl. Clustering should be addressed in the element in the context of the larger rural landscape including local farm economies; rural hamlets, villages, and towns; important sensitive areas; historic sites; and rural resources - such as open space, prime soils, mineral-bearing lands, and forestry.

A rural land use element should describe the county's rural assets; set goals for the various physical, economic, and social dimensions of the landscape; and include comprehensive recommendations for achieving the goals. This type of element would be an appropriate means for addressing the issue of rural sprawl in the context of the new Planning Act and for establishing whether and how clustering is used in a jurisdiction.

While the subject of a rural land use element cannot be adequately covered in this booklet, a few general guidelines about such an element and the role of rural clustering are offered. These guidelines illustrate a variety of considerations about clustering in the context of growth management under the new Planning Act, and any number may be suitable for use by a local jurisdiction in the development of its Plan.

Guideline: The rural land use element should direct residential development pressures towards existing rural population centers, and away from critical masses of farm, forest, and mineral resource lands.

Guideline: The element should also set goals for containing existing patterns of sprawl and for preventing new ones from emerging. The element should recommend tools that will support and enhance rural economies, such as agri-businesses and forestry.

Guideline: The Plan element should support mandatory protective clustering in certain parts of the jurisdiction, in concert with very low density zoning or a prohibition on "major" subdivisions. These areas should be treated as protection areas.

Guideline: These protection areas should be identified, by virtue of comprehensive study and planning, as inappropriate for growth for one or more reasons. The objective would be to keep the potential total number of rural units very low, to use zoning and other tools to create disincentives to subdivision of land, and to ensure that, if properties are developed, open space will dominate the scene and homes will not interfere with farming activities and sensitive areas.

Guideline: The new Planning Act identifies rural population centers as the appropriate locations to absorb rural residential growth pressure. Thus, the element should identify those centers that should be growth areas and those that should not, give the reasons for these choices, and identify the community character and type of growth desired in each particular rural population center. These village areas could be further refined in the element to address various scales of rural settlements including hamlets, villages, towns, and rural cross-road centers.

Guideline: The element should identify specific masses of farm and forest land which need protection. It should recommend ways to attain comprehensive protection of these larger areas by adopting multi-property cluster plans.

Guideline: Following are model goals, objectives, and policies for rural clustering that could be incorporated into the local Plan.

Goals.

Development and growth shall be directed to areas designated in the Plan as suitable for compact and efficient growth.

Development and growth shall be directed away from designated "Rural Protection Areas."

In rural areas, growth shall be directed to designated "Rural Village Centers."

Rural resources including minerals, historic sites, prime and productive agricultural soils, forests, and sensitive areas shall be protected from the adverse effects of development.

Recreational lands shall be included in the open space, consistent with the County's Open Space and Recreation Plan.

17

The County shall establish the goal to direct [X] percent of the expected growth in rural residential units towards "Rural Village Centers" designated in the Plan for rural growth.

Objectives.

Residential development in Rural Protection Areas shall be limited so as to protect critical masses of resource lands and minimize inefficient service delivery costs for government.

Residential development in Rural Protection Areas shall be sited and designed to avoid disruption to agricultural activities, sensitive areas, and rural character.

Residential development in and around Rural Villages shall protect and enhance the Plan-defined character for that community, provide community open space, protect sensitive areas, and serve as a transitional use between the village center and outlying rural areas.

Policies.

Rural growth pressures shall be directed towards the following "Rural Villages:" [List]

The following rural centers shall not be targeted for rural growth: [List. These might include rural historic villages, or other places where preservation and no significant growth are planned.]

[The two policy determinations, above, would be made in cooperation with any affected municipality.]

Rural resources in need of protection shall include: [List by type or specific name]

Rural activities and economies such as farming and forestry shall be preferred uses and supported by right-to-farm and right-to-timber laws. *Model Two: Legislative Findings for a Rural Cluster Ordinance* Whereas, the County Planning Commission, after comprehensive study and public hearings, approved and recommended for adoption an amendment to the Comprehensive Plan entitled the "Rural Land Use Element;"

Whereas, the Board of County Commissioners, after careful consideration and public hearings, thereafter adopted the Rural Land Use Element (the Element) as part of the Comprehensive Plan (the Plan);

Whereas, the Element calls for protection of rural resources including rural character, open space, sensitive areas, historic sites, prime and productive soils, and agricultural and silvicultural industries;

Whereas, the Element recommends clustering in rural areas as a means to protect agriculture, forestry, rural character, and sensitive areas;

Whereas, the Element contains a Plan Map that recommends boundaries for the Rural Protection District;

Whereas, the Planning Commission, after public notice and hearings, has now recommended to this Board a Comprehensive Zoning Map Amendment which shows the boundaries of Rural Protection Districts in the County and a Zoning Text Amendment for Rural Clustering;

Whereas, after public notice and hearings, this Board finds the proposed Map Amendment and Text Amendment to be consistent with the adopted Rural Land Use Element and the Comprehensive Plan;

Whereas, the Board finds that the majority of rural development should be channelled to certain existing rural population centers in accordance with the Plan and sound growth management principles;

Whereas, the Board finds that the limited development which is permitted shall be clustered so as to minimize its adverse impacts on rural character, farming, timber harvesting, historic sites, and sensitive areas;

Whereas, the Board finds that the adoption of the Zoning Map and Text Amendments are necessary to protect and are in the best interests of the public health, safety, and welfare. Whereas the Board finds that the Map and Text Amendments will, in concert with other planning programs and zoning laws of the County, help achieve Visions Two and Three of the Economic Growth, Resource Protection, and Planning Act of 1992.

Now therefore, the Board of County Commissioners hereby approves the Map and Text Amendments and incorporates the Amendments into the official Zoning Map and Ordinance of the County, effective [date].

Model Three: Mandatory Rural Cluster Ordinance

This model uses a zoning "overlay" district that is placed on the zoning map in accordance with the recommendations of the Comprehensive Plan.

Overlay zoning superimposes a new zoning district on the existing zoning map; the overlay may cover more than one underlying zone. The lands that are included in the overlay must share a common set of characteristics or attributes affecting some public interest that may be regulated under the police power. Lands included in an overlay must share characteristics that distinguish them from adjacent lands not included in the overlay zone. Generally, overlay zones act to supplement, not replace, the underlying zoning regulations. The added regulations focus on the special public interest that was the basis for the overlay zone.

A model for a rural clustering overlay zone is provided below. Numerical standards are shown in [brackets] and are provided for illustrative purposes; commentary is indicated in *italics*. This model is recommended for several reasons: 1) The matter of creating regulations is addressed more easily, in a technical sense, with an overlay. 2) It is mandatory because optional tools do not necessarily work. 3) It defines the open space lands according to resource function, which helps establish protection and maintenance priorities. 4) It uses a "regulatory easement" to implement its intent that land designated "open space" remain undeveloped. See page Appendix for a Model Conservation Easement suitable for use or adaptation in cluster projects.

Note that the model will not work, as a practical matter, in rural, nonsewered areas having generous base zoning density. For example, where one- to three-acre lot zoning prevails, the overlay model's eighty percent open space requirement will impact negatively on lot yield that would ordinarily accrue under zoning.

The overlay model is called the "Rural Protection District" (RPD). The RPD requires protection of rural resources as defined in the Comprehensive Plan and eighty percent of the site must remain in protected open space.

The model is based on Calvert County's mandatory cluster ordinance, with certain modifications. Like Calvert County's zone, the model below is merely an overlay zone. Readers should note, therefore, that actual development density would be determined by underlying zoning, and not by the cluster model. Because modifications have been made, the model is not to be construed as representing the policy of Calvert County. It is important, however, to recognize the County's invaluable contribution to the model below.

Rural Cluster Ordinance

Section X Overlay Zones

X.10.00 Overlay Zones Established.

(The "overlay" zone is selected as an efficient and effective means to create a new zoning district for purposes that are not readily addressed by the existing zoning map. In essence, the existing - or underlying - zoning is supplemented by the new overlay zone.)

X.10.01 The following overlay zones are established and shall control the use and development of lands by imposing requirements, criteria, and standards that apply in addition to those in the underlying "euclidean" zone. (*The structure of this model allows new overlays to be added over time and as recommended by the Comprehensive Plan. The overlay approach may be used, for example, for environmental and historic protection.*)

- A. Rural Protection District (RPD)
- B. Reserved for Additional Zones
- C. Reserved for Additional Zones
- X.10.02 Overlay zones shall be established upon study and recommendation by the Planning Commission in the form of an amendment to the Comprehensive Plan, and in accordance with a comprehensive rezoning process. After comprehensive zoning, individual applications for rezoning to RPD shall be decided in accordance with the requirements of Section _____ (*this refers to the section of the ordinance that provides the procedural and substantive requirements for piece-meal rezoning*) and the criteria in Section X.11.02.
- X.11 Rural Protection District (RPD)
- X.11.01 Purpose

The purpose of the RPD shall be to:

A. Use site design to protect rural character, open space, farmland, sensitive areas, historic sites, and forests in accordance with the Comprehensive Plan.

B. Preserve rural industries such as farming and forestry by minimizing constraints and conflicts caused by residential development and its associated activities.

X.11.02 RPD Boundaries

The boundaries of the RPD shall be designated on the official Zoning Map of the County. An RPD shall be at least [X] acres in size. The presence of the following rural resources or conditions shall be considered in determining the boundaries of the RPD.

- 1. Class I, II, and III soils and Group 1 and 2 soils.
- 2. Active farming activities and agri-businesses.
- 3. Forest.
- 4. Historic areas and structures; scenic vistas and rural roads.
- 5. Special visual character in need of protection.
- 6. Sensitive areas.
- 7. Relationship to lands having conservation or agricultural easements.

X.11.03 Permitted Uses

All uses permitted in the underlying zoning district.

X.11.04 Special Exception Uses

All uses permitted by special exception in the underlying zoning district.

- X.11.05 Conditions on the Subdivision of Land
 - A. Land zoned RPD shall be subdivided in accordance with the terms of the Design Standards and Criteria for Clustering, Section Y.
 - B. Subdivision of land zoned RPD shall require 80 percent permanently protected open space. Protection shall satisfy the requirements of Section Y.

Section Y Design Standards and Criteria for Clustering Single-Family Residential Development

This Section addresses procedures, submittal requirements, building lots, placement of lots and roads, and long term protection of open space.

Y.10 Purpose

The purpose of this Section is to ensure that residential subdivision projects within the Rural Protection District (RPD) are designed to fit into the existing rural landscape so as to retain rural character and natural resource systems, and so as to minimize interference with rural-dependent activities including farming and timber harvesting.

Y.11 Procedure

Y.11.01 Conflict of Laws

All requirements in the County Subdivision regulations shall be met. Where a conflict exists, the more restrictive standard shall apply.

Y.11.02 Applicability

The provisions of Section Y shall apply to all residential development proposed in the RPD.

- Y.12.00 Application Requirements Concept Plan
- Y.12.01 Application for subdivision shall be made in accordance with the procedures in Section _______ of this Ordinance, however, prior to submitting an official application, a concept plan shall be submitted. The concept plan shall show existing features including those listed at section Y.12.03, and all proposed building lots, roads, other site improvements, and protected open space as required by this Ordinance. The purpose of the concept plan is to identify issues and problems with developing the site before extensive engineering costs are incurred by the applicant. Another purpose is to provide an early indication on the part of the owner as to which portions of the subject property, if any, are to be retained by the owner after subdivision approval.
- Y.12.02 The concept plan shall be accompanied by a soils map, an aerial photograph, a tax map, and a topographic map, each at a scale of 1" = 600' and showing the boundaries of the parent tract, the proposed lots, and protected open space. (*The submittal requirements will depend on availability of data for a particular jurisdiction.*)
- Y.12.03 The concept plan shall show the following existing features:
 - A. Forested areas, as defined in the County's adopted Forest Conservation Program.
 - B. Cropland, pasture, meadow, and prime and productive soils.
 - C. Sensitive areas including streams and buffers, habitat of threatened and endangered species, 100 year floodplains, and steep slopes.
 - D. Rural resources such as historic sites, scenic views, and agri-businesses.
 - E. Buildings, roads, overhead power lines, rights-of-way for gas, electric, telephone and cable lines, abandoned railroad rights-of-way, cemeteries, trails, trash and hazardous waste dumps, and fences.
 - F. Portions of the parent tract that the owner intends to retain after subdivision approval, as permitted by Y.12.06.C.

Y.12.04 Building Lot

A. Lot Calculation. The maximum number of building lots for subdivisions in the RPD shall be determined in accordance with the following formula:

1.	Total site acres:	
2.	Total wetland acres:	
3.	Site acres minus wetland acres equals Subtotal:	
4.	Subtotal divided by the density of the underlying zone*	
	equals the total number of lots:	

*(The density standard of the underlying zone should be consistent with the recommendations and policies of the Comprehensive Plan. If the goal of the Plan is to protect farming and direct growth away from rural areas, the underlying zoning density should be very low.)

- B. Lot Size, Setback, and Site Access Requirements. The following requirements are established to facilitate placement of buildings and roads in accordance with this Ordinance, to minimize site disturbance, and to ensure adequate light and air.
 - 1. a) Minimum Lot Size on Well and Septic: [X sq. ft.]

(The minimum lot size should reflect the minimum needed for Health Department standards for well and septic system. The Health Department minimum will vary from region to region due to differences in soil type and local hydrology. In some areas, the full benefits of clustering cannot be achieved due to soil conditions that require large lots.)

b) Minimum Lot Size on Public or Community Sewer and Water: [5,000 sq. ft.]

- 2. Health Department approval is required prior to preliminary approval for any lot on individual well and septic.
- 3. Land required for back-up septic systems may be located within the open space defined in Section Y.12.06, provided the land is owned by the homeowners' association and is not located in a sensitive area, forest buffer, or on land to be deeded to a public agency or land trust.
- 4. Minimum Setbacks and Lot Width for Lots Served by Individual Well and Septic

Front Yard:	[35′]
Sideyard:	[10']
Rearyard:	[35']
Lot width:	[100'] measured at the front
	building restriction line

Y.12.05 Protection Requirements for Placement of Lots and Roads

The concept plan shall show the proposed size and locations of building lots. Lots and roads shall be located in areas where they will have the least effect on forests, sensitive areas, cropland, farm buildings, and historic structures, and where they will not diminish scenic and rural character.

Where indicated by the letter "(M)", the Planning Commission may modify the protection requirements of Y.12.05.A through F, to the minimum extent needed to resolve conflicts between individual provisions of Section Y. However, in resolving conflict, priority for protection shall be given to streams and their buffers, steep slopes, 100-year floodplains, and habitats of threatened and endangered species.

- A. Protection of Forested Areas and Wildlife Habitat
 - 1. The requirements of the adopted Forest Conservation Program shall be met.
 - 2(M). Buildings and roads shall be sited in forest edges or shall otherwise be designed to maximize the amount of contiguous forest left intact. Determination of forest areas to be protected shall also consider the location and nature of forest existing on adjacent properties so as to maintain contiguous masses and corridors of forest.
 - 3(M). Roads in excess of [500'] shall not penetrate the existing forest. Driveways in excess of [250'] shall not penetrate the existing forest.
- B. Protection of Sensitive Areas
 - 1. All provisions of the County Zoning Ordinance and Subdivision Regulations for the protection of Sensitive Areas shall be met.
 - 2(M). Roads and driveway crossings shall avoid Sensitive Areas.

Modification of this requirement by the Planning Commission shall require the use of best management practices by the developer to minimize the adverse impacts on sensitive areas. For protection of habitat, the location and timing of construction activities shall adhere to recommendations received from the Natural Heritage Program of the Maryland Department of Natural Resources which are adopted by the Planning Commission as a condition of subdivision approval.

- C. Protection of Cropland, Pasture, and Meadow
 - 1(M). Buildings and roads shall be located in a manner that will preserve cropland, pasture, and meadow and avoid physical divisions.

- 2(M). No more than [20] percent of the total area classified as Class I, II, or III soils may be used for buildings and roads.
- 3(M). Identification of protected land shall consider the existence of cropland, pasture, and meadow on adjacent properties so as to form contiguous masses.
- D. Protection of Historic Structures
 - 1. The Historic District Commission shall be notified of the presence of any building on the site that is more than [50] years old.
 - 2. If the Commission determines that the building has historical merit, the building shall be retained and, where feasible, incorporated into the project.
 - 3(M). Where feasible and necessary to protect views associated with historic structures, buildings and roads shall be located to minimize visual impacts and forested buffers shall be employed for screening.
- E. Protection of Rural Character, Scenic Vistas, and Adjacent Properties
 - 1. Buildings and roads shall be located in a manner that retains and enhances the visual character of the rural landscape.

Buildings and roads shall be located so as to minimize interference and land use conflicts with nearby farms and normal agricultural practices and activities.

- 2. Required Buffers
 - a. All "Sensitive Area" buffers required by the Zoning Ordinance and Subdivision Regulations shall be met.
 - b. Buffer from Public Road

Reducing visibility of development along rural roads designated for visual protection in the Comprehensive Plan shall be a priority consideration in locating buildings and roads in a subdivision project.

The buffer along any particular road shall consist of one of the following, as determined by the Planning Commission:

- (M). A minimum [500'] setback, measured from the edge of the right-of-way;
- (M). A minimum [100'] buffer, which shall contain permanently protected existing forest for visual screening; or

- (M). A minimum [200'] buffer, containing at least a [100']-wide area planted in accordance with the specifications at Y.12.05.E.2.c.ii.
- c. Buffers from Adjacent Properties.

A minimum [100'] buffer shall be established on the site along adjacent property boundaries.

- i. If the buffer is forested, the buffer shall be designated as a protected forest buffer.
- ii. If the buffer is not forested, buildings visible from adjacent properties shall be screened according to the following specifications:

For every [100] linear feet of buffer, there shall be planted:

[Three, minimum 2" caliper canopy trees; four, minimum 6', evergreen trees; and either nine, minimum 2' mixed deciduous and evergreen shrubs, or three, minimum 5' understory trees and six, minimum 2' shrubs.]

The applicant may propose, for Planning Commission approval, a comparable list of plant materials for creating a natural visual buffer.

(Note that this type of buffer can interfere with physical connections to adjacent properties. A buffer waiver could be used by the Planning Commission for cases where connections to existing development are desired, and where connections to future development are anticipated. This waiver could be added to the following subsection on "exceptions," Y.12.05.E.2.d).

d. Exceptions

Buffers from roads and adjacent properties may be waived by the Planning Commission or its designee for parent tracts that are less than [twenty] acres in size.

Lots, but not buildings, may be located in buffers provided that all requirements of this subsection (Y.12.05) are met.

3. The Planning Commission may require fencing to protect farming operations and crops from pets, off-road vehicles, and other nuisances which are found to be potential consequences of subdivision approval.

4. Subdivision Roads

Exceptions to the County Road Ordinance may be approved by the County Engineer for the purpose of maintaining and creating a traditional rural community design.

Roads shall be planted, outside the right-of-way on both sides, with shade trees spaced [30] feet apart on center. This provision shall be modified where needed to comply with sight distance safety requirements.

Subdivision access shall be at a point or points which have the least impact on farming activities.

F. Community Design

Buildings and roads shall be designed and located to protect and enhance the Plan-defined character of Rural Protection Areas.

Buildings and roads shall be designed to promote a sense of community within the subdivision by creating focal points such as parks; by providing on-site trails and walkways and creating linkages where possible with greenways and public lands; and by achieving appropriate spatial relationships among buildings and with open space, roads, and adjacent properties and activities.

Building fronts shall not face building rears.

G. Open Space for Community Use and Recreational Areas

Lands on the site that are designated for trails, greenways, or parks in an official adopted plan shall be designated as open space.

Y.12.06 Designation, Protection, and Ownership of Open Space

Land used to satisfy the required 80 percent open space for the RPD shall be protected as set forth in Y.12.06.B to ensure the preservation and continued maintenance of the open space for its intended purposes in perpetuity. Ownership of the open space and other matters deemed necessary to carry out the purposes of this Ordinance shall be included. The approved subdivision plat shall clearly delineate the open space according to its classification under Y12.06.A, and shall include a recitation of the appropriate paragraph(s) under Y12.06.A.

A. Designation of Open Space

Land on the site that meets one or more of the following criteria shall be included in the designated open space.

(The following approach of classifying the open space is helpful to long-term protection. It provides a sense of the land's purpose in the larger scheme of rural open space, and provides a focus for enforcement and maintenance priorities.)

- 1. Farm Preserve Land used for crops, pasture, or meadow and which is of adequate size and configuration to continue these functions as determined by the County Agricultural Preservation Board.
- 2. Woodland Preserve Areas of forest retention, reforestation, or afforestation that are to remain undisturbed by buildings, lawns, and roads and which are of adequate acreage and configuration to allow for silviculture or wildlife management, as determined by a forester licensed in the State of Maryland.
- 3. Sensitive Areas Wetlands, streams and their buffers, 100 year floodplains, habitats of threatened and endangered species, and steep slopes.
- 4. Public Access Open Space Land to be deeded to a government agency or non-profit land trust which agrees to permit public access for natural parks or other passive recreational purposes.
- 5. Forest Buffer Forested, reforested, or afforested land that meets a criterion in Section Y.12.05.E.2 of this Ordinance.

If the total acreage of lands meeting criteria A.1 through A.5 exceeds the 80 percent minimum required, the excess land may be used for development. However, in determining the designation of open space, the concept plan shall include lands that are most critical for satisfying the purposes of the RPD and Section Y.12.05 of this Ordinance.

Land designated as open space and meeting one or more of criteria A.1 through A.5 may be retained as an undivided open space parcel or may be subdivided as individual open space parcels, provided each parcel continues to meet the applicable criteria and is at least [20] acres in size. In no case shall designated open space be eligible for future development.

- B. Preservation of Open Space
 - 1. Conservation Easements (see Appendix)

Upon the recording of a subdivision, a conservation easement shall be placed on all lands and private waters used to satisfy the 80 percent open space requirement of the RPD. The conservation easement shall run with the land, provide for protection in perpetuity, and be granted and deeded to the County, a County-approved non-profit land trust, or other qualified organization approved by the County. The conservation easement shall be solely for the purpose of ensuring the land remains undeveloped and shall not, in any way, imply the right of public access or any other right or duty not expressly set forth by the terms of the easement.

2. Deed Covenants and Owner's Certificate

Covenants in the deeds of all property owners and an owner's certificate on the recorded plat shall state that the open space shall not be used as building sites. The covenants in the deeds of all property owners and a note on the subdivision plat shall state that farming practices which conflict with residential use and enjoyment may occur on adjacent lands and are permitted by right and are the preferred uses.

- C. Ownership of Open Space
 - 1. The owner of record at the time of subdivision approval may retain title to those parcels of open space identified for retention on the concept plan, or convey these to the homeowners' association.
 - 2. Any open space land not accepted for public ownership or retained by the owner shall be owned and maintained by a homeowners' association comprised of the owners of all the lots within the cluster subdivision.
 - 3. Open space land held by a homeowner's association shall be governed by covenants addressing the method of maintenance, maintenance fee and insurance arrangements, mandatory membership and assessment requirements, public offering statement, improvement of common property, timing of conveyance of common property, timing of transition of governance to the homeowner's association, and maximum assessments.

(This Model is structured to allow retention of certain open space parcels by the owner. This provision accounts for the possibility that owners may want to capitalize on resources such as farmland and forest land. If protection of resource utilization is not a goal of the jurisdiction, this section should be limited to two options: either the land is owned by the homeowners' association, or it is dedicated to public ownership.)

Model Four: Density Incentives to Encourage Rural Enclave Development (Kent County) This model is an excerpt from Kent County's Agricultural Zone, which uses a "density incentive" to encourage enclave development, a specialized form of clustering. The zone permits "scattered" development on a site, but only at a very low density (one dwelling unit per 30 acres). Design guidelines for enclave projects help protect farming and rural character. The County also applies other general guidelines for development in the Agricultural Zone. The reader should take note of several unique features that combine to make this a worthy cluster, as well as growth management, model. These features include the specific levels and ratios of permitted densities, the use of both minimum and maximum lot sizes, the establishment of a maximum enclave size, the use of design guidelines, and the large ratios of open space under the enclave (and even the "standard") method of development.

Agricultural Zone

I. Definitions

- <u>Enclave</u> (*Clustering*): This technique groups house sites close together around access courts with the remainder of the tract left in its natural state. Access to the enclave must be from an internal private road. The purpose of this type of design is to minimize the loss of productive agricultural land due to development, to maintain the visual quality of the County's agricultural landscape, and to reduce the cost of site, street, and utility construction.
- <u>Standard Development</u>: This alternative accommodates traditional subdivision design. Access to the lots must be from an internal public or private road. The purpose of this option is to allow larger scale developments than the enclave technique but to reduce the overall density and preserve significant amounts of agricultural land.
- <u>Scattered Development</u>: This alternative offers the fewest design and access restrictions but also the lowest overall density. Its purpose is to accommodate the landowner who wishes to subdivide on a small scale and maintain the primary use as agricultural.
II. Density, Height, Area, Lot Width, and Yard Requirements

Enclave <u>Development</u>	Standard <u>Development</u>	Scattered Development	
Units Per Acre (d.u. / acre)	0.1 (1/10)	0.05 (1/20)	0.033 (1/30)
Minimum Lot Size Maximum Lot Size	1/2 acre 2 acres	1 acre 5 acres	2 acres N/A
Minimum Lot Width On Public Road Internal Road	N/A 75'	N/A 200'	200′ 100′
Minimum Yard Front Side Rear Waterfront	50' 15' 25' 100'	100' 30' 100' 100'	150' 30' 50' 100'
Maximum Height	35' or 2 1/2 stories	35' or 2 1/2 stories	35' or 2 1/2 stories
Lot Line Setback from External Road	600′	300′	N/A
Road Type	Internal Private	Internal Public or Private	Public Private
Maximum Enclave Size	10 acres	N/A	N/A
Vegetative Screening	Required	Required	Required

Lot Site: All plans should minimize the use of tillable soils for development and maximize the use of *[gently]* sloped and forested areas, which are otherwise less productive for agricultural uses.

Remaining Agricultural Land: The applicant must show that the agricultural land remaining after subdivision is suitable for a commercially viable agricultural enterprise.

(Protected Open Space;90%75%N/Ahypothetical calculation,based on standards above)

III. Enclave Design Standards

- 1. The purpose of the Enclave development pattern is to:
 - a. Minimize the loss of productive agricultural land;
 - b. Maintain the visual quality of the County's agricultural landscape; and
 - c. Reduce the cost of site, street, and utility construction.
- 2. Access to the Enclave must be from a single internal private road.
- 3. The appearance of an Enclave from a public road shall be that of a grouping of farm buildings in that they are clustered together and obviously a use subsidiary to the prime use of the land as agriculture.
- 4. Landscaping that defines the access road along its entire length is desirable.
- 5. The enclave shall be planned and designed as a single unit with careful consideration given to the relationship of structures to one another, landscaping, screening, views, light and air, and internal circulation.
- 6. Strong provision should be made for walking as opposed to vehicular connections within the Enclave.
- 7. Street widths, alignments, and parking should be carefully scaled to the size of the Enclave.
- 8. The streetscape of the Enclave should be designed in detail to avoid repetitious setbacks, driveways, elevations, and landscaping.
- 9. Where an Enclave incorporates an existing historic building, building heights, exterior features, and building arrangements should be harmonious with the historic structure.

Model Five: Clustering for Protection of Sensitive Areas The following ordinance was prepared by Carroll County as a means of environmental resource protection for residential development. It applies to areas having community water and/or sewer, and as an alternative to large-lot development in the Conservation zone. The ordinance is part of the County's implementation program for the County's Master (Comprehensive) Plan and the Planning Act of 1992. The ordinance uses a formula to determine the number of permitted units. It also incorporates modest density increases to encourage cluster development.

Cluster Ordinance (Carroll County)

I. Definitions.

- <u>Cluster Subdivision</u>: A development that groups residential lots and uses on specific portions of a development site in order to reserve open space; environmental or landscape resources; and recreation or public uses by permitting lots smaller than the otherwise required minimum lot size for the zoning district.
- <u>Environmental Resource Area</u>: This term is to be accorded the same definition as set forth in the Carroll County Environmental Resources element of the Master Plan.
- <u>Environmental Resource Land</u>: The combined total acreage of all streams, stream buffers, 100-year floodplains, wetlands, steep slopes, and wellhead buffers on the subject development site.
- II. The Planning and Zoning Commission may authorize the division of tracts or parcels of land into lots, and such lots and their yards may be smaller than otherwise required in this Ordinance; provided that the following conditions are met:
 - (a) Cluster subdivisions are allowed in any district where residences are permitted when community water and/or sewerage facilities are available and in accord with the Carroll County Water and Sewer Master Plan.
 - (b) In the Conservation District, cluster subdivisions may be permitted regardless of whether community water and/or sewerage facilities are available. Clustered lots in the Conservation district without public water and/or sewerage shall average 2.0 acres or less in size and be a minimum of one hundred and fifty (150) feet in width.

- (c) (1) An area not to be less than twenty-five percent (25%) of the gross acreage of any tract submitted for cluster subdivision shall be reserved for a combination of open space, protection of environmental resources, active recreation, and/or public uses. This area may not include roads.
 - (2) In residential district subdivisions of 6 acres or more, a minimum of ten percent of the required reserved land or 1.5 acres, whichever is greater, shall be suitable for active recreational use and may not exceed a grade of three percent.
- (d) All lots shall be designed and located to minimize disturbance of and effects upon designated Environmental Resource Areas. All Environmental Resource Land shall be included in the reserved land to the extent possible.
- (e) Access to reserved land shall be carefully designed and located to enable perpetual maintenance.
- (f) All land lying within three hundred feet (300'), as measured horizontally, of the 100-year planned reservoir flood pool shall be protected from development and deeded, in a form suitable to the County or municipality, to a homeowners' association, the County, or the municipality that owns the reservoir.
- (g) Any reserved land not accepted for public ownership shall be designated as Open Space and shall be owned and maintained by a homeowners' association comprised of all the lots within the cluster subdivision.
 - (h) A cluster subdivision approved for receiving transfer of development rights ("TDR") may not increase density greater than two (2) TDR's for every ten lots created.
 - (i) The amount of reserved land and the maximum number of lots and dwelling units shall be based on the following calculations. All figures are calculated by acreage.

Environmental Resource Land (use the Environmental Resources Inventory for the subject site to derive the numbers used in these calculations)		
	Acres	
streams and buffers ("S & B")]		
100-year floodplains outside S & B	+	
wetlands outside S & B and floodplain	+	
steep slopes outside S & B	ł	
wellhead buffers	+	
Total Environmental Resource Land	=	

Reserved Land		
	Acres	
gross tract area (acres) X $.25 = minimum land required to be reserved$		
minimum land required to be reserved (acres) X .10 = minimum active recreation land required)	
(minimum active recreation land required OR 1.5 acres, whichever is greater, (acres)) + environmental resource land (acres) = environmental resources and active recreation land to be reserved		
minimum land required to be reserved (acres) OR environmental resources + active recreation land (acres), whichever is greater		
Total Land Required to be Reserved	=	

Net Tract Area	
gross tract area	
total land required to be reserved	-
Total Net Tract Area Available for Development	

Maximum Density	(du =	dwelling unit)
Density FactorsR-40,000 → 1.25 du/acreR-10,000 → 5 du/acreR-20,000 → 2.5 du/acreR-7,500 → 7 du/acreConservation → .4 du/acre		
Net Tract Area	17770 [™] si – tanna manogens soar talanda ara'n ta	
density factor for district	Х	d.u.
Total Maximum Number of Permitted Dwelling Units		

Appendix: Model Conservation Easement

Historically, the promise of permanently protected open space within or adjacent to a subdivision project has been difficult to achieve where legal mechanisms were not put in place, or were otherwise weak. If the promise of protected open space is not ensured over the longer term, community distrust of the cluster concept will work against its effectiveness as a land use tool. Following, are brief comments about protection mechanisms, followed by a model conservation easement agreement. This booklet recommends this type of easement as an effective means, along with other tools, for ensuring open space protection over the long term.

Protected open space is usually designated on the recorded subdivision plat with notes that spell out the intended use of the open space. Designations and notes on the plat are useful because they are a visual representation and an official recordation of open space. However, plats and notes in the land records are, as a practical matter, easily forgotten over time. This method needs to be complemented with some oversight and enforcement mechanism.

The typical enforcement mechanism is to use deed covenants, running with the land, that bind individual lot owners (and their successors) and a homeowners' association to protect designated open space. This method has the advantage of using an enforcement mechanism (i.e., the association) that is both present on-site and familiar with the terms of the covenants for open space protection.

The disadvantage of using covenants is that these are, by nature, a legal contract, which, like all contracts, can be changed by mutual agreement of the parties to the covenant. Also, covenants can be held unenforceable by reviewing courts where there are previous failures by the association to enforce the covenants. One possible option for overcoming these short-comings is to make the local government a party to the contract so it can step in and enforce the covenants if necessary.

A very effective option is the use of conservation easements; these agreements are not subject to the pitfalls of typical covenants. In order to use a conservation easement one must identify a non-profit land trust or other entity that is agreeable to holding and enforcing the easement. The advantages of a conservation easement are that the open space will be protected permanently, and the easement holder is an organization committed to open space protection.

In summary, this booklet recommends a multi-tiered approach for protecting open space in a cluster development project. All tools cited above have a role in ensuring protection. Two counties in Maryland are trying this multiple approach. In one jurisdiction, the county itself has agreed to hold conservation easements. The use of easements will become easier over time given the recent rise in the number of local land trusts being formed to accomplish a variety of resource protection goals.

DEED OF CONSERVATION EASEMENT

THIS DEED OF CONSERVATION EASEMENT ("Conservation Easement") made this _____ day of _____, 199___, by and between ______, having an address at ______ ("Grantee").

WITNESSETH

WHEREAS the _____[Grantee]_____ is charitable in nature and is created and exists to conserve the natural and scenic qualities of the environment;

WHEREAS Grantors own in fee simple _____ acres of certain real property designated on an approved cluster subdivision plat as "Designated Open Space" ("Property") situate, lying and being in the _____ Election District of _____ County, Maryland, and more particularly described in Exhibit A attached hereto, which was conveyed to the Grantors by ______ by Deed dated ______ and recorded among the land records of ______ County, Maryland in Liber _____, Folio ____;

WHEREAS Grantors are willing to grant a perpetual Conservation Easement over the Property, thereby restricting and limiting the use of the land and contiguous water areas of the Property, on the terms and conditions and for the purposes hereinafter set forth, and Grantee is willing to accept such Conservation Easement;

WHEREAS Grantors and Grantee recognize the open-space conservation value of the Property in its present state, as a natural and rural area that has not been subject to development, and have identified significant conservation features in Exhibit B attached hereto;

WHEREAS Grantors and Grantee have a common purpose in conserving the dominant scenic, cultural, rural, agricultural, environmentally sensitive, woodland and wetland character of the Property, and, except as hereinafter provided, preventing the use or development of the Property for any purpose or in any manner that would conflict with the maintenance of the Property in its open-space condition;

WHEREAS Grantee is authorized by the laws of Maryland to accept, hold and administer conservation easements, and possesses the authority to accept and is willing to accept this Conservation Easement

under the terms and conditions hereinafter described, and is a "qualified organization" within the meaning of Section 170(h)(3) of the Internal Revenue Code;

NOW, THEREFORE, as an absolute gift of no monetary consideration (\$0.00) but in consideration of the mutual covenants, terms, conditions and restrictions hereinafter set forth, Grantors unconditionally and irrevocably hereby grant and convey unto Grantee, its successors and assigns, forever and in perpetuity a Conservation Easement of the nature and character and to the extent hereinafter set forth, with respect to the Property.

The purpose of this Conservation Easement is to preserve and protect the environment of the Property and to maintain permanently the open-space values of the Property and the dominant scenic, historic, cultural, rural, agricultural, environmentally sensitive, woodland and wetland character of the Property.

To achieve these objectives, the following conditions and restrictions are set forth:

ARTICLE I. DURATION OF EASEMENT

This Conservation Easement shall be perpetual. It is an easement in gross and as such is inheritable and assignable in accordance with Article VI and runs with the land as an incorporeal interest in the Property, enforceable with respect to the Property by Grantee against Grantors and their personal representatives, heirs, successors and assigns.

ARTICLE II. PROHIBITED AND RESTRICTED ACTIVITIES

- A. Industrial or commercial activities other than farming, silviculture and horticulture are prohibited on the Property, except for (1) such activities as can be conducted in existing structures without alteration of the external appearance thereof, and (2) the sale to the public of agriculture or forestry products produced on the Property.
- B. Display of billboards, signs or advertisements is prohibited on or over the Property, except (1) to state solely the name and/or address of the Property and/or the owners; (2) to advertise the sale or lease of the Property; (3) to advertise the agricultural, horticultural, silvicultural and naturalistic uses of the Property; (4) to advertise the sale of goods or services produced by permitted uses of the Property; or (5) to commemorate the history of the Property, its recognition under state or federal historical registers, or its protection under this easement or state and local environmental or game laws; provided that no sign or billboard on the Property shall exceed four feet by four feet. Multiple signs shall be limited to a reasonable number, shall be placed at least ______ feet apart, shall not damage living trees, and shall be placed in accordance with applicable local regulations.
- C. Dumping of soil, trash, ashes, garbage, waste, abandoned vehicles, appliances, machinery or other materials on the Property is prohibited, except that soil, rock, other earth materials, vegetative

matter or compost may be placed (1) as may be reasonably necessary for agriculture and silviculture on the Property or (2) as may be reasonably necessary for the construction and/or maintenance of structures permitted under this Conservation Easement and means of access.

- D. Excavation, dredging, mining and removal of loam, gravel, soil, rock, sand, coal, petroleum and other materials are prohibited, except (1) for the purpose of combatting erosion or flooding, (2) for agriculture and silviculture on the Property, or (3) for the construction and/or maintenance of permitted structures, homesites, means of access and wildlife habitat.
- E. Diking, draining, filling or removal of wetlands is prohibited.
- F. Management and harvesting of all forests on the Property shall be in accordance with the <u>Guide to</u> <u>Forest Harvest Operations and Best Management Practices</u> or comparable provisions of any guidelines or regulations which may replace the <u>Guide</u> in the future or as they may be amended from time to time.
- G. No building, facility, or other structure shall be constructed on the Property after the date of this Conservation Easement, except:
 - (1) To construct accessory structures designed and used for the purpose of serving the residences of the subdivision project (for example, garage, well house, swimming pool, and pier);
 - (2) To construct accessory structures designed and utilized in connection with the agricultural, horticultural, forestry, and naturalistic uses of the Property;
 - (3) Except for those structures listed as historic in Exhibit ____, to replace all existing structures and other structures permitted under this Conservation Easement with structures of similar purpose;
 - (4) Except where otherwise provided by Article ____ (where applicable to historic structures), to improve, repair, restore, alter, expand, remodel, and maintain all existing structures and other structures permitted under this Conservation Easement in this Article;
 - (5) To construct and maintain reasonable means of access to all permitted uses and structures.
 - (6) Grantors shall notify Grantee at least forty five (45) days in advance of any work for construction or preparations for construction and any such change shall be subject to the prior written approval of Grantee.
- H. The total number of residential structures (including for example, but not limited to, principal residences, guest houses, tenant houses, farm manager houses, and seasonal cabins) on the Property shall never exceed ____.
- I. Future subdivision of this Property is prohibited.

- J. Grantors shall establish and maintain a vegetative buffer strip along the ______ River (Creek, etc.). The minimum width of the buffer strip along the ______ River (Creek, etc.) shall be 100 feet (or larger as required by applicable law). Disturbance of the buffer strip is limited to activities reasonably necessary for (1) erosion control; (2) forest or wildlife management; (3) recreational water uses and water-dependent structures; (4) hunting, fishing, or trapping; or (5) access to the water. Manure and compost shall not be stored within 100 feet of streams or Bay shorelines. Pesticides, insecticides, herbicides or fertilizers shall not be used or deposited within 100 feet of streams or Bay shorelines.
- K. Grantors hereby grant to Grantee all development rights (except as specifically reserved herein) that are now or hereafter allocated to, implied, reserved or inherent in the Property, and the parties agree that such rights are terminated and extinguished, and may not be used or transferred to any portion of the Property as it now or hereafter may be bounded or described, or to any other property adjacent or otherwise, nor used for the purpose of calculating permissible lot yield of the Property or any other property.
- L. All rights reserved by Grantors or activities not prohibited by this Conservation Easement shall be exercised so as to prevent or to minimize damage to water quality, air quality, land/soil stability and productivity, wildlife, scenic and cultural values, and the natural topographic and open-space character of the Property.
- M. Except to the extent that prior written approval of Grantee is required by any paragraph of this Article, all rights reserved by Grantors or not prohibited by this Conservation Easement are considered to be consistent with the conservation purposes of this Conservation Easement and require no prior notification or approval, except that, if Grantors believe or reasonably should believe that the exercise of a reserved right may have a significant adverse effect on the conservation interests associated with the Property, Grantors shall notify Grantee in writing before exercising such right.

ARTICLE III. ENFORCEMENT AND REMEDIES

- A. Upon any breach of the terms of this Conservation Easement by Grantors, Grantee may, after reasonable notice to Grantors, exercise any or all of the following remedies:
 - (1) institute suits to enjoin any breach or enforce any covenant by <u>ex parte</u> temporary, and/or permanent injunction either prohibitive or mandatory; and
 - (2) require that the Property be restored promptly to the condition required by this Conservation Easement.

Grantee's remedies shall be cumulative and shall be in addition to any other rights and remedies available to Grantee at law or equity. If Grantors are found to have breached any of Grantor's obligations under this Conservation Easement, Grantors shall reimburse Grantee for any costs or expenses incurred by Grantee, including court costs and reasonable attorney's fees.

- B. No failure on the part of Grantee to enforce any covenant or provision hereof shall discharge or invalidate such covenant or any other covenant, condition, or provision hereof or affect the right of Grantee to enforce the same in the event of a subsequent breach or default.
- C. Grantee, its employees and agents and its successors and assigns, have the right, with reasonable notice, to enter the Property at reasonable times for the purpose of inspecting the Property to determine whether the Grantors, their personal representatives, heirs, successors or assigns are complying with the terms, conditions and restrictions of this Conservation Easement. This right of inspection does not include access to the interior of buildings and structures.

ARTICLE IV. PUBLIC ACCESS

The granting of this Conservation Easement does not convey to the public the right to enter the Property for any purpose whatsoever.

ARTICLE V. EXHIBITS

The following exhibits are hereby made a part of this Conservation Easement:

- A. <u>Exhibit A: Boundary Description and Property Reference</u> is attached hereto and made a part hereof. Exhibit A consists of _____ pages.
- B. <u>Exhibit B: Summary of Conservation Values</u> is attached hereto and made a part hereof. Exhibit B consists of _____ pages.
- C. <u>Exhibit C: Inventory of Existing Structures</u> is attached hereto and made a part hereof. Exhibit C consists of _____ pages.
- D. Exhibit D: Color Slides of the Property With Description of Slides and Slide Index Numbers is kept on file at the principal office of the Grantee and is fully and completely incorporated into this Conservation Easement as though attached hereto and made a part hereof. Exhibit D consists of _____ color slides and ____ pages.
- E. <u>Exhibit E: Annotated Aerial Photograph of the Property</u> is kept on file at the principal office of the Grantee and is fully and completely incorporated into this Conservation Easement as though attached hereto and made a part hereof. Exhibit E consists of one page.

These exhibits reflect the existing uses, conservation values and structures on the Property as of the date of this Conservation Easement.

ARTICLE VI. MISCELLANEOUS

- A. Grantee may assign, upon prior written notice to Grantors, its rights under this Conservation Easement to any "qualified organization" within the meaning of Section 170(h)(3) of the Internal Revenue Code or the comparable provision in any subsequent revision of the Code and only with assurances that the purposes of this Conservation Easement will be maintained; and, if any such assignee shall be dissolved or shall abandon this Conservation Easement or the rights and duties of enforcement herein set forth, or if the proceedings are instituted for condemnation of this Conservation Easement, the easement and rights of enforcement shall revert to Grantee; and if Grantee shall be dissolved and if the terms of the dissolution fail to provide a successor, then Grantors, their personal representatives, heirs, successors or assigns, shall institute in a court of competent jurisdiction a proceeding to appoint an appropriate successor as Grantee. Any such successor shall be a "qualified organization" within the meaning of Section 170(h)(3) of the Internal Revenue Code or the comparable provision in any subsequent revision of the Code. No assignment may be made by Grantee of its rights under this Conservation Easement unless Grantee, as a condition of such assignment, requires the assignee to carry out the conservation purposes of this Conservation Easement.
- B. Grantors agree for themselves, their personal representatives, heirs, successors and assigns, to notify Grantee in writing of the names and addresses of any party to whom the Property, or any part thereof, is to be transferred at or prior to the time said transfer is consummated. Grantors, their personal representatives, heirs, successors and assigns further agree to make specific reference to this Conservation Easement in a separate paragraph of any subsequent deed or other legal instrument by which any interest in the Property is conveyed.
- C. Grantee agrees to hold this Conservation Easement exclusively for conservation purposes, as defined in Section 170(h)(4)(A) of the Internal Revenue Code.
- D. The donation of this Conservation Easement gives rise to a property right, immediately vested in Grantee, with a fair market value equal to the proportionate value that the Conservation Easement bears to the value of the Property as a whole.
- E. This Conservation Easement shall be construed to promote the purposes of the statutes creating and governing the Maryland Environmental Trust, the purposes of Section 2-118 of the Real Property Article of the Annotated Code of Maryland, and the conservation purposes of this Conservation Easement, including such purposes as are defined in Section 170(h)(4)(A) of the Internal Revenue Code.
- F. The provisions of this Conservation Easement do not replace, abrogate or otherwise set aside any local, state or federal laws, requirements or restrictions applicable to the Property.
- G. This instrument sets forth the entire agreement of the parties with respect to the Conservation Easement and supersedes all prior discussions, negotiations, understandings or agreements relating to the Conservation Easement. If any provision is found to be invalid, the remainder of the provi-

sions of this Conservation Easement, and the application of such provision to persons or circumstances other than those as to which it is found to be invalid, shall not be affected thereby.

- H. Grantee shall record this instrument in timely fashion in the official records of _____ County, Maryland, and may re-record it at any time as may be required to preserve its rights under this Conservation Easement.
- I. Grantors and Grantee agree that all mortgages and deeds of trust affecting the property are subordinate to the rights of Grantee under this Conservation Easement. Grantors have provided a copy of this Conservation Easement to all mortgagees and trustees of deeds of trust affecting the Property as of the date of this Conservation Easement, and each mortgagee and trustee has subordinated the mortgage or deed of trust to this Conservation Easement by signing a subordination clause at the end of this Conservation Easement, which shall be recorded in the land records at the time of recording of the remainder of this Conservation Easement.
- J. Any notices by Grantors to Grantee pursuant to any provision hereof shall be sent by registered or certified mail, return receipt requested, addressed to ______.
- K. In any case where the terms of this Conservation Easement require the consent of Grantee, such consent shall be requested by notice to Grantee. Such consent shall be deemed to have been given unless within forty-five (45) days after receipt of notice Grantee mails notice to Grantors of disapproval and the reason therefore.

TO HAVE AND TO HOLD unto the _____[grantee]_____, its successors and assigns, forever. The covenants agreed to and the terms, conditions, restrictions and purposes imposed as aforesaid shall be binding upon Grantors, their survivors, agents, personal representatives, heirs, assigns and all other successors to them in interest, and shall continue as a servitude running in perpetuity with the Property.

IN WITNESS WHEREOF, Grantors and Grantee have hereunto set their hands and seals the day and year above written.

GRA	GRANTORS:(SEA	
nam	e	(SEAL)
nam	e	
STATE OF MARYLAND,	of	, TO WIT:

I HEREBY CERTIFY, that on this _____ day of ______, 1994, before me the subscriber, a Notary Public of the State aforesaid, personally appeared ______ and _____, known to me (or satisfactorily proven) to be the Grantors of the foregoing Deed of Conservation Easement and acknowl-edged that they executed the same for the purposes therein contained and in my presence signed and sealed the same.

WITNESS my hand and Notarial Seal.

Notary Public My Commission Expires: _____

ACCEPTED BY

_____ AS GRANTEE:

name

[add notary clause for grantee]

[If mortgage]

(Name of bank or individual), a corporation organized and existing under the law of the State of _______, [omit if mortgage is seller financed by individual(s)] who is the Mortgagee under a Mortgage, dated _______, given by (name of property owner _____), and recorded among the Land Records of _______ County, Maryland in Liber _____, folio _____, hereby joins in the execution of this Conservation Easement for the express purpose of subordinating its respective right, title and interest under such Mortgage and in and to the Property to the operation and effect of this Conservation Easement.

IN WITNESS WHEREOF, the Mortgagee has executed and ensealed this Subordination Agreement or caused it to be executed and ensealed on its behalf by its duly authorized representative this _____ day of _____, 199___.

WITNESS:	[NAME OF BANK]	
	Title	(SEAL)
STATE OF	: COUNTY OF	: TO WIT:

I HEREBY CERTIFY that on this _____ day of _____, 199_, before me, a Notary Public for the state and county aforesaid, personally appeared ______, known to me or satisfactorily proven to be the person whose name is subscribed to the foregoing instrument, who acknowledged that [he/she] is the [TITLE: i.e. President, VP, etc] of [NAME OF BANK], a corporation organized and existing under the law of ______, that [he/she] has been duly authorized to execute, and executed, such instrument on its behalf for the purposes therein set forth, and that the same is its act and deed.

IN WITNESS WHEREOF, I have set my hand and Notarial Seal, the day and year first above written.

Notary Public

My commission expires on ______.

[If deed of trust]

	and	, Trustees, and [NAME OF BANK], a
corporation organize	ed and existing under the law of	the State of, who are respec-
tively, the trustee and	d the beneficiary under a deed c	of trust dated,
		rded among the Land Records of
		, folio, hereby join in the execution of this
		ubjecting all of their respective right, title and
	deed of trust and in and to the P	roperty to the operation and effect of such Conser-
vation Easement.		
IN WITNESS WHEF	REOF, each of the said trustees a	nd beneficiary has executed and ensealed this
		led on its behalf by its duly authorized representa-
tives, this day	of, 199	
WITNESS:		
		(SEAL)
	Trustee	,
		(SEAL)
	Trustee	
ATTEST:		
[Name of Bank], a co	prporation organized and existin	ng under the law of the State of
	1	
	By:	(SEAL)
Name	Title	
STATE OF	: COUNTY OF	: TO WIT:
I HEREBY CERTIFY	that on this day of	, 199, before me, a Notary Public for

the state and county aforesaid, personally appeared ______, Trustee, known to me or satisfactorily proven to be the person whose name is subscribed to the foregoing instrument, who acknowledged that [she/he] has executed it as trustee for the purposes therein set forth, and that it is [her/his] act and deed.

IN WITNESS WHEREOF, I have set my hand and Notarial Seal, the day and year first above written.

Notary Public

My commission expires on ______.

야 없는

STATE OF _____: COUNTY OF _____: TO WIT:

I HEREBY CERTIFY that on this _____ day of _____, 199_, before me, a Notary Public for the state and county aforesaid, personally appeared ______, Trustee, known to me or satisfactorily proven to be the person whose name is subscribed to the foregoing instrument, who acknowledged that [she/he] has executed it as trustee for the purposes therein set forth, and that it is [her/his] act and deed.

IN WITNESS WHEREOF, I have set my hand and Notarial Seal, the day and year first above written.

Notary Public

My commission expires on _____.

STATE OF _____: COUNTY OF _____: TO WIT:

I HEREBY CERTIFY that on this _____ day of ______, 199__, before me, a Notary Public for the state and county aforesaid, personally appeared ______, known to me or satisfactorily proven to be the person whose name is subscribed to the foregoing instrument, who acknowledged that [she/he] is the _______ of [NAME OF BANK], a corporation organized and existing under the law of _______, that [she/he] has been duly authorized to execute, and has executed such instrument on its behalf for the purposes herein set forth, and that the same is its act and deed.

IN WITNESS WHEREOF, I have set my hand and Notarial Seal, the day and year first above written.

Notary Public

My commission expires on _____. (inside rear cover)



• • • •

. .

.

Prepared Under the Direction of:

Ronald N. Young, *Deputy Director* Scribner H. Sheafor

Principal staff:

William Atkinson Larry Duket Vivian Marsh Robert Rosenbush

Design:

Mark S. Praetorius Ruth O. Powell

Word Processing:

Betsy Zentz

The Maryland Office of Planning wishes to thank the Directors of county and municipal planning agencies; the Technical Support Group of the Cabinet Interagency Committee, the Chesapeake Bay Foundation, and others who so graciously gave of their time to review drafts of this publication. The Maryland Office of Planning also thanks Mr. Thomas Saunders, Director of the Maryland Environmental Trust, for contributing the model Conservation Easement Agreement and other valuable ideas.

This publication is printed on recycled paper.

