PRESERVATION AND PROGRESS IN THE DRAGON RUN

RECOMMENDATIONS for a MODEL COMPREHENSIVE PLAN DISTRICT and ZONING OPTIONS for the DRAGON RUN

A Report of the "Preservation and Progress in the Dragon Run"

Task Force to the Dragon Run Steering Committee and to the Counties of:

Essex Gloucester King and Queen Middlesex

in Virginia

FINAL PROJECT REPORT

September 20, 2005







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PUBLIC PRESENTATION

BACKGROUND

The following series of recommendations have been prepared for the "Preservation and Progress in the Dragon Run" Task Force, composed of representatives from Essex, Gloucester, King and Queen and Middlesex Counties in Virginia. They were prepared for presentation to the Dragon Run Steering Committee and to the four counties that are represented in the Steering Committee and Task Force. The recommendations are intended to respond to each county's long-range desire to conserve the important natural resources and traditional rural economy and small businesses of the Dragon Run area.

In 2002, these four Counties, which contain the natural watershed of the Dragon Run, signed a Memorandum of Agreement to preserve the natural resources and rural qualities of the area. In particular, one of the objectives of the Memorandum was to "Achieve consistency across county boundaries among land use plans and regulations in order to maintain farming and forestry and to preserve natural heritage areas by protecting plants, animals, natural communities, and aquatic systems.¹"

The recommendations in this report are not intended to achieve absolute uniformity in land use regulations across county borders. However, they should achieve an overall consistency and continuity of purpose in conserving the Dragon Run. In general the recommendations rest on two fundamental principles:

- Consistency of purpose
- Flexibility of application

The recommendations are inherently flexible and allow each locality to customize the recommended planning and zoning provisions to best meet their particular code framework and planning context.

There are two basic parts to the recommendations:

- 1. A model Comprehensive Plan District for the Dragon Run
- 2. A recommended "Zoning Framework," consisting of optional zoning provisions for implementing the policies of the model Comprehensive Plan District

These two components of the recommendations are intended to give each county that adopts them a consistent set of policies for conserving the Dragon Run and protecting its rural economy, while suggesting a variety of implementation mechanisms for incorporation into their respective zoning ordinances. While the model comprehensive plan district is general in nature, and is intended to apply to all four counties, the zoning

¹ "Memorandum of Agreement, between Middle Peninsula Planning District Commission, County of Essex, County of Gloucester, County of King and Queen County, County of Middlesex to Participate in the Dragon Run Watershed Special Area Management Plan," 2002

recommendations are intended to be selected, modified and customized by each county to best fit their particular zoning and subdivision ordinance frameworks.

NEXT STEPS

The recommendations in this report will be evaluated and refined by the Task Force before they are finalized for recommendation to the Dragon Run Steering Committee and transmitted to each of the counties. Once the model comprehensive plan and zoning recommendations are transmitted to each county, they will be further refined and customized by each county in the Dragon Run area, in order to make them more closely match the key planning and conservation issues and regulatory framework of each individual county. The overall approach embodied in this process, while not intended to achieve absolute uniformity in land use regulations across county borders, should achieve continuity of purpose in conserving the Dragon Run, while allowing each locality the flexibility to tailor to their needs the specific details of implementing the recommendations.

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I. A MODEL COMPREHENSIVE PLAN DISTRICT FOR THE DRAGON RUN

1.0 INTRODUCTION

The Dragon Run is a special resource worthy of preservation. The Dragon Run and its surrounding landscape owe their extraordinary state of preservation to the landowners in the area that have pursued for generations the compatible land uses of farming and forestry on their land. The Dragon Run has always been treasured by the area's residents. Recent scientific study of the stream has also highlighted its critical ecological importance, including the purity of its water, the wealth of rare and unusual natural species it harbors and the rural character of its watershed that has helped to keep it pristine.

The long-term quality of the Dragon Run and its landscape are of primary importance to the County. The County recognizes that maintaining these qualities also relies on maintaining the traditional pattern of rural land uses in the area. The rural way of life and traditional landscape in the Dragon Run area are valued by the residents of the area and are worthy of preservation.

The Dragon Run area is also a "working landscape." It is not a wilderness but an area that families have lived in and made a living from for generations. The Dragon Run Area should not be "frozen in time" but should change and progress in the future, consistent with maintaining its fundamental rural character and the quality of its natural resources. The key to preserving a rural landscape and way of life is to maintain the economic connections that residents have to their land. While this is often affected by economic trends that are beyond local control, the County recognizes that it can act locally and set policies that will encourage compatible businesses such as farming and forestry, practiced according to responsible management practices, to remain as the mainstays of the local economy. The overall intent of the policies for the Dragon Run area in this Comprehensive Plan are for it to remain largely rural, with low intensity uses, and to preserve its key natural areas and its water quality.

In 2002, the County signed a Memorandum of Agreement, in concert with the other counties in the Dragon Run watershed, to preserve the natural resources and rural qualities of the area. In particular, one of the objectives of the Memorandum was to "Achieve consistency across county boundaries among land use plans and regulations in order to maintain farming and forestry and to preserve natural heritage areas by protecting plants, animals, natural communities, and aquatic systems."

The policies in the <u>Dragon Run Compatible Economic Development and Preservation</u>
<u>District</u> are intended to implement the intent of this Memorandum of Agreement, as well as

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the desire of the County for the careful long-term stewardship of the Dragon Run and surrounding landscape.

2.0 INTENT

The intent of the <u>Dragon Run Compatible Economic Development and Preservation</u> <u>District</u> is to:

- 1. maintain the health and quality of the Dragon Run stream system and associated natural areas.
- 2. achieve the objectives of the Memorandum of Agreement and reinforce the existing shared values for preserving the Dragon Run.
- 3. support the compatible economic base of the Dragon Run area and its rural businesses such as farming and forestry that are compatible with preserving the natural health of the stream system.
- 4. support new rural economic development and businesses that are compatible with the traditional pattern of rural land uses in the Dragon Run area.

3.0 DISTRICT DEFINITION

The boundaries of the <u>Dragon Run Compatible Economic Development and Preservation</u> <u>District</u> are generally defined as the boundaries of the <u>watershed</u> of the Dragon Run. The watershed for the Dragon Run is the area where precipitation collects and funnels to end up in the Dragon Run stream. Conditions throughout the watershed affect the water quality of the Dragon Run. It is also the area where compatible rural land uses have predominated and maintained the quality and health of the stream system.

The following policies are intended to apply to the entire watershed of the Dragon Run. Recognizing that some Counties have previously identified some areas within the watershed for more intensive commercial, industrial or residential uses, the intent of the policies for this District is not to prevent development of those areas, but, through policies and standards, to ensure that they are developed in ways that are compatible with the basic intent of preserving the Dragon Run's natural resources and low intensity rural character.

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4.0 POLICIES

The Dragon Run area includes some of the most intact rural landscape and culture in the County. It is also an area with a wealth of natural resources and a stable local economy, based on the wise use of resources such as soils and timber in the region.

The County has set a high priority on preserving the natural resources and rural character and culture in this District and has adopted policies that will work toward this end as follows:

Rural Character

- 1. The Dragon Run District should maintain its rural character into the future. It should continue to adapt to changing times, but it should do so as a predominantly rural area and future changes should be compatible with its traditional character.
- 2. County policies and land use decisions should work toward preserving this rural character and way of life in the area.
- 3. The District should remain an area for compatible rural economic enterprises that help maintain the environmental health of the stream system.
- 4. New development in the District should integrate harmoniously with the existing rural economy and settlement patterns.

Land Use

- 1. Low intensity rural land uses that are consistent with the preservation of the area's natural resources should be the dominant land uses in the District.
- 2. New residential development in the District should generally be of a very low intensity rural character, incorporating standards to ensure compatibility with the natural resources and rural surroundings.
- 3. New non-residential development in the District should also be low intensity, compatible with surrounding rural areas and incorporate development standards and management practices that ensure preservation of the area's natural resources.

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Water and Wastewater

- 1. The extension of central sewer and water is not considered consistent with preserving the area's rural character and land uses and the County should work with other jurisdictions and regional authorities to find effective alternatives to central sewer and water facilities in the District.
- 2. Wastewater disposal should be on-site and generally of a type that causes the least impact on the quality and purity of ground and surface water.

Compatible Economic Development

- 1. Support the cornerstone rural businesses of the area, such as farming and forestry, and enact policies and ordinances that help protect the long-term viability of these businesses, while ensuring that they are practiced in ways that are compatible with the health of the natural resources on which they depend.
- 2. Encourage compatible new supportive businesses such as value-added farming and timber products, local specialties and handicrafts and small-scale workshops and craft industries, and others that integrate well with the existing rural economy.
- 3. Evaluate local initiatives to assist rural property owners in remaining financially competitive in order to improve the competitiveness of the Dragon Run area's compatible businesses within the region.

Natural Resource Protection

- 1. Protect the key natural resources in the District, including the ground and surface water quality, wetlands and sensitive environmental features, native plant and animal species and their natural habitats and the productive soils that support farming and forestry uses.
- 2. Build partnerships with other jurisdictions and the private sector to address natural resource protection and enhancement issues.
- 3. Link environmental protection to compatible economic development opportunities, and pursue industries that are mutually supportive of natural resource protection in the area.

Recreation and Tourism

1. Discourage the extensive use and exploitation of the area for public recreation and large-scale tourism. Intense, uncontrolled and large-scale visitation of the area works against both the protection of the pristine quality of the Dragon Run and the rural quality of life in the area.

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Encourage small scale and controlled tourism and recreational uses of the area that
preserve natural areas, respect property rights and limit opportunities for
trespassing on private properties in the area. Examples of compatible and
controlled tourism uses include bed and breakfasts, private hunt clubs and
preserves, and private nature tours with strict management and capacity
limitations.

5.0 IMPLEMENTATION

The Comprehensive Plan is a living document. It is intended to be implemented through a series of strategies and actions to be pursued by the County in the coming years. These implementation steps link the Plan to the County's other codes and ordinances and integrate it into the ongoing planning process of the County.

The implementation priorities for this District are listed below. They are directly related to the policies described in the Plan and they serve to guide the County's planning work in the future. However, implementation actions are not the same as policies. It is understood that some of the following actions may be undertaken and others may be modified, as the County explores more effective ways of addressing the basic policy framework set out in this District.

- 1. In reviewing the zoning ordinance standards for properties in the District, support the existing zoning standards that preserve farming, forestry and other compatible uses, as well as future modifications that are consistent with the basic intent of this district.
- 2. Evaluate the zoning standards in the District to identify whether any adjustments should be made to enhance compatible rural businesses without altering the intent of the zoning, such as including performance standards for new residential or commercial development to ensure that it maintains the health of the natural resources and ecology of the Dragon Run.
- 3. Encourage the consideration of future implementation techniques and strategies that conserve existing agricultural and forest land uses and protect the environmental resources of the stream system, such as conservation zoning and subdivision approaches, additional stream buffers and setbacks, purchase of development rights, donation of private easements, landowner compacts and land use taxation.
- 4. Implement programs and exhibits that interpret the natural and cultural heritage of the Dragon Run for both residents and visitors, without encouraging intense or incompatible recreational use of the area's sensitive resources.

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5. Target businesses and employment opportunities focused on compatible rural businesses, such as environmentally responsible farming and forestry and value-added by-products as part of the County's economic development strategy for the Dragon Run area.

II. A RECOMMENDED ZONING FRAMEWORK FOR THE DRAGON RUN

INTRODUCTION

The following series of zoning recommendations have been prepared for the "Preservation and Progress in the Dragon Run" Task Force, composed of representatives from Essex, Gloucester, King and Queen and Middlesex Counties in Virginia. The recommendations are intended to respond to each county's long-range desire to conserve the natural qualities and important resources of the Dragon Run stream and its natural drainage area.

These Zoning Recommendations were prepared in conjunction with the "Dragon Run Compatible Economic Development and Preservation District," intended to serve as a model of a new district for inclusion in each of the County's comprehensive plan documents. While the model comprehensive plan district is general in nature, and is intended to apply to all four counties, the following Zoning Recommendations are intended to be selected, modified and customized by each county to best fit their particular zoning and subdivision ordinance frameworks.

The Zoning Framework is presented in the form of a model overlay district for the Dragon Run area, with a series of optional provisions that address specific areas, such as:

- Uses in the Drainage Area
- Uses in the Stream Buffer Zone
- Optional Conservation Subdivision Development

The recommendations are intended for review by the "Preservation and Progress in the Dragon Run" Task Force of the Dragon Run Steering Committee. They are intended to be general models of regulations that can be revised and customized for each of the four counties in the Dragon Run area. These model zoning recommendations have not been reviewed by County staff or by legal specialists. It is recommended that these model provisions and recommendations be reviewed by the County Attorney and Zoning Administrator in each county at the time of their consideration for potential inclusion in the individual county ordinances.

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SUMMARY OF THE RECOMMENDATIONS

BASIC STRUCTURE

The goal of the zoning recommendations is to conserve the natural resources of the Dragon Run and protect the compatible rural businesses in the surrounding area. In the Task Force discussions, there was a clear desire to address this conservation at both the watershed, or "drainage area" scale, and at the streamside or "stream buffer" scale.

For this reason, the recommendations set up two basic zones that could be applied within the umbrella of an overlay district. These zones and a potential "Dragon Run Conservation Overlay District" are also illustrated at the end of this report in the Summary Illustrations:

- 1. <u>The Drainage Area Conservation Zone</u> the area that naturally drains into the Dragon Run (the "watershed")
- 2. <u>The Stream Buffer Zone</u> a 200-foot buffer landward of the existing Chesapeake Bay Resource Protection Area within the overlay district.

BASIC CONTROLS

The recommendations work to achieve the goal of conserving the Dragon Run and protecting rural businesses through three basic aspects of land use and subdivision controls:

1. Provisions for Permitted Uses in the Drainage Area of the Dragon Run:

A list of prohibited and special exception uses is defined that modify the use list of the base zoning of all land in the overlay zone. In general, the overwhelming majority of permitted uses in the base zoning are unchanged by this provision. However, a few very intensive uses are prohibited and some others that call for special attention and review are put into the special exception category. This is a relatively modest alteration of the base zoning in each County. It does, however, establish some basic controls over the potential for incompatible uses at the very broad scale of the whole drainage area or watershed. It is also anticipated that this basic list of uses would be modified by each County as the recommendations are customized for a particular locality.

2. Provisions for Permitted Uses in the Stream Buffer:

The recommendations also call for a 200-foot "Stream Buffer Zone" outside the Chesapeake Bay RPA, as the basis for extending land use controls adjacent to the stream system. By linking the buffer zone to the RPA, it makes it easy to delineate, and by strictly limiting the land uses in that zone, it makes it easy to administer and understand. The Stream Buffer

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Zone basically limits land uses to a set of very low-intensity uses that are generally the same as those currently listed in the existing Dragon Run Conservation District in Middlesex and King and Queen County. It also permits farming and forestry uses by right, in the full extent of the buffer, provided BMP's are instituted.

In general, the Stream Buffer Zone replaces the current Dragon Run Conservation District with a much simpler buffer zone, defined by linear distance, that builds on the existing RPA zone that is already defined in each County.

3. Provisions for a Conservation Subdivision Option:

Finally, the recommendations introduce a new option for small residential subdivisions called the Conservation Subdivision option. This is a "density neutral" option – it doesn't affect the underlying density in the base zone. The intent of the Conservation Subdivision approach is to allow for more flexibility in the design of small subdivisions in exchange for permanent protection of a portion of the subdivided tract. This provision is intended to respond to the potential for the Dragon Run area to be fragmented over time by the growth of minor residential "by right" subdivisions.

While not a mandatory provision, the Conservation Subdivision option offers an important incentive – an increase in the number of lots that could be subdivided under ministerial approvals (e.g. a minor subdivision) up to a maximum of 10 lots. Currently, there are a variety of restrictions on minor subdivisions in the counties, but they generally allow ministerial approval for subdivisions of no more than two to six lots.

In exchange for this incentive, the Conservation Subdivision option requires that at least 75% of a tract be set aside for "Conservancy Lots" of at least 25 acres each, with one house each, and that the lots be permanently protected from further development and subdivision by a legal instrument such as a conservation easement. The remainder of the tract may be subdivided only as small lots of 1-2 acres each, up to a total maximum of 10 lots per tract (with a required minimum tract size of 50 acres). Thus, the net result of a conservation subdivision is a significant portion of a tract being permanently protected from further development, without transferring it to public ownership. The intent of this approach is to preserve sufficient land that will encourage farming and forestry over the long term, while retaining land in private ownership.

The Conservation Subdivision option is also illustrated at the end of this report in the Summary Illustrations.

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ZONING RECOMMENDATIONS FOR AN OVERLAY DISTRICT

1.0 PURPOSE AND INTENT

The following language is recommended to be included as part of any new zoning provisions or potential overlay district for preservation of the Dragon Run:

The purpose of the [this zoning ordinance revision] is to conserve the natural qualities and important natural resources of the Dragon Run stream and its natural drainage area, and to:

- A. Protect the natural drainage area of the Dragon Run stream system from land uses with potential off-site impacts that could impair the water quality and ecological integrity of the stream system, and from land uses that are inconsistent with the rural character and the compatible agricultural and forestry businesses of the area.
- B. Protect the physical and ecological integrity of the stream ecosystem.
- C. Retard runoff, prevent erosion, filter non-point source pollution from runoff, moderate stream temperature, and provide general environmental protection of the Dragon Run stream network.
- D. Provide a residential development option that permits flexibility of design in order to promote environmentally sensitive and efficient uses of the land.
- E. Preserve in perpetuity unique or sensitive natural resources such as groundwater, floodplains, wetlands, streams, steep slopes, woodlands and wildlife habitat, through an alternative residential development option.
- F. Permit clustering of houses and structures in less environmentally sensitive areas, which will reduce the amount of infrastructure, including roads and utility easements, necessary for residential development.

2.0 DESCRIPTION

Provisions for the preservation of the Dragon Run are recommended at two basic scales or levels. In general, they address a land area that consists of the natural watershed of the Dragon Run stream, including areas adjacent to the stream that act as a natural transition zone between the sensitive habitats of the stream and adjacent land uses.

An overlay district can be described in the zoning ordinance that consists of two basic zones:

1. <u>The Drainage Area Conservation Zone</u> – this area is defined as that land within the County that naturally drains into the non-tidal freshwater stream system upstream of the U.S. Route 17 bridge, and the tidal freshwater stream system from the U.S. Route 17 bridge to its mouth at Meggs Bay,

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generally referred to as Commonwealth Hydrologic Unit ID 'CO2' as described by the Virginia Department of Conservation and Recreation

2. <u>The Stream Buffer Zone</u> – this area is defined as that land within the County that is a distance of 200 feet landward from the established Chesapeake Bay Resource Protection Area identified in the County under Section __ of the County Code, that is also within the Drainage Area Conservation Zone described above.

The combination of the two zones provide broad, relatively lenient restrictions at the watershed scale, combined with stringent restrictions at the stream buffer scale. A county may choose to adopt either or both of these zones in a new conservation overlay district. However, the maximum benefit is achieved by including both of the zones in a comprehensive overlay district. The stream buffer zone limits all uses except for passive conservation and recreational uses in the area immediately adjacent to the stream, providing direct benefits to water quality and habitat along the stream. On the other hand, the drainage area zone only limits a few intensive uses but is applied to the very broad watershed scale. This provision affords some benefit to the Dragon Run by limiting uses that would be potentially detrimental to the ground and surface water in the area. More importantly, it also limits the uses that would be most incompatible with the area's rural character, thus protecting the compatible farming and forestry economic base that has preserved the Dragon Run for generations.

3.0 CONFLICT WITH OTHER REGULATIONS

The recommended zoning provisions should be implemented through the mechanism of an overlay zone. The standards and provisions of the base zoning still apply, unless they are restricted or modified by the provisions of the overlay zone. In order to clarify the precedence of regulations, the following language should be included in any new overlay ordinance:

Where the standards and management requirements of this overlay zone are in conflict with other laws, regulations, and policies regarding land use and development regulations, storm water management and erosion control, wetlands, floodplains, timber harvesting, land disturbance activities or other environmental protective measures, the more restrictive shall apply.

4.0 PERMITTED USES

A. The Drainage Area Conservation Zone:

The function of the Drainage Area Zone is to protect the natural drainage area of the Dragon Run stream system from land uses that could potentially have off-site impacts that could impair the water quality and ecological integrity of the stream system, and from land

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uses that are inconsistent with the rural character and the compatible agricultural and forestry businesses of the area.

The following language should be included to define the permitted and special exception uses in this zone. Each county that chooses to adopt this zoning provision may want to customize the list of uses so that it is compatible with the base zoning districts that are included in its overlay zone. Counties that currently do not have these types of intensive uses permitted throughout the watershed area may choose to forgo this zoning provision if the list of permissible uses in the base zoning is already compatible with the rural character of the Dragon Run area.

<u>Permitted Uses in the Drainage Area Conservation Zone:</u>

All land uses that are permitted or conditional uses in the base zoning district shall be allowed in the Drainage Area Conservation Zone; except as described below:

<u>Prohibited Uses in the Drainage Area Conservation Zone:</u>

Each County may want to customize a list of prohibited uses, based on the uses in its base zoning districts. Examples of intensive uses that may be considered to be put on a prohibited use list include:

Intensive Commercial Uses, e.g.

Truck terminal
Vehicle Dismantling Yard
Automotive Sales
Parking Lots (except as accessory uses)
Laundry Services

Intensive Industrial Uses, e.g.

Heavy Industry
Garbage Service Companies
Meat Packing Operations
Scrap metal Processing Yards
Stockyards
Commercial Feed Lot

Intensive Institutional Uses, e.g.

Detention Facilities Landfill Surface or Subsurface Discharges from a Wastewater Treatment Plant

Special Exception Uses in the Drainage Area Conservation Zone:

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The following uses may be considered for Special Exceptions in the Drainage Area Conservation Zone. As with the prohibited uses above, each County may want to customize a list of Special Exception uses, based on the uses in its base zoning districts. Examples of more intensive uses that may be considered to be put on a Special Exception use list include:

Commercial Uses, e.g.

Automobile racetrack
Self-storage center
Mini-Warehouses
Repair garages
Service businesses
Convenience stores
Commercial animal kennels
Professional occupations
Farm implement sales
Feed, seed, and fertilizer sales

Other Rural Uses, e.g.

Camps and campgrounds
Marinas and boat yards
Sawmills and planing mills
Seafood processing plants
Surface mining
Land application of biosolids
Manufactured homes
Golf courses
Publicly owned airports
Homes for the aged
Private landing strips for exclusive use of owners, clients and guests
Public and private communications facilities
Sport shooting facilities
Assembly and retreat facilities

Special Exception Criteria:

In addition, counties may find it effective to set criteria for the determination of special exceptions. Examples of criteria include:

- 1. Shall not additional cause degradation to the water quality or ecological integrity of sensitive environmental areas
- 2. Shall not create environmental or scenic degradation of the Dragon Run stream system
- 3. Shall not be located closer than five hundred (500) feet to any residential district.
- 4. The property shall abut an existing highway maintained by the Virginia Department of Transportation.

B. The Stream Buffer Zone:

The function of the Stream Buffer Zone is to protect the physical and ecological integrity of the stream ecosystem. The following language is an example of the uses that could be defined as permitted in this zone. As with the other use lists, each county may need to fine-tune this list of uses so that it better matches the typical uses for its conservation-type districts.

<u>Permitted Uses in the Stream Buffer Zone:</u>

Only the following are permitted within the Stream Buffer Zone. The uses permitted in the base zoning district shall not be permitted in the Stream Buffer Zone unless they are included in the following list of permitted uses.

- 1. The construction and maintenance of non-commercial catwalks, piers, fences, and duck blinds, provided that such structures are so constructed on pilings as to permit the reasonably unobstructed flow of the tidal areas, or natural flow in non-tidal areas, and to preserve the natural contour of marshes, swamps and water courses.
- 2. The cultivation and harvesting of shellfish and worms for bait.
- 3. Low intensity outdoor recreational activities, including hiking, boating, trapping, hunting, fishing, shellfishing, horseback riding, swimming, and skeet and trap shooting; provided that no structure shall be constructed except as permitted in subscription (1) of this section.
- 4. Conservation, restoration, education, and research activities by private or public resource management agencies or organizations.
- 5. The normal maintenance, repair, or addition to existing roads, highways, or the facilities of any person, firm, corporation, utility, or government abutting on or crossing wetlands or swamps, provided that no waterway is altered and no additional wetlands or swamps are covered or drained.
- 6. The normal maintenance of existing man-made drainage ditches, provided that no additional wetlands or swamps are covered or drained and provided further that this paragraph shall not be deemed to authorize construction of any new drainage ditch.
- 7. Agricultural management activities must incorporate the application of Best Management Practices (BMPs) in a plan approved by the local Soil and Water Conservation District.
- 8. Forestry management activities must incorporate the application of Best Management Practices in a plan approved by the Virginia Department of Forestry.

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The above list of permitted uses is generally derived from the current Dragon Run Conservation Zone of Middlesex and King and Queen counties. As with the Drainage Area Conservation Zone, each county that chooses to adopt this zoning provision may want to customize the list of uses so that it is compatible with its other low intensity or conservation zoning districts, and so that it does not conflict with the provisions of its Chesapeake Bay Protection Ordinance.

Summary

The following chart summarizes the recommended provisions for the two basic zones within a potential overlay district to be adopted by each county.

SUMMARY OF RECOMMENDED PROVISIONS FOR A POTENTIAL DRAGON RUN OVERLAY DISTRICT									
ZONE:	Boundaries of Zone	Permitted Uses	Forestry	Agriculture					
DRAINAGE AREA CONSERVATION ZONE	Area naturally draining into the Dragon Run	All uses in Base Zone, except prohibited uses as listed	Permitted as in base zone (no additional restrictions)	Permitted as in base zone (no additional restrictions)					
STREAM BUFFER ZONE	200 ft. landward of the Chesapeake Bay R.P.A.	Specific low- intensity uses as listed	Permitted with BMP's	Permitted with BMP's					

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5.0 CONSERVATION SUBDIVISION OPTION

The Conservation Subdivision Option provides for the use-by-right of conservation subdivisions in a potential Dragon Run Overlay District. The following is a general ordinance amendment to allow Conservation Subdivisions as a development option in an overlay zone. The language may be refined to better fit each county's particular code framework.

GENERAL REGULATIONS

<u>Applicability of Regulations</u>. This Conservation Subdivision option is available as a use by right in the [Overlay District], in all zones except where the base zoning of a parcel is Resource Husbandry (RH) or Conservation (C). Applicants shall comply with all other provisions of the Zoning Ordinance and all other applicable laws, except those that are incompatible with the provisions contained herein.

<u>Ownership of Development Site</u>. The tract of land to be subdivided may be held in single and separate ownership or in multiple ownership. If held in multiple ownership, however, the site shall be developed according to a single plan with common authority and common responsibility.

<u>Minimum Tract Size</u>. The minimum tract size for the establishment of a Conservation Subdivision shall be 50 acres.

APPLICABILITY OF THE SUBDIVISION ORDINANCE TO CONSERVATION SUBDIVISIONS

It is the intent of this development option to create and preserve open space and to provide alternative standards for the development of land to those specified in the Subdivision Ordinance. In cases where the provisions for conservation subdivisions do not address a particular question or issue, the provisions of the Subdivision Ordinance shall apply.

DENSITY AND SUBDIVISION REGULATIONS

In Conservation Subdivisions, the permitted development is density neutral, i.e., the overall number of dwellings allowed is no more or less than the total number of dwellings a conventional subdivision layout would yield under the base zoning of a parcel. However, the number of lots that may be developed as a Minor Subdivision, is hereby increased to a total of 10 (ten) lots, provided that all the other conditions of the district are met.

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LOT TYPES AND SIZES

In a Conservation Subdivision, the tract shall be subdivided into two types of lots hereafter established:

<u>Cluster Lots</u> - the minimum lot size for Cluster Lots shall be one acre. The maximum lot size shall be two acres.

Conservancy Lots – the minimum lot size for Conservancy Lots shall be twenty-five (25) acres

At least 75% of a tract shall be subdivided into Conservancy Lots of 25 acres or greater. No more than 25% of a tract shall be subdivided into Cluster Lots of between one and two acres each.

YARD REQUIREMENTS

Conservancy Lot Yard Requirements

- 1. Lot Area: The minimum lot area shall be 25 acres, excluding area to be used for a private access easement or private street.
- 2. Minimum Lot Width: The minimum lot width at the front property line shall be 100 feet and at the required front yard, 150 feet.
- 3. Building Height: The maximum building height shall be two stories but in no event shall exceed 35 feet.
- 4. Yard Requirements:
 - a. Front Yard: 50 feet.
 - b. Side Yard: 20 feet
 - c. Rear Yard: 50 feet.

Cluster Lot Yard Requirements

- 1. Lot Area: The minimum lot area shall be 1 acre, excluding area to be used for a private access easement or private street. The maximum lot area shall be 2 acres, excluding area to be used for a private access easement or private street.
- 2. Minimum Lot Width: The minimum lot width at the front property line shall be 100 feet and at the required front yard, 150 feet.
- 3. Building Height: The maximum building height shall be two stories but in no event shall exceed 35 feet.
- 4. Yard Requirements:
 - a. Front Yard: 30 feet.

- b. Side Yard: 15 feet
- c. Rear Yard: 30 feet.

PERMITTED USES

Cluster Lot Permitted Uses:

1. Single Family Home

Conservancy Lot Permitted Uses:

- 1. Single Family Home
- 2. Conservation of natural, archeological or historical resources;
- 3. Meadows, woodlands, wetlands, wildlife corridors, game preserves, or similar conservation-oriented areas;
- 4. Walking or bicycle trails, provided they are constructed of porous paving materials;
- 5. Passive recreation areas, such as open fields, trails and natural areas;
- 6. Agriculture, horticulture, silviculture or pasture uses, provided that all applicable best management practices are used to minimize environmental impacts, and such activities are not in conflict with the other provisions of this Ordinance;
- 7. Easements for drainage, access, and underground utility lines;
- 8. Other conservation-oriented uses compatible with the purposes of this ordinance.

REQUIRED EASEMENTS FOR CONSERVANCY LOTS

Conservancy Lot Easements

The Conservancy Lot(s) shall be subject to a permanent conservation easement. The Conservancy Lot(s) shall be permanently restricted from future subdivision.

<u>Development Restrictions.</u> All Conservancy Lots shall be permanently restricted from future subdivision and development, except for one single family home, and accessory structures, as defined in the zoning and subdivision provisions of this Code, permitted on each Conservancy Lot. Under no circumstances shall any additional development be permitted on the Conservancy Lot at any time.

The Conservancy lot shall be protected in perpetuity by a binding legal instrument that is recorded with the deed. The instrument shall be one of the following:

- 1. A permanent conservation easement in favor of either:
 - a land trust or similar conservation-oriented non-profit organization with legal authority to accept such easements. The organization shall be bona fide and in perpetual existence and the conveyance instruments shall contain an appropriate provision for retransfer in the event the organization becomes unable to carry out its functions; or

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• a governmental entity with an interest in pursuing goals compatible with the purposes of this ordinance.

If the entity accepting the easement is not the County, then a third right of enforcement favoring the County shall be included in the easement.

- 2. A permanent restrictive covenant for conservation purposes in favor of a governmental entity.
- 3. An equivalent legal tool that provides permanent protection, if approved by the Zoning Administrator.

The instrument for permanent protection shall include clear restrictions on the use of the Conservancy Lot. These restrictions shall include all restrictions contained in this article, as well as any further restrictions the applicant chooses to place on the use of the Conservancy Lot.

APPLICATION REQUIREMENTS

- **A.** <u>Site Analysis Map Required.</u> Concurrent with the submission of a preliminary plat of subdivision, Applicant shall prepare and submit a site analysis map. The purpose of the Site Analysis Map is to ensure that the important site features have been adequately identified prior to the creation of the site design, and that the proposed Conservation Subdivision will meet the requirements of this article. The Site Analysis Map shall include the following features:
 - 1. Property boundaries;
 - 2. All streams, rivers, lakes, wetlands and other hydrologic features;
 - 3. Topographic contours of no less than 10-foot intervals;
 - 4. All Conservation Areas labeled by type, as described in this Article;
 - 5. General vegetation characteristics;
 - 6. General soil types;
 - 7. The planned location of protected Conservancy Area;
 - 8. Existing roads and structures;
 - 9. Potential connections with existing protected open space.
- **B.** <u>Instrument of Permanent Protection Required.</u> An instrument of permanent protection, such as a conservation easement or permanent restrictive covenant and as described below, shall be placed on the Open Space concurrent with the issuance of a land disturbance permit.
- **C.** <u>Other Requirements.</u> The Applicant shall adhere to all other applicable requirements of the underlying Zoning and the Subdivision Ordinance.

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CONSERVANCY AREA

<u>Definition</u>. Conservancy Area is the portion of the conservation subdivision that has been set aside for permanent protection through subdivision into Conservancy Lots. Activities within the Conservancy Lots are restricted in perpetuity through the use of an approved legal instrument.

<u>Required Delineation</u>. The Applicant shall be required to delineate on the Site Analysis Map, an area of at least 75% of the tract area as the Conservancy Area for the tract.

Standards to Determine Conservancy Area.

- 1. The minimum restricted Conservancy Area shall comprise at least 75% of the gross tract area.
- 2. The following primary features are required to be included within the Conservancy Area, unless the Applicant demonstrates that this provision would constitute an unusual hardship and be counter to the purposes of this article:
 - a. The 100-year floodplain
 - b. All areas within the Chesapeake Bay Resource Protection Area (RPA)
 - c. All areas within the Stream Buffer Zone of the Dragon Run Conservation Overlay District, as defined above.
 - d. Slopes above 25%
 - e. Populations of endangered or threatened species, or habitat for such species
 - f. Known archaeological sites, cemeteries and burial grounds
 - g. Important known historic sites
- 3. The following are important secondary features that should be included within the Conservation Areas to the maximum extent feasible.
 - a. Existing healthy, native forests of at least ten acres contiguous area
 - b. Individual existing healthy trees greater than 12 inches caliper the entire dripline area of the tree should be protected
 - c. Other significant natural features and scenic viewsheds such as ponds and views to open water, particularly those that can be seen from public roads
 - d. Prime agricultural lands of at least twenty acres contiguous area
 - e. Existing trails that connect the tract to neighboring areas
- 4. At least 75% of the Conservancy Area shall be in a contiguous tract. The Conservancy Area shall adjoin any neighboring areas of Conservancy Lots, other protected areas, and non-protected natural areas that would be candidates for inclusion as part of a future area of protected Conservancy Lots.

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CRITERIA FOR APPROVAL:

<u>Evaluation Criteria For Approval</u>. In addition to the criteria listed in the Subdivision Ordinance, evaluation criteria for a preliminary plat for a Conservation Subdivision shall be based on the extent to which the plat meets the following criteria:

- 1. All conservation areas are subdivided into Conservancy Lots that are protected as permanent open space.
- 2. The configuration of the Conservancy Area on the tract is at least 75% contiguous and undivided.
- 3. The Conservation Subdivision meets the regulations specified in this chapter.
- 4. The Conservation Subdivision meets applicable provisions of subdivision regulations of this Code, to the extent they are interpreted by the Zoning Administrator to be applicable to a Conservation Subdivision.

<u>Grounds for Denial</u>. In addition to the criteria listed above, approval or denial of a preliminary plat for a conservation subdivision shall include but are not limited to the following:

- 1. The application fails to fully identify Conservancy Areas.
- 2. The proposed method of sewage treatment is inappropriate for the site or found to be potentially dangerous to public heath.
- 3. One or more of the lots within the conservation subdivision are too small to meet the minimum lot size established by this chapter, and/or one or more of the Cluster Lots are too large to meet the maximum lot size for Cluster Lots.
- 4. The street configuration does not provide for connectivity, or preserve natural features, or it is found to be inconsistent with the open space character of the subject property and its surroundings.
- 5. The proposed open space network is divided, not functional, inconsistent with open space plans of the County, or does not provide for the protection of the most valuable Conservancy Areas on the site given the natural and scenic properties inherent on the site.
- 6. The proposed open space network fails to maximize the length of the common boundary between Conservancy Areas on site and Conservancy Areas or public lands abutting the conservation subdivision site.
- 7. The sketch plat appears to be submitted for the major purpose of circumventing improvement requirements that would otherwise be required for conventional subdivisions pursuant to the subdivision requirements of this Code.

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6.0 SUPPLEMENTAL ILLUSTRATIONS:

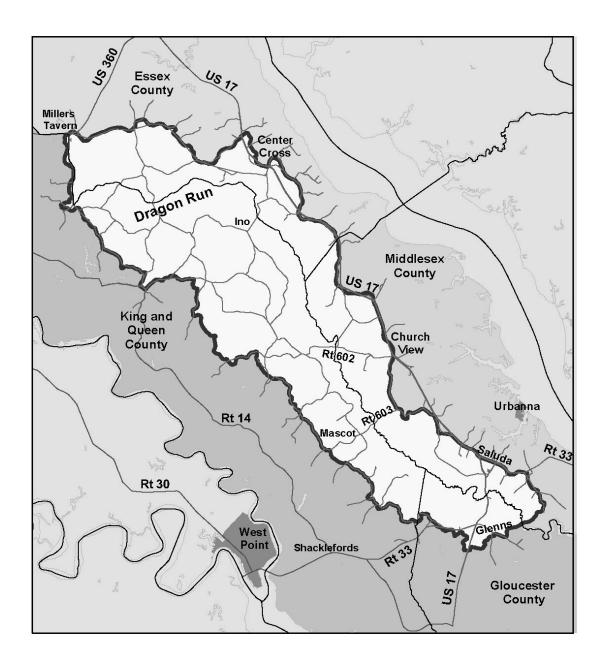


Illustration 1. EXAMPLE OF A DRAGON RUN OVERLAY DISTRICT MAP

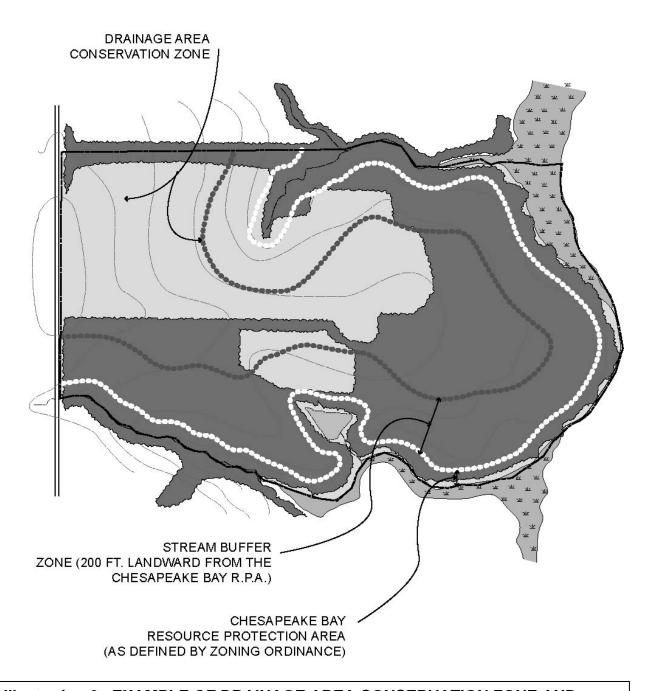


Illustration 2. EXAMPLE OF DRAINAGE AREA CONSERVATION ZONE AND STREAM BUFFER ZONE DELINEATION

CONSERVATION SUBDIVISION EXAMPLE

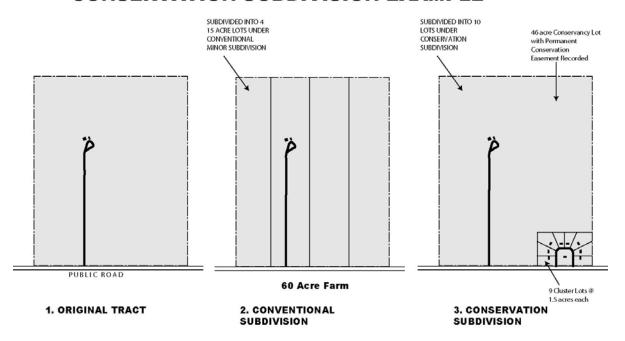


Illustration 3. EXAMPLE OF CONSERVATION SUBDIVISION OPTION

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PRESERVATION and PROGRESS in the DRAGON RUN



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Prepared by: P AR ADIGM DESIGN - Reston, Vinginia

PROJECT OBJECTIVES

OBJECTIVES

- Implement the goals & objectives of the Dragon Run Memorandum of Agreement
 - Develop a **plan to address the inevitable future development pressure** to change the traditional use of land in the Dragon Run Watershed.
 - Achieve **consistency across county boundaries among land use plans and regulations** in order to maintain farming and forestry and to preserve natural heritage areas by protecting plants, animals, natural communities, and aquatic ystems.
- Develop model planning policies and standards for the Dragon Run
 - Comprehensive Plan Policies
 - Zoning Implementation
- Work with each County to adopt consistent land use policies to protect the Dragon Run and encourage compatible economic development uses

TWO PHASES OF THE PROJECT:

- Develop Model Comp Plan and Zoning Recommendations
- Work each County to customize and adopt Recommendations

Why Change Things Now?

NOW - Landowners have been excellent stewards of the Dragon Run to date

Current development pressures are low in the Dragon Run Area

BUT - Development pressures are influenced by regional, national, even global trends

Once an area is "discovered," it is often beyond the power of a locality to control the rate of growth and its impacts

Rapid growth in a rural area taxes the road, water, sewage treatment systems (and the residents)

New taxes on landowners mean even more pressure to "convert" rural land

New populations bring different perceptions - decreased support for rural businesses - increased pressures for recreational uses

THE DRAGON RUN - is an area especially sensitive to impacts from these kind of pressures

It has no additional protection in the Comprehensive Plans or Zoning Ordinances of the four counties in its drainage area

The timing is critical to begin protecting the Dragon Run before the impacts begin to be felt

OVERVIEW of RECOMMENDATIONS

RECOMMEND:

- 1. Create a new Dragon Run Comp. Plan District
 - Establishes goals of conserving the Dragon Run
 - Encourages Rural Businesses
 - Model for all 4 Counties
- 2. Incorporate limited zoning changes to implement the new Comp. Plan policies
 - Each county has slightly different regulatory context
 - Recommendations are intended to be "customized" by each county

OVERVIEW of RECOMMENDATIONS

COMPREHENSIVE PLAN RECOMMENDATIONS:

DRAGON RUN COMPATIBLE ECONOMIC DEVELOPMENT AND PRESERVATION DISTRICT

- * Intent of the District is to:
 - 1. Preserve the natural environment of the stream
 - 2. Protect the traditional rural businesses in the area
 - Encourage compatible new rural businesses
- * Focus of District is on the Drainage Area of the Dragon Run
- * Includes Policies for:
 - Rural Character
 - Land Use
 - Water/Wastewater
 - Compatible Economic Development
 - Natural Resource Protection
 - Recreation and Tourism
- * Implementation recommendations are flexible (may change from County to County)
- * Recommend that all 4 Counties adopt the model District as an amendment to their Comp. Plans

OVERVIEW of RECOMMENDATIONS

ZONING & SUBDIVISION RECOMMENDATIONS:

Three basic types of recommendations:

1. Rural Conservation (Drainage Area Zone)

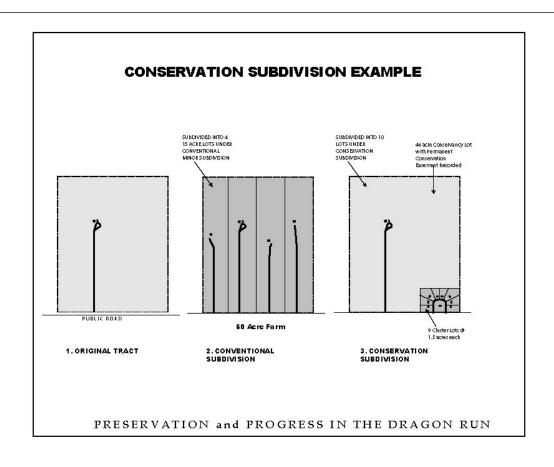
- Intended to protect traditional rural business
- Extends over whole drainage area
- Includes a Table of Uses to modify some uses in the underlying zone
- List of Uses can be customized for each County

2. Streamside Protection (Stream Buffer Zone)

- Intended to protect stream ecology modeled on DRCD
- Extends 200' landward from RPA
- Allows only certain conservation & passive recreational uses
- Permits Farming & Forestry with BMP's

3. Conservation Subdivision Option

- Intended as OPTIONAL approach for owners wishing to subdivide with a conservation easement
- Conservation-based cluster option with permanent easement over 75% of a tract
- Incentive is Ministerial Approval for 10 lot subdivisions
- No common ownership required
- Easements to County or Conservation Organization



NEXT STEPS

- * Presentation to Steering Committee
- * Working with each County (Phase II.)
 - Staff
 - Planning Commission
 - Board of Supervisors
 - Public
- * Ongoing Task Force Role