PROTECTING RURAL AND NATURAL LANDS IN SOUTHERN CHESAPEAKE:
The Future of the Open Space and Agricultural Preservation Program
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Chesapeake Planning Department—November 2007
EXECUTIVE SUMMARY

Chesapeake’s Open Space and Agricultural Preservation (OSAP) Program began in January 2001 when City Council formed a task force to explore options for city-wide open space and agricultural preservation. Earlier this year, the City closed on the first purchase under the City’s Purchase of Development Rights Program. Since that time, the City has been implementing various aspects of the program while exploring ways in which it can be enhanced, expanded, and improved. This report looks at the current status of the program, trends in land conservation and land conversion, available conservation tools, and recommendations to move forward.

The tools that we have available to protect open space and working lands are uniquely suited to the types of land and resources found in Southern Chesapeake. This area is defined in the City’s ordinances as the Rural Overlay and contains around 92,500 acres (not including the Dismal Swamp). Within this larger area there are 12,400 acres (13%) of existing conservation land, 7,500 acres (8%) of federal/institutional land, 8,250 acres (9%) of Fentress Easements, 1,650 acres (2%) owned by the City of Chesapeake, and 15,500 acres (17%) of land that has been either developed or platted for single family residential. This leaves 50,100 acres of undeveloped and unprotected working lands (agriculture and managed forestry) and natural lands. It is this land area that is the true focus area of the OSAP/rural program because this is where the City’s current and future land use policies will have the most direct impact on how Southern Chesapeake and the City as a whole will look years into the future. The City has a unique opportunity and responsibility to protect and enhance the valuable resources that this area contains. There are two other areas of interest in the Rural Overlay, the Northwest River Watershed and the Southern Watershed Area Management Program (SWAMP) conservation corridor. The Northwest River provides up to 10 million gallons a day of drinking water to the citizens of Chesapeake and in recognition of this important resource, City Council adopted the Northwest River Watershed Protection Ordinance in June 2005. SWAMP is an important regional partnership that has led to the development of conservation corridors which identified the most significant natural resources that remain in this area and connected them through linear systems of open space. These conservation corridors also generally identify the areas most critical to protect within the watershed of our main drinking water supply. Currently, 9,800 acres (11% of Rural Overlay) within the SWAMP conservation corridor remains unprotected.

The goals of the OSAP program represent the articulation of the core values that make Southern Chesapeake a special area which has sustained this community for many decades and contributes greatly to the unique quality of life of Chesapeake. It is an area that creates a unique sense of place to this community that is distinct from the suburban development patterns and designs that have dominated the City’s growth areas over the last few decades. The goals for this area as articulated by the OSAP ordinance, the Northwest River Watershed Ordinance, and the 2026 Comprehensive Plan can be summarized as: helping to sustain and protect working lands, preserving rural character, protecting valuable natural lands/natural resources, and providing public open space for both passive and active recreation.

When considering how to reach our goals for natural and rural land protection one of the most important considerations is land conversion to “rural” residential. The process occurs at a variable rate and is dependent on many factors such as adjacent land use patterns, land use regulations, and land economics. It is a one-way process and once a certain threshold has been reached all other adjacent undeveloped and unprotected land will ultimately be converted to residential uses. The conversion to rural residential represents a permanent change to our landscape. Chesapeake only has one opportunity to ensure that we can accommodate limited growth in a manner and location that complements and does not compromise the goals/values of the City’s unique rural landscape.
EXECUTIVE SUMMARY (CONTINUED)

The landscape of Southern Chesapeake has already been impacted by the uncoordinated and fragmented spread of residential growth. The last few decades have seen a large increase in the spread of residential growth in Southern Chesapeake. The overwhelming majority of this growth has occurred on 3 acre lots. Improperly located residential development leads to conflicts with adjacent land uses. This is particularly apparent when considering impacts to agricultural lands. Here is a list of potential conflicts: noise, dust, pesticide use, odors, vandalism, traffic, and decreased incentive to invest due to imminent land conversion and rapidly increasing land values. Each of these factors contribute to land conversion by making it no longer economically viable or operationally feasible to continue farming the land. This is a process that leads to land conversion by default.

There is no silver bullet in terms of protecting our rural and natural lands. In fact, it is a series of tools and actions that when used in combination will help the City achieve and maximize the goals/values for Southern Chesapeake. While OSAP has been designated as a Purchase of Development Rights Program, Chesapeake will need to expand the toolset in order to make any significant progress toward the City’s goals. This is especially important given the fact that there are 50,000+ acres of land that an open space/rural preservation program potentially addresses and the City currently has limited funding to reach these goals. The following tools are evaluated in this report: Purchase of Development Rights, Transfer of Development Rights, Tax Incentives—Local/Federal/State, Grants, Fee-Simple Purchase, Development Regulations.

In order to increase the effectiveness and cost efficiencies of the City’s Open Space/Rural Protection Program, the following prioritized list of recommendations are provided to help guide policy decisions in regards to implementation and next steps:

I) Focus, strengthen, and leverage the City’s existing PDR Program
   a) Address the development rights cost issue within the PDR program
   b) Focus the program on achieving multiple benefits with emphasis on rural character and natural areas
   c) Maximize state funding
   d) Provide for flexibility with the terms of purchase

II) Utilize and emphasize fee simple purchase for key priority parcels within Southern Chesapeake
   a) Create a targeted program for property within the SWAMP conservation corridor
   b) Actively seek partnerships with the State and Federal government for land acquisition within the Interfacility Traffic Area
   c) Explore partnership with Public Utility Department for targeted drinking watershed protection acquisition

III) Promote the availability of land conservation tax incentives

IV) Create a dedicated local funding stream for open space protection
   a) Identify a general fund revenue source
   b) Issue a general obligation bond for land preservation

V) Incorporate recently approved Rural Overlay Design Guidelines into City policy/regulations
   a) Rewrite the City’s Subdivision and Cluster Ordinances
   b) Update the City’s Public Facilities Manual (PFM) to reflect rural characteristics

VI) Create a limited, targeted TDR program

VII) Study the fiscal impact of rural residential growth
**INTRODUCTION**

On December 29, 2006, Chesapeake City Council adopted Resolution #06-R-075 authorizing the first acquisition under the City’s Purchase of Development Rights (PDR) program for the McPherson Farm located off Ballahack Road. This 108 acre development right purchase was the result of many years of effort from staff representing departments throughout the City. The effort to obtain this first PDR purchase began in January 2001 when City Council formed a task force to explore options for city-wide open space and agricultural preservation. After two years of study, the task force issued a report in February 2003 recommending the adoption of a PDR program modeled after the successful Virginia Beach Agricultural Reserve Program (ARP) as the best option to move forward. During the study period, two citizen surveys were administered which indicated a tremendous level of support for open space protection in general (87% and 89%), and specifically expressed very strong support for public funding of open space protection (73% and 86%). City Council recommended having a dedicated funding source for open space protection in the Council’s Two Year Goal Summary from January 20, 2007.

In response to the task force’s report, City Council adopted the Open Space and Agricultural Preservation (OSAP) Program within Chapter 26 of the City Code. Much has happened since the task force report was issued and the subsequent program adoption. One major event was the Council adoption of the 2026 Comprehensive Plan which identified conflicts between our existing City policies and regulations and our rural preservation goals. The Comprehensive Plan included a follow up item to develop a comprehensive strategy to synchronize the City’s rural preservation efforts. The City also learned many important lessons from our first PDR purchase. Lastly, the City has been given more tools by the State to pursue OSAP goals. As a result of these factors, staff has been tasked by Council to reevaluate the current OSAP program to ensure that moving forward, Chesapeake can have the most effective program possible to meet the City’s goals in a cost efficient manner. This report will look at the current status of the program, trends in land conservation and land conversion, available conservation tools, and recommendations to move forward.
PROGRAM FOCUS

Although the City’s OSAP program was initially set up as a City wide program, it is best suited to address open space issues within Southern Chesapeake. This is the location of the City’s prime agricultural land, high quality natural lands, and the watershed for one of the City’s main drinking water supplies. The existing tools available for open space protection lend themselves very well to the types of land and resources found in Southern Chesapeake. This is also an area that is under increased land conversion pressure which will be discussed in more detail later in this report.

This is not to say that we should ignore open space needs in other sections of the City, only that the City should use a different set of tools to accomplish those goals. Due to the significant land values within areas of the City where more intensive development is allowed and actively supported by public policy (i.e. Urban and Suburban Overlay Districts), one of the best approaches is to link open space provisions with the development of new residential areas. This is exactly the approach taken by the Zoning Ordinance in Section 19-700, which requires either the provision of open space within the new development or payment into a fund for improvements to existing open space and acquisition of new open space depending on the current open space availability within the surrounding area. In January 2003, City Council adopted revisions to this section of the ordinance to clarify the requirements for residential developments. Linking development with open space protection can also have limited application within Southern Chesapeake as limited planned growth occurs. This will be discussed in more detail in the tool section of this report along with a number of additional tools.

The City’s 2026 Comprehensive Plan recognized the unique characteristics of Southern Chesapeake with the adoption of several policies that enhanced the importance of the Rural Overlay District. The purpose of the Rural Overlay District is to preserve and protect the rural character of the southern portion of the City. The OSAP program is one of the primary tools that can be used to meet this objective.

The total land area of the Rural Overlay that has been designated on the 2026 Land Use Plan as rural is around 92,500 acres. This excludes Edinburgh, the Municipal Airport, and the designated light industrial node west of the Chesapeake Regional Airport, which are all current or future development nodes in Southern Chesapeake. In order to get a better handle on the total land area that is applicable to OSAP related policies and programs, the current Rural Overlay land uses located within the rural designation have been broken down into the following general categories: Existing Conservation Lands, City of Chesapeake, Fentress Easements, Federal/Institutional, Single Family Residential, and Rural/Natural Unprotected. There are also two other areas of note within the Rural Overlay: the Northwest River Watershed and the Southern Watershed Area Conservation Corridor.
Existing Conservation Lands

Within the Rural Overlay there is approximately 12,400 acres of land that can be classified as conservation land. This represents a land area of around 13% of the Rural Overlay (shown in dark green on the map). This is land owned by three major landholders – the Nature Conservancy, the Virginia Department of Game and Inland Fisheries, and the Virginia Department of Conservation and Recreation. Due to these agencies respective missions, this land can be considered permanently protected from development. This category does not include existing or proposed wetland mitigation banks which would add approximately 3,000 acres to this total. Because of the existing mitigation bank credit supply in this area of the City, it is unlikely that any new banks will be proposed in the near future within the Rural Overlay. The 108 acre McPherson Farm is also included in this total. The last item to note is that the Great Dismal Swamp was also excluded from both the conservation land total and the total land area for the Rural Overlay because of its status as a Federal Wildlife Refuge. The Great Dismal Swamp occupies around 52,000 acres in Chesapeake.
Fentress Easements

Over the years the Navy has acquired approximately 8,250 acres of easements surrounding the Fentress Landing Field. This represents 9% of the land area of the Rural Overlay (shown in orange on the map). The main purpose of the easements is to protect the operation of the landing field from incompatible uses. Due to the nature of these easements, the working and natural lands around Fentress have been protected in a fashion very similar to the City’s existing Purchase of Development Rights Program. Two issues within this area merit future consideration. The first are uses that are incompatible with the City’s existing land conservation policies such as intensive logging of natural hardwood forests. The second is the long term land use plan for this area which is dependent on the future of the landing field.

Federal/Institutional

This category includes land owned by the Navy (Fentress and Northwest Radio Station), the City of Norfolk, and the Saint Brides Correctional Facility. The total land area covered by this category totals approximately 7,500 acres or 8% of the Rural Overlay (shown in gray on the map). Natural lands within the boundaries of both of the Navy’s holdings can play an important role in protecting and enhancing our natural landscape if they are managed appropriately. It is also important to note that the City’s OSAP program can play a critical role in helping manage the threats of encroachment around the Northwest Radio Station in a proactive manner.
City of Chesapeake

The City of Chesapeake owns approximately 1,650 acres or 2% of the Rural Overlay (shown in purple on the map). This includes land used for public facilities (e.g. fire stations) as well as land designated as recreational areas. Land such as the Northwest River Park and the land between the Cavalier Tract and the US Navy Northwest Radio Station could be classified as existing conservation land given the land use intent and the characteristics of the existing land cover. Both of these pieces can serve as useful models for the management and use of future City of Chesapeake land holdings within Southern Chesapeake. The Northwest River Park is used for passive recreational purposes that serve to complement the natural values of the site. The City land adjacent to the Cavalier Tract is managed for conservation purposes in partnership with the Virginia Department of Game and Inland Fisheries.

Single Family Residential

There is approximately 15,500 acres of land within Southern Chesapeake that has either been developed or platted for single family residential. This represents 17% of the Rural Overlay (shown in red on the map). The overwhelming majority of this acreage has been subdivided into 3 acre lots. Residential development in the Rural Overlay will be discussed in much greater detail in the land conversion section of this report.
**Rural/Natural Unprotected**

This category includes all existing undeveloped and unprotected working lands (agriculture and managed forestry) and natural lands. This category includes approximately 50,100 acres or 54% of the Rural Overlay. This category is the true focus area of the OSAP/rural program because this is where the City’s current and future land use policies will have the most direct impact on how Southern Chesapeake and the City as a whole will look years into the future. The City has a unique opportunity and responsibility to protect and enhance the valuable resources contained in this area.

**Rural Land Management Units**

Because of the size of the area under the rural/natural unprotected category, it has been further broken down into management units to help determine the unique threats, tools, and opportunities available to help preserve the special characteristics of each unit. For each unit, different tools will be utilized as necessary to reflect the unique issues inherent within each. These categories were adapted from the Southern Watershed Area—Rural Area Preservation Program Final Report from September 2001:

1. **Agricultural Lands (AL)** - Lands with prime agricultural soils and associated land units which are used for, or could be used for, productive agriculture and sustainably managed timber tracts.
2. **Environmentally Sensitive Land (ESL)** - Areas that contain significant natural resources such as non-tidal wetlands, natural resource buffers, and natural forested areas.
3. **Scenic Resource Lands (SRL)** - Areas that contain or constitute scenic viewshed resources important to the community character of Chesapeake. This unit is not a stand alone unit but serves as an overlay on portions of both the AL and the ESL units mainly along the rural road frontage.
4. **Rural Infill Lands (RIL)** - Land areas that are adjacent to areas of existing non-agricultural residential development that can accommodate additional residential development without substantial negative impacts to adjacent land and community character or impacts could be significantly minimized with proper layout and design.
5. **Rural Development Lands (RDL)** - Lands that are the most suitable for more intense future development. In the context of Southern Chesapeake, the only areas that fit into this category would be Edinburgh and the proposed commerce park west of the Chesapeake Regional Airport.
OTHER UNIQUE AREAS WITHIN THE RURAL OVERLAY

Beyond the different land uses and management units located within the Rural Overlay, there are two other district areas that are important to consider—the Northwest River Watershed and the Southern Watershed Management Program Conservation Corridor.

Northwest River Watershed

The Northwest River runs through the lower middle half of the City’s Rural Overlay. Its watershed is highlighted in blue on the map to the right and is overlaid on the existing undeveloped land area in Southern Chesapeake as described on the previous page. From an intake point located adjacent to South Battlefield Boulevard (shown with a red dot on the map), the Northwest River Water Treatment Plant provides up to 10 million gallons per day of drinking water to the citizens of Chesapeake. In recognition of this important water resource, the City adopted the Northwest River Watershed Protection Ordinance in June 2005. This ordinance has many goals that overlap with the OSAP program. To protect this critical water resource, steps need to be taken to actively manage this important watershed and protect the land resources and forested wetlands that provide tremendous source water protection and natural treatment.

Southern Watershed Area Management Program (SWAMP)

SWAMP was developed in partnership with the City of Virginia Beach, the Hampton Roads Planning District Commission (HRPDC) and the Virginia Coastal Program to protect natural resources, sensitive land, and water supplies within the Southern Rivers Watershed Area. The area includes the watersheds of Back Bay, North Landing River, and the Northwest River. This cooperative effort has been ongoing for over a decade, first starting in the early 1990’s and leading to many important studies and policies for this area. One of the most important outcomes of this process was the development of conservation corridors which identified the most significant natural resources that remain in this area and connected them through linear systems of open space (shown in purple on the map). These conservation corridors also generally identify the areas most critical to protect within the watershed of one of our main drinking water supply sources. Currently, 9,800 acres (11% of Rural Overlay) within the SWAMP corridor remains unprotected. The HRPDC has used the SWAMP approach to expand this network throughout the region with a recent study of Green Infrastructure. Green Infrastructure helps us identify and recognize the ecological services that our natural lands and open space provide to our communities.
Program Goals

When the City considers the goals for the OSAP program, we are really thinking about the values that we place on the land area of Southern Chesapeake. These goals represent the articulation of the core values that make Southern Chesapeake a special area which has sustained this community for many decades and contributes greatly to the unique quality of life of Chesapeake. It is an area that creates a unique sense of place to this community that is distinct from the suburban development patterns and designs that have dominated the City’s growth areas over the last few decades. Many of these values are reflected in the purpose statements of both the OSAP Ordinance and the Northwest River Watershed Protection Ordinance. They are also articulated in the 2026 Comprehensive Plan. All of these documents contain numerous compatible goals that can be summarized for this analysis into four main goal statements:

The City of Chesapeake will take an active role in:

- Helping to sustain and protect working lands
- Preserving rural character
- Protecting valuable natural lands/natural resources
- Providing public open space for both passive and active recreation

Within these broad goal statements we can explore how they relate to the rural land use management units and how these goals can be met with the management of those land types. This concept will be articulated in more detail in the land preservation tool section of this report. The flip side of this is to explore how a laissez-faire or hands-off approach to managing these land units can impact the City’s goals/values. This will be considered in more detail within the land conversion section of this report.

The other point to consider is how to define progress in meeting the goals of OSAP and to provide benchmarks to measure successes or failures. One method that related programs have used is to establish numeric goals. These goals can be expressed as a percent of land protected as in Virginia Beach (20% of their agricultural lands), or as acreage targets as in Isle of Wight (2,000 acres by 2010). Having numeric goals can be useful in helping measure the progress of the program but also can be somewhat arbitrary. The attainment of such goals will largely depend on future land values and the availability of program funding. It is also unclear as to what amount or percent of protected land represents a viable amount. How many acres of the 50,000 acre total focus area would the City need to protect in order to meet our program goals? Is the protection of 20% of the working lands in Chesapeake enough to make this type of land use economically sustainable? It is impossible to determine the answer to those questions since there are many unknowns and also many factors which impact the dynamics of land use in Southern Chesapeake which the City has little control over (e.g. commodity prices, age of farmers, etc.). It is clear though that the City will have to prioritize based on protecting land that provides multiple benefits to the community and emphasize the quality of protected land over the quantity. Much of our valuable natural and working lands have been identified within the SWAMP effort through conservation corridors within the Rural Overlay. Chesapeake must evaluate all land use decisions on their relationship to our broad program goals and how they relate to our management units and protection of resources within the established SWAMP conservation corridors.
Land Conversion

When discussing natural and rural land protection, one of the most important factors to consider is land conversion. In particular, land that is being converted to “rural” residential is key to this discussion. Land conversion to residential land is important for many reasons and will ultimately determine the character of Southern Chesapeake. The photos below illustrate the general process by which land conversion of rural and natural lands takes place using current photos from Chesapeake. The process occurs at a variable rate and is dependent on many factors such as adjacent land use patterns, land use regulations, and land economics. It is very important to note that this is a one-way process and once a certain threshold has been reached all other adjacent land uses will be converted to residential uses. All of the City’s current undeveloped land will reach the ultimate endpoint of stage 6 (possibly stage 5 depending on land use regulations) unless we take steps to manage and protect our rural lands. The conversion to rural residential represents a permanent change to our landscape. Chesapeake only has one opportunity to ensure that we can accommodate limited growth in a manner and location that complements and does not compromise the goals/values of the City’s unique rural landscape.

1. Natural Environment

2. Clearing for Agricultural Purposes

3. Agricultural Development

4. Piano Key Lots and other Exurban Development

5. Low Density Countryside

6. Suburbs
THE CHANGING CHARACTER OF SOUTHERN CHESAPEAKE:
Residential Growth in the Rural Overlay

This series of maps illustrates the spread of residential growth (shown in red) throughout the decades within the Rural Overlay. It is this type of uncoordinated and fragmented growth that can compromise the City’s values/goals for this area and lead to more land use conversion.
THE CHANGING CHARACTER OF SOUTHERN CHESAPEAKE:
Residential Growth in the Rural Overlay
As discussed previously, conversion to “rural” residential represents permanent change. This change occurs not only to the land that is platted for residential but also to adjacent lands. Improperly located residential leads to conflicts with adjacent land uses. This is particularly apparent when considering impacts to agricultural lands. Here is a list of potential conflicts: noise, dust, pesticide use, odors, vandalism, traffic, and decreased incentive to invest due to imminent land conversion and rapidly increasing land values.

While there is no hard and fast rule to the extent of the conflict area impacted by these factors, it is clear that units in closer proximity to the operation leads to more conflicts, as does an increase in the number of units. Studies by the American Farmland Trust have seen measurable impacts at 1/5 to 1/3 miles from the operation. Each of these factors contribute to land conversion by making it no longer economically viable or operationally feasible to continue farming the land. This is a process that leads to land conversion by default.

To illustrate this type of land use change an actual example off of Taft Road will be examined. The highlighted property is a 100 acre farm tract that over time has been encroached upon by incompatible residential uses. Recently this farm was being marketed as land in the “path of development.” This is an example of how incremental and unplanned change that can lead to “default” land conversion. In this case, the land is changing from an Agricultural Land (AL) unit to a Rural Infill Land (RIL) unit. If a build-out of residential uses adjacent to this property was shown, we would see that this path was laid out incrementally over many years, with a tremendous amount of development pressure over the last decade or two. It was the result of an accumulation of individual actions with no real relationship to the land or the context of the rural environment.
This potential development site on Taft Road is an example of how the City’s rural values/goals can be compromised by a default land use conversion. One of the only viable land uses left with all of the existing residential encroachment is more residential. Chesapeake needs to restructure the City’s current land use regulations, policies, and land protection tools so that the norm of land conversion complements and supports the City’s rural goals while providing for limited development. In terms of the particulars of how this compromises the City’s values we can first look at rural character. With the entire road frontage of this site “piano-keyed” with large lot residential, the rural character of this area has been greatly reduced. The residential uses dominate the visual landscape obscuring the open fields and rural setting. This piano key development has also compromised the functionality and use of the working farm land by introducing a number of conflicts. If this were prime soils, some of the City’s most productive farmland would be compromised. This same scenario could be used as an example for conversion of natural lands, where habitat fragmentation occurs and where lose of some of our valuable ecosystem services occur like drinking water source protection and filtration.

It is clear that the City must reach a balance between sometimes conflicting goals. Although the City may not be able to achieve them all, we must strive to maximize the benefits and values that these lands hold to our livelihood and quality of life. In the case of this area, a similar level of residential density could have been achieved, but better planned for and designed using tools such as cluster zoning. This technique allows the City to preserve property rights while protecting our most valuable land assets.

Farm (in red) shown in context with the existing rural undeveloped land.

Farm (in yellow) shown in context with the existing and platted “rural” residential (red).
Conservation Toolbox

There is no silver bullet in terms of protecting our rural and natural lands. In fact, it is a series of tools and actions that when used in combination will help the City achieve and maximize the goals/values for Southern Chesapeake. While OSAP has been designated as a Purchase of Development Rights Program, Chesapeake will need to expand the toolset in order to make any real progress toward the City’s goals. This is especially important given the fact that there are 50,000+ acres of land that an open space/rural preservation program potentially addresses and the City currently has very limited funding to reach these goals.

The following tools will be evaluated in this section of the report:
PURCHASE OF DEVELOPMENT RIGHTS

Description: The program works by purchasing the development rights from a land owner to prevent the land from developing into single family residential. The landowner still owns the land and can continue to live on the property and manage the land for agricultural production, forestry, and/or conservation. A permanent conservation easement is placed on the property that is held by the City and/or a qualified third party. The value of the development rights is currently determined by subtracting the appraised value from the agricultural or open space value of the property. With the City’s program, each enrollment application is ranked by criteria contained in the ordinance to help determine the priorities for purchase. Even with very minimal promotion of the program during our first and only application period, the City received over 20 applications for enrollment covering over 2,000 acres of land, indicating a very high level of interest in the program. One of the main disadvantages of a PDR program is the program cost. The only purchase that has been made so far in the City’s program is the McPherson Farm which was purchased at a land value of $14,500 per acre or $111,857 per development right (12 development rights purchased). When developing the program, the City structured it to use an Installment Purchase Agreement (IPA) method versus an outright purchase of the development rights based on the Virginia Beach PDR program. While the IPA approach helps the City finance the upfront cost of the transaction (~0.30 per $1.00) at current land prices, the City has ongoing interest payment obligations over 25 years that in the McPherson case adds over a million dollars to the cost of the transaction. If you extrapolate these costs over the City’s 50,000 acres of rural/natural unprotected lands, the cost of buying the development rights on even a portion of that total is considerable. The success of Virginia Beach’s PDR program (+7,000 acres enrolled) can be attributed to lower land costs and a substantial local dedicated funding source.

Goals Addressed: This tool addresses three of the main goals of the program. By protecting the traditional working land uses in Southern Chesapeake the rural character is also preserved. If applied to the right land areas, this can also be used to protect sensitive natural lands and resources. Because of the nature of some of these resources (e.g. forested wetlands), future land use will be more restricted than when PDR is used for working lands. This tool does not address the goals of protecting lands for both passive and active recreation because there is generally no public access with the easements.

Applicability to which Rural Management Unit:
• Can be applied to both the Agricultural Lands (AL) and the Environmentally Sensitive Land (ESL)
• Especially useful when the AL and the ESL is overlaid by the Scenic Resource Lands (SRL)
• Chesapeake's PDR program is currently structured to address both Agricultural land and Open Space

Advantages
• Voluntary
• Helps sustain the operation of working lands with influx of cash
• By using an Installment Purchase Agreement (IPA) the City pays lower upfront cost at the current land values

Disadvantages
• Expensive and requires long term funding commitment—25 years of interest payments with IPA
• No public access or use of land
• The use of an IPA for the purchase is administratively complex
TRANSFER OF DEVELOPMENT RIGHTS

Description
In 2006, Governor Kaine signed legislation that allowed localities in Virginia to adopt a Transfer of Development Rights (TDR) program for their communities. A TDR program is similar to a PDR program. In both programs, development rights are purchased from willing landowners. In a TDR program a private developer rather then the City would buy the development rights from an area of the City designated as a “sending area” and transfer those development rights to an area designated as a “receiving area” in order to gain an increase in density. Some states with existing TDR programs allow cities to purchase and bank development right credits to sell or transfer to a private developer. As with a PDR program, the landowner still owns the land and a conservation easement is placed on the property. The price of the development right is negotiated by the two private parties involved in the transaction.

In general, the concept of TDR supports the land use policies of the City’s Comprehensive Plan by helping to protect land within a designated area in the Rural Overlay (sending area) and encourage development and redevelopment in a designated area in the Urban Overlay and possibly the Suburban Overlay (receiving area). It also has the potential to help the City meet other public policy goals, such as encouraging the construction of affordable housing units by providing for increased density.

Goals Addressed
This tool addresses three of the main goals of the program. By protecting the traditional working land uses in Southern Chesapeake the rural character is also preserved. If applied to the right land areas, this can also be used to protect sensitive natural lands and resources. Because of the nature of some of these resources (e.g. forested wetlands), future land use will be more restricted than when TDR is used for working lands. This tool does not address the goals of protecting lands for both passive and active recreation because there is generally no public access with the easements.

Applicability to which Rural Management Unit
• Can be applied to both the Agricultural Lands (AL) and the Environmentally Sensitive Land (ESL)
• Especially useful when the AL and the ESL is overlaid by the Scenic Resource Lands (SRL)

Advantages
• Voluntary
• Helps sustain the operation of working lands with influx of cash
• Limited public funds are used
• Can be used to encourage redevelopment and infill development

Disadvantages
• Potentially difficult to administer
• Potentially time-consuming for developers
• No public access or use of land
• Increased densities can lead to citizen opposition if not placed in the appropriate location and properly designed.
**Fee Simple Purchase**

*Description*
This is a tool used by the City for many of our public facility/infrastructure needs. It is the most straightforward of all land conservation tools and the most understood by the City. It is a tool that guarantees that the land purchased will be used for the intended public purpose. It also is one of the few conservation tools that not only protects the resource, but also usually allows public access and use of the property. Allowing public access to Chesapeake's rural and natural lands helps to greatly enhance the public benefit and allows for residents to have a physical connection to a landscape that holds many important values to the community. Purchased property can be used to meet many community needs such as recreation (passive and active), conservation, and limited public facilities. Within this set of land uses we can also meet some of the City’s other strategic goals such as preventing encroachment to our military facilities and protecting our drinking water source. The other possibility is land banking where we can meet the City’s future needs with current land prices.

*Goals Addressed*
Can be the most effective tool for protecting natural lands, scenic resources, and recreational space. Because of public ownership of the land it is not as effective for protection of working lands, although public land could be leased to farmers on a interim basis.

*Applicability to which Rural Management Unit*
- Can be applied to both the Agricultural Lands (AL) and the Environmentally Sensitive Land (ESL)
- Especially useful when the AL and the ESL is overlaid by the Scenic Resource Lands (SRL)

*Advantages*
- Voluntary
- Allows for public access or use of the land
- Ensures the long term protection of the land

*Disadvantages*
- Can be slightly more expensive than only buying development rights due to higher upfront cost
- Removes property from tax rolls (impact limited due to land use value taxation)
TAX INCENTIVES — LOCAL/STATE/FEDERAL

Description
There are a number of very generous tax incentives that exist for landowners in Virginia. On the local level, the City already takes advantage of one key tax incentive that is available to protect rural and natural lands. In Chesapeake, as with the majority of localities with rural lands in the State, certain natural and agricultural lands are taxed at a land use value which can be substantially less than the market value of property within the City. At the state level, the Virginia Land Preservation Tax Credit Program, is one of the most generous tax credit programs in the country. It allows landowners to receive a tax credit for 40% of the fair market value of a bargain sale (difference in market value vs. sales price) or a donation of a conservation easement. If the landowner does not have the tax liability to take advantage of the tax credit, the credit can be sold on the open market to another tax paper for a slightly reduced cost. On the federal level, there is a tax deduction program in place that allows for a maximum deduction of 50% of an individual’s adjusted gross income (AGI) for donating a conservation easement or selling an easement at a bargain price. Qualified farmers and ranchers can deduct up to 100% of their AGI.

Combining these incentives allows land owners to make up for a significant portion of the value of their donation or bargain sale. These incentives can be combined with PDR purchases, fee-simple purchases, or conservation easement donations to create flexible incentive packages that meet the needs of both the City and the landowner. The City is currently working with two landowners for easement donations in Southern Chesapeake. These donations can be directly attributed to this combination of generous tax incentives.

Goals Addressed
The goals that this tool addresses depends on the type of transaction it is used with (Conservation Easement Only vs. Fee Simple Purchase).

Applicability to which Rural Management Unit
This also depends on the type of transaction it is used for.

Advantages
- Voluntary
- Helps sustain the operation of working lands with influx of cash
- Helps to leverage state and federal funds while limiting local expenditure
- Statewide this has been one of the primary drivers of many of the conservation donations throughout the State

Disadvantages
- To take full advantage of Federal Tax Deduction must be a qualifying landowner
- No public access or use of land (depending on transaction type)
- City does not control availability
**Description**
Grants from both the state and the federal government are able to help supplement local funding for land protection efforts. Unlike other government grant categories there is limited funding at the state and federal level for land conservation. The limited grant programs that exist are also extremely competitive. As an example of this, the State received 31 applications totaling over $24 million for the last funding cycle of the Virginia Land Conservation Foundation and awarded only 15 grants for a total of $6.2 million. The City of Chesapeake’s grant application was not funded.

The City has had only limited success at securing outside grant funds for land conservation. Because of this fact, their applicability to Chesapeake is limited and should only be thought of as a finite source of supplemental funding to enhance a local dedicated funding source. Other disadvantages include the administrative burden associated with grant applications, tracking and reporting, and the time lag that exists in most grant programs between the application period and eventual award. Most grant programs require a minimum 50% local match with some requiring a higher percent.

**Goals Addressed**
Can address all goals depending on what type of transaction the grant is used for.

**Applicability to which Rural Management Unit**
Can apply to all units depending on the focus of the grant program.

**Advantages**
- Helps to leverage state and federal funds while limiting local expenditure
- Grant program focus compatible with the types of lands found in Southern Chesapeake (agricultural and natural)

**Disadvantages**
- Limited funds available
- A local match is almost always required
- Very competitive
- Administratively burdensome
- In most cases a significant time lag exists between application and award
**Development Regulations**

**Description**
The City of Chesapeake has numerous regulations that cover every aspect of the development process. This holds true for Southern Chesapeake although at a lesser degree due to the somewhat limited development opportunities as opposed to the northern half of the City. Within these regulations exist certain loopholes and inconsistencies that undermine their effectiveness in helping to preserve the rural character of Southern Chesapeake. The potential exists for these regulations to be revised to both protect the development rights of landowners while ensuring that our development review and approval process complements rather than compromises our values/goals for Southern Chesapeake.

A key tool under development regulations is the cluster subdivision ordinance provision. A properly structured cluster subdivision ordinance can be one of the most effective tools that we have available. This type of ordinance can help us virtually eliminate piano key subdivisions that ruin the rural character of Southern Chesapeake while providing for a connected system of open space linked to regional conservation corridors. It also helps to protect and restore the City’s existing natural resources. The other key tool under development regulations is to ensure that the layout, design, and engineering of any potential development in Southern Chesapeake is consistent with the rural character of the area as opposed to the utilizing the same design standards of our suburban and urban developments.

**Goals Addressed**
This tool mainly deals with protection of land for open space recreation use with some applicability to protection of natural resources. It has the potential to help protect scenic resources. It can help to prevent use conflicts with adjacent agricultural land but has limited potential to protect agricultural land.

**Applicability to which Rural Management Unit**
- Can be applied to both the Agricultural Lands (AL) and the Environmentally Sensitive Land (ESL)
- Can be especially useful when the AL and the ESL is overlaid by the Scenic Resource Lands (SRL)

**Advantages**
- Helps protect the investments of neighboring landowners in terms of the use value, market value, and conservation value
- Provides for an important balance to land conservation incentives programs
- Can provide for a predictable process
- Provides for a necessary balance between individual property rights and overall community goals
- Protected open space can be linked to community wide network

**Disadvantages**
- No public access or use of land (dependent upon the structure of the regulation)
- Landowners resistant to change
Moving Forward: Recommendations

In order to increase the effectiveness and cost efficiencies of the City’s Open Space/Rural Protection Program, the following prioritized list of recommendations are provided to help guide policy decisions in regards to implementation and next steps.

I) Focus, strengthen, and leverage the City’s existing PDR Program

  a) Address the development rights cost issue within the PDR program
As discussed in the program tool section, the main disadvantage to a PDR program is the cost. While the City cannot directly control the value of land in Southern Chesapeake, there are a number of ways in which we can help make the program more cost effective while still providing benefits to the landowners. One method to help reduce the cost is to set up a cap on the price paid for each development right. This is a strategy that Fauquier County uses for their program where they have capped the price at $30,000 per development right. The value of a development right cap would need to be studied for Chesapeake and periodically adjusted based on the market and available funding. This method can help the City take advantage of the state and federal tax incentives which were discussed in the tool section. Taking advantage of these incentives can allow the land owner to regain much of their value for a potential bargain sale to the City. The other way to take advantage of those incentives is to pay only a certain percent of the appraised price of the land, such as 75% or 80%. The difference in value between the sales price and the market price would qualify the landowner to take advantage of the tax incentives for a bargain sale.

  b) Focus the program on achieving multiple benefits with emphasis on rural character and natural areas
Due to the amount of land eligible for this program (50,000 acres) and the land values in Southern Chesapeake, we need to prioritize our efforts and do more with less. In order to achieve this the City should revisit the current PDR ranking system to ensure that multiple benefits are achieved with each transaction. There will never be enough funding to sustain the viability of the agriculture land uses in Southern Chesapeake with a PDR program.

  c) Maximize state funding
In the last General Assembly session, $4,250,000 was allocated to the Virginia Department of Agriculture and Consumer Services (VDACS) Office of Farmland Preservation to administer a 50:50 match program that is open to all of the State’s PDR programs. Because of how the allocation is structured, Chesapeake is guaranteed to receive $300,000 in matching funds but could receive two or three times that amount depending on what we have available to use as a local match. This is currently a one time infusion of cash for local programs. A more permanent state funding solution may emerge out of the report of the General Assembly’s Joint Subcommittee studying long-term funding for the purchase of development rights to preserve open-space and farmlands. This report is due to the General Assembly by the beginning of next year’s legislative session.

  d) Provide for flexibility with the terms of purchase
Although there are certain advantages to the City and the landowner by using the Installment Purchase Agreement approach to purchasing development rights, there should be mechanisms that allow for the City to outright buy the development rights or to modify the terms of the IPA purchase (e.g. 20 year bond vs. 25 year bond) depending on the needs of the landowner and the City.
Moving Forward: Recommendations

II) Utilize and emphasize fee simple purchase for key priority parcels within Southern Chesapeake

a) Create a targeted program for property within the SWAMP conservation corridor
This is the type of purchase that has the potential for the City to partner with conservation groups and the State (e.g. Cavalier tract) due to the nature of the resource that is being protected. If you look at the existing conservation lands in Southern Chesapeake, these groups have provided for the overwhelming majority of land protection currently exhibited in Southern Chesapeake. The City cannot assume that this trend will continue and relying solely on these partners to protect our resources will ensure that there are opportunities lost for the protection of land that provides environmental services to the community and preserves our unique natural heritage. Chesapeake has to take an active role in protecting this land to ensure that it continues to provide essential benefits to the community.

b) Actively seek partnerships with the State and Federal government for land acquisition within the Interfacility Traffic Area
The City is currently involved in implementing this recommendation with the grant award from the State (Virginia Military Strategic Response Fund) to purchase ~350 acres of land. The City is also currently working closely with the Navy to secure funding to continue the purchase of high priority land adjacent to the land being acquired with the State funding. This is an example of the multi-benefit approach to land acquisition, because not only will this land purchase help us to meet our BRAC directives but it will also ensure that we protect high priority conservation land that is included within our proposed conservation corridor network.

c) Explore partnership with Public Utility Department for targeted drinking watershed protection acquisition
A few years ago the City gave a $100,000 grant to the Nature Conservancy for a Northwest River Watershed Study. The Nature Conservancy and the City have been in contact recently with the Hampton Roads Planning District Commission (HRPDC) to work on this project. This study has the potential to help quantify some of the benefits that land conservation has the City’s drinking water resources. Research from the American Water Works Association in partnership with the Trust for Public Land indicates that this type of approach is being implemented across the country with many positive results.

III) Promote the availability of land conservation tax incentives

As mentioned in the tool section, landowners in Virginia have access to generous tax incentives on both the State and Federal level. Unfortunately, not many landowners are aware of these incentives. In order to help facilitate the utilization of these incentives, it would be beneficial to promote them through targeted mailings and the use of the City’s website. Recently the City has had two landowners approach us to accept an easement donation so that they could take advantage of these incentives. This could be a more common occurrence if more landowners had information on the incentives.
**Moving Forward: Recommendations**

**IV) Create a dedicated local funding stream for open space protection**

This recommendation was specifically listed as a City Council goal on the Council’s Two Year Goal summary from January 20, 2007. Without fulfillment of this recommendation, the implementation of recommendation’s I and II will not be possible. Currently the OSAP program receives funding from 4 main sources as follows:

1) The largest contribution for OSAP comes from the annual appropriation of roll back taxes. The past two fiscal years have provided around $400,000 to the OSAP account. With the real estate market slowing down it is likely that this number will decrease over the next fiscal year.

2) The second largest contribution is the $300,000 transfer from excess Mosquito funds that has taken place over the last two fiscal years.

3) The third contribution comes from revenues collected for public street closures. This is a very limited funding source with revenues of $80,000 and $3,000 over the last two fiscal years.

4) The fourth source of funds is from grant funding. The City has only received $100,000 from this source over the past two fiscal years, despite applying for a number of grants. The limitations of grant funding were discussed in the tool section and should only be used in very limited cases to supplement funding for specific projects.

The OSAP program does not currently have a reliable funding source that can be depended on to sustain the program over the long term. The current sources can fluctuate greatly from one year to the next and the total amount available in our current funding streams do not raise the level of funding necessary to have a program that can implement our program goals for Southern Chesapeake.

a) **Identify a general fund revenue source**

There are a number of possible revenue streams that could be considered for use by the OSAP program. Some possible sources of additional funding for OSAP:

1) A dedicated portion of the local recordation tax. A dedicated recordation fee is used on the state level to help fund the work of the Virginia Outdoor Foundation. As a tax on land transfers, it has a similar nexus to open space preservation as with the appropriation of roll back taxes.

2) A dedicated portion of the real estate tax. Both James City County and Virginia Beach use this as the primary funding source for their successful open space programs.

3) Redirection of existing Mosquito Funds. Although currently the OSAP program receives some funding from this source, additional money may be available for OSAP.
Moving Forward: Recommendations

IV) Create a dedicated local funding stream for open space protection (continued)

   b) Issue a general obligation bond for land preservation
   If a general fund revenue source could be identified for on-going debt service, a general obligation bond would allow for a large one time funding of the program. Having significant resources in the short term could allow us to take advantage of current land prices while purchasing land before it becomes developed. Overtime, land prices will continue to rise while more land will be developed. This is a strategy that has been used successfully throughout the country as well as in Virginia. Many of these initiatives occur through land conservation bond referendums. Over the last 10 years there have been 13 land conservation ballots approved by voters in Virginia raising over $277 million. The chart below lists the most recent of these ballot measures. As can be seen below they were all passed by an overwhelming majority of voters. This level of support is similar to what our previous surveys have shown in Chesapeake in regards to support for the public funding of land conservation.

<table>
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<th>Mechanism</th>
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<th>% No</th>
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<td>78%</td>
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V) Create a limited, targeted TDR program

Although the current structure of the state’s enabling legislation for TDR is not perfect, it does allow localities in the State to have a viable TDR program. There are a number of communities currently studying this as one option for land conservation. This tool has been used effectively in states such as New Jersey and Maryland. Even if the City does not actively pursue a TDR program it would be beneficial to have one in place in targeted areas to allow for flexibility in negotiations with developers. Chesapeake should work on drafting a TDR ordinance as well as creating our designated “sending” and “receiving” areas. A TDR has the potential to provide for some open space protection while encouraging development and redevelopment in our urbanized areas of the City.
Moving Forward: Recommendations

VI) Incorporate recently approved Rural Overlay Design Guidelines into City policy/regulations

a) Rewrite the City’s Subdivision and Cluster Ordinances
A well designed cluster subdivision may be the best single tool that the City has to protect rural and natural lands. As outlined in the City’s Design Guidelines for the Rural Overlay adopted by City Council on May 15, 2007, a cluster ordinance can help us preserve rural character while allowing for the protection and restoration of our natural features. A well written cluster ordinance could become the primary means to subdivide land in Southern Chesapeake completely replacing the current subdivision ordinance. To help offset any cost associated with road extensions due to cluster subdivision setbacks, limited density bonuses could be used based on the total size of the development project. The rewrite of the cluster subdivision ordinance should also ensure that all cluster subdivision open space lands tie into the SWAMP conservation corridor and integrate into a City wide greenway plan.

b) Update the City’s Public Facilities Manual (PFM) to reflect rural characteristics
The PFM currently has a one size fits all approach to the design of public improvements that is reflective of the more intensive development projects in the Suburban and Urban Overlay Districts. A process to modify the PFM to reflect the rural and natural conditions in the Rural Overlay has the potential to make our development review process complement our rural preservation goals. It also has the potential to lower the cost of development by decreasing the amount of required impervious surfaces and allowing for development design to better relate to the natural characteristics of the landscape.

VII) Study the fiscal impact of rural residential growth

There have been a number of studies performed in communities nationwide by the American Farmland Trust (103 studies in 22 States—5 studies in VA) and others that have explored the issue of community service costs for various land uses. The median results of the ATF studies is that for every $1 in revenue received by the community, residential uses require $1.15 in services, working/open land requires $0.36 and commercial/industrial requires $0.28. This is a useful analysis that helps determine the tradeoffs for particular development patterns. With the recent update to the City’s fiscal impact model, Chesapeake should explore the applicability of performing such a targeted study for the Rural Overlay. A related study to the fiscal impact study would be to perform a “build-out” analysis of Southern Chesapeake under different development scenarios.
“Smart conservation is just as important as smart growth. Smart conservation is proactive, large-scale and coordinated. We need to think of open space as a form of infrastructure just as we think of roads as infrastructure. It must be viewed as a necessity, not an amenity. It must be preserved through a public investment, not leftover money. And, it must be preserved as a connected, contiguous system, not fragmented and preserved in isolation.”

Ed McMahon, ULI Senior Fellow
forever Chesapeake

Ray and Connie McPherson Farm
January 2007 OSAP Purchase