



**Virginia Cooperative Extension**

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# Situation Analysis Report

## Rappahannock County

### 2013

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## Introduction

Rappahannock County conducted a situation analysis led by staff members, the 4-H council, members of the Extension Leadership Council, civic organizations, and local government officials. The process involved the development of a Rappahannock County Unit Profile as well as gathering community and resident perspectives on issues in the county. This information was analyzed and priority issues were identified.

A review of the situation analysis revealed that many of the issues identified in 2008 remain relevant. The unit profile was developed based on census data and preliminary findings of the Rappahannock County 2013 Comprehensive Plan. The issues that surfaced during this process were field verified by interviewing residents, agency personnel, and key county officials. Jenny Kapsa, Rappahannock County 4-H Coordinator, provided youth development information through her 4-H advisory committee. The 2013 County Comprehensive Plan informed the process and top priority issues for the county were identified for VCE.

## Unit Profile

Rappahannock County is in the northern portion of the Commonwealth of Virginia. Washington, the County Seat, is about 65 miles southwest of Washington, DC, and 120 miles northwest of Richmond, the State Capitol. The county extends north and south 24 miles and east and west about 21 miles. It has an area of approximately 267 square miles. The northwestern boundary is in the Blue Ridge Mountains and separates the county from Page and Warren Counties. The Rappahannock River forms the northeastern boundary and separates the county from Fauquier County. The county is bounded on the southeast by Culpeper County and on the southwest by Madison County.

### Water Resources

Springs, wells, streams and ponds currently provide adequate water for the people and livestock in the county. Approximately 96% of the residences in the county depend upon private wells, springs or streams for their drinking water. Water quality in the county is generally good, although excessive hardness and acidic conditions are occasionally encountered.

A great deal of concern exists both to protect the quality of our water resources and to analyze in some detail the quantity of water available to support a growing population.

### Agriculture

Historically, Rappahannock County has been an agricultural community with most residents depending upon the production of agricultural products for their employment and income. Today, the rural nature of the county continues to reflect the importance of agriculture to county residents, even though the decade of 1990-2000 saw the most precipitate decline in agricultural employment in our county's history.

Of increasing importance are the production of grapes, produce and the rise of organic farming. While dwarfed in economic terms by traditional agricultural and horticultural operations, both endeavors have been continuously reinforced by new investment over the past decade. This trend may reasonably be expected to continue in the coming five years. One of the goals of the county is to encourage renewal and diversification of horticultural activities.

While agriculture is still the foundation of the county's economy, more residents depend on other sectors of the economy for their main employment needs.

Between 1949 and 1974, the total number of farms in Rappahannock County declined nearly 63% from 687 to 257. A slow reverse in that trend has followed with an increase to 416 farms as shown in the 2007 Census of Agriculture. The percentage of total county land area devoted to farm usage has fairly steadily decreased since 1974.

While the number of county farms has begun to very slightly increase, the average farm size has been decreasing. In 2007, the average size was 156 acres, down from 279 in 1982.

An emerging trend of new and beginning farmers seeking assistance improves opportunities for beginning farmers and ranchers to establish agricultural operations and communities in the Northern Piedmont of Virginia. To address this trend, we support the development and enhancement of whole farm planning curriculum and training, online resources, social networking, and farmer mentoring.

Evolving food systems is another national, state, and local trend. These systems are attempting to link farms, food, and community health, to economic development opportunities centered on agriculture.

### **Orchards/Vineyards/Vegetable Production**

The orchard land in Rappahannock County consists primarily of apple production, although the county also harvests a considerable peach crop. In 2007, Rappahannock and adjoining county farms produced 13 million pounds of apples, while approximately 3.48 thousand pounds of peaches on 35 acres. The overall production of orchard crops has sharply declined over the years. However, the fresh market sales of apples and peaches are increasing. Expected earnings per acre are greater with fruit crops than with livestock, forages, or grain. According to this source, gross receipts from apple orchards could easily reach \$11,000 per acre and peach orchards \$5,000 per acre, assuming fruit is sold direct to customers. Currently, all orchard and vegetable farms direct market the majority of their products. A relatively small but significant amount of vegetables are now grown in the Northern Piedmont for direct market sales. Farmers markets, and CSA's are the primary outlets, however a growing number of institutions such as hospitals, public schools, 4-H center, restaurants, etc. are purchasing fruits and vegetables grown in Rappahannock and surrounding counties.

Wine grape production has steadily increased over the last decade. In 2007 1,419 tons of wine grapes were produced in PD 9.

## Cattle

Beef cattle (all livestock) numbers have grown over the past several decades, both as a principal farming operation and as one aspect of an integrated farm management plan. This trend has steadily shaded upwards, with occasional retraction due to the nationwide cattle market fluctuations.

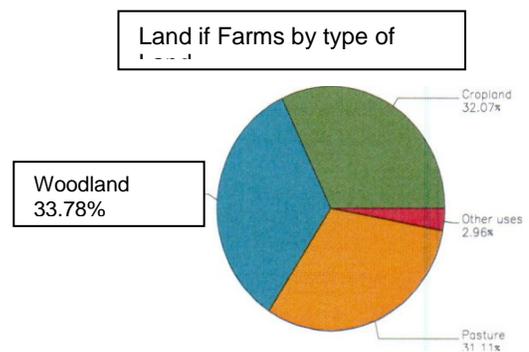
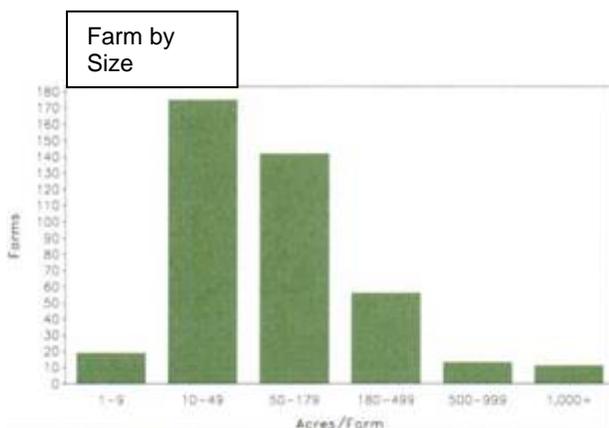
## Forests

Rappahannock County contains considerable forestland, most of which is hardwood of an oak and hickory type. According to the Virginia Division of Forestry, in 1981 approximately 105,795 acres or 62% of the total county land area was forestland. Approximately 70% or 73,707 acres of this forestland was classified as commercial forestland and 31,739 acres were considered "productive reserve" or forestland sufficiently productive to qualify as commercial forestland, but withdrawn from timber utilization through statute or administrative designation. These figures are also little changed from 2007.

## Value of Products Sold

The total value of county agricultural products sold increased from \$5.2 million in 1987 to \$7 million in 2007. The increase in agricultural products sold between 1987 and 2007 corresponds with the increasing number of vineyards and wine production in the county.

Rappahannock County Farms by size: 2007 Agriculture Census



## **Housing**

Since 1960 the number of housing units in Rappahannock County has steadily increased. In 1960, 1,865 units were reported in the county. The 1990 census reported a total of 2,964 units, or an increase of over 11% from the previous decade. This number had increased to 3,303 in 2000 and in 2011 the number of housing units was 3836; a 16% over the last decade.

Rappahannock County's level of substandard housing, lacking some or all plumbing or overcrowded, is 8.3% of total houses. Affordable housing is lacking in Rappahannock County.

## **Community Facilities**

Community facilities consist of those services provided by the county government or other governmental agencies to enhance the public's quality of life and general welfare. Because the adequate provision and maintenance of such facilities is important to the continuance of a well-balanced, diverse, and healthy community, identifying their current availability and extent is necessary.

Community facilities can be viewed as including several distinct groups. Among these are educational services, libraries, recreation, protective services, medical services, and public utilities.

## **Recreation**

With its abundance of open spaces, streams, rivers and natural areas, Rappahannock County offers numerous recreational opportunities. Primary among these are fishing, hunting, horseback riding, camping, hiking, and canoeing.

Much of the recreation in the county centers on the Shenandoah National Park that occupies approximately 31,761 acres within the County. Other popular areas are in the Rappahannock River Valley and the Thornton River between Woodville and Sperryville.

While the county does enjoy these large outdoor recreation areas, it has few community type park areas. The community lacks a parks and recreation department and offers little in terms of a youth development program. 4-H continues to be one of the few professionally organized youth development programs in the county.

## **Age Distribution**

The age and sex distributions of the population are important for several reasons. People under the age of 18 and over the age of 65 are generally more dependent than those of "prime" working ages. Therefore, a large percentage of an area's population in these age groups have definite economic and fiscal repercussions affecting per capita income, buying power and the costs of providing governmental services. Further, a comparatively young population with many females in the child bearing ages influences birth rates, school enrollments, public service demands, and future population totals.

The percentage of the population composed of individuals under 20 years decreased steadily from 1970 to 2000 while those persons 65 years and over increased by 51%. In 2011, those persons 65 years and over totaled 1404 or 18.92% of the population. Persons in the 45-64 age brackets edged upwards from 21% of the population in 1970 to 24% in 1990 and then grew markedly to almost 35% in 2011. The proportion of those persons 0-19 years decreased from 37.5% in 1970 to 29.6% in 1980, fell still further to 25.3% in 1990, and was 22% of the population by 2011. The 20-44 years age brackets share grew from 28.5% in 1970 to 37.6% in 1990 and fell back to 24.31% in 2011.

The 1990 Census results seemed to portend real future growth in population towards the lower end of the demographics. The surge in population in the prime child-rearing years has not been repeated with the 2010 Census, and indeed, the next demographic cohort set (45-64 yrs) has showed a roughly corresponding increase in percentage of the total.

This trend, along with the increase in the 65 and over population, resumes and reinforces Rappahannock's post World War II trend towards a "graying" of our population.

## **Youth and Elderly**

According to the 2010 census, approximately 22% of all residents living in Rappahannock County are between the ages of 5 -19 years. With no Parks and Recreation Department in Rappahannock County, it is imperative that an affordable youth organization be present to meet the social, recreational and developmental needs of these children.

Historically, activities for youth and the elderly have been provided through the county's extensive network of schools, churches, local volunteer Fire Halls and other venues. In addition, the county supports the Rappahannock Athletic Association and Rappahannock Soccer League that provide organized baseball and soccer league play for youngsters.

The Rappahannock-Rapidan Community Services Board provides services to the county's elderly population through meals-on-wheels and an on-site meal program currently offered at Trinity Episcopal Church in Washington.

## **Occupations**

While the economy of Rappahannock County has historically been based upon agriculture, it no longer employs as high a percentage of the work force as once was the case. The decade of 1990-2000 saw the most precipitate decline in Agricultural employment in our county's history. Although the percentage of persons employed in that sector of the economy increased slightly between 1980-1990, it is still far below the 1970 figure, which in turn was lower than figures for previous decades. There have been a number of major investments made in agriculture over the past four years, particularly in "niche" areas such as grapes, vegetables, and organic products that may reverse this trend. While agriculture is still the foundation of the county's economy, more residents depend on other sectors of the economy for their main employment needs.

More generally, between 1980 and 2000, the total number of employed persons increased from 2,517 in 1980 to 3,375 in 1990 and to 3,591 in 2000. Reflecting the rural character of the county, production, crafts, operations, farming and general labor of all kinds were represented in Rappahannock County at a rate greater than that for the State. In 2012 the total number of employed persons was 2,185.

It is worth noting that the proportion of workers who are classified by the Bureau of the Census as self-employed remains substantially higher in Rappahannock than many other jurisdictions; 612 of total employment of 3,591. This translates to 17.1% of workers as opposed to lesser percentages, generally in single digits, in adjacent counties. Reflecting the increasing commuting trend towards the governmental employment centers to the north and east, adjacent counties had an average of 15% of their worker populations employed in Federal, State or Local governments. Rappahannock, in an increase of over 5% since 1990, had 17% of its workforce employed by a governmental entity.

### Civilian Industries By Which Employed 1980-2012

	1980		1990		2000		2012	
	#	%	#	%	#	%	#	%
<b>Agriculture, Forestry, Fisheries &amp; Mining (&amp; Hunting in 2000)</b>	297	11.8	409	12.1	289	8.0	248	11.4
<b>Construction</b>	431	17.1	649	19.2	555	15.5	363	16.6
<b>Manufacturing</b>	489	19.4	416	12.3	185	5.2	84	3.8
<b>Transportation</b>	79	3.2	144	4.3	*	*	32	1.5
<b>Communications &amp; Other Public Utilities</b>	33	1.3	105	3.1	282	7.8	13	0.6
<b>Wholesale Trade</b>	42	1.7	102	3.0	51	1.4	44	2.0
<b>Retail Trade</b>	312	12.4	385	11.4	281	7.8	192	8.8
<b>Finance, Insurance, Real Estate</b>	88	3.5	122	3.6	145	4.0	84	3.8
<b>Business, Repair Service</b>	135	5.4	155	4.6	--	--		
<b>Personal, Entertainment, Recreation Services</b>	170	6.7	193	5.7	310	8.6	325	10.3
<b>Health Services</b>	150	6.0	154	4.5	*	*	30	1.4
<b>Educational Services</b>	-	-	144	4.3	533	14.8	255	11.7
<b>Other Professional Services</b>	101	4.0	179	5.3	428	11.9	612	28.0
<b>Public Administration</b>	89	3.5	218	6.46	279	7.8	148	6.8
<b>Other</b>	-	-	-	-	253	7.0		
<b>TOTAL</b>	2517		3375		3591		2,185	

SOURCE: U.S. Census Bureau

## Income Characteristics

Between 1969 and 1979 the median income of Rappahannock County families increased from \$12,625 to \$16,878 or 33.7%. Likewise, the 1979 mean or average income of Rappahannock County families was \$20,694 while the State figure was \$25,022.

Clearly, the income of Rappahannock residents has been on a steady rise since then with particularly notable increases in the past decade. Median family income in 2000 stood at \$51,848 while per capita income stood at \$23,863. In 2011 the median was 64,113 and the mean income was 92,277. Anecdotal evidence of the counties' general increase in wealth may also be showing the fact that 12.97% of the population reported incomes of \$100,000 or above, the twelfth highest percentage from among the 135 counties and independent cities. Similarly, with 4.74% of families reporting incomes below the poverty line.

## Adjusted Family Income

### Households by Income

Total	3,076	100.0%	3,310	100.0%
Households				
<\$10,000	74	2.41%	127	3.84%
\$10,000-\$14,999	180	5.85%	157	4.74%
\$15,000-\$24,999	249	8.09%	299	9.03%
\$25,000-\$34,999	332	10.79%	358	10.82%
\$35,000-\$49,999	539	17.52%	435	13.14%
\$50,000-\$74,999	510	16.58%	456	13.78%
\$75,000-\$99,999	376	12.22%	504	15.23%
\$100,000-\$149,999	399	12.97%	433	13.08%
\$150,000-\$199,999	272	8.84%	278	8.40%
\$200,000+	145	4.71%	263	7.95%
Median income	58,500	-	64,113	-
Mean income	79,665	-	92,277	-

SOURCE: U.S. Bureau of the Census

## Community and Resident Perspectives

Data was collected by using issues forums, and key informant interviews. The responses to the data collected along with the top issues facing families in general in our community are as follows:

- Transportation – Clients/youth don't participate in programs offered by respective agencies because they don't have transportation:
  - After school programs are available - sports/clubs/activities - but not well attended
  - Public Health Clinics
  - Overall public transportation provided was underutilized by the general public but do need after school transportation for kids
  - Community involvement (churches etc) take care of critical health related appointments
- Affordable housing
- Few job opportunities within the county
- Parental Involvement (10-12 yr old) is minimal
- Parenting programs are available, but packaging/presentation/advertising of parenting programs need modification
- Nutrition – Youth and Adult Obesity

### 1. What are the top health-related issues facing our community (your clientele)?

- Childhood Obesity
- Healthy eating habits/nutrition
- Alcohol and drug prevention programs for youth
- Parent and Family Issues: Parents still need guidance in parenting their own children

### 2. Where are some of the gaps in services for families, nutrition, and finance?

- Inability to reach families in need
- VCE only providers for family, nutrition, and finance programs
- Getting the word out to those in need
- Obesity
  - Ignorance – buying cheap/fast/ inexpensive/soda/ kool aid/ cookies
  - Adequate food storage is an issue

Don't know nutrition and opt for quick fix in terms of feeding the family

## 1. What are the challenges facing the agricultural community?

### **Challenges to Rappahannock Farmers**

The following challenges were identified:

- Global trade and increasing agricultural imports at low commodity prices are making it impossible for farmers to make a profit.
- Rappahannock County is not the best farmland.
- The average farmer in Rappahannock Co makes \$18,122 per year selling commodities.
- Many farmers have to take an outside job in order to stay in farming.
- Opportunities for local and regional markets are needed
- Aging population of farmers and lack of family interest to continue farming
- Invasive species monitoring and control
- New and beginning farmer programs

### **What other programs or actions would be helpful in keeping agriculture viable in Rappahannock County?**

- Soil Health and water quality programs that offer increased flexibility to implement BMPs on the farm.
- Increase the amount of money paid to farmers for installing and maintaining agricultural BMPs.
- Alternatives to traditional commodity production for Rappahannock farmers; niche products such as organic vegetables, horticultural products (vineyards), forestry products and grass fed beef.
- Developing local and regional food systems.
- Address the needs of new and beginning farmers.
- Provide the latest researched based information from land grant universities to the farming community.
- Lack of land grant support for developing alternative crops and markets

One major mechanism available to help Rappahannock County farmers maintain their land is the land use taxation program. Not only does this program make it feasible for farmers to keep their land, but it also enables some farmers to obtain free use of additional farm land owned by absentee owners and weekender farmers. Several issues were discussed concerning land use taxation:

- It limits county revenue. Combined with the commonwealth's composite index, the result is constraints on school funding from both local and state sources.
- Easements result in land use taxation to the land owner but are better for county revenue due to the way in which the commonwealth computes the composite index.
- The need for public education concerning the merits and benefits of land use taxation for all citizens of the county. According to one estimate, fifty percent of the public does not favor land use taxation. Many taxpayers do not understand that full market value is paid on the house and surround, even when the overall farm is in land use taxation program. Efforts to foster better public understanding of land use taxation could be a useful step in retaining farmland and therefore in watershed protection.

- The importance and implications of enforcing the rules of eligibility for land use taxation. Some participants felt that strict enforcement is politically essential; others felt the penalties are too severe and thus takes too much risk with farmland preservation.
- Ways the program could be strengthened to further assist farmers in keeping their land. For example, barns could be taxed based on their use rather than market value.
- Possible alternatives to, or augmentation of, land use taxation such as purchase of development rights.

## **Priority Issues**

### **4-H Youth Development**

Rappahannock 4-H reaches more than 500 Rappahannock County youth through in-school programming, 4-H clubs, camping programs, and special activities. In 2013 Rappahannock County 4-H offered new programs to the community; 16 4-H workshops and four summer travel day camps. Each of these programs was designed to offer parents additional day care options, and for youth to be exposed to people and places in the community that they may not have known about, in hopes of peaking their interests and expanding their learning opportunities. In addition, the 4-H travel camps provided Rappahannock County teenagers with a local employment opportunity.

The biggest challenge in offering these programs was reaching the Rappahannock community with information about the 4-H workshops and the travel camps. Despite weekly information being put in the Rappahannock County Elementary School's (RCES) Tuesday folder (a way to notify parents of programs and activities for children at the RCES) and the Rappahannock News, parents were often surprised to learn of 4-H workshops that they had not known about, and many did not know about the 4-H travel camping programs.

With one year of successful programming behind us, word will spread throughout the Rappahannock community about these 4-H opportunities. And with hundreds of pictures from the 2013 programs, advertising will be enhanced. As a result, we expect to have a much greater enrollment for both the 4-H workshops and the 4-H travel camps in 2014.

In an effort to establish these programs in the community, the Rappahannock County 4-H program intends to offer 4-H workshops during the second half of the school year, and two travel day camps in the summer of 2014. These programs will:

- Provide parents with a day care alternative;
- Provide entertaining, hands-on, subject-specific programming from various local businesses, organizations and citizens in and nearby Rappahannock County.
- Provide an employment opportunity for teenagers.

On behalf of Rappahannock County 4-H and the Virginia tech Foundation, a 501(c)(3) organization, we respectfully request the Richard Lykes Foundation to donate \$15,000 to help support these 4-H programs to youth in Rappahannock County.

4-H workshops will be available to all Rappahannock youth from 5 – 18 years of age, and will cover a wide range of topics. Each workshop will be free of charge, will be designed to last 1.5 - 3 hours, and will take place only once, unless there is an interest in offering additional programming on a specific topic. Workshop instructors who would like to offer additional programming will be encouraged to start a 4-H club for long term programming, or to work with Headwaters' After School program to lead a six week workshop.

4-H workshops will provide youth with the opportunity to learn a skill, create something, and participate in an activity that is of interest to them. 4-H instructors will primarily be members of the Rappahannock community who have knowledge that they would like to share. Local businesses/organizations will be encouraged to lead 4-H workshops in order to educate Rappahannock youth about what they do and offer within the county, and in turn, have youth in the county be more knowledgeable and involved with these businesses/organizations.

The Extension office will handle all advertising, registrations, and will secure instructors, workshop locations, and program supplies. The 4-H Coordinator is a 20 hour/week position, and will not be able to attend the workshops. Therefore, a Workshop Supervisor will be hired to oversee the workshops as they take place.

4-H Workshops will be primarily offered right after school at the Rappahannock County Elementary School (RCES), with those workshops designed for teens being mainly offered at the RCHS. Some workshops may be offered at other locations, such as Hearthstone, Belle Meade, or at a specific business, so that they may promote their business/program/establishment.

#### **4-H Youth Develop Priority Issues:**

1. Expand 4-H program opportunities to Rappahannock youth.
  - Currently 4-H curriculum is expanding in Rappahannock schools.
  - Incorporate 4-H curriculum in public and private elementary and high school classrooms.
  - Home-school families do not use 4-H curriculum as part of their schooling
  - Introduce 4-H curriculum to home-school families and encourage development of 4-H clubs.
  - There are limited after school programs
  - Create new 4-H after school clubs at local schools.
2. Create 4-H programs and activities for youth to interact with seniors
  - The number of seniors in Rappahannock County has increased over the years. More interaction between youth and seniors is desired.
    - Create 4-H programs and activities whereby seniors and 4-H youth interact.
3. Make community aware of volunteer opportunities within 4-H.
  - The overall community of Rappahannock County is unaware of the many volunteer opportunities that 4-H offers. Many in the community think of 4-H as being strictly

animal related and are not aware of the other nine curriculum areas or of the variety of programming opportunities that are available through 4-H.

- Advertise 4-H volunteer opportunities through the local newspaper.
- Educate community about 4-H and the many volunteer opportunities that exist by speaking at local community organizational meetings, PTOs and to local businesses.
- To make volunteering to lead a 4-H club or activity more appealing to local teachers, discuss the possibility of teachers receiving recertification points towards their mandatory license renewal credit hours.

## **ANR Programs**

Rappahannock's agricultural, forestry and tourism industries are critically dependent upon the careful nurturing of the county's unspoiled natural resources. Based on the unit profile, county comprehensive plan, and community perspectives, the following priority issues were identified.

Surrounding communities are losing the natural resources base necessary to continue farming as a viable enterprise. The goal of Rappahannock County is to preserve agricultural land and promote agricultural enterprises associated with tourism and economic development. To achieve these goals the following issues were identified.

### **ANR Priority Issues:**

- Encourage renewal and diversification of horticultural crops including, tree fruit, vegetable production and viticultural activities. It is generally recognized that perennial horticultural crops require a higher degree of production management than do most agronomic crops and livestock farms, and extension has few agents serving this sector of agriculture.
- Apple, peach, grape, vegetables, and wine production within the county are established enterprises that complement agricultural tourism, local food systems, economic development centered on agriculture and programs related to these enterprises are top priority.
- Further development of local and regional food systems is necessary to sustain the economic viability of the community.

Inability to stop growth, and encroachment from surrounding counties.

- To encourage and maintain a viable rural agricultural and tourism-based economy compatible with the county's size and character.
- Promote and protect agriculture as the primary use of land in rural areas and inform the public of the benefits of this policy.

Protection of natural resource from uncontrolled development and detrimental agricultural activities; including soil, water, air, view-sheds, scenery, food sheds, and fragile ecosystems.

- Encourage traditional and innovative soil health and water conservation practices among the county's farmers in order to preserve productive soils, to control erosion and siltation and to protect water resources.

- Ensure that timber harvesting and road construction is conducted such that sedimentation of streams and other environment impacts are minimized.
- Encourage and facilitate the donations of open-space easements on land that is identified as having important scenic, historic, open-space, conservation, agricultural, woodland and wildlife-habitat qualities.
- Promote the best management and prevention measures for potential groundwater pollution sources, including septic tanks, and wells.
- Actively engage with landowners to foster and support the use of Best Management Practices in agricultural and forest activities.
- Support use-value taxation and other fiscal programs that help to alleviate economic burdens on owners of agricultural, horticultural and forested land and continue land use planning to protect agricultural land from escalating assessments.
- Investigate and initiate ways of promoting tourism as a suitable and appropriate form of economic development and ensure that tourism-oriented development is compatible with the rural and agricultural character of the county and economic development centered on agriculture activities of the county.
- Support the development of markets for Rappahannock County agricultural products, and cooperate with individual agricultural interests within the county, and establish liaisons with counties in the area that have similar development programs.
- Support the conduct of an inventory to identify environmentally significant lands, and the establishment of a countywide groundwater-monitoring network.