

## **Chapter 6**

# **NATURAL RESOURCES PLAN**

## INTRODUCTION

Spotsylvania County's natural resources play a significant role in defining its character and environmental health and also play a role in its economic activities, helping support local tourism and employment. The County's rich heritage and character have been an important aspect of the high quality of life as well as a source of pride for residents.

As presented in the following section, the Plan contains policies and strategies that aim to promote the consideration of, and protection of the County's sensitive natural resources. The primary themes of these strategies address resource identification and protection, education and public awareness, and expanded economic opportunities as a means to build value into the preservation of County resources. Natural Resource policies and strategies should be undertaken on behalf of the citizens of the County. The stakeholders in this endeavor – property owners, land developers, local government, preservation groups and special interest groups, and interested citizens – must have viable and creative tools to be good stewards of their natural resources. The adoption and implementation of this Plan helps guide efforts to ensure a future for our natural resources.

### **THE CODE OF VIRGINIA - ENABLING LEGISLATION**

This element, along with its corresponding appendices, have been compiled and provided to comply with the Code of Virginia Sec. 15.2-2223.2. Comprehensive plan to include coastal resource management guidance, and Sec. 15.2-2224. Surveys and studies to be made in preparation of plan; implementation of plan.

Natural Resources survey and study materials have been compiled to satisfy the Code of Virginia 15.2-2224. Surveys and studies to be made in preparation of plan; implementation of plan. Due to their nature providing background, inventory, or reference information, as opposed to providing guidance or offering land use direction, such information has been located in Appendix D of this Comprehensive Plan. Natural Resource topics covered include: (1) Soils and Groundwater, (2) Water Reservoirs and Dam Break Inundation Zones, (3) Wetlands, Watersheds, and Streams, (4) Identification of Protection Policies, (5) Vegetation and Wildlife, (6) Forestry, (7) Production of Food and Fiber, (8) Land Conservation, (9) Implementation and Funding Resources.

### **NATURAL RESOURCES POLICIES AND IMPLEMENTATION STRATEGIES**

**Policy 1: Balance the protection of environmental resources and natural wildlife habitats with development.**

Strategies:

1. The County should support the mitigation of impacts upon unique and/or endangered resources including rare species (See Natural Resources Appendix Table 3) and their habitats as part of the development review process.
2. Catalog open space and greenways in GIS in order to promote systematic linkages and connections where feasible to establish wildlife corridors.

3. Encourage land development practices, which minimize impervious cover to promote groundwater recharge, and/or tree preservation.
4. Encourage the use of the voluntary tree preservation credit described in the Design Standards Manual that is available as a tool to reduce clear cutting and protect existing trees on a development site.
5. Encourage recycling.
6. Enhance litter control efforts including enforcement and cleanup along County roadways.
7. Reduce long term energy costs for County buildings through energy audits and energy efficiency improvements to achieve greater savings.
8. Support the maintenance and growth of the local forestry industry, local food and fiber production (agriculture), and mining.
9. Promote multiple uses of forested land where appropriate such as outdoor recreation, wildlife habitats, watershed protection, and timber harvesting.
10. Locate land uses where their tolerance is compatible with existing or proposed noise levels and/ or reduce impacts through vegetative buffering or building design.
11. Promote dark sky lighting.

**Policy 2: Protect the County's potable water resources.**

Strategies:

1. Review all applications for extraction of mineral resources to prevent irreversible impacts to the environment, impacts to existing development and to ensure reclamation (assuring re-use potential and/ or non-contamination) for future development.
2. Consider exhausted or closed quarry sites as possible recreational lakes and/ or water reservoirs.
3. Initiate a county-wide study to identify and protect aquifer and groundwater recharge areas.
4. Continue efforts to discontinue chlorine and fluoride water treatment methods in favor of alternative methods.

**Policy 3: Seek to create public/ private partnerships to promote and protect natural resources while integrating natural resource goals with community and economic development, tourism and, public safety goals.**

Strategies:

1. Promote public and private cooperation in the preservation of environmentally sensitive areas for public open space, park, and recreation activities having minimal impact on the site.

2. Identify and make available a list of resources, including existing programs and potential funding sources that community members may like to pursue to improve environmental conditions.

**Policy 4: Investigate the feasibility of providing additional public access points for boating (incl. canoe, kayak), fishing along the Rappahannock River and Lake Anna. The access points should be developed only after soil stability has been determined and an appropriate method has been designed to minimize erosion and its subsequent sedimentation impact.**

Strategies:

1. Consider selling County land along navigable waterways or, where feasible, working with private developers and/ or regional or state agencies to speed up and promote private development with public water access.

**Policy 5: Promote Natural Resource Protection through Education.**

Strategies:

1. Include education areas in parks for observing and learning about the natural and physical environments, including ecology, wildlife, plants, geology, hydrology, and landforms.

**Policy 6: Consider Virginia Institute of Marine Science Guidance.**

The following coastal resource guidance, provided by the Virginia Institute of Marine Science (VIMS) applies to the tidal extent of the Rappahannock River. The County is working to create its own shoreline and eco environment document to address the non-tidal tributaries, streams, creeks and rivers. County environmental staff is currently working with Caroline County on researching non-tidal tributaries, creeks, streams and river shoreline restoration and preservation that will address our common watersheds and will be easily adaptable for the entire county.

1. Refer to the guidance presented in the locality's Comprehensive Coastal Resource Management Plan (CCRMP) prepared by VIMS to guide regulation and policy decisions regarding shoreline erosion control.
2. Utilize VIMS Decision Trees for onsite review and subsequent selection of appropriate erosion control/shoreline best management practices: <http://ccrm.vims.edu/decisiontree/index.html>.
3. Utilize VIMS' CCRMP Shoreline Best Management Practices for management recommendation for all tidal shorelines in the jurisdiction.
4. Consider a policy where the above Shoreline Best Management Practices become the recommended adaptation strategy for erosion control, and where a departure from these recommendations by an applicant wishing to alter the shoreline must be justified at a hearing of the board(s).
5. Encourage staff training on decision making tools developed by the Center for Coastal Resources Management at VIMS.

6. Follow the development of the state-wide General Permit being developed by VMRC. Ensure that local policies are consistent with the provisions of the permit.
7. Evaluate and consider a locality-wide permit to expedite shoreline applications that request actions consistent with the VIMS recommendation.
8. Seek public outreach opportunities to educate citizens and stakeholders on new shoreline management strategies including Living Shorelines.
9. Follow the development of integrated shoreline guidance under development by VMRC.
10. Evaluate and consider a locality-wide regulatory structure that encourages a more integrated approach to shoreline management.
11. Consider preserving available open spaces adjacent to marsh lands to allow for inland retreat of the marshes under rising sea level.
12. Evaluate and consider cost share opportunities for construction of living shorelines.