

Protecting the Forests of the Chesapeake Watershed Virginia Forest Conservation Stakeholders

Goal and Framework for Executive Committee DIRECTIVE 06-1

Introduction

Forests cover over eight million acres of the Chesapeake Bay watershed in Virginia. These forestlands make significant contributions to the natural and economic health of the Commonwealth. The forests of the Chesapeake watershed contribute approximately \$12 billion to the economy of Virginia and provide employment for over 90,000 people. These same forests also provide wildlife habitat and recreation opportunities, improve air quality, and help to protect the quality of drinking water for 4.4 million people. Forests play an important part in the quality of life and natural beauty found in Virginia.

Unfortunately, Virginia's rapid population growth puts these forests and their benefits at risk. Virginia is losing forestland at a rate of 26,000 acres per year and much of this loss is occurring within the Chesapeake watershed. Loss of forest acres and the fragmentation of the remaining acres reduces the potential of the forest to provide economic, social and ecological benefits for the Commonwealth and its residents.

Recognizing the importance of forest cover in improving the health of the Chesapeake Bay, and the threats facing the forests of the watershed, the Chesapeake Bay Executive Council issued Directive 06-1 to spur protection of the forests of the Bay. The Directive calls for each state to develop forestland conservation goals and strategies that will safeguard Virginia forest land into the future.

The following recommendations are the result of the collective efforts of the Virginia Forest Conservation Stakeholders working group (working group). The working group was hosted by Virginia Department of Forestry (DOF), the lead organization for the Executive Directive 06-1. Organizations represented in the Stakeholder Group are listed in final section, Partnerships and Action.

The working group met three times in early 2007 to develop Virginia's response to the directive. The working group developed criteria for a GIS analysis to identify high priority lands for conservation; considered linkages between conservation and stormwater regulations, and identified tools to increase conservation of forestlands that protect water quality.

Forest Conservation Goal

The forest conservation plan developed by the Virginia Stakeholders Group will reduce the loss of forest land through a combination of short and long term protection strategies as well as permanent protection of targeted forest lands. GIS analysis is used to focus conservation tools and strategies on forests that provide the greatest benefits to water quality and that are at the highest risk for conversion. These strategies will result in the permanent protection of 135,000 forested acres within the Bay watershed by 2012 and 315,000 acres by 2020.

Virginia has a strong tradition of private land ownership and forest management. Because of limited funding available for easements and acquisition of forestland, efforts in Virginia will rely on an array of alternatives that assist and encourage landowners not to convert their forest land to other uses. This plan identifies tools and strategies, existing and potential, which could be used to encourage landowners to hold onto forest land.

Land conservation strategies represent a continuum from short term to perpetual. It is up to the landowner, given all pertinent information, to decide what level of protection is appropriate for their ownership. The responsibility of the state is to provide landowners with sound guidance while encouraging landowners to place their land under the greatest level of protection appropriate. Over time, landowners will be encouraged toward longer term protection.

This plan defines the state's role in identifying properties that are most important to protect and in developing the conservation tools and strategies that will enable landowners to maintain their land in forest cover. This plan recognizes that development must occur somewhere and that effective forest conservation will depend on guiding development to the least valuable forest lands for conservation while protecting those identified as the most valuable.

High value forests were identified by GIS analysis that included;

- Streams, shorelines, and floodplain forests and forested wetlands
- Forests in headwaters and on steep slopes
- Forests protecting drinking water supplies
- Large contiguous blocks of forest, and
- Sustainable, managed working forests.

These parameters were identified as priorities in the EC Directive. The Virginia analysis also included two measures of existing terrestrial and aquatic biological integrity. Land conversion threat was determined using housing density projections for the year 2030 (Appendix A). The relative weights of the layers were set as follows:

- **30%** Modified Index of Biotic Integrity (*mIBI*)
- **30%** Index of Terrestrial Habitat Integrity (*I_{THI}*)
- **20%** large forest blocks
- **5%** Streams, shorelines, floodplains and forest wetlands
- **5%** headwaters and steep slopes
- **5%** drinking water source protection areas
- **5%** managed working forests

Conservation Strategies

The Virginia Stakeholders strategy recognizes the importance of maintaining forest cover throughout the bay watershed while placing greater emphasis on conserving forests that have very good biotic integrity but face a significant risk of conversion. Many of the following tools and programs can be applied statewide as well as be focused on areas of high value forest in the Chesapeake Bay.

Existing Incentives for Permanent Protection

- 1) **State Tax Credits for Donation of Conservation Easements** – Virginia provides saleable tax credits equal to 40% of the value of the donation. These credits provide a strong financial incentive to landowners, regardless of income level. Starting in 2007, the total amount of tax credits available statewide has been capped at \$100 million annually. The cap notwithstanding, the conservation easement program remains in high demand. Accordingly, the cumulative appraisal value of donated easements is expected to greatly exceed this limit.
 - a) If the annual cap is exceeded, some landowners may be discouraged from donating easements due to the absence of the state tax credits. Eliminating or increasing the annual cap could help to maintain the current pace of easement donations.
 - b) The Virginia Outdoors Foundation (VOF), Virginia’s primary holder of conservation easements, is a strong organization with a solid land conservation record. Due to limited staff and financial constraints the organization is not able to meet the ever-increasing easement demand. In particular, state resources do not currently meet landowner interest in donating conservation easements. For instance, inability to meet demand has forced VOF to limit the number of easements they can accept and responsibly steward in perpetuity; thus, effectively excluding many landowners with less than 100ac.

The working group recommends:

- i) Increasing state resources dedicated to accepting easement donations through VOF or other state agencies as appropriate.
 - ii) Identifying other organizations to hold easements and allocating resources to meet this ability.
- 2) **Purchase of Development Rights (PDR)** – Thirteen localities currently have a local PDR program with some level of funding available. The Virginia Department of Agriculture and Consumer Services (VDACS) is providing \$4.25 million in matching funds to localities that have established PDR programs.

The working group recommends that:

- a) Increase the number of localities that have funded PDR programs.
 - i) Provide state assistance with establishing new and expanding existing local PDR programs in forest conservation target areas.

By 2012 - Offer presentations on PDR programs to all localities that have high value forest areas. - VDACS/VDOF/PEC

- ii) Increase state matching available for local PDR programs.
- iii) Assist localities with feasibility studies for dedicated funding sources.

Obtain training through Trust for Public Lands or other non-governmental partners.

Potential Incentives for Permanent Protection

- 3) **Increase Funding for Fee-Simple Acquisition and Easements** – The Virginia Land Conservation Fund (VLCF) provides annual funding for the purchase of land and easements for significant properties. These funds are available to state agencies, and private groups. Private organizations or landowners must provide a 50% match for funding.

The working group recommends:

- a) Increase funding for VLCF to protect forestland in targeted areas.

- 4) **Transfer of Development Rights** – These programs can be very complex and their development and use may be beyond the resources of local planning staffs. However, a successful TDR program may enable a locality to target forest land conservation while allowing desirable growth in other areas.

The working group recommends:

- a) Enable state leadership to research successful TDR programs and develop guidelines for Virginia localities.

Potential State Funding Sources for Conservation

Lack of consistent funding limits the ability of State agencies to develop proactive forestland conservation programs. Virginia's greatest success to date has been through voluntary donation of conservation easements. While effective in increasing the number of acres under permanent protection this system does not focus resources on the areas identified as being of high value for conservation. Dedicated funding that is relatively consistent from year to year will enable:

- State agencies to purchase land or easements on the most critical lands
- Increased matching funds for local PDR programs that target critical lands
- Increased resources for state agencies to process donated easements
- Increased funding for grants to low income landowners to donate easements

Potential funding sources for forest conservation could be tied to development that results in loss of forest cover; examples include recordation fees, water service fees, or tree cover mitigation payments.

Existing Incentives for Landbase Conservation

- 5) **Land Use Value Taxation** – Basing property taxes on the current-use value of land rather than the best-use is an existing county-level incentive program that encourages short-term conservation of forestland. Seventy-two counties and nineteen cities currently have land use ordinances on the books.

The group recommends:

- a) Encourage all localities to adopt or maintain land-use value taxation for forestland.
 - i) Effectively communicate to counties the benefits of conserving forestland and reduced tax burden associated with timberlands relative to development.

**By 2008 - Provide model programs and training to all counties that have high value forest areas.
- RC&D, DOF, VCE, PEC**

- b) Increase the effectiveness of this program by encouraging the use of a graduated tax reduction that offers lower property tax rates in exchange for longer periods of protection.
 - i) Survey counties to determine interest/impediments to this program.
 - ii) Develop state reimbursement program to replace lost tax revenue for counties.
 - iii) Implement pilot program in several localities.

- 6) **Ag-Forestal Districts** – This is another existing county-level incentive program that provides longer-term forestland conservation. This program allows for more focused conservation than the county-wide land-use value tax. Because fewer landowners can take advantage of these districts, they may place less of a burden on the localities.

The group recommends:

- a) Increase the use of this program by localities.
 - i) Provide seminars for landowners in targeted areas to demonstrate the benefit of forestal districts.

By 2010 - Implement farm/forestal workshop for forest landowners. - RC&D, DOF, VCE, PEC

- b) Reduce the tax rate for lands in ag-forestal districts.
 - i) Pilot a state reimbursement program to replace lost tax revenue for counties.

Research coordinated between VA Tech and VDACS.

- 7) **Riparian Buffer Tax Credit** – This existing state tax credit reimburses landowners for a portion of the value of timber intentionally left standing in riparian buffers. The buffer area must be left in unharvested forest use for a period of 15 years.

The group recommends:

- a) Increase the use of this program with aggressive outreach.

Devote DOF staff or provide training to other organizations to guide landowners through RBTC signup.

- b) Increase the effectiveness of this program by reducing the tax rate for lands in buffers.

Research coordinated between VA Tech and VDACS.

- c) Ensure long-term protection by offering greater tax credit and/or lump sum payment (similar to CREP buffer easement) in exchange for permanent or long-term conservation easements on the buffer areas.

- 8) **Make Forests Profitable** - Ecologically sound forest stewardship plans and harvest regimes result in healthy forested systems which provide many benefits to the Commonwealth's citizens, including timber.

The group recommends:

- a) Increase total number of landowners enrolled in stewardship plans and increase numbers of plan preparation through consulting foresters.
- b) Maintain and develop markets for timber and other forest products and services.
- c) Promote *Forestry for the Bay* to enable small landowners to develop their own forest management plans online. This could expand the reach of professional forest management guidance without increasing demands on state staff.

- 9) **Cost Share Programs** – State and Federal programs that pay landowners for implementing conservation practices can provide an incentive to keep land in forest cover.

The group recommends:

- a) Increase the presence of DOF activities in forest conservation target areas.
 - i) Actively promote increases in state and federal cost share programs to benefit forest landowners.
 - ii) Emphasize forestland conservation in targeted areas with state committees for Reforestation of Timberlands (RT-VA) Environmental Quality Incentive Program (EQUIP-Federal), and Conservation Reserve Enhancement Program (CREP-Federal).
- b) Evaluate current provisions of the State Reforestation of Timberlands (RT) cost share program to provide funds dedicated to forest practices on CB targeted conserved lands.
 - i) Propose enabling legislation to dedicate a portion of RT cost share to land base conservation (not just riparian).
 - ii) Work with legislature and industry to support changes to RT program.

Potential Incentives

- 10) **Incentives for Developers** – Effective tools have been developed in Virginia and in other states to integrate forestland conservation and profitable development. If more localities were aware of these tools, they would have more options when facing development pressure.

The group recommends:

- a) Identify profitable practices benefiting both potential development and forest conservation and apply them more widely in Virginia.

Identify university or private resources available to research these programs.

- 11) **Landowner Payments for Ecosystem Services** – Recognizing the economic, human health, and ecological benefits which forests provide the Commonwealth's citizens, market-based mechanisms to support the maintenance of contiguous forest cover need further exploration.

The group recommends:

- a) Institute an ecosystem market in Virginia.

Education Component

12) Education for Local Decision Makers – Increase awareness of the benefits of forests with emphasis on ecosystem services. Provide information and examples of planning tools available for conservation at the local level.

The group recommends:

- a) Bring Non-Point Source Education for Municipal Officials (NEMO) training to Virginia.
Bring together representatives from Chesapeake Bay Local Assistance and Virginia Association of Counties to sponsor training sessions.
- b) Develop regional forest conservation planners to provide education and outreach for landowners, local decision makers, and conservation partners.
By 2007 - DOF to create three to four regional positions.
- c) Develop GIS tools to identify forest conservation priority areas to guide local planning.
By 2007 - DOF to use GIS to identify forest conservation priority areas for entire state.

Potential Regulation

13) Expand Buffer Implementation – Chesapeake Bay Act regulations place restrictions on construction and clearing adjacent to the Bay and its tributaries to reduce nutrient and sediment flows into the bay. Expanding the program to additional counties would increase the miles of working buffers. Also, within the CBA counties, the level of enforcement varies.

The group recommends:

- a) Promote Bay Act compliance to counties outside of tidal zone. Push to implement voluntary compliance with buffer restrictions in counties that don't currently fall under CBA regulations.
- b) Increase enforcement of buffer restrictions by counties.

14) Raise Standards for Forestry Designation – Many property owners receive benefits in exchange for keeping their land in forest. However, the standard for what constitutes forest management varies by locality. Raising the standard may limit the number of landowners taking advantage of this program, thereby limiting the cost to the localities. The landowners that do meet the criteria would be expected to provide a higher level of forest management.

The group recommends:

- a) Develop uniform standards for forestry designation in localities.
- b) Adopt uniform standards in all localities.

15) Add Elements to Comprehensive Plans – County comprehensive plans shape land use decisions and have tremendous potential to foster conservation. Making localities aware of planning and zoning tools that aid conservation and getting them incorporated into the comprehensive plans at the time of the required 5-year review would help to protect forestlands.

The group recommends:

- a) Develop model county comprehensive plans that include forestry elements for localities.
By 2007 - DOF to utilize interns to research potential comprehensive plan elements.

16) No Net Loss of Forests Campaign- The potential exists to use the same approach that has been applied to wetlands protection. However, the large acreages lost each year would be difficult to mitigate within Virginia. The scope of the program could be limited by applying it to just the critical forest areas identified in this report or to riparian buffer forests.

The group recommends:

- a) Develop campaign similar to “No Net Loss of Wetlands” but tailored to forests.
- b) Consider as a first step the mitigation of forest loss on state construction projects.

Actions to Expand Forest Cover

Much of the directive efforts focus on retention of existing forests. There can be a number of strong strategies to expand forests. Elements of the GIS analysis tools used in identifying the most important forest areas can also be used to identify areas with the most potential for expansion of forests in critical areas. These efforts will focus on:

1. Non-forested riparian areas
2. Marginal agricultural land
3. Land that is in a transitional use area (agriculture has ceased, development not yet occurred)
4. Developed areas that are in a state of decline or have been abandoned
5. Open areas (often mowed) in large lot developments or other developed areas.
6. Mined lands with no/marginal forest cover.

There have been strong and focused initiatives in the agricultural sector to address areas 1 and 2. Efforts could likely be strengthened in area 6. There may be good potential to make gains in forest (or future urban canopy cover) by focusing attention in areas 3, 4, and 5.

The VDOF, the VCE, and local Soil and Water Conservation Districts will jointly work to develop and implement forest cover establishment in sections 3, 4, and 5. The VDOF, in conjunction with the Division of Mines, Minerals, and Energy and mining companies will address area 6. VDOF, DCR, VDACS, and NRCS should continue strong commitment in areas 1 and 2.

Regulatory Linkage to Stormwater and Land use

The Virginia Department of Conservation and Recreation has regulatory authority regarding stormwater management when land is developed. DOF recognizes the value of forests in moderating the effects of stormwater in both rural and urban settings. DCR is in the process of revising the Stormwater Management Regulations which include provisions for Riparian Forest Buffers, riparian area preservation, and the incorporation of trees and other types of vegetation as an option to meet the requirements of the Stormwater Regulations. DOF has been working with DCR to incorporate these measures into the Stormwater Regulation Revision, and will continue to provide input on the value of forests to stormwater management as well as stormwater regulation development.

All land use decisions in Virginia are made by the various localities. There is opportunity through careful and deliberate work by localities, DCR, and VDOF to incorporate forests in land use planning and the development process. This can be accomplished in several ways:

- Incorporation of BMP's based on trees and forests in County Comprehensive Plans
- Follow-up with emphasis and highlighting of these in county zoning ordinances
- Promotion of BMP's based on trees and forests to local building officials and developers
- Promotion and use of BMP's based on trees and forests as retrofits in existing developed areas.

The strength of these actions is that they are based on existing solid regulations that can be enhanced through inclusion and promotion.

Partnerships and Action

The Virginia Department of Forestry has been designated the lead agency for the Forestland Conservation EC Directive 06-1. The Department has been very fortunate to have the assistance of an outstanding stakeholder group that helped to develop and guide the process. The group held an initial meeting on February 16, followed by additional meetings on March 20 and April 23. Department staff included the State Forester, an Assistant State Forester, two Division Directors, two Assistant Division Directors, a Regional Forester, and the Land Acquisition Coordinator. In forming the Stakeholders Committee, the Department's goal was to have broad representation from those parties interested in forestland conservation, but to keep the group to a workable size. The partner groups are:

State Government:

- Virginia Department of Agriculture and Consumer Services
- Department of Conservation and Recreation
 - Office of Land Conservation
 - Division of Natural Heritage
 - Division of Soil and Water Conservation
- Virginia Outdoors Foundation
- Virginia Cooperative Extension

From/For Local Government

- Planning District Commission
- Soil and Water Conservation Districts
- Virginia Association of Counties

From/For Forest Industry/Forest Landowners

- Virginia Forestry Association
- Mead Westvaco

Federal Government/Bay Organization

- U. S. Forest Service, Chesapeake Bay Program
- Chesapeake Bay Commission
- U. S. Geological Survey
- Natural Resources Conservation Service

Private Land Conservation Organizations/Trusts

- Piedmont Environmental Council
- The Nature Conservancy
- The Pinchot Institute

There are, and can be a myriad of interactions between these varied groups and others to effect forestland conservation in Virginia. A central and very positive outcome of this group would be to develop a ***comprehensive plan of action for land conservation in Virginia***. This is a bold and ambitious task that would require buy-in from many levels. Strategies of this larger plan would include a great deal of cooperation between partners.

Here are some potential examples that could be elements of this larger plan:

- Continued existence and meeting of the Stakeholders Group for information sharing, strategy development, and to gauge progress. The Group has already planned a June meeting.
- Seek to integrate direct forestland conservation activities between Stakeholder members. Example: The Department of Forestry and the Virginia Outdoors Foundation are examining a Memorandum of Understanding between the two agencies regarding conservation easements. Example: Greater communication and goal setting between Forestry and Agriculture conservation programs, particularly regarding expansion of forests in riparian areas and on marginal land.
- Strengthen relationships and assistance to local governments. Example: VDOF forest management local needs characterization project. This effort will provide high quality tabular and spatial information regarding forest resources to localities, as well as offer professional assistance in forest and watershed management.
- Bring together the large body of data that exists regarding land conservation in Virginia like and including The Virginia Outdoors Plan, and the Virginia United Land Trusts Strategic Plan.

- Strengthen outreach and information efforts to target groups, especially local governments and forest landowners. Virginia Cooperative Extension will be a key player in this effort.

Partnership timeline and milestones:

-Through 2007: Continue Stakeholder Group meetings.

-By June 30, 2008: Have prepared draft for land conservation plan for Virginia, including specific goals and strategies.

-By January 1, 2009: Adopt Plan

Summary

The Virginia Stakeholder Group has accomplished our first goal of identifying forestlands that have the greatest potential to protect water and are at the greatest risk of conversion. Through GIS analysis we have identified **315,000 acres** that will be the focus of conservation efforts through the **year 2020**. Conservation strategies will involve programs at the state and local level that contribute to short term and long term conservation. The success of these efforts will depend largely on the success of education programs for local decision makers to make them aware of the value of forests for water quality and quality of life. The number of acres of forestlands placed under permanent protection will depend on the funding and staffing of state and private organizations that hold easements and land for conservation.