

PRIVATE LANDOWNERS AS STEWARDS OF BIODIVERSITY
AN ANALYSIS OF THE ECOLOGICAL VALUE
& SOCIOECONOMIC FEASIBILITY IN VIRGINIA

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EXECUTIVE SUMMARY

Traditionally, state and federal land management agencies have been largely responsible for the protection of critical natural resources. However, in light of the political and financial insecurities these agencies often face, combined with the increasing urban sprawl and highly dissected private land ownership patterns that exist in many parts of the country, it is uncertain how easily they will be able to acquire additional significant tracts of land in the future to protect currently unprotected, at-risk lands identified by the gap analysis process (i.e., the “gaps”). It is therefore becoming important to strengthen this conservation land base and diversify the options available for filling these gaps.

The most recent trend in land management is for private, individual property owners to take an initiative and participate voluntarily in land trust and easement programs. A conservation easement places a legally binding, voluntary development and land use restriction on privately held land, generally in perpetuity. There are many benefits to this system - to the landowner, the conservation profession, and the resource. In this study we examined the conservation easement programs in Virginia and explored two questions:

1. What is the *ecological potential* of easement programs to enhance and build the existing conservation estate, and
2. Is such dependence *socioeconomically feasible*?

The Virginia General Assembly created the primary Virginia land trust organization, the Virginia Outdoors Foundation (VOF), in 1966 with a mandate to “promote the preservation of open space lands and to encourage private gifts of money, securities, land or other property to preserve the natural, scenic, historic, open-space and recreational areas of the Commonwealth”. Other organizations can also hold land easements (the Land Trust Alliance identifies 34 currently operating private and public land trust organizations that operate in Virginia), but the VOF holds approximately 95% of easement lands in Virginia.

We approached this study with a 2-phased approach, reflected by the above objectives. The ecological potential of conservation easements as a strategy for protecting critical natural resources was explored through the use of ArcGIS, and built upon the products of Virginia’s Gap Analysis (VA-GAP). In short, we examined the resources on existing conservation easements and compared them to the list of critical resources identified by VA-GAP. The socioeconomic feasibility was examined in 2 ways: 1) through a literature

review of previous surveys and studies that examined landowner motivations for participating in conservation easement programs, and 2) by coordinating and conducting 2 informational public meetings for landowners in counties identified as high priority by the GIS analysis.

Ecological Potential

Critical Biodiversity

Ecological potential was broken down into 2 criteria – critical biodiversity protection and critical land cover type protection. In examining biodiversity, we found that critical biodiversity lands make up 27% of the state, mostly located in the mountains of western Virginia and along the coast in eastern Virginia. When protected lands (including National Forests, National Parks, etc.) are removed from this figure, critical biodiversity lands comprise only 21% of currently unprotected lands, reflecting the fact that currently protected lands have already targeted these biodiversity resources to a certain degree. In fact, approximately half of the protected lands in Virginia qualify as critical biodiversity features. However, 78% of the critical biodiversity lands in Virginia (21% of the state overall) remain unprotected and potentially at risk.

Looking specifically at conservation easements, easements in western Virginia (where a large concentration of high biodiversity lands occur) also appear to have targeted critical diversity features very well; over 73% of easement lands in that region are high priority. Nearly 30% of easement lands in central Virginia and the Shenandoah Valley are high priority, and most likely these lands are concentrated in parts of those regions that overlap the mountain and/or coastal regions. In the coastal region, approximately 25% of easement lands protect critical biodiversity features, and 20% of easement lands protect lands ranked 10. Overall, 24% of easement lands statewide protect critical biodiversity features.

Critical Land Cover

The second ecological criterion we examined was the Critical Land Cover Criterion where the goal is to have each land cover type sufficiently represented in the protected lands network to ensure habitat for all wildlife, fish, and plant species. Given the distribution of protected lands in Virginia, it is clear that the cover types most often represented include mountain forests and coastal wetlands. Conversely, the most under-represented cover types (the critical cover types) include open habitats (fields and other herbaceous cover types) and non-montane forests (including riparian habitats and forest types that occur in both central and eastern Virginia). Species that depend on these cover types, and that are currently unprotected, include the willow flycatcher (*Empidonax traillii*), river otter (*Lontra canadensis*, state special concern), eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*, federal species of concern, state special concern), Bachman's sparrow (*Aimophila aestivalis*, federal species of concern, state threatened), Eastern river cooter (*Pseudemys concinna concinna*), Pine grosbeak (*Pinicola enucleator*), Delmarva fox squirrel (*Sciurus niger cinereus*, federal endangered, state endangered), and the Southeastern crown snake (*Tantilla coronata*).

Overall, 52% of easement lands protect critical land cover resources – more than twice the proportion of easement lands that protected critical biodiversity resources. Easement lands in central and eastern Virginia and the Shenandoah Valley have targeted critical diversity features very well, with over 50% of easement lands in each region considered to be high priority land cover types. Similarly, just under 50% of northern Virginia easements protect high priority cover types. In fact, the region with the lowest percentage of high priority land cover types on easement lands, western Virginia with only 22% protecting critical land cover types, was the most important region for protecting biodiversity (73% of easement lands in this region protect high priority biodiversity features).

Clearly, one of the greatest ecological values of conservation easements is in their ability to target these critical land cover resources and round out the conservation network. When the two criteria are combined, between 50% and 75% of conservation easements lands protect critical natural resources. Although the total volume of land protected under privately owned conservation easements (1% of the state) is small compared to the amount of land protected through ownership by governmental agencies or private conservation organizations (12% of the state), what they **do** protect is usually a valuable addition to the conservation network whether due to the biodiversity or land cover features that are present.

Socioeconomic Feasibility

When a landowner donates a conservation easement, certain tax benefits become available to him, based on the value of the easement (the difference between the market value of the land before and after easement restrictions). Federal incentives include an income tax deduction (up to 30% of adjusted gross income) from tax code section 170(h), a reduction in the value of the land for estate tax purposes, and an additional estate tax exclusion from tax code section 2031(c). State conservation easement law varies significantly from state to state. In Virginia, a 2000 law allows easement donors to earn a state income tax credit (credited to taxes due – NOT deducted from income) of up to 50 percent of the fair market value of the easement. The income tax credit can be spread over 6 years by the landowner or can be sold to other taxpayers. This Virginia legislation is one of the best state-level incentives for conservation easement donations in the nation, and the ability to spread benefits out over 6 years and/or sell unused tax credits to other taxpayers allows even low income landowners with very little state income tax liability can earn valuable benefits.

Many studies have been performed to analyze landowner motivations for participating in conservation easement programs. In every study we looked at, the majority of landowners take part in easement programs in order to preserve the land rather than reap financial gains. For instance, 54% of Vermont donors stated their primary reason for participation was to preserve the land, with the second most popular primary motives being to pay off debts or expand their operations (21% each). Similarly, 89% of North Carolinian participants stated that protecting land from development was an important motivation for them and 86% stated that the protection of green space was an important motivation. Wildlife habitat protection and recreational motivations were important for

77% and 63% of respondents respectively. Interestingly, income or estate tax advantages fell into fifth place with only 54% of respondents indicating financial concerns as an important motivational factor.

Public Meetings

Two counties in Virginia were selected as the sites of public meetings: Giles County in based on the Biodiversity Criterion and Mecklenburg County based on the Critical Land Cover Criterion. Giles County is located along the Blue Ridge Mountains, with the New River (a nationally designated Wild and Scenic River) running north-south through the center of the county. Giles County land cover is made up of a mix of montane forests, riparian valleys, and small family farms averaging about 70 acres each. Giles County's population of just over 16,000 is under growing development pressure from the adjacent Montgomery County (population of approximately 80,000), where Virginia Tech and the rapidly growing towns of Blacksburg and Christiansburg are located. Based on our ecological evaluation, 66% of the unprotected lands in Giles County are high priority biodiversity lands and 30% are critical land cover types. In contrast, Mecklenburg County is located in south-central Virginia in the Piedmont physiographic province. It is made up of a mix of deciduous and coniferous forests and relatively large family and corporate farms averaging about 200 acres each. Although the county is slowly losing agricultural land, development pressure is minimal and economic activity is slow. The county is primarily a slow-paced agricultural community, with a total population of just over 30,000. Surrounding counties also have small populations, ranging from 14,000-35,000 people. Based on our ecological evaluation, 88% of the unprotected lands in Mecklenburg County are considered to be critical land cover types (the highest of any county in the state), primarily because very little land in the Piedmont region is currently being protected.

The Giles County meeting was held October 23, 2003. Speakers included representatives from the Conservation Management Institute, the Virginia Outdoors Foundation, and the New River Land Trust. Co-sponsors included the Giles Rural Development Alliance, the Skyline Soil and Water Conservation District, and the Giles County Farm Bureau. Twenty-three individuals participated in the Giles County public meeting, representing as least 16 properties. Two additional Giles County landowners requested that information be mailed to them after the meeting because they were unable to attend. Presentations informed participants of the valuable resources around them and of the costs and benefits of conservation easement options available to them.

Questions from participants during the meeting revolved primarily around requests to clarify the land use restrictions that go into place under conservation easements and what specific property rights are retained by the landowner (i.e., could the land still be subdivided for children?). Also, participants were concerned with the perpetuity of conservation easements and asked presenters to clarify the role of eminent domain when governmental activities encounter such easements. In short, participants wanted to be sure that if they placed land under easement, that it would prevent both private developers and governmental regulations from breaching the easement agreement in the future.

In the exit survey, 71% indicated that they attended the meeting in order to learn how to conserve natural resources. Forty-three percent (43%) indicated they wanted to learn about the tax credits involved and/or about how to prevent future development, and 28.6% attended in order to learn about estate planning options. Nearly all respondents (87.5%) were Very Satisfied with the amount of information provided to them, the quality of the presentations, the extent to which the meeting met their expectations, and the overall quality of the event. Seventy-five percent (75%) of respondents were Very Satisfied with the extent to which their questions were answered. When Very and Somewhat Satisfied responses were combined, each of these statistics jumps to 100% satisfied. Further, 87.5% of respondents reported that they would recommend a similar meeting to their friends. At the end of the exit survey, respondents were asked to indicate how likely they were to pursue setting up an easement on their property. Two respondents indicated that they would be Very Likely to set up an easement in the near future, representing between 100-200 acres. An additional 4 respondents indicated that they would be Somewhat Likely to do so and that they would seek additional information before making a decision, representing 800-1250+ acres.

The Mecklenburg County meeting was held October 16, 2003. Speakers included representatives from the Conservation Management Institute and the Virginia Outdoors Foundation. Co-sponsors included the Lake County Soil and Water Conservation District, the Mecklenburg County Cooperative Extension Office, and the Mecklenburg County Farm Bureau. Twenty-two individuals participated in the Mecklenburg County public meeting, representing as least 14 properties. Three additional Giles County landowners requested that information be mailed to them after the meeting because they were unable to attend.

Questions from participants during the Mecklenburg meeting reflected a deep concern among participants for being compensated for their property rights. Most questions were asked to clarify the tax benefits and how they work in realistic situations. Questions were also asked about will provisions (i.e., can I leave my land to VOF when I die?), and the possibility for outright purchase of development rights (PDR) rather than donations. Although a few participants were interested in the conservation aspect of conservation easements, most were focused on the potential financial benefits. This is likely a reflection of residents not perceiving a significant development pressure.

When asked about their motivation for attending the public meeting, 50% indicated that they attended in order to learn about the tax benefits associated with conservation easements and 50% attended to learn about how to conserve natural resources. Forty percent (40%) indicated they wanted to learn about the estate planning benefits involved. Finally, only 20% of respondents attended in order to learn about how to prevent future development. Respondents expressed a high level of satisfaction with their experience at the meeting, though not as high as participants in Giles County. Seventy percent (70%) were Very Satisfied with the amount of information provided to them, 56% were Very Satisfied with the overall quality of the event, 44% were Very Satisfied with the extent to which the meeting met their expectations and the extent to which their questions were

answered, and 40% were Very Satisfied with the quality of the presentations. However, 80% of respondents reported that they would recommend a similar meeting to their friends. When asked to indicate how likely they were to pursue setting up an easement on their property, one respondent indicated that he/she would be Very Likely to set up an easement in the near future, representing between 200-500 acres. An additional 3 respondents indicated that they would be Somewhat Likely to do so and that they would seek additional information before making a decision, representing 500-1200 acres.

As a first contact with landowners and potential conservation easement donors, these meetings were a success. However, it became apparent that the economic atmosphere, level of development pressure, and overall lifestyle pace are critical factors to consider when presenting this material to landowners. Participants in Giles County were more receptive to the idea than Mecklenburg County participants. More specifically, Giles County participants had a greater focus on conservation needs and development prevention, with an associated interest in any financial benefits available to them. Conversely, Mecklenburg County participants appeared to be primarily focused on financial gains with a secondary focus on conservation. Either motivation can lead to the donation of conservation easements, but if landowners with financial concerns as a primary motivator do not perceive the financial gains as significant, then conservation easements will be dismissed as an option.

Implications

Ecologically, speaking, the conservation easements in Virginia do protect valuable resources – primarily because they are well suited to land cover types that are not well protected by other means. So, the simple answer to our first question in this study, “Can/Do conservation easements protect ecologically valuable land,” is “Yes.”

The issue, however, becomes more complicated when the question of socioeconomic feasibility is raised. Specifically, conservation easements in their current form are likely to be most feasible in areas that are already feeling significant development pressure, which unfortunately is what the concept of conservation easements is trying to prevent. First, these developing areas are most likely to have landowners interested in the conservation value of easements. Second, these developing areas will also yield the greatest financial (tax) benefits for donors because the fair market value of developable land will be at a premium and the resulting easement value will be maximized, therefore maximizing the potential tax benefits. Financially speaking, the tax benefits are simply not great enough for the majority of landowners to really benefit financially from the donation of a conservation easement. If a conservation motive is already there, the tax benefit can be a nice added incentive, but it probably is rarely the sole motivator, even in areas where development rights are sold at a premium.

In conclusion, conservation easements can be a valuable addition to the conservation network from an ecological value point of view, but the feasibility of such a program depends highly on community values, status, and growth trends. Unfortunately, it appears that lands must already be significantly threatened in order to benefit considerably from conservation easement programs, but at least this program is available

to these communities at a time when other conservation options may have already been exhausted. Future expansion of easement programs, easement options, and financial benefits likely will allow this program to be applicable in a greater variety of communities, and we look forward to watching this transformation take place and perhaps being able to help shape the future of conservation easements with studies such as this.