

**Financing Land Preservation in
West Virginia's
Cacapon and Lost River Watershed**

**Final Program Report
Prepared by the Environmental Finance Center
University of Maryland**

April 10, 2006

Executive Summary

On November 2, 2005, the University of Maryland Environmental Finance Center, on behalf of the Cacapon and Lost Rivers Land Trust (the Trust), convened a financing charrette to assist the Trust in their efforts to develop a long-range financial strategy for protecting a particularly critical section of land in the watershed. The goal of the event was to develop the framework for a financing and implementation plan for preserving more than 14,000 acres linking an existing conservation hub to a national forest and a wildlife management area. This report, developed by the staff at the Environmental Finance Center, outlines the core components of a sustainable, effective financing strategy, and provides detailed next steps and recommendations for implementation.

The report contains five key sections:

- A summary of the November 2 financing charrette and an overview of the key issues discussed by the participating panelists.
- An overview of a financing template and a suggested process for developing and implementing a sustainable financing strategy.
- A set of long-range recommendations for the Trust, including a discussion of organizational capacity and marketing considerations.
- A list of the participating charrette panelists.
- A matrix of funding opportunities suggested by the charrette panelists.

This program was managed and implemented by the Environmental Finance Center (EFC), an independent [non-academic] center located at the Institute for Governmental Service at the University of Maryland. The EFC has worked with communities in EPA Region 3 for more than 11 years. One of the Center's core strengths is its ability to bring together organizations and individuals necessary to help communities develop solutions for a wide variety of problems. Through workshops, charrettes and trainings, the EFC has assisted communities with source water protection, stormwater management, green space and green infrastructure planning, low impact development, rate setting for drinking water and wastewater, septic system management, aquatic restoration, and community outreach and education. The EFC's work on this program was made possible by a grant from the U.S. Environmental Protection Agency Sustainable Finance Team.

Summary of the November 2 Financing Charrette

On November 2, 2005, the EFC conducted a financing charrette on behalf of the Cacapon and Lost Rivers the Trust. The goal of the charrette was to develop a strategy for financing and implementing a plan to protect a particularly critical section of land in the watershed that would link the currently established Hampshire County Conservation Hub to the George Washington National Forest and the Short Mountain Wildlife Management Area.

The charrette, conducted in a roundtable format, engaged a panel of experts from a variety of disciplines with a group of local stakeholders familiar with the Trust and its work. The charrette provided a unique forum for community leaders and resource experts to identify the innovative tools and best management practices necessary for protecting the estimated 14,000 acres targeted for protection as part of this effort.¹

Core Issues. The panel's work focused on two core areas: (1) the short- and long-term financing tools that Trust could make use of in a sustainable financing strategy; and (2) the organizational and institutional capacity considerations the Trust will need to address in order to successfully implement this sustainable financing strategy. As part of its discussions, the panel identified the following key issues for the Trust to address in order to achieve its land protection goals:

- Since connecting this hub to the national forest and the wildlife management area will require the protection of an additional 14,000 acres of land, the Trust will need a long-term financing strategy in place to guide the process of land protection.
- The charrette panel felt strongly that a sustainable financing strategy must begin with the community itself. The costs associated with permanently protecting 14,000 acres of land in this region are estimated to be in the tens of millions of dollars. Ultimately, a sustainable plan to finance a land protection program of this magnitude must include significant local participation.
- Many of the property owners in the Cacapon watershed are not actually full-time residents of the area, but rather second-home owners who chose this location for many of the same "way-of-life" characteristics the Trust is trying to preserve. A sustainable financing strategy must look at ways to capitalize on the financial resources of this audience.
- In the initial charrette discussions, the panel identified the role the Trust plays, or would ultimately play, in the community as critical to the successful implementation of any financing strategy. The Trust will have to consider just how visible a community member they want to become, and how much they want to expand their organizational capacity to accommodate their role in the community as well as the responsibilities that come with protecting these additional 14,000 acres.

The charrette addressed each of these core issues. These core concerns provided the basis for the panel's discussion, and served as the foundation for the following financing strategy.

The Charrette Process. The planning process for this event began in June 2005 when the EFC held an initial meeting with the Executive Director of the Trust and a handful of land protection experts familiar with the region and the work of the Trust. This group determined that an EFC facilitated financing charrette would be an effective tool in the process of establishing a

¹ A complete list of the charrette panel appears in Appendix A of this report.

sustainable funding strategy for the Trust, and this group ultimately served as the steering committee for the event. Over the course of the summer a series of planning meetings defined precisely what type of information would be most useful to the Trust. The steering committee determined that the Trust needed both short-term funding-based strategies that could be acted upon immediately to bridge the funding gap, as well as longer range strategies that would ensure sustainable revenue flow for the future of the organization.

The challenge for the charrette steering committee was to find a way to allow charrette panelists to provide as many potential funding program suggestions as possible without disrupting the flow of charrette discussions on long-range strategies. There was a tremendous amount of experience and knowledge in the room about current opportunities, and the steering committee wanted to provide an opportunity for the Trust to leverage that knowledge even though all of the potential opportunities could not be discussed during the event. Ultimately, the steering committee agreed on a wall-mounted chart, or matrix, with ample space for panelists to add their program suggestions into any one of the following five program categories that served as the foundation for the financing strategy:

- **General fund and fee-based programs.** General fund and fee-based programs such as specialty taxes, impact fees and the like can provide a reliable source of funding that can be further leveraged with bonds, SRF loans and other programs. However, the process of establishing these programs is lengthy and involved. The panel's recommendations for these types of programs are discussed extensively in the section on long-term strategies.
- **Regulatory programs.** Land use regulations can determine the location of development, as well as the extent to which it can occur, if at all. Effective use of regulations can reduce costs associated with obtaining easements by reducing the number of parcels available for development. The charrette panel made several regulatory recommendations. Panelists suggested making use of any zoning regulations, such as steep slope, riparian buffer, or subdivision ordinances already in existence to limit the parcels available for development. The panel also suggested that the Trust initiate or support additional zoning regulations such as requiring perc tests and establishing development design guidelines which are discussed further in the section on long-term strategies.
- **State, local, federal or private funding programs.** There will never be enough state, federal or private grant money available to finance all of the Trust's land preservation goals. However, these programs can provide adequate funds to launch a program while a sustainable funding source is secured or cover other funding gaps.

The panel suggested that the Trust look into federal programs including EPA's Targeted Watershed programs or the Agency's Supplemental Environmental Funding program whereby entities looking to resolve compliance failures may provide funds for conservation easements or the establishment of green buffer systems. The Coastal America program, which is the collaborative effort of a variety of state, federal and local agencies, focuses primarily on the coastal regions of the United States; however, the Cacapon would likely qualify for portions of the program that address erosion and non-point source pollution control and could also potentially be a good partner in the program's Corporate Wetlands Restoration Partnership.

A number of private funding programs were recommended as well. Panel members suggested that the Trust consider applying for a National Fish and Wildlife Foundation

Chesapeake Bay Targeted Watershed Grant. Other panelists suggested that the Trust look into the Riparian Coop Fund or the Center for Watershed Protection's Builders for the Bay program.

- **Market-based programs.** Communities are increasingly turning to markets to address environmental protection and natural resource issues. In an effort to use a natural resource in a manner that offers the greatest societal yield, market systems allow the forces of supply and demand to determine the value of allocations of resource use. The charrette panel suggested a number of market systems that could be applicable to the Cacapon watershed. For example, the Trust or property owners in the watershed could accumulate "credits" for protection of the region's natural resources that could then be banked or sold to those consuming resources in another part of the watershed, providing additional revenue to the Trust or property owner.

The Trust and other landowners could obtain credits for resource protection efforts such as carbon sequestration or renewable energy sources on protected lands. Or, to keep lands in production, they could establish partnerships that conserve the land but still allow for the removal of a resource product (such as timber, produce, game, etc.). Several charrette panelists have extensive experience with these types of programs and can be contacted directly for additional guidance. As with general fund type programs, the panel felt strongly that many of these market-based opportunities will require a long-term strategy for development and implementation.

- **Programs that coordinate multiple community priorities.** Community resources can be used more efficiently when land use and conservation goals are viewed holistically with other community priorities such as public health, safety, economic development or recreation. The charrette panel recommended that the Trust look for opportunities to align existing community priorities or obligations, such as the development of watershed plans or TMDL implementation plans, with their own.

In all, the panel suggested more than three dozen financing opportunities – programs that could potentially provide funding, although possibly limited in amount or availability, to secure land and particularly critical parcels as quickly as possible.² In addition to discussing the opportunities identified as part of the matrix exercise, the panel devoted significant time to discussing the necessary elements of a long-term sustainable financing strategy. A summary of that discussion follows.

Recommended Financing Strategy

Effective financing provides leaders at all levels with a unique tool for identifying and overcoming fiscal, institutional, and administrative barriers to restoring and protecting natural resources. Effective environmental financing is predicated on two core components: identifying and leveraging sustainable, dedicated revenue streams or sources, and expending fiscal resources in a manner that improves program efficiency and the return on investment. By understanding the relationship between these financing components, as well as the tools, programs, and best management practices that impact them, community leaders will develop more effective programs that will greatly improve implementation success while reducing overall implementation costs.

² A full summary of the panel's recommendations is included as Appendix B of this report.

This report focuses on providing the Trust with recommendations for impacting each of these areas, specifically:

- The opportunities for increasing the community's capacity by identifying and leveraging sustainable revenue sources.
- Effective tools for reducing and managing program costs.
- Improving the efficiency of program expenditures, with a focus on increasing return on investment.

Our hope is that by addressing each of these issues and by highlighting the connection between them and their corresponding roles within a financing strategy, the Trust will have a workable template for moving forward with their efforts to connect the Hampshire County Conservation Hub to the George Washington National Forest and the Short Mountain Wildlife Management Area.

Successful and sustainable environmental financing is a community-wide process that requires the engagement and participation of a variety of institutions, stakeholders, and citizen. Though each financing effort is unique, the process of developing a successful financing includes a number of core steps, and the charrette panelists addressed each throughout the day.

Estimating Implementation Costs. Financing begins with costs. Quite simply, it is very difficult to develop a financing strategy of any kind without a firm understanding of the cost associated with the project. Estimating costs for large-scale land protection efforts that incorporate multiple parcels, can be difficult because implementation can take several years. Given the dynamic nature of the land and real estate market throughout the mid-Atlantic region, it is very difficult to accurately estimate what total costs will be to connect the Hampshire County Conservation Hub to the George Washington National Forest and the Short Mountain Wildlife Management Area. Clearly, however, protecting the entire 14,000+ acres will require tens of millions of dollars in funding, with current estimates in the range of \$20 - \$30 million.

Gauging community capacity. Much of the panel's discussions throughout the day focused on the Trust's capacity to implement a large-scale land protection effort. The panel quickly realized that even though the Trust has had explosive growth over the past several years and has become a regional and national model for protecting community resources, it will never have the capacity to protect all the land in the watershed that needs to be saved. In fact, it would be an unprecedented accomplishment for the Trust to protect the core 14,000 on its own. In short, success will require a community effort.

Closing the capacity gap. Ultimately, the goal of the financing strategy is to increase the community's capacity to protect natural resources within the watershed. Effective financing requires innovative and efficient financing instruments. Financing instruments are essentially the means for connecting the financing source to the project costs. Often the link is direct, such as a fee on services or a dedicated tax. Many times the link is more indirect, such as general obligation fund programs like property taxes being used to pay for multiple community programs. Even more indirect are those financing instruments that are implemented to reduce costs, such as emissions trading and various development rights programs.

Clearly, the community is lacking many of the resources it will need to implement an aggressive land protection effort. With very little local regulatory controls in place, open space and natural resource protection must be accomplished in other ways. There are encouraging signs related to

local efforts to develop agricultural land protection programs, but the funding in these programs will not be enough to accomplish all that needs to be done within the watershed. Therefore, a primary goal of a financing strategy should be to identify where the breakdowns in organizational and community capacity are occurring, and then leverage programs and resources to improve that capacity.

Identifying and Leveraging Dedicated Financing Sources

Developing and leveraging financing sources is essential for this effort, yet it is also the most difficult financing goal the Trust and the community will face. In fact, it was the absence of local protection and funding efforts that necessitated a financing charrette. Therefore, EFC and the charrette panelists considered this to be a key long-term goal and strategy for the organization. Clearly this will take years to accomplish, but it will also be crucial to the success of the Trust's land protection goals.

Local financing sources. Financing sources essentially refer to the ultimate payer of the cost associated with the project. Obviously, the goal is to leverage as many sustainable sources as possible to finance the project. In addition, the most sustainable financing sources are the most direct sources, i.e., the citizens and businesses located within the watershed. A major capacity deficiency for the community is the fact that the Cacapon and Lost River watershed is very rural and not densely populated. As a result, the potential for leveraging local financing sources is restricted. However, the panel did identify several potential local financing options which are discussed later in the report.

The Trust has been hugely successful in protecting farmland in the watershed, primarily through donated easements, and has done so with what is fundamentally a one-person operation that has been able to rely, to this point, on promoting the Trust's efforts through the word-of-mouth provided by participating landowners. In fact, there is currently a backlog of landowners interested in placing easements on their properties. With easements values in the area currently running at approximately one-third of property value, it is essential to close on as many of these agreements as soon as possible. A sustainable, dedicated revenue stream would ensure that the Trust had funds available when easement or land purchase opportunities arise.

State financing sources. After local sources, the next most direct source of financing is at the state level. Though protecting land within the watershed is primarily a local issue, the state does have a direct stake in the outcome, and therefore a direct financing role to play. Specifically, transportation, which is a state controlled issue, has had a major impact on the resource and has resulted in state sponsored financing efforts within the watershed. The Trust has directed the implementation of some very innovative financing efforts that have linked highway mitigation dollars to local land protection. With increased development comes an increased need for roads, utilities, and other infrastructural requirements, which often results in the need for mitigation. The Trust has proven itself capable of handling mitigation projects responsibly and effectively in the past, and it should continue to cultivate the relationships that have brought in mitigation projects to this point. In addition, the Trust should aggressively position itself as the organization at the state level that is capable of implementing mitigation projects smoothly, efficiently, and effectively. With growth pressures increasing, there will certainly be more mitigation projects in the pipeline in the future.

Federal Financing Sources. Federal financing sources are often the most removed from the resource, but they can be essential for seeding innovative programs, partnerships, and ventures.

In addition, the federal government has a stake in the protection of the Cacapon watershed because of its impact on the Chesapeake Bay – a multi-jurisdictional resource. Because of this connection, the charrette panel suggested a number of federal programs that could help initiate or supplement a land preservation project. Many of them were outlined in the matrix exercise, but several stand out as long-term financing opportunities.

The panel strongly suggested seeking a federal earmark. An earmark is legislative language inserted into an existing appropriations bill that specifies how a portion of the money already budgeted to a particular department or agency should be spent. Members of Congress can request an earmark, dictating that the federal government spend on a specific program, when they feel the program provides a substantial social return and has significant value to the community. The panel recommended that the Trust pursue an earmark by working to further the Congressional relationship initiated by the Executive Director and the Chesapeake Bay Program last fall, clearly articulating how the Trust is the appropriate institution to fill the needs of a particular budget line-item in an existing bill such as the 2007 Farm Bill or the items in the federal budget related to National Forests.

It is important to note that while federal funding through earmarks can provide much needed seed money for important conservation efforts, it is generally not a sustainable financing solution. In addition, given the increased pressure to reduce earmarks in the appropriations process, success in this area is certainly not guaranteed. Therefore, it is essential to articulate to federal officials why spending federal resources in the Cacapon watershed will be an investment in the protection of a very unique natural resource. From a sustainable financing perspective, it is essential that any federal resources expended in the watershed build lasting programs that will result in the permanent protection of valuable resource lands, the protection and restoration of ecosystems and water quality, and the formation of sustainable locally based financing systems.

Improving Return on Investment with Innovative Financing Instruments

The financing process contains two primary parts: ***acquiring*** and ***investing*** fiscal resources. The goal in the private or corporate sector is to invest resources for the goal of making profit. The goal for an organization like the Trust is different, however. The primary financing goal for the Trust is to achieve an organizational goal at the lowest cost. Therefore, securing financing sources is just the first step in the Trusts financing strategy. The next step will be to implement financing instruments that will allow the Trust to protect the 14,000 acres as efficiently and effectively as possible.

The charrette panelists identified a variety of potential financing instruments that could be used to assist the Trust and the community in protecting land throughout the watershed. Some of the more innovative options are described here. However, as was mentioned in the first section of this report, a matrix containing a description of each of these programs is provided in the appendix. It is important to note that many financing instruments are appropriately implemented by local governments. For instance, financing tools such as bonds and installment purchase plans would not be appropriate for the Trust to implement, but could be an essential part of the Trust's financing strategy to protect land within the watershed. This report does not discuss the role of financing institutions and the implementation of financing instruments and tools. However, the development of effective local and state financing institutions will be essential for successful implementation.

Purchase of development rights programs. Until very recently, the Trust had relied almost exclusively on voluntary easements to meet its land protection goals. And, while the Trust will continue to cultivate landowners who are interested in voluntarily easing their property, it is becoming increasingly likely that the organization will need to purchase the development rights on many priority parcels. Therefore, purchase of development rights programs (PDR) will become increasingly important for the Trust and the community. Again, this will require dedicated financing sources, which were discussed above. However, it will also be essential to implement financing instruments that can reduce the overall cost of implementation.

Installment purchase agreements. An installment purchase agreement (IPA) is an innovative payment plan offered by a handful of jurisdictions with purchase of development rights or easement programs. By using IPAs, local governments can leverage preservation funding while lands are still available and offer landowners financial advantages that developers cannot duplicate. At settlement, the landowner grants the jurisdiction a permanent agricultural conservation easement in exchange for an IPA. IPAs spread out payments so that landowners receive semi-annual, tax-exempt interest over a term of years (typically 20 to 30). The principal is due at the end of the contract term. Jurisdictions can purchase zero-coupon U. S. Treasury bonds to cover the final balloon payments. “Zeroes” do not generate regular interest income. Instead, they yield a lump sum when the bond matures. Because zero coupon bonds cost a fraction of their face value, the public entity leverages available funds. Landowners also can sell or securitize IPA contracts at any point to realize the outstanding principal.

The advantages of an IPA program to the landowner are:

- Tax-exempt interest — Landowners can earn tax-exempt interest semiannually for up to 30 years on the full value of their sale. They pay no federal or state income taxes on such interest;
- Deferral of taxes on capital gains — Landowners entering into IPAs may defer recognition of capital gains until they actually receive the principal amounts of such purchases;
- Better estate planning — By deferring recognition of capital gains indefinitely, selling landowners create the opportunity for IPAs to pass to their estates, where federal estate taxes paid may reduce or eliminate any capital gains taxes that would ultimately be due by the heirs;
- Charitable deduction — Landowners can realize deductions that are equal to the difference between the appraised value of the lands or easements sold and the prices the county pays.

The advantages of an IPA program to the community are:

- Leverage — By making interest payments over 30 years, the local governments can pay for preservation over the period during which their citizens enjoy the open space, thus pushing the costs of conservation well into the future. For most communities experiencing growth and land use pressures land protection is an acute need. Once land is developed it is lost to conservation forever. Therefore, acting immediately is essential, and an IPA program local officials to protect significant amounts of land, spreading the costs over a number of years;
- Discount Purchases — Though land conservation and environmental protection is a community issue, with unique differences within each community, there are some things that are common to all land protection efforts. Most importantly, it is almost always cheaper to act now than it will be to act later. And, because of the value of benefits offered over a 30-

year period, selling landowners should be willing to sell their lands or easements at discounted prices from appraised value. By implementing IPA programs now and thereby locking in to a financial agreement with landowners, the community will be saving money. Land values will only increase over time, thereby increasing the costs for protection;

- Return on Investment — IPAs are an excellent way for communities to increase return on investment. By pushing implementation costs into the future, and at the same time realizing costs savings by acting immediately, the return on investment is increased, thereby improving the financial position of the County.

Incremental taxing programs. Many of the landowners moving into the watershed are second-home owners who have purchased vacation homes. In fact, approximately 50% of the homes in the watershed are second-homes. The Trust should work with local officials to create an incremental financing district around these developments. With government approval, higher tax rates could be applied to these districts, the proceeds from which could go into a fund dedicated for easement purchases. The Trust will want to make certain that the revenue goes into an easement or land protection dedicated fund so the revenue cannot be diverted to other government programs or expenses.

Agricultural transfer taxes. One of the most encouraging developments in the watershed has been the development of agricultural protection boards. Agricultural protection boards fund land protection through taxes collected on the sale of land classified as “agricultural use” although typically the tax can be waived if the new owner commits to continuing to maintain the agricultural use for a set minimum number of years. This tax is designed to serve both as a deterrent to taking agricultural land out of production, but also as a penalty when these lands are sold to developers. The proceeds of this tax would be dedicated to an agricultural land preservation fund and could then be used for the purchase of easements on existing farms. The Trust should work with local officials to have agricultural development boards implemented in each of the three watershed counties.

Reducing Costs through Local Development and Land Use Controls

One of the most effective ways to reduce the costs of land protection is to control and target growth through effective local land use regulations. Unfortunately, land use regulations in the three counties within the watershed are not restrictive enough to offer any land use protection. Hampshire County’s Comprehensive Planning process is currently dormant, and there are few if any local zoning restrictions. Hardy and Morgan Counties have limited and rather ineffective zoning in their plans. This vulnerability could leave local development determinations outside the control of the community, and from a financing stand point, it is essential that community leaders work with elected officials to develop effective, enforceable zoning ordinances. Development controls such as stream buffer, steep slope, and floodplain restrictions will reduce the number of parcels available for development, thereby reducing the costs associated with acquiring easements on the 14,000 acres the Trust is working to protect.

An effective means for reducing development pressure and its associated costs is to influence not only where development happens and at what density, but also how that development is carried out. The Trust could reduce the fiscal burden associated with new development by designing and implementing rural design guidelines. Such guidelines are necessary, especially as they relate to commercial development. Growth problems are not solely created by residential development. Other types of construction and development projects that accompany residential

growth, including stores, churches, and various support services to local residents, also influence growth patterns. By encouraging local officials to incorporate comprehensive development guidelines, population growth can be more effectively managed, thereby reducing overall implementation costs.

Next Steps

Develop a Strategic Plan for the Trust. The Cacapon and Lost Rivers Land Trust has become one of the most successful and most respected local land protection organizations in the region. Its ability to protect thousands of acres of land in a short amount of time is extraordinary, but even more impressive is the fact that this small organization has been protecting land by design. One of the most innovative characteristics of the Trust has been its desire to carefully plan its conservation efforts to ensure the greatest conservation success. In fact, the Trust has taken a targeted approach to conservation, identifying those areas with the natural, ecological, cultural, and historic value. This approach is the cornerstone of the Trust's newfound success in the watershed.

To initiate this shift toward strategic conservation, the Trust assembled board members, local residents, and resource professionals in the summer of 2002 for a three-day gathering to target lands important for future preservation. The workshop, named "Healing Waters" in recognition of the Native American meaning for Cacapon, was designed to (1) prioritize and map lands to protect within the watershed; (2) identify various conservation "tools" to facilitate land protection; (3) develop partnerships to extend conservation efforts beyond the Trust; and (4) enhance related local conservation efforts. The next step for the Trust is to develop a strategic plan for making this strategic conservation effort a reality.³

The purpose of the financing charrette was to provide the organization with the beginnings of a strategic implementation for the Healing Waters plan. Many of the ideas discussed at the charrette were dealing with financing issues that will have a profound impact on the organization and the way that it will function in the future. Two of the core recommendations – working with local officials to develop local financing sources and more restrictive land use regulations – will be extremely controversial within the community. The Trust must in effect do a capacity audit on the community and determine the role of different institutions for accomplishing land protection goals. Specifically, it will be essential for the Trust's staff and Board to understand the type of institutions that are necessary for advocating for more local participation in the form of revenue and development restrictions. The organization's leaders must then determine if the Trust is the appropriate institution for addressing and advocating these issues. These institutional decisions must be made as part of a broader strategic planning effort.

A strategic plan would function as a set of organizational priorities that will guide the efforts of the Trust over the next five to ten years and would answer questions regarding the identity of the Trust, its goals, and its criteria for success, as well as what its role in the community and who its partners should be.

³ Hastings, Wink *Strategic Land Conservation: Saving Place through Heart and Science* February 15, 2006

Continue to develop key partnerships. One of the consistent themes throughout the charrette was the need for the Trust to develop strategic partnerships to accomplish its land protection goals. The organization has been very successful working with other non-profits and government agencies and has a reputation for effective collaboration. It will need to build on these relationships in the future. The panel identified a number of stakeholder groups the Trust should consider priority partners in the future. These groups are as follows.

- **Area Developers:** Population growth and land development, to a certain extent, are inevitable. The Trust should look for ways to work *with* the development community rather than constantly trying to race against them, so that the Trust can influence the type of development that does take place. Carefully crafted outreach would, at the very least, better inform developers on Best Management Practices and construction methods that minimize impact to the environment for parcels the Trust is unable to permanently protect. At best, this outreach could inspire partnerships between the Trust and certain developers that could result in maximizing open space protection and additional financial resources for the Trust's efforts.

There was considerable discussion throughout the charrette event, as well as the preceding planning meetings, about using strategic development as a tool for engaging the development community, and targeting growth to sections of the watershed where it would be most appropriate. The Healing Waters event provided the Trust with a strategic conservation strategy, and it had the opportunity to use the results of that event to not only target priority conservation lands, but to identify priority developable lands. By clearly identifying where the Trust thinks growth and development is most appropriate, the Trust can begin to develop key partnerships with builders and developers throughout the region.

- **Agricultural Community:** There is no group that has more at stake in the watershed than the agricultural community. Agriculture has an historical significance in this watershed, and is at the core of the quality of life that draws many to the region. The farming community has been and will continue to be a strong ally for the Trust in its land protection efforts. However, the panel felt strongly that protecting farm and agricultural lands is not enough. As development and growth pressures increase throughout the watershed and the region, the value of land will continue to climb, and as this happens, the working margins on agricultural lands will decline putting more and more economic pressure on farmers. This has been happening throughout the mid-Atlantic region, and has started to happen within the Cacapon and Lost Rivers watershed. As long as the value of farm receipts cannot compete with the value of land, farmers will be pressured to convert their land to development.

Ultimately, it will become prohibitively expensive and impractical for communities to use land and development rights acquisition as the core strategy for protecting and preserving community character. Long-term success will require sustaining and growing the region's agricultural economy. Preserving the agricultural economy by supporting programs that make agriculture more economically viable for farmers and transition new farmers into the industry will reduce the incentive to sell land to developers and could encourage donated easements.

- **Corporations:** Local private enterprises and regional corporations looking to "green" up their public image may be willing to partner with the Trust to provide easement donations on their

own properties or resources for easement purchases on other properties or associated outreach efforts.

- **Downstream Communities:** Downstream communities receive their drinking water from source water in this watershed. The Trust should look for ways to express to these communities that investing in land protection upstream can mean reduced drinking water cleanup costs in their own communities.

Conduct a Parcel Analysis. A parcel analysis on 500+ acre parcels in areas of critical importance will provide crucial information about how best to attempt to protect the land. Knowing the history behind who owns the parcel will help determine exactly what outreach methods and financial programs are most likely to be effective tools for enticing landowners to protect the property.

There are several potential partners that could provide assistance with this analysis, specifically Mike Strager of West Virginia University or Peter Claggett of the Chesapeake Bay Program. Both have experience in projects of this nature and access to the type of equipment and data needed to identify and map parcels in the watershed.

Develop a Comprehensive Marketing Strategy. Ultimately the Trust will not be able to protect the entire Cacapon and Lost Rivers watershed on its own. Protecting the natural, cultural, and historic resources of the region will require a sustained community effort with the participation of myriad organizations, institutions, and local leaders. However, the Trust has shown over the past five years that it will be the land protection leader within the community and that its work is essential protecting the community's way of life. In order to build on the organization's successes, the staff and board of directors must develop a comprehensive marketing strategy. A carefully developed marketing strategy will enable the Trust to set the tone for its role in the community. A coordinated, consistent, proactive approach will provide the Trust the opportunity to influence community and stakeholder perception of the organization.

As part of the charrette process, the Environmental Finance Center conducted a half-day meeting of key charrette participants to discuss the value of a marketing strategy and its core components. This marketing team identified two key issues that it felt were essential for the Trust to build on in the coming months:

- The work of any land trust is very complicated and at times difficult for many people to understand. In addition, the Cacapon and Lost Rivers Land Trust has a very broad mission that can make its work even more difficult for many people to understand. Therefore, it is essential for the Trust to narrow its message to some key themes. The first theme is the resource itself. The Cacapon and Lost Rivers and their watershed lands are unique resources that are being threatened in a rapidly urbanizing region. Even people and institutions not directly connected to the region can understand its importance if it is articulated effectively.
- The Trust has become a regional, if not a national leader in protecting local resources. The organization must work to market this success to potential funders both inside and outside the community. This message of success will resonate with institutional, governmental, and private funding sources. In short, it is critical that the organization market its success and capacity to protect a natural and cultural treasure.

Next steps

- As a follow up to the marketing strategy meeting, the Environmental Finance Center, in

partnership with *Marketing for Change*, a private sector progressive marketing firm, will conduct a one-day marketing audit and strategy development event on behalf of the Trust. The goal of the event will be to clearly identify the messages, audiences, and resources that the Trust must leverage in order to successfully implement its aggressive land protection goals. The event will take place in the late spring, early summer of 2006 and will be held in College Park, Maryland.

Conclusion

These recommendations should help provide the framework for a sustainable financing and implementation strategy for the Cacapon and Lost Rivers Land Trust as they work to connect the Hampshire County Conservation Hub to the George Washington National Forest and the Short Mountain Wildlife Management Area. The Trust has some very difficult decisions to make regarding exactly how they want to expand their organizational capacity and the role they want to play in this community. The strategy articulated above will require the Trust to be a much more visible and influential presence in the community. However, by developing an effective financing strategy, the community can increase the return on its investment and therefore improve program success.

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This report was developed in response to the November 2, 2005 Cacapon and Lost River Financing Charrette held at the Cacapon Resort State Park. The Environmental Finance Center would like to thank each of the panelists who participated in that event and provided feedback, technical assistance, and advice for the development of this report. Names and contact information for each panelist is included in the appendix to this report.

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- Tom Demoss, US EPA Region 3
- Wink Hastings, National Park Service, Chesapeake Watershed Assistance Program

Appendix A: Financing Land Conservation in West Virginia's Cacapon and Lost River Watershed Participating Panelists

Charrette Facilitator: Dan Nees

Director, Environmental Finance Center, University of Maryland

Mr. Nees has been with EFC for five years and assumed the role of Director in January 2005. Over the past seven years, he has worked with communities in the Chesapeake Bay watershed on environmental finance and sustainable development initiatives. His work focuses on building coalitions of diverse interest groups and directing them towards common finance and implementation goals. Additional experience includes serving as Project Manager of Corporate Programs at The Nature Conservancy and Manager of Alternative Marketing at U.S. News and World Report. Mr. Nees holds a B.A. in Economics, a Master of Environmental Policy, and an MBA, all from the University of Maryland, College Park.

Project Manager: Jennifer Cotting

Program Manager, Environmental Finance Center

Jennifer Cotting joined EFC in 2004 to manage an EPA funded program designed to help communities in Region 3 overcome barriers to implementing and financing their watershed protection efforts. Prior to joining EFC, Ms. Cotting worked as an independent consultant developing and implementing environmentally based education and outreach programs for nonprofit organizations and government agencies. She received her B.A. in Communications from Marymount University and her M.S. in Sustainable Development and Conservation Biology from the University of Maryland. Ms. Cotting is also co-editor of *Urban Wildlife News*, the semi-annual newsletter of the Urban Wildlife Working Group of The Wildlife Society.

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Charrette Panelists:

Wiley Barbour

Executive Director, Environmental Resources Trust

As Executive Director of Environmental Resources Trust, Wiley Barbour is focused on developing the infrastructure for a robust GHG emissions trading market by providing independent registry services. Mr. Barbour has and will continue to work extensively in the development of GHG measurement and verification protocols, GHG management and reporting systems, and GHG emissions auditing.

Mr. Barbour has over 14 years of experience working as an air pollution engineer, climate and energy policy analyst, and greenhouse gas emissions estimation specialist. Prior to joining ERT, he served six years in the U.S. Environmental Protection Agency, first in the Policy Office and most recently as a senior environmental engineer in the Market Policy Branch, in EPA's Office

of Atmospheric Programs. His responsibilities included directing the development of the U.S. Greenhouse Gas Emission Inventory Program, supporting market based solutions to air pollution problems, providing policy analysis in support of international negotiations, and developing near and long-term global emission scenarios. Mr. Barbour has also worked in numerous expert groups of the Intergovernmental Panel on Climate Change (IPCC), is a lead author of several United Nations Inventory Review Reports, and represented the U.S. EPA on several interagency teams addressing emission estimates, international bunker fuels, carbon sequestration, and compliance assurance.

Prior to joining EPA, Mr. Barbour was a consultant and Program Manager at Radian Corp where he directed numerous projects for federal, state and corporate clients, developing and improving emission inventory techniques and estimating emissions of criteria and toxic pollutants. Mr. Barbour has also served with the State of Florida's Department of Environmental Regulation, reviewing permit applications for solid waste facilities and performing compliance audits at landfills.

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John Bernstein

Program Director, Land Trust Alliance

John Bernstein is the Director of Conservation Programs for the Land Trust Alliance. He oversees LTA's field offices, Rally and other conferences, publications, Standards and Practices programs, and information services. Previously, John served as Director of the [Maryland Environmental Trust](#), where he managed the acquisition of more than 300 conservation easements, bringing the Trust's total easement holdings to 101,000 acres.

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Mike Clark

Western Water Project Director, Trout Unlimited

The Western Water Project is a six-state effort by Trout Unlimited to increase in stream flows for fisheries and wildlife, thereby providing landowners more flexibility in managing their resources. States include Idaho, Montana, Wyoming, Colorado, Utah, and California. This is the largest effort to reform western state water laws now underway by any conservation group. Clark has led six different non-profit groups over the past 30 years, including Yellowstone

Heritage, the Greater Yellowstone Coalition, Friends of The Earth, and Highlander Center. He has served on over 20 non-profit boards.

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Tom DeMoss

EPA Region 3

Tom has worked in the Environmental field for 30 years. From 1979-1984, he was involved in the formation and leadership of the Chesapeake Bay Program as its Deputy Director and then Director. He then went on to found and direct the EPA National Estuary Program (NEP) that included 23 estuary programs around the country. He directed the NEP from 1984-1990. In the 1990s, Tom formed a unique scientific partnership between EPA Mid-Atlantic Region, the States, the Office of Research and Development in EPA, Academia, NGOs and public interests to plan, conduct and use sound science in Environmental decision-making. It was called the Mid-Atlantic Integrated Action (MAIA) program and Tom was the Director. In 2001, Tom on an interpersonal agreement from EPA, worked with the Canaan Valley Institute to develop interest and support for a Highlands Action Program (HAP) to improve the water quality, living resources and habitat there-in. Tom is back in EPA Region 3 working on HAP.

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Greg Fishbein

Business Consulting Group, The Nature Conservancy

Greg Fishbein manages the Nature Conservancy's Business Consulting Group, an internal group which supports Conservancy conservation programs worldwide on the implementation of large, complex conservation initiatives. Greg's recent accomplishments include leading the development of the Nature's Conservancy three-year strategic plan; coordinating the acquisition of the 150,000 acre Valdivian Coastal Reserve in Chile; and conducting the valuation of and assisting in negotiating the acquisition of a 250,000 acre easement and 20,000 acres in fee title in the Upper Peninsula of Michigan.

Prior to joining the Nature Conservancy in 2002, Greg was Partner at Mercer Management Consulting in Boston and served as an aide to Senator Daniel Patrick Moynihan. Greg holds a BA in Economics from Dartmouth College and an MBA from the Wharton School of Business. Greg is a member of the Board of the Wildlands Center for the Prevention of Roads based in Missoula, Montana.

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Matthew Grove, AIA

Partner, Grove Dall'Olio Architects

Matthew Grove has served in leadership roles for a variety of prestigious architectural projects which include the restoration and renovation of Sailor's Snug Harbor Cultural Center on Staten Island, New York; the conversion of the Stuyvesant Hotel in Kingston, New York; the renovation of the Residence Halls at State University of New York in Stony Brook; as well as the new design and construction of the Intermodal Transportation Center in Martinsburg, West Virginia.

A native of Martinsburg, West Virginia, Mr. Grove studied architecture at Carnegie Mellon University, an institution which is nationally renowned for its academic emphasis in engineering. Upon graduation, he relocated to New York City where he was engaged by such prominent firms as Cabrera-Barricklo, Architects, and later, David Smotrich & Associates. During his employment, he served as Project Architect for the AIA award-winning Woodstock Meadows Residential Community in Woodstock, New York, as well as the restoration of the historic Jewish Community Center in Brooklyn, New York.

In 1993, Mr. Grove established his own practice in New York City. Realizing the potential for both new construction projects and preservation efforts in the Eastern Panhandle, Mr. Grove returned to Martinsburg in 1994 where he was joined by his wife and partner, Lisa Dall'Olio. Since that time, the firm of Grove & Dall'Olio Architects PLLC has been involved with project work commissioned by Shepherd College, Blue Ridge Outlet Center, Morgan County Public Library, The City of Martinsburg, as well as numerous private sector residential clients.

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Meredith Lathbury

Vice President of Conservation and General Counsel, Potomac Conservancy

Meredith joined the Conservancy in 2000 and guides the organization's conservation programs, including its land protection, restoration, and legislative and policy initiatives. As general counsel, she also provides guidance on the Conservancy's legal affairs. Under Meredith's leadership, the Conservation Program has protected more than 7,500 acres of scenic and streamside lands, recreational access areas, working farms and forests, and urban green spaces in Maryland, Virginia, West Virginia, and the District of Columbia. In 2002, Meredith spearheaded

the opening of the Conservancy's first field office, located in Winchester, Virginia, which is now the center of the organization's headwaters conservation efforts.

Before joining the Conservancy, Meredith worked as a planner for the Chesapeake Bay Critical Areas Commission, Maryland Department of Natural Resources, and served as director of education for Environmental Concern, Inc. in St. Michaels, Maryland. Meredith holds a J.D. and Masters of Environmental Policy from Vermont Law School. She is also a member of the Maryland Bar and the United States Federal Bar.

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Meredith joined the Eastern Shore Land Conservancy in January 2006 and can now be reached at:

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Matthew Logan

President, Potomac Conservancy

Matthew was appointed executive director of the Potomac Conservancy in September 1998, and was named president in January 2002. Since that time, he has guided the organization through an exciting period of growth. Matthew's responsibilities include strategic planning, partnership and resource development, and community relations.

Prior to joining the Conservancy, Matthew worked in various capacities with such groups as Resources for the Future, The Land Institute, and the International City/County Management Association. He began his career as a regional planner in his home state of Kansas. Matthew holds Master's degrees in both land use planning and United States history. He served on the Board of Directors of Friends of the Potomac and Alliance for the Chesapeake Bay, and was a co-founder and Chair of the Potomac River Keeper. Today, he is active on the Boards of Alliance for the Chesapeake Bay and the Acorn Hill School, where his two children attend, in Silver Spring.

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Daniel Patrick O'Connell

President, Evergreen Capital Advisors, Inc.

Daniel Patrick (Pat) O'Connell is the founder and president of Evergreen Capital Advisors, and has spent the last 14 years providing financial advisory services to local governments. A specialty has been financing for farmland and open space preservation. The installment-purchase farmland preservation financing program that he designed for Howard County, Maryland was given the GFOA's Award for Excellence in Financial Management, and has been implemented in

Harford and Anne Arundel counties, Maryland; Virginia Beach, Virginia; Burlington and Mercer counties, New Jersey; and six Pennsylvania counties.

Prior to his work as financial advisor, Mr. O'Connell served on the board of directors and managed the public finance activities of Butcher & Singer Inc., a Philadelphia-based investment-banking firm that was a member of the New York Stock Exchange and which is now a part of Wachovia Securities. He was also associated for three years with the Wall Street investment banking firm of Goldman, Sachs and Co., where he sold fixed-income and equity securities to regional institutions.

Pat O'Connell graduated from Princeton University with an A.B. in Economics, and received his M.B.A. from the University of Virginia's Colgate Darden Graduate School of Business Administration. He is an associate member of the Maryland Public Finance Officers Association. Mr. O'Connell serves on the Board of Trustees of Delaware & Raritan Greenway, central New Jersey's regional land trust, and on the National Advisory Council of the Trust for Public Land, a San Francisco-based land conservation organization. He has spoken frequently at national conferences of the Land Trust Alliance and American Farmland Trust on financing land preservation.

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Richard Pritzlaff

President, Biophilia Foundation

Since 1999 Richard Pritzlaff has served as the President of the Board of Directors of the Biophilia Foundation, a private foundation that supports efforts to create, restore, and protect wildlife habitat. He also operates Land Stewardship Services, a consulting service offering NGO's, state and federal agencies, and private landowners guidance on land preservation, wildlife management, and natural resource-based economic development projects. He also serves on the board of Directors of Maryland Environmental Trust.

Prior to establishing Land Stewardship Services, Richard worked on land preservation issues for both The Trust for Public Land and Chesapeake Wildlife Heritage. He holds an MS in Environmental Policy and Policy from Johns Hopkins University and a BS in Engineering from Vanderbilt University.

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Tom Schueler

Director of Watershed Research and Practice, Center for Watershed Protection

Tom founded the Center for Watershed Protection in 1992 with the mission to protect and restore our nation's watersheds. He has a keen interest in the science and management of urban streams, and has worked for more than 20 years on practical techniques for protecting and restoring them. Tom has authored several widely-used references, including *The Practice of Watershed Protection*, *Rapid Watershed Planning Handbook*, *Better Site Design*, and *Design of Stormwater Wetland Systems*. He co-authored the *Maryland Stormwater Design Manual* and has developed new approaches to use impervious cover as an environmental indicator and management tool for watershed planning. From 1982 to 1992, Tom worked at the Metropolitan Washington Council of Governments, where he led the Anacostia Watershed Restoration Team.

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Appendix B: Matrix of Short Term Funding Opportunities for the Cacapon and Lost Rivers Land Trust

Suggested Program	Panelist	Program Type	Additional Information	Follow Up Contact
Coordinating Community Priorities				
local watershed plans		community priorities		
TMDL Implementation Plan		community priorities		
Federal/State/Local/Private Programs				
Builders for the Bay	Tom Schueler	federal/state/private	http://www.cwp.org/builders_for_bay.htm	Rebecca Winer, CWP
Chesapeake Bay Targeted Watershed Grant		federal/state/private	www.nfwf.org/programs/targetedwatershed/	
Coastal America	Randy Pomponio	federal/state/private	www.coastalamerica.gov	EPA -- Bill Hoffman, Mindy Lemoine
Earmarks Farm Bill		federal/state/private federal/state/private		
Mitigation Banking (energy, transportation)	Randy Pomponio	federal/state/private		EPA -- Bill Hoffman, Jeff Lapp, Bill Arguto, John Forren
National Forests		federal/state/private		
New Markets		federal/state/private		
NFWF Watershed Grants		federal/state/private	www.nfwf.org/program.cfm	
Region III Watershed Grants		federal/state/private		
Riparian Co-Op Fund	Matthew Grove	federal/state/private		Matthew Grove
Roll Back Tax		federal/state/private		
Special Area Management Plans	Randy Pomponio	federal/state/private		Jeff Lapp, EPA
Supplemental Environmental Projects	Randy Pomponio	federal/state/private		Jeff Lapp, EPA
EPA Targeted Watersheds		federal/state/private		
Tax Credits		federal/state/private		
General Fund and Fee-Based Programs				
Bonds	Pat O'Connell	general fund/fee-based	leveraged against transfer tax	Pat O'Connell

Installment Purchase Agreement (IPA)	Pat O'Connell	general fund/fee-based	leveraged against transfer tax	Pat O'Connell
Riparian BMP Bond	Matthew Grove	general fund/fee-based		Matthew Grove
Second Home Taxes	Pat O'Connell	general fund/fee-based	use tax increment financing, freeze assessments taxes at purchase price, or implement impact fees	Pat O'Connell
State Revolving Fund/local tax	Richard Pritzlaff	general fund/fee-based	borrow against a dedicated local property tax mechanism	

Leveraging Markets

Conservation Buyers		markets		
Disbursement System	John Bernstein	markets	create a system to insure that easement purchase \$\$ go to those in need over those who could donate	
Donated Easements	Pat O'Connell	markets	offer transferable tax credits for donated easements	Pat O'Connell
Farming Markets		markets		
Prioritize easement purchases	John Bernstein	markets	use degree of discount from full market value to prioritize purchases	
Private Partners	Greg Fishbein	markets	look to partnering with developers, individual investors, investment funds, etc to participate in turnover market	Greg Fishbein
Profit a Prendre	Pat O'Connell	markets	see attached document	Pat O'Connell
Renewable Energy TDR's		markets markets		
TIMO	Pat O'Connell	markets	TIMO for large forestry holdings	Pat O'Connell
Voluntary Markets -- Carbon Sequestration	Wiley Barbour	markets	create market based on carbon sequestered on agricultural lands	Wiley Barbour

Regulation

Development Guidelines		regulation		
Perc Tests	John Bernstein	regulation	requiring perk tests before subdivision of land could avoid issue of trying to reassemble lots determined to be unbuildable	
Stream Buffer Ordinances		regulation		

Subdivision
Ordinances
Zoning Strategy

regulation
regulation