Diversifying Funding for the Chesapeake Bay Trust

A White Paper Report

Provided by the Environmental Finance Center University of Maryland



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Executive Summary

Background

Over the past two decades, The Chesapeake Bay Trust (the Trust) has served as a leader in funding the state of Maryland's Bay restoration and education programs. However, as the demand for funding increases with shifting community priorities, the Trust must think strategically about the viability and sustainability of its financial resources. In an effort to identify opportunities to build on its success, the Environmental Finance Center at the University of Maryland (EFC) has produced a white paper report titled Diversifying Funding for the Chesapeake Bay Trust. This report provides a comprehensive analysis of current and future funding opportunities, as well as recommendations for further establishing the Trust as the preferred funding organization for Chesapeake Bay restoration programs in Maryland.

The Environmental Finance Center's work focused on two core tasks. The first was to identify opportunities for the Trust to increase its revenue growth, thereby achieving its goal of building its annual grant making programs to \$5 million. We refer to this part of the report as short-term revenue or funding opportunities. In this case, short-term refers to the opportunity for immediate program implementation. Our goal was to identify revenue programs that can quickly increase the Trust's grant making capacity. Though we were looking for short-term implementation schedules, we focused much of our analysis and research on those opportunities that provided the greatest potential for long-term, sustained revenue growth for the organization.

The second task was to analyze the organization's expanding role in the broader regional effort to protect and restore the Chesapeake Bay and its watershed lands. Our goal here was to identify opportunities for the Trust to expand its capacity and impact throughout the watershed, fill critical financing gaps in the Bay's recovery, and increase its unique role in the Bay restoration process. In effect, during this portion of our analysis we began the process of looking at the expanding role of the Trust as a financing and implementation institution, and how it might better serve as a conduit for fiscal resources throughout the state and the watershed.

Analysis Criteria

In the process of identifying potential funding opportunities and sources, the EFC project team developed a format or structure for analyzing each opportunity. The goal was to develop a report format that will allow Trust staff and leadership to compare opportunities and make effective decisions about which programs to pursue. Each of the identified funding opportunities were analyzed according to the following criteria:

Type of opportunity: the type of opportunity distinguishes revenue programs from those that leverage existing and future sustainable revenue sources.

Level of opportunity: the level of opportunity refers to the potential revenue associated with the program.

Administrative requirements: EFC's analysis in this area focused on potential staffing requirements, structural changes, and program development resources.

Potential barriers: our goal was to identify the political, administrative, and legal barriers associated with each potential program, as well as to identify potential strategies for overcoming those barriers.

Recommended dissemination strategy: an important consideration for developing a funding program is to understand the associated cash flow.

Recommended next steps and timing: EFC provided recommended next steps for each of the identified funding opportunities.

Short-Term Opportunities Advance the Trust's Strategic Plan

The report analyzes a variety of potential revenue and financing opportunities, all of them unique in their own way, yet many with similar administrative requirements, implementation

challenges, and growth opportunities. Some of the highlighted opportunities, such as those associated with voluntary revenue programs, would coincide with the Trust's strategic planning goals, support the organization's core competencies, and require relative little shift in administrative capacity or function. These programs could be implemented within a relatively short amount of time. Based on the analysis criteria developed by the project team, we feel that the following five revenue programs offer the most immediate revenue opportunities:

· Raising the license plate renewal fee.

Often the greatest opportunities for growth are associated with the continued development of current programs, and this is certainly the case with the Trust and the license plate program. By increasing the voluntary fee from \$5 to \$10 per year, the Trust could eventually double its revenue from these donations.

• Developing an E-ZPass check-off program.

The idea is to encourage E-ZPass customers to check-off a box on their application agreeing to make a donation to the Trust each time a prepayment is made to their account. If implemented successfully, each pre-payment would serve as the equivalent of a program renewal fee or donation to the Trust.

Developing a Bay Lane toll program.

The idea behind the Bay Lanes is to allow travelers to "round up" their toll when they travel across bridges and tunnels by traveling through clearly marked, dedicated "Bay Lanes." The extra money would be donated to the Chesapeake Bay Trust and would be used to fund priority restoration projects.

• Leveraging existing re-granting opportunities.

There are existing grant programs targeting restoration of the Chesapeake Bay watershed, and there are opportunities for the Trust to compete for those funds.

Expansion of the Chesapeake Bay Funders Network (CBFN).

As a founding member and the current co-chair of the CBFN, the Trust has an opportunity to leverage local, regional, and national foundations to make a bigger impact in its strategic programs.

Making a Greater Difference by Expanding Trust Strategy

While the foundation for the Trust's future success will depend on immediate revenue growth, in many ways, short-term revenue opportunities require mid-and long-term vision and focus. Ultimately, the goal of the Chesapeake Bay Trust is to advance protection and restoration of the Chesapeake Bay and its rivers. However, it must do this by expanding on its core capacities and competencies as an institution. This may require new, innovative, and in some cases aggressive approaches for advancing the organization's mission. In other words, the Trust may find it necessary to consider a longer-range strategy for building on its roll as a financing institution in the watershed restoration effort in order to meet its potential and best impact the Bay's restoration.

Opportunities, such as those related to government loan and agriculture programs would require the Trust to expand on its core organizational capacities in very different and innovative ways. These programs will require longer implementation timelines. The EFC project team identified several potential mid-range programs that would provide the Trust with a real opportunity to expand its impact and influence throughout the watershed, while filling critical gaps in Bay restoration financing and implementation. We have identified two key mid-range opportunities that would require likely 3-5 years for full implementation. These opportunities tend to focus on leveraging existing state and federal funding and financing programs such as:

• The state revolving loan program.

Through this federal program, EPA grants money to the states that, in turn, make low-interest loans in their communities to fund high priority water quality activities. The key feature of SRF programs is that the funds, by definition, must be paid back, and this requires sustainable, dedicated revenue streams. This very feature of the program, combined with the Trust's unique revenue programs, provides an opportunity for the Trust to expand the capacity and effectiveness its revenue programs by using or leveraging SRF to advance the most pressing Bay restoration needs.

Leveraging state and federal agricultural programs.

Agricultural programs, specifically those related to financing non-point source pollution issues, provide the Trust with perhaps the most significant long-term opportunity to expand its reach and impact throughout the watershed.

Additionally, the EFC team identified a number of longrange opportunities that will also require expansion of the organization's mission, but may result in the Trust playing a fundamental role in the financing of the Bay's restoration. Potential opportunities to consider include:

• Mitigation and conservation banking programs.

These types of programs could provide the Trust with an opportunity to initiate and support large-scale conservation and restoration efforts.

Enforcement actions.

Enforcement penalties are collected on both a state and federal basis for a variety of violations that have detrimental impacts on the health of the Bay. There is a potential opportunity for the Trust to help direct how these programs are implemented across the state and the watershed.

Geographic Expansion and Institutional Capacity: Moving the Restoration Effort Forward

One of the most significant opportunities facing the Trust is geographic expansion. As with expanding the Trust's institutional capacity, geographic expansion would allow the Trust to meet some very critical financing and implementation needs in the watershed. As the leader and fiscal agent of the Chesapeake Bay Funders Network for instance, the Trust is taking a leadership role in organizing private foundations to fund projects of watershed-wide importance. While Trust funding is not at work in other states, its role as a convener and fiduciary of the CBFN has been critical to attracting more funds for projects that benefit the health of the Bay. This example demonstrates the potential value the Trust could provide the Bay effort if its geographic reach were to be expanded. Our report analyzes how geographic expansion should be incorporated into a broader program implementation strategy, and identifies the opportunities and barriers associated with expanding outside the state of Maryland.

The path to success: An implementation strategy

Though successful implementation of these programs will certainly be a dynamic process, it is helpful to think of the implementation process or strategy in terms of a timeline or a continuum. Several programs provide immediate opportunities for revenue growth, while others require a longer-term vision and a process by which these opportunities can be explored in the context of an expanded Trust strategy. All of them, however, are connected, each building on the organization's unique structure, relationships, and past successes. It is our hope that this report provides specific recommendations that will help the Trust meet its strategic planning goals, while challenging it to consider how its mission could expand to further aid the efforts to bring back the Chesapeake.

Introduction

Over the past two decades, the Chesapeake Bay Trust (the Trust) has served as a leader in funding the state of Maryland's Bay restoration and education programs. As the demand for funding increases with shifting community priorities, however, the Trust must think strategically about the viability and sustainability of its financial resources. In an effort to identify opportunities for the Trust to build on its success, the Environmental Finance Center at the University of Maryland (EFC) has developed a comprehensive analysis of current and future funding opportunities, as well as recommendations for further establishing the Trust as a premiere funding organization for Chesapeake Bay restoration programs in Maryland.

Report Structure

This report focuses on two core funding and financing components, each essential for the long-term effectiveness of the Trust and its mission. The first component is structural: identifying the best methods for the Trust to increase and diversify its annual revenue. This part of our work required a comprehensive examination of currently available funding sources and an indepth analysis to identify revenue sources that best align with the goals and objectives of the Trust. The available funding sources investigated can be viewed in the following three broad categories of opportunities:

- (1) **Voluntary Donation Opportunities** which include the various state and federal mechanisms used to collect voluntary donations for nonprofit organizations, such as license plate programs, tax check-offs, the Combined Federal Campaign and others.
- (2) **State and Federal Grant and Funding Opportunities** with a particular focus on those dedicated to watershed restoration and protection programs, such as revolving loan funds, state and federal agency grants, and special appropriations.

(3) **Re-granting Opportunities** – where the Trust could administer funds from private foundations to organizations seeking to protect and restore the Bay.

The second component of the project focused on the phases or timing of the Trust's growth and development. The EFC analyzed the Trust's strategic plan and provided recommendations for short and long-term financial growth of the organization, as well as a suggested implementation strategy for advancing these recommendations. Our work focused on how the Trust can continue to align itself with the institutional and financing needs of the Chesapeake Bay restoration effort, and how it can enhance its effectiveness throughout the State of Maryland and the entire Bay watershed.

Summary of Key Findings

Efforts to protect and restore the Chesapeake Bay and its watershed are at a critical juncture. In effect, leaders within the Bay community have expanded the debate from what needs to be done to restore the Bay to how to make it a reality. The discussion now focuses directly on the institutions and framework that will be necessary to move forward. The Chesapeake Bay Trust has an opportunity to play a critical role in this dialogue and to serve as an example of how fiscal and financial innovation can occur. Specifically, the organization has an opportunity to develop public/private partnerships that can effectively leverage a variety of funding resources.

Our goal in developing this report was to provide the Chesapeake Bay Trust leadership and staff with a roadmap for achieving the core elements of the organization's strategic plan. Our work focused on two core tasks. The first was to identify opportunities for the Trust to increase its revenue growth, thereby achieving its goal of building its annual grant making programs to \$5 million. We refer to this part of the report as short-term revenue or funding opportunities. In this case, short-term refers to the opportunity for immediate program implementation. Our goal was to identify revenue programs that can quickly increase the Trust's grant making capacity. Though we were looking for short-term implementation schedules, we focused our analysis and research on those opportunities that provided the greatest potential for long-term, sustained revenue growth for the organization. Our research and analysis focused on the three core revenue areas: voluntary check-off type programs, state and federal government programs, and re-granting and private funding opportunities.

The second task was to analyze the organization's expanding role in the broader regional effort to protect and restore the Chesapeake Bay and its watershed. Our goal was to identify opportunities for the Trust to expand its capacity and impact throughout the watershed and increase its critical role in the Bay restoration process. In effect, we began the process of looking at the continuing role of the Trust as a financing and implementation institution and how it might continue to serve as a conduit for fiscal resources throughout the state and the watershed.

Part of the EFC's objective with this project was to provide a strategy for leveraging the opportunities identified in this report. Rather than just develop a laundry list of potential revenue opportunities, we provided a potential strategy for achieving long-term program and revenue goals. In the final section of this report, we discuss the potential future of the organization and how its unique structure and organizational governance could serve as a critical financing and implementation tool for the state of Maryland, as well as other jurisdictions throughout the watershed. Our belief is that the Trust is a very unique organization that is structured in a way that can fill a variety of institutional financing and implementation gaps in the Chesapeake Bay restoration effort. Our analysis focuses on financing needs and how the Trust can grow its capacity in the future.

Clearly the Trust leadership and staff will determine the ultimate direction and impact of the organization. Our goal was not to influence program activity, but to identify opportunities for increasing capacity and effectiveness. Though the growth of an organization like the Trust is in many respects an organic or dynamic process, we feel there is a path to success. The following section outlines a strategic approach and implementation strategy for advancing our recommendations.

The foundation for success: voluntary funding programs.

Our analysis focused on the future and how the Trust can leverage significant sustained financing and funding opportunities. The most significant opportunities were related to voluntary funding programs. The Trust's aggressive short-term revenue goals will require rapid implementation of new programs. Voluntary programs provide significant opportunities because they tend to require relatively little administrative adjustments and capacity building, and, like current Trust revenue programs, can be very sustainable in the long-term. This report provides a description of a number of opportunities that we feel the Trust can immediately leverage to build the foundation for future growth and success. This does not mean that implementation of these programs will be easy. In fact, many of the programs and opportunities that we identified had one thing in common - there are often significant institutional or political barriers. However, in very few cases did we feel that these barriers were

insurmountable. On the contrary, with a strategic approach, we feel that all of the opportunities presented in this report can be successfully leveraged and implemented.

Balancing short-term revenue goals with long-term **impact.** While the foundation for the Trust's future success will depend on short-term or immediate revenue growth, in many ways, immediate revenue opportunities require long-term vision and focus. Ultimately, the goal of the Chesapeake Bay Trust is to advance protection and restoration of the Chesapeake Bay and its watershed. The Trust's revenue goals and the codified strategies for increasing grant making activities are the first step in building the capacity of the organization to further the Bay restoration effort. However, our analysis has indicated that there is a direct connection between short-term revenue goals and long-term capacity of the organization. The final section of this report provides an analysis of the types of institutional opportunities that we feel are available to the Trust and could both increase its long-term capacity and provide structure to short-term revenue goals.

Building on the Trust's unique relationship with the state.

The Chesapeake Bay Trust is one of the most extraordinary environmental organizations in the country. Though there are a number of examples of successful watershed organizations and institutions, the Trust is truly unique in its structure, governance, management, and effectiveness. In many ways, its effectiveness is the direct result of the organization's relationship with the state. Though a direct connection to the state government is not without its difficulties, it is critically important for what the Trust is trying to accomplish. In the short-term, the Trust's unique connection to the state creates an opportunity to develop exclusive relationships and revenue opportunities not available to other organizations and institutions. In the long-term, this relationship will allow the Trust to develop critical financing institutional capacities that will result in sustainable, dedicated revenue sources. The result will serve both the needs of the organization - enabling it to advance its mission across the watershed - and the needs of the state, by having the Trust fill critical financing and funding institutional needs. It is critical that the Trust begin immediately build on the political and institutional relationships that will be essential for implementing many of the programs discussed below.

Overcoming a crowded marketplace. There is no question that the Trust is operating in a very competitive marketplace, and leveraging many of the voluntary revenue pro-

grams highlighted in this report will require the organization to overcome a significant level of competition for resources. This is a phenomenon that the Trust staff and leadership have had to manage throughout the organization's existence. However, given the intense competition for funding resources among organizations and institutions across the region, it is critical that the Trust act aggressively and quickly to capture revenue opportunities when they are available. Only by establishing itself as a critical financing and funding institution in the broader Chesapeake Bay restoration effort will the Trust be able to effectively and continuously leverage scarce fiscal resources in a crowded marketplace.

Building on the foundation of success. Over the past twenty years, the Trust has established itself as an effective champion of the Chesapeake Bay and effective supporter of education and stewardship in communities across the region. At the same time, the organization has served a critical institutional role in financing and funding the Bay's restoration and protection. The organization is now presented with an opportunity to significantly build on that foundation of success. Later in this report we discuss the long-term opportunities available to the Trust to increase its capacity by continuing to facilitate funding and financing of critical Bay stewardship needs. Ultimately the source of the Bay's problems, and the solution to those problems, rests with the citizens within the watershed. And in order for effective, sustainable solutions for restoring the Bay to be implemented the citizens of the basin must understand their role and responsibility in the Bay's decline and restoration.

The Trust's stated mission of developing better citizen stewards has profound financing and implementation ramifications. In many ways the lack of money and innovative programs facilitating efficient and effective investment are the most significant barriers facing restoration and protection efforts throughout the watershed. The citizens of the watershed will be asked to pay for more and more of the costs associated with their actions, and those citizens will want to know how their money is being spent, and what their role is in the process. By focusing on education and outreach, the Trust is performing a critical financing function by informing the citizens of the region, which is a critical component of the political process. We feel that it is critical for the organization to expand its efforts in these areas as a way of increasing its capacity and institutional role in the financing process.

Analysis Structure and Criteria

In the process of identifying potential funding opportunities and sources, the EFC project team developed a format or structure for analyzing each opportunity. The goal was to develop a report format that will allow Trust leadership and staff to compare opportunities and make effective decisions about which programs to pursue. Each of the identified funding opportunities were analyzed according to the following criteria:

Type of opportunity: Identifying appropriate funding sources was the core of the EFC's research and analysis and our work has focused on two areas of available funding sources: those that will increase the revenue coming into the Trust and those that increase the Trust's ability to leverage existing and future sustainable revenue sources. The available funding sources to be investigated can be viewed in the following three broad categories of opportunities:

- (1) **State and Federal Funding Opportunities** with a particular focus on those dedicated to watershed restoration and protection programs, such as revolving loan funds, state and federal agency grants, and special appropriations.
- (2) **Voluntary Donation Opportunities** which include the various state and federal mechanisms used to collect voluntary donations for nonprofit organizations, such as license plate programs, tax check-offs, and others.
- (3) **Private Opportunities** where the Trust could administer funds from foundations or other private sources seeking to protect and restore the Chesapeake Bay.

Level of opportunity: the level of opportunity refers to the potential revenue associated with the program. This part of the analysis describes the potential annual revenue of a given revenue opportunity and how that estimate was derived.

Administrative requirements: one of the most important issues for the Trust to consider will be the administrative requirements associated with each program or opportunity. A stated goal of this effort is to keep administrative costs low. The EFC's analysis in this area focused on potential staffing requirements,

structural changes, and program development resources.

Potential barriers: identifying potential barriers to implementation was a core part of this project. Specifically, our goal was to identify the political, administrative, and legal barriers associated with each potential program, as well as to identify potential strategies for overcoming those barriers.

Recommended dissemination strategy: An important consideration for developing a funding program is to understand the associated cash flow. Many funding opportunities are predictable and can be disseminated on an annual basis with a significant degree of certainty. Other opportunities are cyclical in nature and are more suited to other types of dissemination efforts. Each funding program is grouped into one of three implementation methods:

- (1) **Pass-Through Funds:** programs that provide steady income that can be granted back out reliably and routinely.
- (2) **Endowment Funds:** those that should be invested and have expenditures drawn on interest income.
- (3) **Time-Release Funds:** programs that provide large sums of money, but somewhat inconsistently, making a slow disbursement over a three- or five-year period more practical.

Recommended next steps and timing: Finally, the EFC provides recommended next steps for each of the identified funding opportunities. In addition, we discuss the timing of the program, identifying whether or not it presents an immediate or long-term revenue opportunity.

In addition to applying the above criteria to each funding opportunity, the report provides case studies and examples from around the country of how other organizations have implemented similar programs, if applicable.

Voluntary Funding Opportunities

Voluntary funding opportunities have provided the foundation for the Trust's grant-making activities since its inception in 1985. In fact, the development and incorporation of the organization was directly connected to the development of an innovative voluntary funding program - the Chesapeake Bay license plate program. Though the Trust has relied on this program, in addition to the state tax check-off program, for more than 20 years, the EFC project team feels that there are significant opportunities for the Trust to expand these voluntary programs. The EFC project team focused on opportunities that can be leveraged and implemented in the near future, thereby immediately increasing the Trust's annual revenue. Many of the programs and opportunities analyzed and recommended by the EFC project team have been developed and implemented in communities across the country and have served as the foundation for some very effective restoration, outreach, and protection activities in a number of communities and watersheds. However, many of these programs have also shown a tendency to atrophy over the years for a variety of reasons. The project team identified the following issues, concerns, and characteristics as being critical to maintaining the vitality of the Trust's current programs, as well as the successful implementation of new revenue opportunities.

Building on current programs and relationships.

The success of license plate and state tax check-off programs provides the Trust with significant credibility, and it is critical for the Trust to leverage this credibility into other state-related opportunities, including the E-ZPass program, and boating and fishing licensing programs. In many respects, the success of the license plate and tax check-off programs is the result of the fact that the programs meet critical needs for both the Trust and the state. The Trust, obviously, is provided with sustainable, dedicated revenue streams. The state is provided with an opportunity to directly engage citizens in the restoration process in a way that is non confrontational and positive. The opportunities described in this section provide both institutions with an opportunity to benefit to an even greater degree.

As part of the process of developing this report, the EFC project team solicited input from a number of industry and resource experts from across the state and the region. ¹ Several people who provided comments for this report expressed concern that the Trust could end up being too aggressive by targeting too many voluntary programs at the same time, specifically those related to state programs. Two primary concerns were expressed. The first concern was that pursuing too many funding programs would result in state officials becoming resistant to implementing any new Trust-related funding programs. This concern was often based on past experience working on fee-based programs across several state agencies and institutions. While we respect the fact that several of the programs identified will face significant political and administrative barriers, we feel strongly that the Trust can successfully take advantage of these opportunities in a way that benefits both the Trust and the state.

Throughout this report, we focus on the opportunity for the Trust to fill an institutional role in funding and financing the restoration and protection of the Chesapeake Bay and its watershed. We feel strongly that the Trust fills a critical need in the restoration effort, and that by implementing many of the voluntary funding programs described below, the Trust will improve the state's capacity to meet its responsibilities related to implementing the tributary strategies. We feel strongly that the Trust should pursue these opportunities by stressing the benefits and corresponding efficiencies that will avail themselves to state officials by developing and implementing these programs.

The second concern expressed was that citizens throughout Maryland and the watershed will become fatigued by these programs, thereby reducing overall effectiveness. Clearly the Trust does not want to implement new opportunities that will exhaust or cannibalize existing programs. While this is a legitimate marketing concern, there is little evidence to suggest that the Trust is reaching that point. In fact, the Trust's own survey efforts have indicated that there is opportunity to successfully increase revenue programs. In the long run, the citizens of the watershed will pay the costs associated with the restoration effort, and there will be no single solution or program that

¹ A description of the steering committee process is provided in the concluding summary section of the report

will be sufficient to leverage the resources necessary for funding restoration programs. It will require a strategic application of both voluntary and mandatory revenue programs, and it is critically important that the Trust provide citizens with as many opportunities as possible to support the restoration effort.

Overcoming administrative and political barriers.

Our analysis focused on the level of opportunity and administrative requirements associated with each financing opportunity. However, there are other factors that must be considered when implementing new programs, and one of them is the program's effectiveness in advancing the Trust's marketing message to either a broader audience, or to an audience that will be uniquely interested in that message. One way of accomplishing this is to develop programs that have a direct connection to the resource. The closer the connection to the resource, the more effective many revenue programs will be at advancing the organization's core message. These programs don't always provide the greatest opportunity for immediate revenue growth, but they can assist in furthering the organization's goals in other ways. Though the benefits to the Trust — and in many respects to the associated state agencies — are clear, there are administrative and political barriers associated with each that the Trust must consider as it develops its implementation strategy.

Though there are relatively few legal barriers associated with implementing these programs, there will almost certainly be bureaucratic and institutional obstacles that will need to be overcome. Though these barriers exist, each of the programs identified below, including the E-ZPass program and the boating and fishing license programs, should be aggressively pursued. As mentioned above, these programs provide not only the Trust with an opportunity to increase its revenue and capacity, but they also provide the associated state agencies and political leaders with an opportunity to effectively leverage fiscal resources. It should be noted that the formation of the Chesapeake Bay Trust 25 years ago, as well as the development of the license plate and tax check-off programs, required a persistent approach to overcoming these very political and administrative barriers. Had the leadership at the time chosen not to continue their efforts to develop these critical programs, the Trust would likely not be the organization it is today.

Fundraising vs. financing.

The Environmental Finance Center's goal with this project was to identify opportunities for the Trust to leverage sustainable, dedicated revenue opportunities that would allow the organiza-

tion to fulfill its very unique role in the community. This type of capacity analysis is conducted by non-profit organizations across the country everyday, and most of the time the concern is related to implementing what we refer to as traditional fundraising programs and activities. These types of activities are often associated with efforts such as capital campaigns, membership drives, direct mail efforts, and special events. Though there are some fundraising activities that may be appropriate for the Trust to consider (we discuss several at the end of this section of the report) we chose not to focus on these types of programs two reasons. First, the EFC focuses its work on financing and implementation activities, and the role of institutions in the broader community effort to protect the environment and our natural resources. Our work does not often focus directly on nonprofit capacity development. Second, and perhaps more importantly, the Trust is not a standard nonprofit. It is not membership-based, nor does it exist to support its own programs. It exists to support community efforts to protect and restore the Bay. Though the Trust may want to consider some of these traditional fundraising programs as part of a marketing program with the goal of increasing the organization's exposure in the community, we do not feel that these types of activities provide significant direct revenue opportunities.

Review of Voluntary Funding Opportunities

Chesapeake Bay Plate Program

Often the greatest opportunities for growth are associated with the continued development of current programs, and this is certainly the case with the Trust and the license plate program. In addition to serving as the foundation for the Trust's work in the watershed for the past 25 years, the Chesapeake Bay license plate program has also served as a national model for how to support critical community programs and priorities. The program also serves as a model for several of the other revenue opportunities that are described in this report.

It is clear that this program will and should continue to serve as the foundation of the Trust's voluntary revenue programs in the future. Not only does the program provide the Trust with its most significant source of revenue, it also provides an opportunity for the Trust to effectively execute an organizational marketing strategy. Clearly the Trust staff and leadership have done an excellent job managing and growing this program, and no wholesale changes are needed or recommended. There are programmatic growth opportunities, however, specifically related to the license renewal fee.

In 2004, the Maryland legislature passed a voluntary renewal fee for the Chesapeake Bay license plate that requires Bay plate holders to pay a voluntary annual fee of \$5 per year or \$10 every two years. If a Bay plate holder declines to pay the donation, then the Motor Vehicle Administration sends the person a regular Maryland tag on its receipt of the Bay tag. The fee generates more than \$1 million per year in funds and it is the Trust's most important and sizable new source of revenue. Although there are a few examples of specialty license plate programs across the nation that do not carry a renewal fee, the vast majority do, and according to research conducted by the Trust, annual renewal fees range from \$5 to \$105. The average renewal fee from 15 specialty plates that address conservation issues was approximately \$25. By increasing the voluntary fee by \$5 per year, the Trust could eventually double its revenue from these donations.

Level of opportunity: Assuming that the fee structure would not be instituted until July 1, 2007 at the earliest, and increased fee of \$5 per year would begin to generate revenue in 2009. At that time, the fee could generate \$650,000 in additional income and more than a \$1 million per year in subsequent years.

Administration: The program would function in an identical fashion as the existing Bay plate program. Therefore, administrative requirements would be in line with the Trust's existing capacity.

Potential Barriers: In 2004, the state of Maryland increased registration fees for vehicles. As would be expected, the action was not popular in the public's view and there remain some lingering complaints about the rate increase. Given this, it may be difficult for the administration to agree to an increased fee at this point.

Dissemination strategy: Revenues from this program would be ideal for supporting the Trust's pass-through funding grant making activities.

Recommended next steps and timing: The project team

recommends that the Trust pursue this opportunity with the administration, especially given the program's relatively low renewal rates compared similar programs across the country. In addition, efforts to increase the renewal rate now may be aided by the Trust's current Bay Plate marketing campaign. Clearly the Trust leadership has an understanding of the political dynamics related to this program and are best positioned to develop and recommend an implementation strategy. However, given the resistance to the rate increase, this may not be an immediate funding opportunity.

E-ZPass

The first step in the Trust's revenue growth strategy should be to expand the application of its two biggest revenue programs – the license plate fee and the state tax check-off program – into other areas. A significant opportunity to expand these programs is related to the E-ZPass program. The structure of this regional electronic toll collection system provides an opportunity to leverage sustained, significant revenue sources through a new application of a voluntary check-off program.

The E-ZPass program is a regional toll system used on most toll bridges and toll roads in the eastern United States from Virginia to Maine, and recently extended into Illinois. All states use the same technology, allowing travelers to use the same E-ZPass tag throughout the network. Various independent systems that use the same technology have since been integrated into the E-Z Pass system. These include Fast Lane in Massachusetts, Smart Tag in Virginia, and most recently I-Pass in Illinois.

The Maryland E-ZPass program is managed and operated by the Maryland Transportation Authority. Like the other states that participate in the E-Zpass program, MTA has its own billing and customer service center, which is connected to other state centers and programs by a secure network (the "reciprocity network"). These managing state agencies also set their own customer account policies. Areas of variation include the refundable deposit or nonrefundable charge for an E-ZPass tag, periodic maintenance fees, paper statement fees, the low balance threshold, and replenishment amounts. The E-ZPass is usually offered as a debit account: tolls are deducted from prepayments made by the users. Users may opt to have prepayments automatically deposited when their account is low, or they may submit prepayments manually. Some agencies also allow postpaid accounts with a security deposit (which effec-

tively renders them much like prepaid accounts with a different replenishment policy).

It is the revolving nature of this program that offers the most significant funding opportunity for the Trust. The idea is to encourage E-ZPass customers to check-off a box on their application agreeing to make a donation to the Trust each time a prepayment is made to their account. If implemented successfully, each prepayment would serve as the equivalent of a program renewal fee or donation to the Trust.

Level of opportunity: The potential level of opportunity for the Trust is significant. There are more than 400,000 E-ZPass customers in Maryland alone. Again, a voluntary check-off program could be developed in a way that provides the Trust with a donation each time a customer's account is either automatically or manually updated. This revolving nature of the program would provide long-term revenue stability and growth. The exact level of opportunity will be determined by several factors including the participation rate related to new customers, initial participation rates of existing customers, the retention rate of existing customers, and the average number of times customers across the state prepay their accounts each year.

Administrative requirements: As was discussed above, there will certainly be administrative requirements associated with developing and implementing an E-ZPass program. However, in most ways, the program would function in a similar if not identical fashion as existing revenue programs. Therefore, administrative requirements would be in line with the Trust's existing capacity.

Potential barriers: Because this program would be new to the E-ZPass program, there will almost certainly be obstacles that will need to be overcome. Through analysis of similar check-off programs across the country, as well as through conversations with E-ZPass officials, the EFC project team has identified the following core barriers that must be considered.

• **Political:** In this case, political refers to the internal politics and decision-making with public agencies. Though E-ZPass officials have been receptive to the idea of developing this type of voluntary program, it will represent a very different approach to the program than has been done in the past. For that reason, the Trust leadership must immediately engage both agency officials as well as state elected officials as the highest levels to move the idea for the project forward.

• Administrative: The most significant administrative barrier is related to encouraging the participation of existing E-ZPass customers. One of the benefits the program offers to consumers is the automated prepayment system. Customers do not need to actively manage their accounts through billing statements and other subscription-based payment tools. As a result, encouraging current customers to participate in the program would require an extensive marketing campaign that would need to be implemented in partnership with the Maryland Transportation Authority and the E-ZPass program directors and managers.

Other than the need for an internal marketing program, it appears as though there would be few additional administrative requirements on the part of the Trust. Again, however, this program will require the Maryland Transportation Authority and the E-ZPass program to administer a program that is very new and innovative. The Trust and its staff and leadership must work closely with agency staff to ensure that the program is developed in a way that reduces administrative hurdles and inefficiencies.

• **Legal:** There is one potential legal barrier that must be overcome in order for this opportunity to be leveraged. As the program exists now, the E-ZPass revenue supports the Maryland Transportation Trust Fund. It is possible that the program's current bonding prohibits use of these funds for any other purpose. A new bond would have to be issued that would allow for this type of program. This could also present an opportunity for the Trust, as well as MTA officials. Not only does the current bonding system prevent E-ZPass revenue from being used on this type of program, it also prevents MTA from using the E-ZPass system for other consumer needs such as parking fees. The Trust staff and leadership could work closely with MTA officials to issue a new bond, thereby opening up a variety of opportunities for both institutions.

Dissemination strategy: This program has the potential to provide the same type of sustained, dedicated revenue streams that have served as the foundation for the Trust's work over the past 20 years. Therefore, revenue would support the Trust's grant making pass-through fund programs.

2 It is certain that the current restrictions would prohibit E-ZPass revenue from being used for any other purpose other than in support of the Maryland Transportation Trust Fund. However, it is not certain that a voluntary check-off program would be considered restricted funding, given that it is a voluntary donation on the part of the E-ZPass subscriber.

Recommended next steps and timing: This program provides a relatively immediate revenue opportunity for the Trust. The Trust staff, in partnership with the EFC project team, has been in contact with E-ZPass officials, and though there is a certain degree of hesitance on the part of those officials to implement this program, there are relatively few legal barriers to be addressed. It is our recommendation that the Trust develop a better understanding of the bonding limitations as well as other legal issues, and work to find a champion for the idea within the administration. With the appropriate political support, the program could be implemented very quickly.

Clearly the Trust has been working to develop its own marketing capacity and has initiated efforts to increase participation in the Bay Plate program. We recommend that the Trust staff begin to identify marketing tools that could be used to effectively encourage existing E-ZPass customers to participate in the program.

The Chesapeake Bay Lanes: Leveraging Vehicular Traffic and Tolls

Perhaps no human activity impacts the Chesapeake Bay and its watershed lands more than transportation, specifically vehicular traffic. As the population within the watershed continues to grow, more and more roads are built and more and more vehicles travel on those roads. The resulting changes in hydrology and water quality have an acute impact on the Bay, and the costs associated with mitigating these costs are estimated to be in the billions of dollars. Like any human activity, the most effective and equitable way to mitigate the negative impacts caused by infrastructure development is to attach a fee directly to the activity. Clearly, developing mandatory fees as part of transportation to mitigate water quality impacts would be politically difficult, if not impossible. However, there are ways of developing very effective voluntary fee programs. The E-ZPass program is one such idea, but there are other ways to give drivers in the watershed an opportunity to "do the right thing." One potentially lucrative way would be to develop Chesapeake Bay Lanes at the Chesapeake Bay Bridge and Baltimore Harbor tunnels and toll bridges.

The idea behind the Bay Lanes is similar to the voluntary round up programs discussed later in this section. Like those programs, the idea is to allow travelers to "round up" their toll when they travel across bridges and tunnels by traveling through clearly marked, dedicated "Bay Lanes." The extra money would be donated to the Chesapeake Bay Trust and would be used to fund priority restoration projects. The idea could even be applied to the E-ZPass program, where the discount applied to E-ZPass customers is donated to the Trust. As with E-ZPass, there are real marketing opportunities associated with this idea, and the result could be significant resources coming to the Trust. In addition, the idea could be implemented across the watershed – for example, installing Bay Lanes at the Chesapeake Bay Bridge Tunnel – providing a long-term opportunity for the Trust to expand its programs to other jurisdictions.

Type of opportunity: This program would result in a sustainable, dedicated funding stream to the Trust. Therefore, it would potentially serve as pass-through funding, similar to current Trust revenue sources.

Level of opportunity: The level of revenue could be significant. The Chesapeake Bay Bridge carries nearly 25 million cars per year. If 10 percent of those drivers were to take advantage of the Bay Lane, it would generate almost \$1.3 million per year for the Trust. Expanding the program to other bridges and tunnels across the state would obviously increase that funding level.

Administrative requirements: As with the E-ZPass program, there will certainly be administrative requirements associated with developing and implementing an E-ZPass program. However, in most ways, the program would function in a similar if not identical fashion as existing revenue programs. Therefore, administrative requirements would be in line with the Trust's existing capacity.

Potential barriers: Clearly, the most obvious barrier would be political. This program would require an investment on the Maryland Transportation Authority, and like the E-ZPass program will almost certainly meet with resistance on the part of state officials.

Dissemination strategy: Like the other check-off programs proposed or in use now, this program would fund pass-through grant programs at the Trust. If implemented across the state and marketed effectively, this program could become the Trust's most significant source of funding.

Recommended next steps and timing: At this time, the EFC project team is still researching the legal and administrative barriers that may be associated with this opportunity. However,

it is clear that the primary barrier will be political. However, the development, implementation, and administration of this program would be relatively simple. Therefore, we feel that this idea offers a very significant funding opportunity that could be implemented relatively quickly.

It is our recommendation that the Trust leadership begin a dialogue with senior officials at the Maryland Transportation Authority on both of these potential programs. In preparation for those meetings, the Trust needs to clearly outline the potential benefits of the program not just to the Trust and its programs, but also to MTA. In effect, the Trust should develop this as a cause-related marketing-type program that will ultimately benefit both institutions.

Fishing Licenses

Fishing licenses provide another opportunity for developing an effective voluntary-based revenue program. A significant advantage to this opportunity is that there is a natural connection between the work of the Trust, the Chesapeake Bay, and the activity being licensed. Therefore, a well-executed marketing effort could not only increase program participation rates, but it could also serve as a very effective tool in educating direct users of the resource on the issues facing the Bay watershed and the resources needed to protect and restore it. A voluntary program targeting boaters, crabbers, and fishing enthusiasts across the state could result in a very important tool in the Trust's – and the state's – funding and financing efforts.

The Maryland Department of Natural Resources (DNR) licenses and manages recreational fishing activities in the state. These activities have served as the foundation for a number of voluntary revenue programs in many other states across the country. Many state have implemented voluntary donation check-off options on hunting and fishing license applications. And although programs vary from state to state, these donations fund a broad spectrum of conservation and social efforts including wildlife and fisheries management, general public and youth education programs, and "hunters for the hungry" activities.

Level of opportunity: DNR offers more than a half dozen freshwater licenses that range in price from \$5 to \$10, as well as three recreational crabbing licenses that range from \$5 to \$15. DNR also offers more than a half dozen tidal bay sport

fishing licenses that range from \$1 to \$15 for individuals and \$40 to \$240 for boating groups and charters. According to the Department's 2003-2004 Annual Report, nearly 600,000 licenses were granted in 2003. Obviously, participation rates will determine the level of this opportunity. However, given the number of licenses issued each year, as well the connection to the resource, a reasonable estimate would be that the project could generate several hundred thousand dollars per year.

Administrative requirements: There would be relatively few administrative requirements on the part of the Trust. However, as with the E-ZPass program, this program would present new administrative requirements on the part of the associated state agency, in this case Maryland DNR. Therefore, the Trust and its staff would need to work closely with DNR officials to ensure the program is developed efficiently, thereby reducing administrative costs and thereby increasing program effectiveness and capacity.

Potential Barriers: Perhaps the most significant barrier associated with implementing this opportunity is the resistance by a number of stakeholder interests. There have been efforts in the past to develop mandatory fee-based programs targeting fishing and boating licenses. These efforts created a significant level of resistance and animosity not only among boaters and fishing enthusiasts, but also within the Department of Natural Resources. As a result, any subsequent attempts to develop even voluntary programs have been discouraged. Clearly, it is important for the Trust to consider the failure of these past efforts as it implements its strategic goals. However, proposing a voluntary check-off program, like those that have been implemented successfully in other states across the country, may provide the Trust with an opportunity to overcome many of the concerns that have developed as a result have past efforts to attach fees to these licensing programs.

Other than the potential administrative requirements described above, the only significant barrier preventing the implementation of this program is political. Both fishing license fees and boater registration fees (discussed below) are used by DNR to support natural resource programs. Therefore, there may be significant resistance on the part of DNR leaders to attach any new ideas to these programs.

Dissemination strategy: Revenues from this program would be ideal for supporting the Trust's pass-through funding grant making activities.

Featured Case Study: Turn-In-Poachers

Background

Turn-In-Poachers (TIP), a non-profit organization operating in a number of U.S. states and Canada, was started by concerned sportsmen and women dedicated to better protecting wildlife. TIP programs provide support to the enforcement arm of state fish and game agencies by issuing cash rewards to those who provide verifiable and actionable information on poaching activities. Award amounts are dependant on the severity of the offense and can range from \$100 to \$250 for information related to the poaching of small game, fish, birds, or furbearing animals to \$1000 for information on the poaching of threatened or endangered species or commercial poaching operations.

How the Program Operates

Turn-In- Poachers in lowa was established in August of 1985 and works in coordination with the Iowa Department of Natural Resources Law Enforcement Bureau. A board consisting of Iowa sportsmen and women as well as representatives of a number of state conservation organizations (such as Iowa Bowhunters, Izaak Walton chapters, Pheasants Forever chapters, Iowa Wildlife Federation) establishes operating policies and also solicits private funds to support the program. All rewards paid to informants on successful TIP cases are private monies which the TIP board has collected through membership fees, private donations, and sale of promotional items such as T-shirts and caps.

To mark the twentieth anniversary of the Iowa TIP program, the state's Department of Natural Resources (DNR) created a voluntary initiative geared towards the state's hunters and anglers. The new program allows hunting and fishing license applicants to make a \$2 voluntary donation to the TIP program.

Current Program Status

Although only in its first year, the program has met with a fair amount of initial success. During the first week of the program, more than \$400 was voluntarily donated to the TIP fund and lowa DNR officials associated with the program anticipate that annual donations for the first year will top \$25,000 to \$30,000.3

	Anglers	Angling TIP Donators	Hunters	Small Game Donators
Resident	301,691	5,437 (2%)	82,685	2,236 (2.7%)
Non-Resident	30,541	336 (1%)	13,586	1,620 (12 %)

Table I: TIP Donations for August 2005 through August 2006

Implications for PDE

In this case, establishing the program was relatively easy and did not require legislation or departmental rule. A one-page document entitled "Financial Transfer of Funds Agreement Between The Iowa Department of Natural Resources And The Turn-In-Poachers Of Iowa, Inc. A Private Organization" created the program and satisfied the department's legal requirements. This allows for the transfer of the donation funds from the department's Fish & Wildlife license fund to the Turn-in-Poachers organization. Iowa DNR officials feel that the fact that funds being shifted were voluntary donation dollars rather than direct license revenues made this a much simpler process.

³ All information compiled from http://www.iowadnr.com/law/tip.html and personal conversations with Steve Dermand, Executive Officer, Law Enforcement Bureau, Iowa Department of Natural Resources.

Boater Registrations

Like fishing license fees, boater registration fees provide another opportunity to develop a voluntary program that is directly connected to the resource itself. Any boat equipped with any type of primary or auxiliary form of mechanical propulsion and is used principally in the State of Maryland is required to be registered with DNR.

Several states across the country offer boaters the option to make voluntary donations as part of the registration process. The state of Washington in particular has an application check-off options that send funds to a nonprofit organization. A similar program in Maryland would give boaters the opportunity to make an additional voluntary contribution to fund Chesapeake Bay Trust programs.

Level of opportunity: The annual registration process, which includes titling, costs \$26 per boat. In 2003, approximately 100,000 boats were registered in the State of Maryland. Considering a \$5 check-off program at a participation rate of 10 percent, the program would generate approximately \$50,000 annually.

Administrative requirements: As with the fishing licensing opportunity, there would be relatively few administrative requirements on the part of the Trust. In fact, administrative cost could be reduced even further if the two programs were developed and implemented at the same time.

Potential Barriers: Other than the potential administrative requirements described above, the only significant barrier preventing the implementation of this program is political.

Dissemination strategy: Revenues from this program would be ideal for supporting the Trust's pass-through funding grant making activities.

Recommended next steps and timing: From an administrative and legal standpoint, there are very few barriers to developing and implementing this program. Therefore, it could be considered an opportunity that could be leveraged in the relative short-term. However, given the often-negative response that both the fishing and boating license programs generate, it's possible that implementation could be considered long-term. However, it is our recommendation that the Trust leadership open a dialogue with DNR officials on these two ideas. Again, the approach should be similar to a cause-related

marketing program where the benefits to both institutions are highlighted. If the program were developed effectively, it would provide a significant opportunity DNR to reach out to citizens across the state and provide them with an opportunity to support a program that would have a direct impact on an activity and resource that directly impacts them.

Featured Case Study: Maritime Historic Restoration and Preservation Account - page 19

Utility Bill Round-Up Programs

Round-up programs allow bank and utility customers to mathematically round their bill up to the nearest whole dollar and assign the additional charge to a savings account or charitable organization. These types of programs have been implemented in communities across the country supporting a variety of social needs. Utility round up programs allow utility customers to voluntarily have their monthly utility bill rounded-up to the even dollar (for example, a bill of \$71.57 becomes \$72.00). The extra change (43 cents, in this example) goes to charity. This revenue-generating tool has been successfully employed by electric cooperatives since 1989. Today, more than 240 electric cooperatives are utilizing the round up programs to engage their customers in supporting charitable causes. ⁴

Because of the public fury over recent drastic increases in electricity bills, this may be a particularly opportune time to approach one of the power companies about a bill stub check-off program of this nature.

Level of opportunity: Customers have responded very favorably to the idea. Nationwide, customer participation rates average 50 percent, with some rates as high as 90 percent and 97 percent in North Carolina. In the eight-state Southeast region, there are 31 co-ops reporting participation rates of 70 percent or higher. Through the round up method, a participant's average monthly donation will be about 50 cents. For each 1 million participants, the annual proceeds to charity are \$6,000,000. The total national potential exceeds \$1 Billion per year. ⁵ Because of these relatively high participation rates, there is the potential for significant revenues to be generated.

⁴ Information provided by the Utility Customers Charitable Trust, Inc. web site.

⁵ Utility Customers Charitable Trust, Inc. web site.

Featured Case Study: Maritime Historic Restoration and Preservation Account

Background

The Maritime Historic Restoration and Preservation Account was created in the state of Washington to help fund the activities of two organizations dedicated to of the state's nautical traditions and the conservation of the vessels associated with it. The account, which was legislatively established in 1996⁶, receives funds that are voluntarily donated by boaters through a check-off option available on the both the paper and online versions of the state's boater registration application.

How the Program Operates

The funds are collected by the state's Department of Licensing and are then turned over to the account which is managed by the state treasurer. Both the Treasurer's Office and the state's Department Licensing receivea portion of the account's proceeds to cover the administrative costs of handling the account. Eachfiscal year after these administrative costs are deducted from the account, half of the remaining funds are given to the Grays Harbor Historical Seaport Authority and the other half are given to the Steamer Virginia V Foundation.⁷

Current Program Status

Though the Grays Harbor Historical Seaport Authority and the Steamer Virginia V Foundation undoubtedly benefit from the maritime historic restoration and preservation account, the amount that they receive every year from the account is not significant. The first year that the program was in existence, the organizations received approximately \$7,500, but proceeds have slowly declined over the past several years. In 2005, each organization received just over \$7,000 and the donations account for a very small portion of the organizations' overall funding. Last year, for example, the Maritime Historic Restoration and Preservation Account funds accounted for a mere 0.5% of the Grays Harbor Historical Seaport Authority's annual earnings of approximately \$1.4 million.⁸

Implications for PDE

Although this program benefits from its integration into both the paper and online boater registration process, the account and its connection to the two recipient organizations is not heavily promoted and has little, if any, associated outreach activities. Also, voluntary donations through the boater registration process are the sole source of income for the Account. PDE could expect a significantly more profitable program if boater registrations were just one of several voluntary donation opportunities feeding into a regional account for science and research and these opportunities were promoted and supported by a thorough, well-developed public outreach campaign.

- 6 Revised Code of Washington, Title 88, Chapter 02, Section 053.
- 7 According to the enabling legislation, if either organization ceases to exist, the remaining organization will receive all proceeds from the account. If both organizations cease to exist, then the Department of Licensing will no longer collect voluntary donation upon vessel registration. Any money remaining in the account will go to the state to be split between their Office of Archeology and Historic Preservation and their Parks Renewal and Stewardship account.
- 8 Because the Grays Harbor Historical Seaport Authority is a municipal nonprofit and the Steamer *Virginia V* Foundation is an entirely private operation that is not publicly funded, the information regarding donors and specific donations is not matter of public record and consequently, participation levels for the program are not known.

Administrative requirements: There would be relatively few administrative requirements on the part of the Trust. As with several other voluntary opportunities, there would be new administrative requirements on the part of the associated agencies and utilities. However, given the popularity of these programs across the country, as well as the established support

institutions and organizations, administrative costs could be kept relatively low by leveraging and learning from these other programs and services.

Potential barriers: Implementing this type of program has a couple of drawbacks and barriers. First, there is significant

competition for these programs and associated revenue. Unlike the license plate program, the Trust will not be a first mover in this area and will not be able to exclude other philanthropic efforts.

Perhaps the most significant barrier is related to the state's Chesapeake Bay surcharge program. Wastewater utilities provide the most direct connection to the Chesapeake Bay. However, every citizen across the state is now being charged \$2.50 per month to fund the implementation of wastewater best management practices. It would be very difficult to add an additional fee even voluntary to customer sewer bills. However, other utility bills, such as electric and water, do provide opportunities that the Trust should consider leveraging.

Dissemination strategy: These programs have the potential to provide sustainable, predictable revenue streams. Therefore, they would be ideal for funding annual, pass through grant programs.

Recommended next steps and timing: These programs can be implemented relatively quickly. There are significant technical assistance resources available – specifically the Utility Customers Charitable Trust – that are available to the Trust as it develops a strategy. We recommend focusing on electric and water utilities. The program could be developed and implemented with little administrative burden on the Trust. Therefore, it should be considered an immediate revenue opportunity.

Featured Case Study: Palmetto Electric Cooperative

Background

The Palmetto Electric Cooperative was established in 1940 and currently provides electricity to approximately 61,000 households in South Carolina's Jasper, Beaufort, and Hampton counties. Palmetto has long been dedicated to improving the quality of life for residents of the state's Lowcountry, not only by providing affordable electric service but also through charitable efforts.

How the Program Operates

A pioneer in the use of billing round up programs for community betterment, Palmetto initiated Operation Round Up in 1989. The program gives customers of the cooperative the opportunity to voluntarily round their bill up to the nearest whole dollar and contribute the additional charge to the Palmetto Electric Trust. These funds are then disbursed to individuals and organizations in need throughout the Lowcountry region at the discretion of an independent Board of Directors made up of community leaders who serve on a voluntary basis. The Board is responsible for the evaluation all grant requests and determines how all Operation Round Up monies will be distributed.

Current Program Status

Operation Round Up has been very successful thus far, having raised \$2 million in its first ten years and \$3.5 million total to date. The average annual donation is \$6 per participant and the participation rate has averaged over 60% over the course of the programs history. Donations through Palmetto are tax deductible and are not used for political purposes. Among the various environmental programs that Palmetto supports are Lights Out for Sea Turtles, Osprey Habitats, Adopt-A-Highway, and Energy Star Transformers. In 2005, Palmetto donated \$35,170 to local organizations, \$21,458 to Bright Ideas Educational Grants, and \$220,452 to individuals in need, for a grand total of \$277,080 in charitable contributions. It is important to note that these results were generated with a small pool of participants – 61,000 households. A strategically developed and effectively marketed program could generate significant revenue for the Trust, especially if the organization targeted multiple utility programs

Implications for PDE

Although Operation Round Up is a licensed trademark of the Palmetto Electric Cooperative, to date the company has helped more than 225 other cooperatives and organizations across the country establish their own round up programs under the trademark. According to the July/August 2006 Cooperative News & Views newsletter, "cooperatives around the United States have used similar programs to raise over \$50 million for their communities." Palmetto's website also outlines the steps that should be taken by other organizations that would like to implement a round up program, stressing the importance of a solid public outreach and advertising campaign.

⁹ The statistics contained in this case study came from the company's website: http://www.palelec.com/community/index.html

Affinity Credit Cards

There are a number of high profile nonprofit organizations that have partnered with banks to offer cause-related credit cards. Through these programs, the bank involved typically makes a contribution to the sponsor organization for each new account opened, as well as for each dollar charged to the card. These programs provide an additional source of revenue to the sponsor organization and are appealing to the public because it gives them the opportunity to direct corporate donations to the organization of their choice. ¹⁰

Affinity cards bear the logo of the charity, as well as the issuer. That is why they are often confused with co-branded cards. But co-brand cards give perks and discounts to the user, whereas affinity cards are philanthropic. Each time a consumer uses the affinity card for a purchase, a balance transfer or a cash advance, the bank donates a percentage of the amount to the organization.

Contributions made through affinity cards are not tax-deductible because the donations are part of a contractual arrangement between the issuer and the charity. Despite their cost, affinity cards are tremendously popular. Visa International estimates that by 2003, half of all credit cards issued worldwide were affinity and co-brands. Consumers like affinity cards because they are a token of something they feel strongly about and create opportunities to share their passion with others. ¹¹

Level of opportunity: It is difficult to gauge to potential opportunity associated with a program like this because they are almost always associated with membership-based organizations. Examples of the program scale include the MBNA affinity programs with on behalf of Defenders of Wildlife, Ducks Unlimited, the Humane Society of the United States, and the National Wildlife Federation. Ducks Unlimited has collected over \$50 million since their program's launch, and Defenders has received more than \$4 million since the inception of their program. Chase offers cards for Amnesty International, the National Aquarium in Baltimore, and World Wildlife Fund among others. World Wildlife Fund has collected approximately \$10 million over the ten-year history of their program. The EFC will examine the practicality and potential for an affinity card program for the Trust.

Administrative requirements and potential barriers: The discussion on administrative requirements was combined

with the potential barriers, because in many ways, the most significant barrier to implementing a program of this type is the administrative capacity that would be required by the Trust. It is important to note that the project team is not advocating the adoption of this, or any of the other opportunities identified as part of this project. Our goal was to perform a feasibility study and analysis for a variety of revenue opportunities. Our analysis indicates that the administrative and institutional adjustments required for implementing an affinity credit card program may prohibit implementation. However, we have included this opportunity as an example of a broader revenue category that the Trust may want to pursue.

Non-profits across the country raise money in a variety of innovative and creative ways. The tools, programs, and resources these organizations use to increase revenue would normally be described as fundraising activities. The EFC and the project team did not analyze these types of activities. Again, our focus was on those opportunities that are more closely related to financing activities. However, the Trust may want to consider an aggressive fundraising approach as a way of increasing program revenue. We mention this because many of these types of activities, affinity card programs for example, require administrative staff support, aggressive marketing, and program development unlike what the Trust has the capacity for at this time. Clearly, this is the major barrier associated with these types of programs.

Another barrier that could make implementation difficult is the limited potential market. All of the case studies identified by the EFC project team were associated with large membership-based organizations. The EFC was not able to identify a single example of a non-membership based organization implementing an affinity card program. Therefore, implementing these types of programs would require a different approach. One approach would be to partner with another organization or institution to target their members of customers.

Dissemination strategy: Once programs are established, the funding is sustainable and predictable. Therefore, this would potentially fund annual grant and pass-through funding programs.

Recommended next steps and timing: We feel this is a long-term revenue opportunity. Implementation would require a very creative partnership with other institutions that have the capacity to leverage customers, members, or supporters. We recommend the Trust meet with officials at other large non-profits that have successfully implemented these programs including the World Wildlife Fund and the Nature Conservancy.

¹⁰ Emotional appeal of charging for charity rings up donations for favorite causes. Libby Wells; Bankrate.com

¹¹ Libby Wells; Bankrate.com

Featured Case Study: Chase Bank's World Wildlife Fund Affinity Credit Card

Background

The World Wildlife Fund (WWF) was established in 1961 with the goal helping people live in harmony with the natural environment, as well as protecting endangered species and their habitats. Since that time, the organization has evolved to become the world's largest privately financed conservation organization with a presence in more than one hundred countries around the globe. WWF has 1.2 million members in the United States and another 4 million worldwide.

How the Program Operates

WWF began their affinity card program in 1995 and has offered it through Chase bank since 2002. Members have the option of selecting either a WWF Visa or MasterCard. Income is generated in two ways: a \$50 contribution from Chase for each new account established, and I percent of the sale every time a purchase is made using the card. Chase pays for all marketing of the card and sends out approximately 100,000 to 200,000 solicitations for pre-approved cards to credit-worthy WWF members annually.

Current Program Status

Over the course of its ten year history, the WWF affinity card has generated more than 10 million dollars for the organization. The program accounts for approximately I percent of the organization's annual income and is consistently one of WWF's top five corporate fund raising activities.

Implications for the Chesapeake Bay Trust

Affinity cards can be attractive for a number of reasons. They enable consumers to contribute to a cause about which they feel strongly, leaving the card user feeling satisfied that they are doing their part to help their chosen cause. Also, given that 190 million Americans carry a credit card and 55 percent of credit card users carry a balance on their card, it seems mutually beneficial for a charitable organization and a card issuer to partner. The card issuing bank benefits from having direct access to a pool of potential new customers and stands to make interest income on those who carry a balance; the nonprofit benefits financially from an activity the majority of members already engage in – charging purchases to a credit card.

Consumer attitudes regarding credit cards, however, should be carefully considered in the process of deciding whether or not to offer an affinity card and how to structure any associated marketing efforts. A segment of the public has expressed an increasingly a negative view of credit cards, and those who hold such views may be offended that an organization of the Trust's stature would offer such a program. Further, with the deluge of credit card offers most consumers receive, an offer for a credit card from the Trust could be regarded as simply another piece of "junk mail."

An issue that may be of particular concern for the Trust in this decision-making process is the environmental record of the card-issuing bank. Because the Trust is an organization dedicated to the protection and restoration of the Bay, its associates also care strongly about aiding the environment. However, some credit card companies have been charged with carelessly disregarding the environment. Organizations such as the Rainforest Action Network have led the fight against corporate insensitivity to the environment. Ironically, the same corporations that purport to "help" the environment with affinity card programs are at the same time charged with endangering the environment by financing projects that promote global warming, destroying habitat or increasing pollution loads.

Finally, because the Trust is not a traditional membership organization with an extensive database of members, some alternative arrangement with the card issuing institution would be necessary to satisfy their need for constantly expanding the pool of potential new customers, and the Trust would likely have to absorb the associated administrative costs of this alternative arrangement.

State and Federal Funding Opportunities

Over the past several years, greater focus has been given to the role of state jurisdictions and the federal government in funding and financing the restoration of the Bay. And, while most would agree that there is a need for an increased commitment from the jurisdictions and the federal government, significant resources are already being applied to the restoration effort. For example, the federal government, across a variety of agencies, currently commits \$200 - \$250 million per year towards projects directly related to restoring and protecting the Chesapeake Bay and its watershed lands and natural resources.¹²

The first part of our research included identifying and cataloging funding, financing, and capacity development programs at the federal, state, and local levels. The EFC project team has developed matrices of these programs and categorized them based on a variety of factors including the level of opportunity, type of program (grant, loan, technical assistance, etc), use and practicability, and funding sector. Matrices were developed for a number of watershed issues including agriculture, land and air protection programs, and wastewater funding and financing opportunities. These matrices, included in the appendices to this report, have served as the foundation for our research.

Clearly, federal and state programs provide the foundation for many of the restoration and protection programs necessary for implementing the tributary strategies. In addition, leveraging these programs provides a real opportunity for the Trust to expand its efforts to increase its capacity and impact in the future. However, though there are significant opportunities for the Trust to work cooperatively with federal and state agencies, there are significant barriers associated with leveraging federal and state resources directly.

The federal government clearly represents a vast source of funding opportunities; however, it can often be very difficult to strategically and directly leverage the types of sustainable,

Though it is clear that federal and state funding is becoming more and more scarce, there is need for grant funding programs and institutions like the Trust. In fact, the Trust's recent success in leveraging federal money to be re-granted in support of community restoration projects is an indication that opportunities do exist. Public funding of environmental and community priorities is often cyclical, and the dynamics of these funding programs is very similar to any financing or market-base environment. When funding sources are "flush", there is an opportunity to fund a variety of organizations and programs. However, when funding becomes more restrictive, there is a tendency to focus on those programs and institutions that have proven to be effective and efficient. In other words, there is always a need for effective and innovative organizations, and there will always be federal and state funding available in support of these organizations. Like many of the other opportunities identified in this report, leveraging state and federal funding sources will require a clear, sustained implementation strategy. Such a strategy should focus on building relationships within the funding agencies and institutions with the goal of identifying institutional needs and priorities and building programs that will meet those needs.

In addition to obtaining direct federal and state funding, there are significant opportunities for the Trust to increase its capacity by leveraging existing federal funding and financing programs.

dedicated revenue streams necessary for supporting long-term program requirements. Federal funds are almost always dissiminated in support of program activity, which means that the federal agencies that are investing the \$200 - \$250 million in annual appropriations are supporting programmatic activity. These programs and agencies have their own staff, resources, expertise and priorities, and there is not always need for third parties, such as the Trust, to serve as a re-granting institution for these resources. In addition, the trend at the federal level has been to decrease funds targeting Chesapeake Bay restoration efforts. As a result, direct revenue resources are limited. In spite of these significant barriers, there are opportunities for the Trust to leverage public resources.

¹² Information provided by the U.S. Environmental Protection Agency Chesapeake Bay Program Office in support of the Chesapeake Bay Blue Ribbon Finance Panel process.

By working in partnership with federal and state agencies, the Trust can serve a critical institutional role in assisting in reducing the barriers associated with watershed restoration and protection programs. An important example of this is related to agricultural programs. Though the EFC identified few direct funding programs within USDA and its sister agencies, there are opportunities for the Trust to strengthen the impact of these programs across the state and the watershed. A discussion on how the Trust can leverage these programs is provided below.

Review of Federal and State Funding Opportunities

State Revolving Loan Fund (SRF)

The state revolving loan fund program has become the primary federal and state financing program for funding water quality programs and efforts across the country. Through this federal program, EPA grants money to the states that, in turn, make low-interest loans in their communities to fund high priority water quality activities. Although traditionally used for building or upgrading water treatment facilities, states are increasingly devoting these funds towards nonpoint source and watershed protection activities. Thirty states, including Maryland, use their Clean Water SRF dollars to address nonpoint source issues, and 15 states now accept applications from private and nonprofit entities.

One of the primary reasons for instituting the SRF system was to move federal and state governments away from grant programs towards a system that encouraged communities to be more self sufficient in the financing and implementation of capital infrastructure needs and water quality requirements. The key feature of SRF programs is that the funds, by definition, must be paid back, and this requires sustainable, dedicated revenue streams. This very feature of the program, combined with the Trust's unique revenue programs, provides an opportunity for the Trust to expand the capacity and effectiveness its revenue programs.

In the final section of this report, we discuss the possible future institutional roll of the Trust in the broader effort to finance the restoration of the Chesapeake Bay. A critical institutional

opportunity for the Trust will be its ability to improve on the efficiency of current financing and funding efforts. The SRF provides an example of how the Trust can fulfill this role. The organization's sustainable, dedicated funding streams provide it with the opportunity to use debt and loan programs to both advance programs and financing efforts that may not be available to other organizations, communities, and watershed stakeholders. This in effect would improve the efficiency, capacity, and reach of the SRF program. The EFC project team has identified the following four examples of the types of SRF leveraging opportunities available to the Trust. ¹³

- Community Partnerships: There are a number of ways the Trust could use the SRF to help communities better position themselves to make use of the program. The Trust could use its revenue stream to help communities with low credit ratings secure the loan, with the loan then being paid back by the community. On projects that have a certain "useful life" such as certain best management practices or stormwater management projects, the Trust could offer to make the down payment or initial payments to get the project off the ground with the community making the remainder of the payments. In cases where SRF dollars cannot be used for certain parts of a project (ex: planning and design work) the Trust could provide the community an initial grant to cover these expenses and help get worthy projects lined up for the SRF pipeline. This scenario might lend itself particularly well to stormwater management and urban retrofit projects.
- **Conduit Lending:** Because addressing nonpoint source issues upstream can be a more cost effective method of resource protection, the Trust could use an SRF loan to make grants to upstream communities to put best management practices and other protective measures in place. The Trust, the community or a combination of the two depending on which scenario is most advantageous could then make payments on the loan.
- Interstate Opportunities: Should the Trust, at some future point, choose to expand their efforts beyond Maryland's borders, there is even the possibility of using the Clean

¹³ These ideas were generated through conversations with the State Revolving Fund Branch at U.S. EPA Headquarters, and the Maryland Department of the Environment.

Water SRF to pay for projects within the watershed, but in other Bay states. If the Trust were to be established as an interstate agency with "substantial duties pertaining to the control of pollution" the organization could request approval from EPA's Administrator to serve as an interstate agency implementing water quality projects in the Chesapeake Bay watershed with Clean Water SRF assistance.

• **Obtaining a loan:** Because the Trust meets the Clean Water State Revolving Fund's definition of a "person," the Trust could use their existing revenue stream to apply for a low interest loan that could then be used to grant or loan out to communities for projects that protect or restore the Bay. It is important to note the characteristics, or limitations, associated with directly leveraging the loan program. Borrowing implies that there is a need for resources in the present, and obviously would commit future revenue to loan repayment. However, if the goal is to expand or advance a critical program or initiative, borrowing from the SRF could be a very effective way to increase capacity.

Type of Opportunity: SRF programs provide an opportunity for the Trust to both leverage current programs and increase program revenue. The leveraging opportunity exists through community partnerships and conduit lending practices. Revenue opportunities would exist if the Trust itself became a borrower.

Level of Opportunity: The level of opportunity is directly related to the type of program the Trust would consider implementing. For example, if the goal were to borrow money to disseminate back out to the community in the form of grants, the level of opportunity would be directly related to the level of debt the Trust is willing to assume. ¹⁴

Administrative requirements: It is very difficult to determine exactly what type of administrative capacity these programs would require. Clearly, leveraging SRF funding would require the Trust staff to have a thorough understanding of financing tools and instruments related to debt funding programs. In addition, these programs could require the Trust to focus on one

Potential barriers: Perhaps the most significant barrier associated with leveraging the SRF program is the fact that this application of the program would be very unusual and innovative. There are few if any similar programs to model, and therefore, these ideas would almost certainly require a significant amount of time to develop and implement.

Recommended next steps and timing: Given the complexity of these opportunities, we feel that these are longer-term opportunities for the Trust. However, without question, the potential use of the SRF program by the Trust generated a significant amount of discussion among policy and finance experts across the region. There is clearly a significant amount of interest in exactly how these programs might work, and many of the SRF experts interviewed as part of this project feel that the Trust could serve as a national example of how these loan programs can be leveraged to fund non-point source programs. The EFC project team feels strongly that the Trust should take advantage of the significant interest associated with these programs, and continue the discussion with federal and state SRF experts. We recommend that the Trust convene an SRF forum within the next several months to further discuss how these programs might work and the opportunities for moving forward. Such a forum should include SRF program leaders from EPA headquarters and EPA Region 3, state SRF program managers, and other financing experts. Such an event would provide the Trust leadership and staff with an opportunity to build on the momentum generated by this project, and to take advantage of the opportunity to implement this very unique program.

or two large-scale restoration or protection projects. In other words, unlike traditional grant management, the Trust may need to become more intimately involved with the programs on the ground. Ultimately, how the program develops and the types of projects that would be funded would determine the administrative requirements.

¹⁴ Technically, the level of opportunity would also be determined by the capacity of the SRF program at the state level.

Featured Case Study: Maryland's Linked Deposit Program

Background

Legislation amended by the 1997 and 1998 sessions of the General Assembly enabled the Maryland Department of the Environment (MDE) to establish the Linked Deposit Program. Through this program, MDE is able to enter into partnership with community lenders to provide private entities the opportunity to obtain financing for the implementation of non-point source pollution reducing measures.

How the Program Operates

The Linked Deposit Program is designed to help improve water quality in the region by making it possible for private water systems operators, farmers and other landowners to secure loans at below market interest rates from existing commercial lending institutions to conduct capital improvements that will reduce nutrient loads to the Chesapeake Bay and its tributaries. The borrower's below-market interest rate loan is then "linked" to a below-market rate of interest investment MDE's Water Quality Financing Administration (WQFA) makes with the participating lender. MDE is able to fund this and other water quality programs by means of a Capitalization Grant form the U.S. Environmental Protection Agency under the federal Clean Water Act.

Eligible water quality projects include agricultural best management practices (BMP) such as sediment control, manure structures, stream protection, grazing management, and wetland creation or enhancement, as well as non-agricultural BMPs including correcting failing septic systems, shoreline erosion control, stream and wetland restoration, and stormwater management facility development, retrofit and repair. MDE develops an eligible project list for projects related to drinking water through an annual solicitation of private water systems. The types of eligible drinking water projects include water main distribution line replacements, creation of water storage facilities, and the upgrade or repair of a facility to maintain compliance.

MDE and the state's Departments of Agriculture and Natural Resources established a project certification process by which each potential borrower must obtain a "Certificate of Qualification" from the appropriate local approving authority prior to applying for the loan. Once the project is approved, the borrower submits a loan application directly to a participating lending institution. The lender determines the credit worthiness of the applicant and sets all loan terms and conditions. At the point where a project is deemed eligible and the loan is approved, the lending institution and the MDE enter into an investment contract that provides low interest terms to the borrower. Loan payments are made by the borrower directly to the lending institution, and it is the sole responsibility of the borrower to obtain all necessary federal, state, and local permits for the project. More than a dozen institutions across the state are members of the Linked Deposit network of lenders.

Current Program Status

MDE's WQFA has allocated \$12 million for eligible non-point source projects from the program's inception through 2005; however, due to the popularity of the program, this allocation will be increased by \$4 million for federal fiscal year 2006. It is anticipated that \$3 million of this funding will go towards agricultural best management practices and the remaining \$1 million will be directed to other non-point source projects.¹⁶

Implications for the Chesapeake Bay Trust

The Linked Deposit Program is an example of how the State has worked in partnership with other organizations and institutions to gain program efficiencies and effectiveness.

¹⁵ This is the County Soil Conservation District or Natural Resource Conservation Service Office for agricultural, shoreline erosion control, stormwater management, stream and wetland projects or the local health department for failing septic system projects.

¹⁶ Federal Fiscal Year 2006 Intended Use Plan. Maryland Department of the Environment Water Quality Revolving Loan Fund Program. July 12, 2006. http://www.mde.state.md.us/assets/document/water/FINAL-WQSRF-FFY2006-IUP-PPL.pdf.

USDA and Agricultural Programs

Agricultural programs, specifically those related to financing non-point source pollution issues, provide the Trust with perhaps the most significant long-term opportunity to expand its reach and impact throughout the watershed. Financing agricultural best management practices is complicated and difficult for a variety of reasons, not the least of which is the lack of statutory requirements for reducing nutrient and sediment inputs. Effective implementation of any public service, including environmental programs such as the Chesapeake Bay restoration effort, requires effective and sustainable financing. And financing requires three core elements – sources, institutions, and instruments. Without effective regulatory requirements, it is often very difficult to develop the financing institutions that are necessary to leverage financing sources and implement financing instruments in any effective, sustainable way. As a result, implementation of agricultural best management practices has relied on cost-share, pay-as-you-go federal and state programs. Though this has resulted in significant barriers in the Bay restoration effort, it creates an opportunity for the Trust to fill a critical financing gap and to increase its effectiveness throughout the state, and potentially the entire watershed.

Direct funding opportunities

The first step in identifying funding and revenue opportunities related to agricultural programs starts with USDA. There are more than 24 USDA conservation programs (though not all are applicable to the Bay watershed) that add up to hundreds of millions of dollars in federal assistance. Coupled with state programs, agricultural funding programs could offer the Trust a significant funding opportunity. However, as was discussed above, federal programs can be extremely competitive, cumbersome, and restrictive. Therefore, redirecting the monies that fund conservation and Farm Bill programs would be difficult. As a result, we feel that leveraging these types of programs should be considered a long-term opportunity.

Leveraging opportunities

The primary opportunity available to the Trust is in leveraging current USDA funding programs. Although taking advantage of these types of programs would not result in additional revenue to the organization, it could significantly increase the Trust's impact and the total resources funding agricultural best management practices, thereby furthering its conservation mission throughout the watershed. The key will be to

target programs that address economic and financial risk to farmers associated with implementing water quality best management practices.

Because of the financing institutional breakdowns that have developed in the agricultural industry, programs targeting water quality best management practices on farms focus heavily on federal and state pay-as-you-go and cost share programs. These programs quite simply pay farmers to implement best management practices that they might not otherwise implement. However, even with programs that often approach 100 percent cost share levels, there is often resistance by farmers to implement any practice that may have long-term negative impacts on farming production or income. The problem can be especially acute when programs require taking farmland out of production. Without some type of process or effort to mitigate risk to these farmers, many funding programs are not implemented to their full capacity, thereby leaving valuable resources unused.

Again, the primary concern with improving agricultural stewardship is the economic and financial dynamics associated with unregulated activities, such as farming practices that lead to non-point source pollution. Because these activities are unregulated, farmers must voluntarily internalize the costs associated with any innovative alternative or experimental best management practice. Therefore, it is critical to provide economic incentives to farmers, which has served as the basis for most of the current Farm Bill programs. In effect, current cost share programs are structured to impact or influence market activity, and a critical issue associated with any market system is risk. Risk avoidance or mitigation is a significant concern for farmers, and often prevents the complete application or utilization of many federal and state funding programs. This is where the opportunity for the Trust exists. Working in partnership with USDA and state agency officials, including NRCS and MDA respectively, the Trust could develop innovative tools that serve as an insurance policy of sorts to farmers, thereby providing extra economic incentive to implement innovative best management practices. For example, the Trust could work directly with NRCS to supplement federal cost share programs. In effect, the Trust would put up a guarantee to the farmer of a certain level of income over a certain amount of time. The cost share program would cover, as its name implies, the costs associated with the implementation of the best management practice, and the Trust would guarantee that the farmer would

make a minimum financial return related to the practice. Essentially, the Trust would serve as insurance on the project.

Recommended next steps and timing: As with the SRF opportunities, leveraging Farm Bill programs would require continued dialogue with USDA and state officials. The Environmental Finance Center will be implementing a series of research studies over the next calendar year that will focus on the capacity of current state and federal funding programs and the opportunities available to local, state, and federal officials to fill many of the institutional financing gaps associated with the restoration process. As part of these studies, we recommend convening a group of agriculture experts and officials to discuss these leveraging opportunities and to identify next steps and recommendations. This meeting or forum would be conducted by EFC on behalf of the Trust, and could serve as the formation of a standing working group that could assist the Trust in identifying funding and financing opportunities available in these areas.

State Lottery Programs

Leveraging state lottery proceeds offers a potentially huge revenue opportunity that is balanced with significant political and legal barriers. Forty states and the District of Columbia currently run lotteries and other states are considering them. State-run lotteries are the most popular form of commercial gambling in the U.S., with half or more Americans participating in any recent year. Compared to other forms of legal gambling, they are second only to casinos in terms of the takeout (consumer spending minus prizes). In fiscal year 2003, total consumer spending on lotteries was nearly \$45 billion and per capita spending was \$155.33. In FY 2002, the average American spent more money on lotteries than on reading materials or movies (theater admissions only). Approximately 31 percent of consumer spending on lotteries, or almost \$14 billion, was transferred to state coffers in FY 2003, and in FY 2002 lottery funds accounted for 2.2 percent of own-source general revenue in the average lottery state. 17

Nearly a dozen states dedicate a portion of their state lottery revenues to conservation. In Maryland, lottery programs contributed \$477 million to the State's General Fund in 2005. The proceeds of certain games are directed to the Maryland Stadium Authority (over \$21 million in 2005). A similar arrangement dedicating a portion of lottery proceeds for Bay protection and restoration with the Trust as the distributing entity could provide steady, additional revenue.

Although no government agency technically considers lotteries a tax, lottery revenues are, nonetheless, an implicit tax. From a revenue standpoint, lottery tickets are no different from other goods subject to excise taxes; once the funds are transferred to state coffers, they can be used in any way the legislature sees fit (even in states that "earmark" lottery proceeds). As a result, these funds are guarded very aggressively by state legislatures. Earmarking lottery revenue for conservation and Chesapeake Bay restoration purposes will be considered by many to be the equivalent of earmarking state tax dollars. This creates a tremendous political barrier.

Featured Case Study: Nebraska State Lottery Funding for the Nebraska Environmental Trust - page 29

Re-granting Programs: The Chesapeake Bay Small Watershed Grants Program

Again, the opportunities to secure direct federal and state resources are limited. However, there are existing grant programs targeting restoration of the Chesapeake Bay watershed; and there are opportunities for the Trust to compete for those funds. The most significant of these programs is the Small Watershed Grants program, currently managed by the National Fish and Wildlife Foundation (NFWF). The Small Watershed Grants Program is administered by the National Fish and Wildlife Foundation, in cooperation with the U.S. Environmental Protection Agency, Chesapeake Bay Program. NOAA Fisheries, USDA Forest Service, USDA Natural Resources Conservation Service, and other sponsors provide additional funding for the program. Authorization for the program comes from the Chesapeake Bay Restoration Act of 2000 which authorizes the Chesapeake Bay Program to "offer technical assistance and assistance grants ... to local governments and nonprofit organizations and individuals in the Chesapeake Bay region to implement 1) cooperative tributary basin strategies that address the water quality and living resource needs in the Chesapeake Bay ecosystem; and 2) locally based protection and restoration

¹⁷ Lotteries and State Fiscal Policy, By Alicia Hansen for the Tax Foundation; October 1, 2004.

Featured Case Study: Nebraska State Lottery Funding for the Nebraska Environmental Trust

Background

In 1992 the Nebraska Environmental Trust (NET) was created the Nebraska State Legislature through the Nebraska Environmental Trust Act. NET is intended to support Nebraska's efforts to conserve, enhance, and restore the state's natural environment, with the concept that while state wildlife agencies can do a great deal to ensure that lands are protected and preserved, they often benefit greatly from the support a legislatively established trust can provide. NET views itself as filling a supplemental role to the state's wildlife agencies, implementing collaborative stakeholder efforts and leveraging private investment opportunities that would be more difficult for a government agency to put in place.

How the Program Operates

The primary source of funding for NET is the Nebraska State Lottery, and in November of 2004, Nebraska voters passed a legislative amendment that directed 44.5 percent of lottery proceeds (after the first \$500,000) to NET. NET grants out approximately 98 percent of the funds received annually to grant applicants, including citizens, organizations, communities, farmers and businesses, whose proposals focus on one of the institution's established funding categories. These categories are revised every five years by NET's board which consists of nine citizen volunteer appointed by the Governor (three from each congressional district) as well as the heads of five state agencies dealing with parks, agriculture, natural resources, health services, and environmental quality. This board is also has a role in evaluating grant applicants that have meet with NET staff approval.

Current Program Status

Over the past twelve years the lottery has transferred more than \$91 million to the NET, enabling the organization to fund more than 700 projects in the state in the last ten years alone. In 2005, NET received more than \$10 million in lottery proceeds and operational costs were less than 3 percent and paid entirely out of interest income.

Implications for the Chesapeake Bay Trust

The Nebraska Environmental Trust Act established that this Trust would be maintained as a part of the state accounting system as a cash fund, and unless otherwise noted will be used to fund the Trust as well as pay the institution's administrative costs. This has created challenges for the Trust. The state legislature has reallocated a portion of NET's funding (\$2.8 million was redirected from the institution's 2003 budget) to make up for the shortcomings of other state agencies. If the Chesapeake Bay Trust were to pursue a portion of Maryland's lottery funds, careful consideration should be given to the specifications of the establishing legislation. Selecting language that clearly dedicates a percentage or dollar amount to the Trust on an annual basis would likely minimize the state's opportunity to reallocate funds.

Another consideration for the Chesapeake Bay Trust in deciding to whether or not to pursue a program of this nature is the fundamental difference in how state lottery proceeds are distributed in the state of Maryland. To date in 2006, the lottery has generated over \$1.56 billion dollars. Revenues after prize money, operational expenses and retailers' earnings deductions top more than \$500 million, or approximately 32 percent of total revenue derived from lottery sales. Currently, these proceeds in their entirety go into the state's General Fund. Altering this arrangement would likely require legislative amendment, and although the Trust has the political connections and respect of the voting public to make this a reality, the organization would have to carefully consider any potential political fall out that pursuing this opportunity might create.

programs or projects within a watershed that complement the tributary basin strategies, including the creation, restoration, protection, or enhancement of habitat associated with the Chesapeake Bay ecosystem." ¹⁹

Type of funding opportunity: The Small Watershed Grants Program is designed and implemented as a "re-granting" program. Therefore, it would function in much the same way as current Trust programs.

Level of opportunity: Currently the program disseminates approximately \$3.5 million per year, funding approximately 130 projects across the watershed. NFWF is funded through an additional grant to administer the program. This grant is "competed" every three years, at which time other organizations are encouraged to send in proposals to manage and administer the program. Based on the work of the Trust throughout the state over the past 20 years, we feel there is a significant opportunity for the Trust to compete for these funds.

Administrative requirements: Of all the opportunities identified as part of this report, this one would require the fewest administrative changes at the Trust.

Potential barriers: The most significant barrier associated with this opportunity is the fact that the grant is competed and that NFWF has positioned itself effectively as the manager and administrator of this program. In many ways, the Small Watershed Grants Program is associated with NFWF. This would certainly guarantee that the grant process for securing the right to administer the program would be competitive.

Another significant barrier associated with this opportunity is in many ways political. Unlike most of the other programs analyzed as part of this report, the Small Watershed Grants Program does not represent a new source of funding. Leveraging this opportunity would require the Trust to compete for existing funds, against an established organization in the watershed. There is the possibility that this could impact the Trust's reputation with other organizations across the watershed. However, in spite of these concerns, we feel it is important for the Trust to consider competing for these funds. A major

consideration related to financing environmental programs – or with any type of financing for that matter – is efficiency. The more efficient a funding or financing effort can be implemented, the more cost effective that program or effort will be. In other words, competition saves money, thereby making program implementation more efficient and effective. Clearly an argument could be made that the Trust could implement this program very efficiently, given that the organization's mission is focused myopically on restoration of the Chesapeake Bay. The Trust has the resources and the capacity to implement the programs without having to adjust current administrative or organizational capacity. In short, by competing for these funds, the Trust would be improving the efficiency in which the resources are disseminated, thereby resulting in more on the ground impact. In the long run, this is good for the Bay.

Another barrier to consider is the fact that the Small Watershed Grant program is implemented across the entire Chesapeake Bay watershed. Therefore, for the Trust to compete for all of the funding, it may require a change to its original charter.

Dissemination strategy: The funds would be disseminated in the same way as current Trust grant programs.

Recommended next steps and timing: The Small Watershed Grant is competed every three years. Given that there is obviously no guarantee that the Trust would be awarded with the grant to administer the program, the opportunity would have to be considered potential significant, but long-term. The next step is to prepare for the next competition cycle. In the interim, however, there are re-granting opportunities that the Trust could leverage. Again, its own experience securing some of these funds is an indication that the Trust staff has successfully developed many of the relationships that will be necessary for leveraging these opportunities. Given that the availability of these funds is not predictable, the key next steps are to developing an understanding of the decision making process within each federal and state funding and financing agency and institution, and to identify and develop relationships with the key decision makers in those agencies and associated programs.

¹⁹ National Fish and Wildlife Foundation Website http://www.nfwf.org/programs/chesapeake/index.cfm

Private Funding Opportunities

Over the past decade, Americans have become increasingly interested in the activities of private foundations and philanthropists. Much of this interest is driven in part by high-profile philanthropists such as Bill and Melinda Gates and Warren Buffet, but the interest also has to do with the increasingly critical role of foundations in supporting social needs across the world. Foundations and private funders are able to support innovative, cutting edge issues that may not be funded effectively through public programs or corporate and industry activity. As a result, private philanthropy often seeds innovation related to a number of social issues, including environmental protection. Though charitable giving will not solve the financing problems facing the Chesapeake Bay restoration effort, there are significant opportunities to leverage these increasingly significant resources.

Clearly, private philanthropic dollars provide a significant opportunity for the Trust. According to Giving USA, more than \$230 billion dollars was gifted in 2003. Of that total, 16 percent, or \$38 billion, was contributed by foundations and corporations. Many experts in the field of philanthropy believe that there is a significant "wave" of potential philanthropic giving on the horizon. As Baby Boomers age, many experts believe they stand to benefit from the greatest generational transfer of wealth in our country's history.²⁰ Regardless of the number of philanthropic dollars in the marketplace the competition for these dollars will be significant, especially for a re-granting organization like the Trust.

Institutional sources reduce administrative requirements

Private individual philanthropy dwarfs corporate and foundation giving. However, developing an effective, sustainable private giving program will require significant administrative changes at the Trust. In many ways, the Trust is at a disadvantage in this area. Other organizations, specifically the Chesapeake Bay Foundation (CBF), are better positioned and

structured to take advantage of private revenue sources and programs such as membership, planned giving, and major donor activities. Determining the potential effectiveness of building a comprehensive development programs was beyond the scope of this analysis. However, it will be essential for the Trust to leverage private funding resources. Therefore, working directly with philanthropic institutions and corporate donors will allow the Trust to diversify its funding without expanding beyond its administrative capacity.

Expanding the Chesapeake Bay Funders Network

As with all the other funding opportunities that EFC investigated, there are two potential opportunities related to foundation revenue: expanding the Trust's annual cash flow, or leveraging existing resources. Clearly, the most desirable alternative for the Trust would be to identify re-granting opportunities with large, environmental or natural resource-based foundations and corporate philanthropic programs. However, the opportunities for building this type of re-granting program are limited (though not unprecedented). A more likely scenario or opportunity would be to facilitate significant private giving within the watershed. And, the most effective way of accomplishing this strategy would be to build on existing programs and institutional structures, specifically, the Chesapeake Bay Funders Network.

There are two primary reasons why expanding the Network would be the most effective strategy for increasing private revenue. The first reason is institutional. Most foundations have corporate charters that require the institution to disseminate money in perpetuity. The requirement essentially means that available dollars from foundations is strictly in the form of interest revenue on existing, or growing, endowment resources. This means that the amount of foundation resources stays relatively constant, and is impacted mostly by market behavior. As a result, the capacity within these institutions also

²⁰ This theory was questioned in a recent American Association of Retired Persons survey.

stays relatively constant, though staffing levels and the impact of particular programs can also be affected by fluctuations in interest income. This has significance for the Trust because most foundations have the capacity to continually manage and direct funding programs. In other words, they do not often need a third party to identify program opportunities and serve as resource experts. Therefore, re-granting opportunities are limited. However, foundations are always looking for opportunities to increase the impact of their resources, and the Chesapeake Bay Funders Network provides that opportunity.

The second reason is in many ways political. The final section of this report addresses many of the Trust's long-term goals, strategies, and opportunities. A core element of this long-term vision is the potential role for the Trust outside the state of Maryland. As will be discussed in detail, there are many barriers facing the Trust as it looks to increase its capacity and influence outside Maryland, not the least of which is the other funding organizations working on similar issues in other jurisdictions. A very effective way of developing trust with these other institutions and organizations would be to increase the amount of private giving and philanthropy occurring outside Maryland. In effect, the Trust is in a position to serve as a facilitator for private philanthropy. This would set a critical precedent for the Trust's future work in other jurisdictions.

Corporate re-gifting programs

Corporate philanthropy is often very different from foundation giving. Corporate philanthropic activity is directly impacted by market behavior. Therefore, philanthropic dollars can fluctuate significantly, which can make it difficult for companies to develop and maintain the capacity to develop effective, sustainable giving programs. As a result, re-granting opportunities may be available to the Trust.

The greatest opportunity in this area might also be the Chesapeake Bay Funders Network. Corporate philanthropists are no different than other private and public funding institutions. They want their money to be used towards innovative, sustainable programs. In addition, many funders prefer that their resources are leveraging other resources in the community. That is the real strength of the Network, and that dynamic provides a significant opportunity for the Trust. The goal would be to essentially turn the Network into a campaign,

with the goal of increasing total philanthropic dollars being dissiminated in the watershed. This would create a very good selling point for increasing corporate giving. Many corporations may not have codified giving programs, especially regional corporations with an interest in Chesapeake Bay issues. However, the Trust could serve as the institutional capacity for these organizations. A possible approach for the Trust would be to develop a series of corporate grant programs that target specific issues or communities. Corporations would be solicited to donate to the Trust, and the funds would be disseminated in a manor that meets the needs of the organization. This would differ significantly from traditional corporate fundraising programs because the funds would not support program activity, but would be directly granted back to the communities.

This program would provide two primary advantages to corporations. The first is that they could point to tangible on the ground results associated with their charitable giving. This provides significant marketing opportunities for the companies involved. Second, this program would allow corporations to pool money, thereby having a greater impact on the ground. There are a number of regional corporations and institutions that may be interested in supporting restoration activities but do not have the resources to manage or implement programs alone. A pooled foundation approach would provide a solution to this problem. In short, the Trust would be providing private corporate funders with an opportunity to leverage other funding resources, thereby increasing their impact and effectiveness.

Chesapeake Bay Trust and Long-Term Growth

Introduction

The EFC's primary goal with this project was to identify opportunities for the Trust to increase its revenue base so that it can expand its grant programs across the state. In effect, our goal was to help the organization expand its capacity by building on its reputation for quality programs and funding assistance. As we discussed in the earlier sections of the report, the foundation for this growth has been established, and we offered a variety of programs and revenue opportunities that we feel the Trust can, and should, take advantage of. As part of this analysis we identified a number of key issues associated with these revenue opportunities and recommended implementation strategies for moving forward. In addition to identifying opportunities for revenue growth, however, EFC had a second goal in mind as it completed its analysis. Our goal was to identify the long-term opportunities available to the Trust as it advances its mission to restore and protect the Chesapeake Bay.

In addition to providing a framework for meeting the organization's strategic goals over the next few years, the project team wanted to analyze the long-term impact of the Trust on the restoration effort. In many ways, the focus of the restoration effort has been going through a fundamental shift over the past few years. Though issues of funding and fiscal capacity have always been debated among stakeholders engaged in Bay related issues, there has been a shift from a process of identifying the necessary restoration best management practices and associated nutrient load reductions, to developing the necessary implementation and financing strategies. As this shift progresses, the Trust will be advancing its mission in an environment where many of the most critical restoration decisions will focus on issues related to identifying and leveraging sufficient revenue sources. In fact, in addition to the need for effective, efficient enforcement of necessary water quality laws and regulations, the most critical policy decisions over the coming years will focus on the need for leveraging sustainable, dedicated revenue streams sufficient to support necessary restoration activities.

This shift in the restoration effort required the EFC to use a

different approach to identifying and understanding the Trust's opportunities for long-term growth and expansion. Rather than focus on opportunities for long-term organizational growth, the project team began what we hope will be a continuing process of understanding how the Trust can have a greater impact on the larger implementation and funding process. In effect, this is the natural progression for any organization working to advance its strategic goals and visioning. Ultimately, the goal of any social institution is to expand its capacity in an effort to increase its impact in the community. Again, the first section of this report focused on opportunities for the Trust to expand its organizational capacity. This part of our analysis focuses on how the Trust may be able to expand its impact in the community. To that end, we have outlined the potential opportunities for the Trust to play a critical role in the restoration effort by serving as a critical institution in the financing process. Our analysis focuses on two core issues: expanding the Trust's institutional capacity as well as its geographic range.

Expanding the Trust's Institutional Capacity

To better understand the Trust's future in the Bay restoration effort, it is important to consider the critical capacity gaps in the restoration effort, and the Trust's role in finance and funding process. Though the Trust was not developed explicitly to serve as a financing organization, it has nonetheless for years served a critical financing function in the restoration effort. Finance itself is an allocation process of acquiring, managing, and investing fiscal resources, and the process of financing the restoration and protection of the Chesapeake Bay will ultimately require myriad institutions, partners, and programs. The goal of any financing effort is to accomplish a goal in the most efficient way possible, thereby increasing return on investment, and the Trust has improved the efficiency of the Bay restoration financing effort through its grant making activities. Our goal was to identify opportunities for the Trust to expand this critical financing role in the community, thereby increasing its capacity throughout the watershed.

The financing process is universal. In other words, it applies to micro level applications, such as the Trust's efforts to increase its grant making capacity and implement its strategic plan, as well as the macro level, such as financing the restoration of the Chesapeake Bay. Regardless of the scope of the financing effort, there are several core components of the financing process that are critical to the Trust's long-term goals and strategies. These three components – financing sources, instruments, and institutions – provide an effective foundation for the Trust in the future.

Revenue sources.

Financing starts with revenue, and more specifically with revenue sources. Essentially, a revenue or financing source is the ultimate payer of a cost associated with any activity financed or paid for. The tributary strategies, as well as the work of the Trust, have a multitude of associated costs, and these costs require some type of corresponding revenue source. The Trust has very effectively leveraged some very key revenue sources, i.e. the license plate and tax check-off programs. The Trust has now begun the process of diversifying these revenue sources so that it can expand its programs. This is an excellent metaphor for the Chesapeake Bay restoration effort. We are always looking for new sources to fund restoration activities. It is important to remember, however, that the ultimate revenue source for the Trust's programs is not voluntary check-off programs, government grants, or foundations. The source is always the citizens of the community. This is a critical point for the Trust because it is directly related to the organization's financing role over the past two decades, and provides the foundation for increasing its impact in the years to come.

The process of leveraging revenue or financing sources is critical in the restoration process. In fact, much of the innovation related to implementing the tributary strategies in the years to come will not be represented in the form of new technologies and best management practices to reduce nutrients and sediments to the Bay. Rather, much of the innovation will be directly associated with the political will necessary to leverage revenue resources from the citizens of the basin. For instance, the Chesapeake Bay surcharge program (the flush fee/tax) is considered by many to be one of the most innovative, progressive environmental laws to be passed in the past twenty years. However, the innovation related to the program is not related to the BMP the revenue will fund, nor is the financing process the funds will support any more

innovative than most large-scale public sector financing efforts. Rather, the innovation was in the ability of the state legislature and the administration to develop the political will to extract the revenue from the financing resource – the citizens of the state. That was truly innovative.

Again, the long-term ramifications for the Trust are significant. There are a number of reasons why the surcharge legislation was successfully passed, but much of its success can be attributed to the fact that passage of the law met with very little resistance on the part of the citizens of the state. It could be argued that a significant reason for this is that Maryland's citizens have been educated for years on the importance of restoring and protecting the Bay. Therefore, they knew that public financial resources, to some extent, would be necessary to accomplish our restoration goals. Elected officials make decisions based on the needs and desires of their constituents, and this requires the constituents to understand critical issues. Education and outreach programs, when implemented effectively, result in a more informed electorate — this increases community capacity, which in turn advances the implementation and financing process. For twenty years the Trust has funded efforts to make that public awareness and stewardship of the Bay a priority. This is a critical financing role, and in many ways it can only be accomplished by an organization like the Trust, and it serves, in many respects, as a foundation for the Trust's growth and impact in the future.

Over the past several years, there have been several highprofile initiatives targeting financing issues and the gaps and opportunities facing communities and jurisdictions in their implementation efforts. Though money alone will not restore the Bay, restoring the Bay will cost money, and it has become very clear that we have not directed sufficient funding to the restoration effort. Ultimately, success will require the increased commitment of every citizen, consumer, and business across the watershed. As the citizens of the Bay watershed are asked to pay more and more of the restoration bill, there will be a demand for institutions like the Trust to allocate those fiscal resources in a way that maximizes the public's return on investment.

Financing institutions.

Financing institutions are essential in the financing process. In effect, the institutions enable the transfer of revenue or financing resources from the source to the program or costs associated with implementation. In the private sector, these institutions

develop as a result of market forces or market activity and are driven by the laws of supply and demand. However, in public sector, financing institutions are created to manage the financing process as a result of various compulsory activities or to accomplish a critical community service. The source of the revenue is no different in either scenario – it is the citizens of the community. And, the function of the institutions is no different – it is to facilitate the allocation of revenue sources.

Again, though the Trust was not developed explicitly to serve an institutional role in the financing process, it has nonetheless fulfilled that need in a critical way for the past twenty years. Developing the Trust allowed the state to leverage sustainable revenue streams and dedicate them towards restoration of the Bay. Citizens who participate in both of the established check-off programs know that the money will be used exclusively for Bay restoration activities, specifically those related to education, stewardship, and on the ground best management practices. The role of the Trust is to separate itself from all other government functions and to be an objective steward of the public's resources with a singular purpose in mind. This is a critical financing function. Though there were many reasons for the development and formation of the Trust, what state leaders were implying was that a private institution like the Trust would be better equipped and most effective at allocating and managing certain public resources to accomplish certain community goals and priorities. There is a significant opportunity for the Trust to build on this arrangement and to continue to fill the existing institutional gaps in the financing process. We have provided analysis of several institutional opportunities that we feel would allow the Trust to expand its effectiveness throughout the region and allow the organization to become a critical tool in the restoration process.

Mitigation and Conservation Banking Programs

A mitigation bank is a wetland, stream, or other aquatic resource area that has been restored, established, enhanced, or (in certain circumstances) preserved for the purpose of providing compensation for unavoidable impacts to aquatic life and habitat. A mitigation bank may be created when a government agency, corporation, nonprofit organization, or other entity undertakes these activities under a formal agreement with a regulatory agency. These types of programs could provide the

Trust with an opportunity to initiate and support large-scale conservation and restoration efforts.

Activities requiring mitigation programs are directly related to housing and commercial development and road construction. While both the development community and state transportation authorities have become significantly more progressive in their approach to sustainable construction and development activities, the environmental impact of new construction can be significant. Again, mitigating the impacts of these activities has become a priority in all states, and there is a significant opportunity for the Trust to help invest mitigation dollars in the most effective way possible. For example, as state officials become more aggressive in enforcing water quality requirements such as TMDL's and MS4 stormwater programs, the possibility exists that new development throughout the state will require offset programs to mitigate water quality impacts. Essentially, developers and landowners may at some point be required to pay fees in-lieu of protecting water quality on site. A significant concern related to these types of programs includes the administrative capacity to collect the fees and direct them to on the ground projects. An institution like the Trust could fill that role on behalf of the state.

Another opportunity exists at the local level. Many municipal and county governments have implementing a variety of resource protection measures such as forest conservation laws. These laws often require developers to mitigate forest loss from development activities. Again, there is often an administrative capacity problem to implement mitigation programs, and there may be an opportunity for a funding and project based organization like the Trust to fill the capacity gap.

Type of Opportunity: These types of programs would primarily be a revenue generating opportunity. The level of opportunity is undetermined at this time. Though mitigation banking and offset programs create significant funding and financing opportunities for the Trust, as well as Bay watershed communities, there are equally significant complexities, administrative issues, and implementation barriers associated with these types of programs. EFC staff has begun initial conversations with MDE officials regarding these types of programs; a full program description and analysis of the opportunity will be included in the final white paper report. Wetland mitigation in Maryland, with its booming real estate market, is a big business - just not for private-sector mitigation banks.

Mitigation banking is not as popular an option in Maryland as it is in other states due largely to a point in state law that treats it differently than in-lieu programs, which require that for every acre impacted, one and a half acres have to be mitigated. In-lieu programs have an even exchange of one acre for one acre. As a result, there is very little mitigation banking going on in Maryland. The most popular option, accounting for almost 85 percent of the mitigation work, is done by the permit holder who drafts a mitigation plan, which must be approved by the Maryland Department of the Environment. The second most popular option is the in-lieu program, operated by MDE. MDE collects \$400,000 annually in in-lieu fees from developers impacting the most common type of wetland, non-tidal ones away from the coastline. The cost to create new wetlands depends on the price of real estate in the county, but [some] have estimated that the costs range from \$12,000 to \$58,000 an acre. 21

MDE usually replaces an average of roughly 40 acres of nontidal wetlands a year. According to the most recent MDE studies, there is a little less than 600,000 acres of wetlands in the state. This marks a 58 percent drop from the estimated historic acreage. Efforts to stem the loss and recoup lost a creage intensified in the late 1990s when the federal government implemented a no net loss policy. A 2002 MDE study found a net gain of 6,966 acres from 1998 to 2001. ²²

Sidebar: Conservation Banking

A similar program to mitigation banking is conservation banking. Traditionally used to protect endangered or threatened species, the basic idea of banking as a mitigation strategy is relatively simple: in anticipation of future mitigation requirements, someone, e.g., an individual landowner or state highway department, invests in conservation activities at a bank site, e.g., acquiring high quality habitat or restoring degraded habitat for a particular species. The Fish and Wildlife Service accepts such an investment as compensatory mitigation for future activities detrimentally affecting the species or habitat type conserved on the bank site. Conservation banking has a number of potential advantages over traditional approaches to mitigation. By completing necessary mitigation prior to project impacts, banking assures that the mitigation is done, and done properly. Further, in theory, banking allows mitigation on a larger scale, providing advance mitigation at a single large site for multiple future projects that would otherwise be mitigated at several smaller sites.

In addition, banking creates the opportunity for some landowners to turn endangered species on their property, or restorable habitat for such species, into assets. That turns on its head the conventional wisdom of many landowners that endangered species are a liability to be avoided because of the land use restrictions that can accompany them. Finally, since the number of credits that some banks earn is a function of how successfully species or habitats are restored, bankers have a compelling economic incentive to do the best restoration job possible.

²¹ Mook, Ben, The Baltimore Daily Record. April 7, 2006.

²² Mook

Featured Case Study: Virginia Aquatic Resources Trust Fund

Background

Established in 1995 through a Memorandum of Understanding (MOU) between the U.S. Army Corps of Engineers Norfolk District (Corps), the Virginia Department of Environmental Quality (DEQ) and The Nature Conservancy's Virginia Chapter, the Virginia Aquatic Resources Trust Fund ²³ is one of several compensatory mitigation options available for permitted impacts to wetlands and water in the Commonwealth of Virginia.

How the Program Operates

The Fund is set up to accept monetary payments as an offset for Corps or DEQ permitted projects that have made every effort to prevent and minimize harm to the Virginia's aquatic habitats, but still have certain unavoidable environmental impacts. This fee, the amount of which is determined by the Corps based on a mitigation cost estimate, is paid by the permit applicant "in-lieu-of" conducting an on the ground mitigation project. The Nature Conservancy (TNC) ten directs these funds to mitigation projects that have met with Corps approval. Funds are spent out in a time-release distribution method with the expectation that funds will be disbursed by TNC within three years of being received.

Current Program Status

Over the course of the program's eleven year history, 437 permit applicants have paid well over \$13.5 million into the Fund for impacts to over 184 acres of non-tidal wetlands. Of this total, approximately \$5.25 million has been allocated by TNC to projects that have restored or preserved nearly 3,000 acres of wetland and upland habitat, a success rate far exceeding the no-net-loss standard set by the Commonwealth for non-tidal wetlands. Annual revenues reached an all time high of over \$3.2 million in 2003, but have trended downward in the years since, with 2005 revenues topping just over \$830,000.

For the five years that fee-in-lieu payments for stream mitigation has been allowed, 157 permit applicants have paid just over \$13 million into the Fund for impacts to over 104,000 linear feet of streams. Of this total, approximately \$790,000 has been allocated by TNC to projects that have restored or preserved nearly 36,000 linear feet of stream and upland buffer habitats. Although the success rate does not meet the one-to-one linear foot standard established by the state, it should be noted that the compensatory program for stream impacts was just established in 2001 and has only allocated 6 percent of the revenues collected to date. ²⁴

Implications for the Chesapeake Bay Trust

A major consideration for the Chesapeake Bay Trust in establishing a program of this nature is a newly proposed mitigation rule that would, after a five year transitional period, require that all in-lieu programs that function as compensatory for permits issued by the Corps meet the same standards as mitigation banks. ²⁵ If the Trust were to seek to implement an in-lieu-of partnership, this issue could be addressed in the language of the initial MOU. Also, the proposed legislation would not affect mitigation agreements at the state-level.

²³ This fund was initially known as the Virginia Wetlands Restoration Fund. A December 2003 amendment to the 1995 MOU allowed the contribution of stream restoration in-lieu-of payments and changed the name of the fund to the **Virginia Aquatic Resources Trust Fund** to reflect the fund's expanded function.

²⁴ Works cited include: Memorandum of Understanding between the Virginia Department of Environmental Quality and the Norfolk District, Corps of Engineers Concerning Operation of the Virginia Non-tidal Wetland Program (2001); Virginia Aquatic Resources Trust Fund: Amendment to the Memorandum of Understanding between The Nature Conservancy and the U.S. Army Corps of Engineers, (December, 2003); and the 2005 Report of Activity by the Virginia Aquatic Resources Trust Fund (April, 2006). All three documents are available in their entirety from the Environmental Finance Center, University of Maryland

²⁵ Federal Register, Vol. 71, No. 59; March 28, 2006

Enforcement Actions

Enforcement penalties are collected on both a state and federal basis for a variety of violations that have detrimental impacts on the health of the Bay. At the federal level, the EPA's Compliance and Enforcement Office conduct enforcement activities. At the state level, these activities are the responsibility of the Maryland Department of the Environment. Enforcement actions at both the state and federal level typically take one of two forms, monetary penalties or supplemental environmental projects, and often a combination of the two is involved.

Fines: the parties that brought suit share Enforcement and compliance cash penalties. Those collected by the federal government are returned directly to the US Treasury. In FY

'05, MDE collected \$1.6 million in penalties, over \$600,000 of which by the Water Management Administration.

Supplemental Environmental Projects (SEP): As an alternative to paying the full enforcement penalty levied, some violators choose to conduct an environmentally beneficial project separate from any corrective measures that must be taken place to address the violation. The SEP has a monetary value far greater than the penalty offset. However, it is still a very appealing option to many violators because of the positive public relations opportunity the project can create. A well-developed catalogue of potential supplemental environmental projects as well as a strong relationship with the regulatory agencies involved could enable the Trust to direct a portion of these projects towards the goals of the organization.

Featured Case Study: The Hudson River Foundation

Background

The Hudson River Foundation for Science and Environmental Research, Inc., generally referred to as the Hudson River Foundation, or HRF, has a history and a set of programs and activities that may be of interest to the Partnership for the Delaware Estuary as it examines its future.

How the Program Operates

HRF was established in 1981 by the State of New York as a non-profit corporation with its own Board of Directors, under terms of an agreement among environmental groups, government regulatory agencies and utility companies concerning the impacts of electric power generating facilities along the Hudson River. One particular set of issues dealt with recovery of costs from the successful battle to prevent construction of a pumped storage hydroelectric facility on Storm King Mountain, one of the landmark environmental lawsuits of the era.

The Hudson River Fund was established in 1982 with an endowment to HRF of \$12 million to sponsor independent scientific research and education programs to build sound public policy for future management of the River and its watershed. The Fund is managed by a group of investors overseen by the Board. It has tripled in value to about \$36 million since its establishment, and has provided over this same period 662 grants at a value of nearly \$32 million. Most grants are for research focused on the Hudson, although there is also support for graduate and other fellowships and educational programs.

In 1985, an additional agreement with the State of New York created the Hudson River Improvement Program as part of HRF, with an initial endowment of \$1.5 million. The mission of the Improvement Fund is to support public enjoyment and use of the River, with special focus on capital construction, development or physical improvements. Of special note is that the purpose includes enhancing scenic and cultural as well as natural resources. Since inception, this fund has increased in value to \$2.7 million while awarding 520 grants totaling \$4.8 million. Many of these funds have gone to improve public access to the River and to upgrade and expand local parks and recreation facilities.

A further augmentation of the HRF portfolio occurred in 1994 with the establishment of the New York City Environmental Fund, as a result of a \$5 million payment by the Consolidated Edison Company, the local electric utility, under terms of an agreement resolving

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natural resource damage claims by the New York State Department of Environmental Conservation. The purpose is to support the "restoration, care, public enjoyment of, and education about New York City's natural resources." Most grants are small amounts to educational and neighborhood groups, so that in twelve years 574 awards totaling \$8 million have been made by HRF. The remaining value in the Fund is nearly \$3 million.

Finally, as a result of a settlement in 2002 related to the visual and other impacts of power plants along the Upper Hudson, \$1 million was paid to the HRF to establish the Catskill-Olana Mitigation Fund. The Fund is to support local projects to improve vistas and provide public facilities in communities along the River affected by the utility construction. A major concern was the intrusion of one power plant into the historic views from the 19th century painter Frederick Church's estate, Olana. A number of grants have been made and the current value of the Fund is over \$2 million.

Current Program Status

Summing these results, the endowment of the Hudson River Foundation now stands at \$43 million, after having made nearly 1800 grants worth over \$45 million. However, it is important to note that different spending philosophies underlie each of the separate programs. The Hudson River Fund remains the basic endowment, and is managed to assure a sound long-term financial condition for HRF. The Improvement Fund is intended to have long-term stability, as well, in order to assure a steady source of project funds. The New York City Environmental Fund is managed to provide payout for a number of years, then phase out. And the Olana Fund is intended to be spent in the next two years or so. These different management strategies are designed to meet the original intent of the agreements setting up the Funds, and are within the discretion of the Board of Directors of HRF.

In addition to the grant programs to support science, fellowships, education and improvement projects along the River, the HRF has developed an important internal program to bring scientific understanding to bear on public policy. Much of this effort is tied to two estuary management programs, the Harbor Estuary Program (a partnership of the Federal government and the States of New York and New Jersey), and the Hudson River Estuary Program, a New York state program focused on the tidal river between the Harbor and Albany. In addition, there is a close working relationship with the U.S. Army Corps of Engineers Hudson-Raritan Estuary Study. For example, HRF staff led in the development of effective measures of contamination in the waters and sediments of the Harbor. And with the support of contractors from Cornell and elsewhere, they are currently leading the effort to develop a science-based conservation restoration plan for the Estuary, with funding from the Corps.²⁶

²⁶ Drafted by Bill Matuszeski based on his personal knowledge and experiences as a member of the Hudson River Foundation's Board of Directors.

Clearly, all of the programs and financing tools described above would best be described as long-term opportunities for the Trust. In fact, for the Trust to successfully position itself as an appropriate institution to be engaged in these issues would require a long-term commitment by the Trust, and a desire to build capacity in non-traditional program areas. However, we feel that these programs serve as a useful template for the Trust leadership as they position the organization in the years to come. Again, the long-term goal of the organization should be to advance its mission in a way that provides the greatest utility for communities throughout the watershed. If the Trust has an opportunity to expand its institutional capacity in these areas, it could result in more effective and efficient investment

of public resources. This would provide real benefit for the organizations, institutions, and communities involved in the restoration process.

There are also other community benefits that could result from the Trust incorporating these types of institutional efforts into its program activities. Ultimately, the success of the Bay restoration effort will rely on individual communities across the watershed implementing water quality programs that meet their specific needs and priorities. By implementing mitigation and enforcement programs, the Trust would have the opportunity to facilitate restoration and conservation activities that have real local impact while at the same time positively impact-

ing the health of the Bay. In other words, the Trust could help provide a "Bay" focus to many of these local restoration and conservation tools.

Ultimately the Chesapeake Bay Trust leadership must decide whether or not these types of institutional opportunities are an appropriate and effective way to advance the organization's mission. In fact, it could be argued that these types of programs may cause the organization to stray from its core mission to promote public awareness and participation in the restoration and protection of the Chesapeake Bay. At the very least, embracing these types of programs could certainly be considered a non-traditional approach to advancing that mission. However, the public is made up of a lot of different types of people, businesses, organizations, and stakeholders. And by expanding its focus to include more institutional-type programs and opportunities, the Trust may be able to effectively engage even more of the public than it has in the past.

Finally, the opportunities described above are just a sample of some of the innovative tools that are being developed and implemented to protect and restore natural resources across the country. Even if these programs are not appropriate opportunities for the Trust to pursue, there is a broader strategy that must be considered. In the very beginning of this report we discussed the importance of building on the Trust's unique relationship with the state. The institutional programs described in this report have one thing in common: the key partner would be the state and local governments. The Trust is uniquely positioned to help advance these types of innovative financing and funding solutions to very expensive and intractable restoration issues. Regardless of how programs develop in the future, the key goal should be to work in partnership with the state to advance these innovative ideas, thereby advancing the restoration effort in the most efficient, effective way possible.

Expanding the Trust's Geographic Range

In the summer of 2005, the Environmental Finance Center, in partnership with the Chesapeake Bay Program, facilitated and convened a committee to outline options for creating a Chesapeake Bay Regional Financing Authority. The committee was charged with identifying appropriate models and administrative structures for developing an institution that would address regional watershed issues, specifically those related to non-point source emissions. Though the work of

the committee was comprehensive, especially concerning how a regional financing institution should be structured, the motivation or reasons for creating a regional financing authority were very basic. The committee determined that for a regional financing authority to work, it must enhance existing state financing efforts and institutions in two ways: (1) improve the capacity of state financing systems, i.e. make them more efficient or effective, and/or (2) provide access to additional capital and fiscal resources that otherwise would not be available to them.²⁷ There are significant parallels between the analysis provided by this committee and the decisions facing the Trust related to regional expansion.

Though determining when and how the Trust should expand its work to other jurisdictions will require a very strategic approach, there are essentially two reasons why the Trust should consider expanding its work to other jurisdictions. Expansion should be considered if it would benefit the Trust in one of two ways: (1) it would allow the organization to leverage new revenue sources that otherwise would not avail themselves, or (2) it would benefit the overall restoration effort. Our analysis considers each of these issues, and outlines a logical process for initiating work in other jurisdictions.

Geographic Expansion and Organizational Capacity: Leveraging New Funding Resources

Again, the first issue that must be considered is whether or not geographic expansion would allow the Trust to increase its capacity. This is a critical issue for two reasons. First, much of the Trust's existing revenue sources ultimately come from citizens in Maryland. Therefore, it would be very difficult, if not impossible, for the organization to use those funds on any project outside the state. Second, expanding geographically without the opportunity to leverage additional revenue sources would increase the programmatic responsibility of the organization without a commensurate increase in capacity. Clearly, in the long-term, this would not be a sustainable approach.

It is possible, however, for expansion into other jurisdictions to ultimately increase revenue opportunities for the Trust. For example, if the Trust were able and willing to implement

 $^{^{27}}$ Chesapeake Bay Financing Authority Organizational Template A White Paper from the Financing Authority Committee, Chesapeake Bay Program 2005

programs across the entire watershed, it would then be in a much better position to compete for funding programs such as the Small Watershed Grants program. This would significantly increase the level of opportunity associated with that program. Likewise, regional expansion would allow the Trust to consider expanding revenue programs such as the Bay Lane, E-ZPass, and other voluntary revenue opportunities. Finally, with a watershed-wide focus, the Trust would potentially be much more effective leveraging private funding sources such as corporate marketing and philanthropic dollars, as well as foundation support.

Geographic Expansion and Institutional Capacity: Moving the Restoration Effort Forward

In many ways, if the Trust were to expand its work to other jurisdictions, it would benefit the broader restoration effort. As we have stated repeatedly in this report, the Trust is a very unique organization that is fulfilling a critical funding and implementation function in the restoration effort. The Trust's grant programs support innovative approaches to engaging the citizens of the basin in the restoration effort, as well as the development and implementation of a variety of effective and essential water quality best management practices. Spreading these programs across the watershed would ultimately benefit the entire region. The benefits, however, could be much more profound and could impact how the Bay restoration effort is financed and implemented.

Though there is still some significant uncertainty concerning the resources that will be needed to restore the Bay, what we do know is that success will require the commitment and participation of every citizen, consumer, business, and institution in the watershed. Success will cost money, and it will require everyone to pay their fair share. However, success will also require that money be invested in a way that achieves maximum on the ground results. The citizens and taxpayers living in this watershed must know that they are getting the maximum return on their investment.

As we discussed above, money alone will not solve the restoration problem. However, money invested in the most effective way possible will, and the Chesapeake Bay Trust, through its grant programs, has been efficiently investing money for the past 20 years. The types of programs and activities that the Trust supports are critical to the restoration

process, and it could be argued that no other institution could perform this service. When the citizens of the Bay watershed – not just Maryland, but the entire Bay watershed – are "encouraged" to pay their fair share of the restoration costs, there will be a need for regional financing institutions, like the Chesapeake Bay Trust, to invest that money in programs, projects, and on the ground activities that will ultimately restore the Bay. By expanding now into other jurisdictions, the Trust could effectively position itself as one of the critical financing institutions that will be necessary for success.

Over the next several months, there will be an effort to readdress the issue of a regional financing authority, and to consider such an authority or institution in the context of a broader regional financing strategy. Though the restoration effort will require the participation of myriad institutions and organizations across the watershed, it is likely that a single, regional institution will be necessary to finance a variety of programs, especially those that focus on inter-jurisdictional pollution issues. We feel strongly that the Chesapeake Bay Trust could potentially serve as this institution. Clearly this is an idea that would require significant research and due diligence before moving forward, but one thing is certain. It would require the Trust to operate throughout the entire watershed. Taking steps to expand operations to other jurisdictions now could position the Trust to serve a much larger, critical role in the overall financing effort.

Barriers to Geographic Expansion Clearly there are potentially some very significant issues or barriers facing the Trust if it considers expanding into other jurisdictions. First, any attempt to move into certain jurisdictions would almost certainly be met with significant resistance from other non-profit funding institutions operating in the watershed. Expansion by the Trust will be considered a threat to these organizations and their funding sources, and the Trust should expect these organizations to defend their programs resources, and areas of influence vigorously. There is also the issue of legal charter. The Trust is chartered in the state of Maryland to operate only in the state. Therefore, the Trust would need to initiate an effort in the Maryland General Assembly to have the charter adjusted to allow the organization to expand.

Recommendations for Moving Forward Though these barriers do exist, the EFC project team feels strongly that the opportunities related to geographic expansion far outweigh the barriers.

However, it will be important for the Trust to move forward strategically, thereby reducing potential friction and inefficiencies. Our first recommendation is for the Trust to work to have its charter modified to allow for expansion. Clearly it makes no sense to move forward if expansion is not allowed by law. Second, we recommend that the Trust aggressively pursue the funding opportunities that would complement regional expansion, such as the E-ZPass program, the Bay Lanes, and the Small Watershed Grants program. All of these would, by definition, position the Trust to work in other jurisdictions. Third, we recommend that the Trust focus heavily on building private funding sources through the expansion of the Chesapeake Bay Funders Network. Not only would this strengthen the Trust's capacity, it would show other funders throughout the watershed that the goal of the organization is not to grow, but to improve stewardship of the Bay. This could help alleviate concerns that other non-profits and funding organizations may have.

Finally, we recommend piloting projects in a single jurisdiction in an effort to better understand the process for moving forward. Our recommendation is that the Trust investigate opportunities in three jurisdictions: the District of Columbia, Delaware, and West Virginia. Implementing projects in these three jurisdictions would allow the Trust to test the Geographic expansion idea in a sustainable, controlled way, while at the same time meeting critical watershed needs across the region. ²⁸

District of Columbia. Though the District is a critical partner in the Bay restoration effort, they are still developing and establishing many of the institutions that are critical for funding innovative water quality programs. In addition, the issues facing the District, specifically urban stormwater management, are some of the most entrenched, intractable, expensive problems we are dealing with in the restoration effort. Therefore, a pilot program in the District would allow the Trust an opportunity to begin its jurisdictional expansion in a controlled, manageable way, while at the same time helping to fund solutions to some

Delaware. Though Delaware is the smallest state in the region, the jurisdiction serves a critical role in the implementation process, especially in areas such as agricultural stewardship and best management practices. In addition, there are significant inter-jurisdictional issues in several watersheds, such as the Choptank. The Trust could target a watershed like the Choptank and implement programs that encourage and facilitate inter-jurisdictional implementation and financing.

of the most significant water quality issues facing communities across the region.

²⁸ It is important to note the EFC project team has not had discussions with officials in these two regions on this issue. Given the nature of these types of discussions and negotiations, we felt it best to allow the Trust leadership to initiative these conversations.

Conclusion

In conclusion, the Chesapeake Bay Trust is poised to expand existing programs and continue a phase of long term growth. This can only be achieved through use of multiple financing instruments and calculated institutional change. After analyzing all the options the EFC project team believes taking the following steps offers the Trust the greatest opportunity to increase funding available for bay projects:

Increase funding contributed from voluntary donation programs.

Voluntary donation programs offer the Trust the most significant and sustained funding source. Most noteworthy of the voluntary funding programs explored by the EFC project team include those funding sources related to transportation: increasing cost of the existing Chesapeake bay license plate program, the E-Z Pass voluntary program, and a concept for "Chesapeake Bay Lanes" where extra change would be collected at special toll plazas as direct donation to the trust. The "bay lanes" idea has significant marketing benefits and is an opportunity to reach residents across the region. All of these ideas expand on current relationships with the state through the existing Chesapeake Bay License Plate Program. Each program has significant institutional and political barriers, but the EFC team believes that with a strategic approach these opportunities can be successfully leveraged and implemented.

Expand the Trust's institutional capacity.

To meet program funding goals, the Trust must think creatively about acquiring long term, sustainable funding sources for bay restoration activities. This means filling existing institutional gaps in the financing process. Opportunities here include forging partnerships with the state to utilize monetary payments for mitigation and conservation banking for priority bay restoration projects. The EFC project team also believes the Trust has opportunities to garner moneys from enforcement actions for bay restoration activities. Both of these opportunities start with presenting a clear restoration plan with priority projects, estimated costs, and benefits to state officials.

Seriously consider expanding the Trust's geographic range.

EFC project team believes that expanding the Trust's sphere of influence to a broader geographic range is an opportunity to tap new funding sources for existing restoration efforts across the region. The overall restoration effort has a gap in regional financing institutions that can target funding for the most critical of projects. The Trust with its 20-year record as a financer of bay restoration projects is in a position to fill this gap. In doing so the Trust can be a supporter of existing and established organizations in other states who support common mission of restoring the Bay. There appear to be funding opportunities that would be more achievable for a regionally based organization such as administration of the Small Watershed Grant Program. Overcoming political barriers with a spirit of partnership and careful positioning to fill existing gaps and support existing efforts, the overall benefit can be great. Stepping up and out of the Trust's boundaries, translates to significant benefits for the bay over the long term.

The EFC Team

Jennifer Cotting, Program Manager

Ms. Cotting joined the 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. She is now a Program Manager for EFC's Natural Resource activities. Prior to joining the 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 M.S. in Sustainable Development and Conservation Biology from the University of Maryland and her B.A. in Communications from Marymount University. Ms. Cotting is also co-editor of Urban Wildlife News, the biannual newsletter of the Urban Wildlife Working Group of The Wildlife Society.

Dan Nees, Director, Environmental Finance Center

Mr. Nees has been with the Environmental Finance Center for six years, and assumed the role of Director in January 2005. Mr. Nees has worked with communities throughout the Mid-Atlantic region in their efforts to implement and finance environmental and sustainable development initiatives. His work has focused on developing and building coalitions of diverse interests groups and directing them towards common financing 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 a Master of Business Administration, all from the University of Maryland, College Park.

Michael Curley, Executive Director, International Center for Environmental Finance

Mr. Curley is the founder and executive director of the International Center for Environmental Finance, which is funded with a \$3 million grant from the U.S. Environmental Protection Agency (USEPA). For several years, he also served as the senior financial advisor to the Office of International

Affairs at USEPA. Mr. Curley's work has focused on the former Soviet Union, Central America and Asia to develop financial mechanisms for funding infrastructure projects. Throughout his work, he advised many governments and international organizations on finance in over 25 countries across the globe, including the World Bank, and the North Atlantic Treaty Organization (NATO). He also served as a Senior Lecturer at the Johns Hopkins University on International Project Finance and also as an Adjunct Professor of Banking and Finance at New York University where he taught Venture Capital as well as Capital Markets & Investment Banking. Mr. Curley holds a Juris Doctor from the University at Buffalo Law School in Buffalo, NY and a Bachelor's degree from Georgetown University in Washington, DC.

William Matuszeski, Consultant

Mr. Matuszeski is the former Director of the Chesapeake Bay Program from November, 1991 until April, 2001. The Chesapeake Bay Program is the premier watershed restoration effort in the United States, and is recognized world-wide for its clear goals, measurable achievements, comprehensive approach to such complex problems as air pollution deposition and land use change, and use of computer models to test management options. In recognition of his role in these achievements, Mr. Matuszeski was the 2001 recipient of the Environmental Protection Agency's highest honor for distinguished service, the Lee Thomas Award. Since retiring in 2001, he has served as a consultant to regional efforts to manage, preserve and restore watersheds, including the Hudson River Valley, New York Harbor, Long Island Sound, Narragansett Bay, and the Sea of Cortez in Mexico. He recently co-authored a report of the Chesapeake Bay Commission on the most cost-effective measures to restore the Bay, and worked with the United Nations on standards for coastal reconstruction after the Asian tsunami. Mr. Matuszeski received his undergraduate degree in government from the University of Wisconsin and his law degree from Harvard with a specialization in land law. After law school, he served for two years in the Peace Corps in Venezuela, working on urban development problems for the city government in Valencia.

The Environmental Finance Center, University of Maryland

This project was managed and implemented by the Environmental Finance Center at the University of Maryland. The Environmental Finance Center (EFC) is 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 13 years. One of the EFC'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.