Conowingo Watershed Implementation Plan Financing Strategy

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SCHOOL OF PUBLIC POLICY
CENTER FOR GLOBAL SUSTAINABILITY

Contents

Executive Summary

The following report is a product of the Center for Global Sustainability (CGS, or the Center), based at the University of Maryland. CGS is located in the Washington, D.C. metropolitan area, which provides the Center with access to a strong research network and international policy experts and contacts. CGS's research informs global, national, and local discussions on climate, energy, economic development, and sustainability. The Center's work is organized around four topical areas—climate policy; energy pathways; health and ecosystems; and adaptation and resilience—that draw upon existing strengths at the University of Maryland, with the integrative goal to facilitate policy design and multi-stakeholder implementation.

CGS and its partners Throwe Environmental and E3 International, were awarded an EPA grant in July 2019 to develop and implement a financing system designed to advance the Conowingo Watershed Implementation Planning (Conowingo WIP) process. The Conowingo WIP is a road map toward achieving a "pollution diet" similar to those in place for the entire Chesapeake Bay watershed. For decades, the Conowingo Dam reservoir functioned to trap nutrients, sediment, and other pollutants so that less of it traveled from the Susquehanna River to the Bay. Now the area behind the dam has silted in, rendering it unable to trap any more pollutants. CGS proposed to design and implement an innovative financing system that will result in greater financing scale and efficiency in support of water quality and pollution reductions defined in the Conowingo WIP. This report provides a framework for this financing system.

Project Team. Project partners include CGS and the following organizations:

- **Throwe Environmental, LLC** assists the public and private sector in finding innovative and effective solutions to a broad array of environmental challenges through analysis, technical assistance, and outreach.
- **Hogan Lovells, LLC** is a global law firm that works on complex legal challenges across topics and issues.
- **E3 International, LLC** is a leader in developing sustainable strategies to promote resilience and environmental benefits.

Project Phases. This multi-year project is being implemented in three phases. This report serves as a culmination of our work in Phase 1 and a segue to our implementation effort in Phase 2:

- <u>Phase 1: Evaluation and Due Diligence.</u> The purpose of Phase 1 was to identify a financing system capable of advancing the goals and timelines of the Conowingo WIP. During this first 12-month phase, the project team convened an advisory committee and evaluated existing financing capacities across the watershed and researched innovative financing processes from other parts of the country. The team drafted the structure of a new Conowingo WIP financing system and process. Phase 1 has been completed.
- <u>Phase 2: Program Launch and Implementation.</u> In Phase 2, the project team will launch the implementation and investment process at scale to provide an opportunity to identify the strengths and weaknesses of the proposed system.
- <u>Phase 3: Financing System Implementation.</u> Phase 3 will be designed to enable course adjustments and establish a permanent Conowingo financing system.

Summary of Key Issues

The Conowingo WIP process and the proposed financing system is founded on decades of implementation experience and knowledge. The proposed financing system is not entirely new. However, the Conowingo WIP process has some unique elements that require some equally unique financing policies and systems. First, the Conowingo WIP is interstate in nature. Project implementation and financing processes must have the capacity to function across jurisdictional boarders. Second, the Conowingo WIP is distinct and separate from existing state WIPs currently in place to address Chesapeake Bay pollution limits. The Conowingo WIP is independent of these plans, and the implementation obligation is in addition to the existing state WIP obligations. The Conowingo WIP differs significantly from the state WIPs in that the entire process—including funding, financing, and implementation—will presumably be implemented collectively among all the Bay jurisdictions. Financing the Conowingo WIP creates some unique challenges. Successfully dealing with those challenges will require state and federal leaders to address some key issues and barriers moving forward.

One key issue is that a ***public commitment to invest is paramount***. The entire Conowingo WIP financing process is predicated on the responsibility of the public sector in general and the Bay States in particular to fund restoration activities. Without this obligation and commitment, the Conowingo WIP financing system will be very limited in scale and impact. There appears to be consensus that the public sector is responsible for funding and supporting the Conowingo WIP restoration activities, but as of yet, there is no clear indication of exactly how that consensus will translate into action. The scale and impact of the financing process will be extremely limited without this commitment.

The current fiscal challenges facing the Bay States are very real and very daunting. As a result, the proposed financing system must address the difficult task of accomplishing offsetting additional pollutant loads with fewer financial resources. The responsibility for ensuring restoration implementation rests with the public sector; however, any new financing system that does not alleviate the fiscal burden of that responsibility will not be successful. The development of the financing strategy as proposed in this document occurred within the parameters of these two foundational issues.

Public investment is essential, but public investment alone will not be sufficient. Long-term sustainable implementation success will require investing in the most innovative industries and processes that have the potential to create efficiencies, identify and leverage untapped revenue streams, and utilize long-term financing and investment tools. In short, the Conowingo WIP financing process must result in a transition from publicly subsidized grant funding to publicly incentivized restoration investments.

Long-term restoration success will require close collaboration with and partnerships between the public and private sectors. It is the public sector's responsibility to put the parameters around the restoration financing process in the form or regulation, policies, and long-term funding. It is the private sector—the businesses, investors, farmers, landowners, churches, nonprofits, and citizens—that have the primary implementation role in the financing and implementation process.

Finally, there are clearly very difficult decisions to be made moving forward. The financing strategy provided in this report is no panacea for the challenges and difficulties that lie ahead. However, this strategy provides leaders and jurisdictions across the region with a reasonable, sustainable, and ultimately successful path forward. It is predicated on a core recommendation: ***Establish the Conowingo Financing Authority.***

The unique interstate nature of the Conowingo WIP puts added emphasis on the need to expand institutional capacity within the financing system. A primary recommendation is to establish a Conowingo Financing Authority. This Authority should reside in a single jurisdiction with the capacity to receive revenues and invest in restoration activities across the region and the Bay watershed. Its mission will be to facilitate and execute water quality restoration funding and financing transactions specifically in support of the Conowingo WIP. The Authority will be structured on three primary components and processes: diverse pools of capital; innovative procurement and investment processes; and, long-term capacity through debt financing.

The Conowingo Financing Authority will be the mechanism by which a more efficient, effective, and innovative implementation process can move forward at scale. The details of how the Authority will be established and function will be determined once restoration leaders approve a final WIP. However, the basic structure of the Authority and the system in which it will function and operate are described in the following financing plan.

Phase 1 Project Review

This project's objective is to establish an innovative financing system that results in greater scale and efficiency in support of water quality and pollution reductions defined in the Conowingo WIP. This financing system will presumably be founded on the creation of a new financing institution or authority charged with allocating and investing fiscal resources in support of water quality restoration. The project work plan was designed to: 1) assess the existing financing systems intended to support Conowingo restoration activities; 2) propose a design and implementation strategy for a new Conowingo WIP financing system; 3) develop a process for assessing the viability of establishing a new interstate financing institution; 4) identify the necessary resources to launch and sustain it; and, 5) develop an implementation plan and a proposed investment process and timeline. Work in Phase 1 was organized around five tasks:

- Task 1: Convene a project advisory committee. The first task was to convene an advisory committee comprised of financing and policy experts from across the Bay watershed. The committee has and will continue to meet on a quarterly basis to discuss substantive issues related to the financing challenge and the regional response to that challenge.[1]
- Task 2: Evaluate the existing financing capacity. Task 2 was to assess the current financing capacity and associated system as it relates to supporting the Conowingo WIP. The project team conducted a thorough assessment of the existing financing system and its capacity to absorb the restoration requirements associated with the Conowingo WIP. The purpose was

[1] A list of advisory committee members is provided in Appendix A.

not to assess the capacity of the Bay jurisdictions to implement the state WIPs. It was to assess how effectively the Bay states can/will assume the additional implementation responsibilities associated with the Conowingo WIP. An array of issues associated with implementing and financing the WIP were addressed, including the ability to facilitate and engage in interstate restoration funding/financing transactions. The project team also evaluated the capacity of institutional structures and public revenue, procurement policies, and the ability to take advantage of unique financing and private investment opportunities. Task 2 represented a core project deliverable.

- Task 3: Develop a Conowingo financing system implementation plan and strategy. The project team used the financing assessment from Task 2 as a foundation for developing a template for a Conowingo WIP financing strategy based on key financing processes and elements. These include: sufficient and sustainable revenues and sources of investment; institutional capacity necessary to allocate and invest fiscal resources appropriately; the capacity to link water quality financing with economic development and diversification; the capacity to implement market-based financing processes; the ability to develop and implement financing processes across jurisdictional boundaries; and the ability to work in partnership with private investors and businesses that are either appropriate for the financing process or directly involved with the Conowingo restoration and mitigation effort.
- Task 4: Develop a Financing Authority implementation and business plan. Perhaps the most unique element of the Conowingo WIP financing strategy will be the potential creation of a water quality infrastructure financing authority. A dedicated financing institution can potentially provide multiple benefits to the financing process. These benefits include creating investment scale by providing a mechanism for pooling and disseminating public capital. In addition, a financing authority can link public infrastructure projects to private capital by making projects "bankable" or investable.
- Task 5: Assess the potential legal barriers and opportunities associated with the proposed financing system. The complexity of the Conowingo WIP requires a thorough understanding of the legal issues associated with establishing a regional financing system as well as establishing (potentially) a regional financing authority. This analysis was led by Hogan Lovells, LLC. Potential legal issues associated with an interstate financing process were addressed. These include: inter-jurisdictional engagement and financing; establishing market-based financing processes and systems; and issues associated with linking Conowingo WIP financing processes to state WIP investments.

Background. The success of the Conowingo WIP process will be predicated on a sustainable, efficient, and effective financing system. A financing or financial system enables the exchange of fiscal resources between lenders, investors, borrowers, and other participants in the financing process. Though financing systems are relatively unique to the industries in which they operate, the goal of these systems is basically universal: to allocate and distribute financial resources to maximize return on investment.

This project offers a unique opportunity to step outside existing restoration financing processes and conduct an objective assessment of the challenges and opportunities that are associated with the Conowingo WIP. The project team engaged dozens of infrastructure financing and investment experts from across the region and the country. The project team conducted case studies on financing institutions and processes with the goal of identifying unique processes and programs that may benefit Conowingo WIP implementation and financing efforts. In addition, the project team conducted detailed assessments of existing financing processes and resources thereby identifying the strengths and weaknesses of the current system and its capacity to meet the Conowingo financing challenge. Finally, the project team analyzed the proposed Conowingo WIP itself to establish a better understanding of the resources, institutions, and processes necessary for achieving proposed restoration goals. This due diligence was the precursor for developing a proposed financing strategy.

Phase 1 was conceptually very simple: find a way to fund and finance activities, actions, and projects necessary to mitigate an additional 6 million pounds of annual nitrogen emissions and 0.26 million pounds of phosphorus. Certainly, the Conowingo WIP process is not novel in that the Bay jurisdictions have implemented similar efforts through the development of state-based WIPs. However, the unique circumstances related to the Conowingo WIP present equally unique financing challenges. Some of these challenges are unique to the Conowingo WIP; others are embedded into the broader economic and restoration system.

The Financing Challenge

Though the additional annual pollutant load reductions associated with the Conowingo Dam reservoir are a relatively small percentage of the total necessary load reductions Bay-wide, they are not insignificant. Additional pollutant load reductions require more resources in the form of land, labor, time, and revenue. The Conowingo WIP must address more restoration responsibility with limited resources. As a result, any new financing system that does not alleviate the fiscal burden of these new restoration responsibilities will not be successful. There must be a shift in how public capital is deployed to address environmental restoration and protection. As the Conowingo WIP process moves forward, public capital must be managed as investment capital, and the ecological return on those investments must be achieved through a combination of innovative funding and financing processes. Public capital should be used as a catalyst for new technologies, practices, and market mechanisms. Some specific challenges for making these new approaches a reality are highlighted below.

Interstate Implementation and Financing. The Chesapeake Bay restoration effort is founded on the obligation of the Bay states to achieve mandated pollution reduction goals. Leaders in each of the Bay states and the District of Columbia previously established financing institutions, programs, processes, regulations, and revenue streams necessary to achieve mandated pollution reductions. As a result, the Chesapeake Bay restoration effort is supported through an amalgamation of seven distinct yet interconnected financing systems. Watersheds and nutrients do not respect geopolitical boundaries, but laws and regulations do. The law is very clear: the Bay jurisdictions are primarily responsible for developing and implementing plans that address pollutions loads that have been attributed to their respective state. The current Bay restoration financing system reflects this jurisdictional responsibility.

The development of the Conowingo WIP occurred against the backdrop of these state-based regulatory and implementation systems. However, the Conowingo WIP is intended to step outside this state-based system and address the challenged posed by the additional pollutant loads collectively and collaboratively. This in turn refines the challenge: to develop a collaborative Conowingo WIP funding and financing strategy that works in concert with the existing state-based implementation and financing system that is in and of itself not designed for this type of collaborative process.

Uncertainty in Regard to Scale of the Funding Challenge. The proposed Conowingo WIP is estimated to cost approximately $53 million annually. These costs were estimated using the Chesapeake Assessment Scenario Tool (CAST), which enables users to establish customized cost profiles associated with individual best management practices (BMPs). These profiles include summarized information related to capital, operations and maintenance, and opportunity costs.

An important part of the CAST model is its capacity to convert aggregate costs to annual costs. Though annualized costs are important for comparing the scale and fiscal impact of restoration scenarios, there are two very important limitations to connecting these cost estimates to the financing process. First, annualized costs do not provide an estimate of necessary annual cashflows. This is because annualized costs are based on modeled best management practice lifespans, and these estimated lifespans have no connection to actual cashflow. Best management practices are primarily funded through grants and cost share programs or through debt financing. In either case, the cashflow requirements are based on program and financing requirements. While the useful life of a structural practice is accounted for within financing processes, it has little to do with grant funding. For example, if a stream restoration project is paid for through an implementation grant, the entire cost to the state for funding the project occurs in the first year, not over the 30-year life of the project. A cashflow estimate would put the costs entirely in year one, whereas CAST spreads the costs across the entire project lifespan.

Second, annualized costs do not necessarily provide an accurate estimation of what overall restoration costs will be for each scenario. This is because accurately estimating long-term total project costs requires a present value calculation, which in turn requires an end date. For those scenarios that rely heavily on annual practices, annual costs extend essentially in perpetuity. For those scenarios that focus on permanent practices, costs decrease overtime because funding and financing comes to an end. Therefore, total implementation costs are influenced by time horizons, something that annualized costs estimates do not take into account.

Uncertain Risk Environment. The Conowingo WIP process was launched within an environment of extreme uncertainty on the part of both the public and private sectors. This is an unprecedented and extraordinary time in our history. The world has changed and will continue to do so into the future. The proposed financing system must be designed to evolve accordingly. All financing endeavors expose all parties to risk. However, ignoring, avoiding or removing risk from the financing process also results in removing any opportunity for financial and environmental innovation and efficiency as well as the incentives for facilitating innovative economic growth and development.

Accelerated implementation. There are many challenges associated with financing and implementing best management practices at a scale necessary to address the required Conowingo WIP pollution load reductions. The limited time available to meet required restoration deadlines adds another layer of complexity to the process. Though the Conowingo

WIP is unique, mandatory deadlines are not. Any financing system must focus on moving limited amounts of capital to the most effective best management practices in a short amount of time.

The Enabling Conditions for Success.

The Conowingo WIP financing challenges are very real. While there is no definitive path forward, there are real options for creating the conditions necessary for making the challenge less burdensome. The processes, projects, and actors will shift over time. The following conditions necessary to achieve sustained long-term restoration success will remain consistent.

Establishing a Sustained Commitment to Long-term Return on Investment. The most significant Conowingo WIP financing barrier is associated with ensuring adequate public funding to support restoration investments. Unfortunately, there is no identified revenue source that will alleviate the funding obligation of the Bay states. Funding decisions will require difficult policy decisions moving forward. It is important to note, however, the positive impact that a strong upfront and sustained funding commitment can make in advancing restoration activity in both the short- and long-terms. Once state leaders signal that restoration investments will be supported through continuous and sustained public funding, private capital will flow and restoration investments can be made at scale.

There is an acute need to accelerate investment to address mandated restoration deadlines. It is beyond the scope of this project to make recommendations regarding the source of new revenue sources. This report does serve to address six primary categories of funding and the unique purposes and desired outcomes associated with each. When aggregated, and invested with a long-term strategy in mind, there are very real opportunities to significantly expand the impact of existing funding and revenues.

Maximizing Financing Efficiency and Effectiveness. Being efficient means achieving a goal or outcome in the least amount of time with the least amount of resources. Maximizing efficiency will ensure that new and existing funding and financing processes have the greatest impact on water quality. Reducing the relative costs of pollution reduction will be foundational to the entire financing process. In fact, ***creating cost efficiencies, i.e. maximizing restoration value for every dollar spent, is the equivalent of identifying and allocation new revenue streams.*** To put this in perspective, there are hundreds of millions if not billions of dollars invested annually by local, state, and federal governments in support of Chesapeake Bay water quality practices and initiatives. If program managers were able to achieve even 10 percent efficiency on those investments, there would be more than enough money to fund and finance the Conowingo WIP without raising another dollar. Saving 10 percent and moving to the Conowingo would be difficult, but it does point to the possibilities that exist to solve these financing challenges.

Moving towards efficiency in the financing process will require redefining the relationship and interaction between public and private funding and investment processes. The public sector's responsibility in the financing process is to ensure access to information in the market, regulatory compliance, permitting, and project monitoring and tracking. In addition, the public sector should focus on controlling the administrative costs associated with these essential activities. Most importantly however, the public sector should focus on ensuring that the price it is paying for environmental outcomes is as low as possible. This will require public agencies and leaders to allow the market and the private sector to focus on costs that are directly related to factors of production, such as land, labor, and materials. In other words, it is the private sector's responsibility to control the cost of planting trees, and it is the public sectors responsibility to ensure that the price it pays for the ecosystem services provided is as low as possible. This approach to efficiency and costs requires a shift in how public funding is invested in support of water quality restoration activities. It involves shifting away from grant funded projects to purchasing ecosystem services, which in turn requires entirely new institutional frameworks, procurement policies, and relationships with the private sector.

Incentivizing Innovation and Ingenuity. Long-term and sustained restoration success will require identifying new and innovative approaches to reduce nutrient pollution and equally innovative approaches to funding and financing best management practices. The adoption of market-based procurement systems creates the potential for identifying innovative restoration approaches. The challenge is that the public sector and regulated systems are not particularly effective at incentivizing innovation and ingenuity. This implies a new way of thinking in regard to funding and investment. This new approach will be central to the new restoration financing system.

The Restoration Financing System

A financing system is simply a collection of institutions and rules of engagement that permit the exchange of funds. In the private sector this includes banks, exchanges, insurance companies and investment firms. In the public sector the system includes agencies charged with allocating and distributing revenues in support of programs and capital projects. When financing systems are functioning appropriately, borrowers, lenders, and firms invest current funds, either to produce goods and services or to generate financial returns on investment. Financing systems can be local, global, and virtually anywhere in between; and while the structure of these systems is basically universal, how these systems function tends to mirror the unique nature of the industries, regions, and cultures in which they exist.

> The restoration financing system is comprised of four components: rules and regulations; revenue streams; institutions; and procurement and transaction processes.

Financing systems that support the delivery of public goods and services have unique characteristics that enable them to function effectively. This is the case in regard to those systems that support the protection of the public "commons," which are the resources that are managed for the benefit of all. The government takes on an outsized role (relative to the private sector) in the design, execution, and support of the necessary financing processes of these systems. The Chesapeake Bay and Conowingo restoration financing processes are no exception. The restoration financing system is a complex, interconnected ecosystem of actors, rules, agencies, and revenues all working with the collective purpose of restoring and protecting the Chesapeake Bay and its watershed lands. As is the case with the Bay ecosystem itself, attempts to simplify and model the financing system is fraught with uncertainty and limitation. Doing so, however, is essential to determine how best to improve system performance. Understanding how best to improve the financing system requires an understanding of the structure and components that enable it to function effectively. To that end, the project team identified four components that will serve as the basis for the Conowingo WIP financing process.

***Rules and Regulations*.** The Chesapeake Bay Total Maximum Daily Load (TMDL) has created an exceptionally complex legal and regulatory environment, and as a result, laws and regulations have a significant impact on the financing process. While literally every market is guided by rules and codes of conduct to ensure a level of trust in the system, regulations and law take on added importance within the context of the Bay restoration effort, if for no other reason than without them there is no restoration market or financing system at all.

The scale and complexity of the Bay restoration effort has resulted in complex rules and regulations regarding implementation and financing. The entire restoration effort is very prescriptive. Virtually all restoration activities are structured, including the financing processes that support the process. The Bay watershed model and the resulting WIPs literally define the entire implementation process, including the types of acceptable installation practices, where they can be installed, and the credit given for their installation. All of this is reasonable given the nature of the TMDL, but it creates significant restrictions on the financing system, and working through those restrictions is much of the purpose of this entire process.

***Sufficient, Diverse, and Sustainable Revenues*.** Financing systems ensure money is exchanged efficiently. What distinguishes restoration systems from others is the role revenue plays. In a market-based financing system, revenues and cash flows exist because of the self-compelled desire for profit and financial gain. In a regulated or commons-based financing system, revenue flows exist because governments are required to take action. This is the case for the Chesapeake Bay: without public revenue flows, restoration does not occur. Identifying and allocating sufficient and sustainable revenue streams/sources is an issue that tends to receive the greatest amount of attention in regard to the Chesapeake restoration process. The Conowingo WIP is no exception. This makes sense given the scarcity of available revenue sources.

***Procurement Systems*.** An often overlooked component of the financing process is effective procurement processes. Government procurement—government agencies soliciting the business or private sector for the goods and services they provide—represents the point where public revenues and regulations directly connect to the market and private investment. Procurement is where the entire financing system is enabled. All the innovative policies and programs designed to reduce costs, incentivize innovation, and accelerate implementation are able to function well, or not, through the procurement system. Rethinking public procurement processes is a central theme within the Conowingo WIP financing process.

***Institutions*.** The fourth primary component of a functioning restoration financing system is public institutions. Public institutions are involved in virtually every aspect of the restoration process, including assessing and allocating revenues, developing and enforcing rules and regulations, tracking and monitoring restoration activities, and guiding and coordinating the efforts of a broad set of actors and stakeholders. Institutional structures are part of the uniqueness of the Bay restoration process. For example, the Chesapeake Bay Program enables a wide variety of agencies form across the region to formally collaborate on restoration activities. However, given the state-based nature of the restoration effort, financing institutions are located and function primarily within the state financing frameworks. This in turn creates a challenge for financing the Conowingo WIP.

These four components represent the primary structure of the Chesapeake Bay restoration financing system. By extension, these four components provide the structure for the Conowingo WIP process. The Conowingo WIP, however, is in many ways unique from the state-based WIPs and the broader restoration effort. The Conowingo WIP is designed to be a collaborative, watershed-based restoration process. This implies that restoration activities, including funding and financing, will occur across jurisdictional boundaries. This will have a profound impact on the entire system, including institutional structures and their associated financing processes. Second, the entire process is being designed and implemented within a very uncertain economic and fiscal environment. Though public revenues are scarce even in the best of times, they are even more so now, and public budgets are stretched perhaps further than before. The Conowingo WIP financing system must be designed to do more with less.

Time is of the essence. The legally mandated implementation deadline is fast approaching. The process to address offsetting additional pollutant loads associated with the Conowingo Dam reservoir got a very late start. Much of the foundation for the Conowingo WIP financing system is in place, but necessary adjustments need to be made quickly.

The following financing structure and strategy provides what we believe is the most reasonable path forward for achieving the Conowingo WIP's restoration goals and responsibilities. The strategy is founded on the four key financing components—rules and regulations; revenue streams; procurement processes; and long-term financing—while at the same time creating the enabling conditions for success. The entire strategy is centered on what will be a very unique institution: the Conowingo Financing Authority.

Conowingo Financing Authority

Institutions are the organizing mechanisms within financing systems. Institutions ensure that rules, regulations, and codes of conduct are enforced, thereby enabling the participants in the financing process to trust the veracity of the system. They establish and manage the procurement processes that public agencies rely on to build, operate, and maintain infrastructure. Institutions provide structure to innovative approaches for advancing innovation and ingenuity within the public financing sector. Financing institutions create the enabling conditions that are necessary for the entire restoration process to function effectively.

The unique interstate nature of the Conowingo WIP puts added emphasis on institutional capacity within the financing system. The focal point of the Conowingo WIP financing process is expanding institutional capacity in the form of a new financing corporation called the Conowingo Financing Authority.[2] The Authority's ***mission*** will be to facilitate and execute water quality restoration financial transactions. As envisioned, it will serve to directly fund, finance, and invest in projects, practices, and technologies that advance ecosystem restoration goals, primarily in support of the Conowingo WIP. The Authority will contract directly with public, private, and nongovernmental organizations (NGOs). In addition, the Authority will have the ability to receive

[2] The term "authority" is used as a placeholder. Authorities can be defined as a specific type of financing institution. The exact corporate and institutional structure will be determined in Phase 2.

funds from any public, private, or nonprofit institution or investor and invest these funds within any of the Chesapeake Bay states/jurisdictions. Specifically, the Authority will be authorized to procure services directly through RFPs and other similar procurement mechanisms and support innovating ventures, projects, and practices through direct equity investment or through debt financing. The Authority will be structured on three primary components and processes:[3]

- A restoration fund supported through a diverse pool of capital. An infusion of multiple revenue sources will be required that go beyond what is currently allocated from public sources from federal and state governments. These revenues must be varied and diverse.
- Innovative procurement and investment processes designed to reduce risk and accelerate restoration investment activities. The Authority must have the capacity to move beyond traditional procurement processes. It must have the ability to disburse and invest any funds that it receives. The Authority must also have the capacity to track the use of those funds to ensure that investments are achieving restoration goals. Finally, it must have the capacity to move money quickly and efficiently in support of efficient restoration outcomes.
- Long-term investment through debt financing. The authority must have the capacity to finance projects in the long run through the appropriate use of equity and debt. It must be able to leverage in a variety of ways such as bonds as well as through innovative public private partnerships. The primary mechanism to raise revenues will be through the issuance of revenue bonds by the authority. The revenues to support these bonds will come from the revenue-generating practices that the authority identifies. The authority will, in turn, use the proceeds of these revenue bond issuances to invest in these practices.

Component 1: The Restoration Fund

The Authority's restoration funding and investment activities will be supported through a dedicated pool of revenue called the ***Restoration Fund*** (or the Fund). The purpose of the Fund will simply be to fund and finance restoration practices and activities in support of water quality and ecosystem restoration. The Fund will be the mechanism that receives money to support restoration practices, and it is through the Fund that investments will be made in support of those practices. It will serve as the link between private investment and public funding. The Fund will support a portfolio of projects that collectively will advance Conowingo WIP implementation in the most efficient and effective way possible. Program/project team leaders at the Authority will select projects based on overall cost efficiency, cashflow requirements, and the project's potential connection to available financing mechanisms. Projects will be selected based on availability of revenue within the Fund itself.

Table 1 summarizes the four best management practice (BMP) categories that will comprise the Fund's project portfolio: natural infrastructure; constructed filters and water quality treatment; pollution reduction and nutrient management; and agronomic/annual practices. The purpose of

[3] A fourth component—project monitoring and tracking—will be essential for many of the Authority's efficiency goals to be achieved. We differ discussion on that issue to our project partners who are responsible for designing and implementing a Conowingo WIP monitoring system.

segregating the BMPs in this way is to identify the unique funding and financing needs and characteristics, cashflow requirements, appropriateness for long-term financing, and potential risk. This provides a glimpse of how a portfolio of practices will fit into a variety of funding sources and financing tools and mechanisms.[4]

Table 1: Conowingo Financing Authority Project Portfolio

Category	Practice Types	Land Use: Urban/Rural	Annual or Structural	Funding and Financing Risk Profile	Potential Strategy
Natural Infrastructure	Forests, streams, wetlands, aquatic habitat	Primarily agriculture based, but also includes urban stream restoration	Exclusively structural, some with very long-time frame	Often very high (relatively) implementation costs. Annual cashflow requirements decrease significantly over time	Long-term financing opportunities with a finite end date
Constructed Filters and Water Quality Treatment	Primarily urban stormwater management but also includes agriculture structures such as animal waste storage	Both rural agriculture and urban stormwater	Exclusively structural	Often very high (relatively) implementation costs. Annual cashflow requirements decrease significantly over time	Long-term financing opportunities with a finite end date
Pollution Reduction and Management	Manure injection, manure management	Both urban and rural, with greater reduction opportunities associated with ag/ rural practices	Non-structural practices, often focused on behavior modification		Short-term funding with limited financing opportunities and no end date
Agronomic Practices	Cover crops, conservation tillage	Primarily/exclusively agriculture based.	Non-structural practices	Very low (relatively) annual cashflow requirements. Very uncertain future funding requirement: projects must be funded in perpetuity. As a result, funding and implementation risk can increase significantly over time	Short-term funding with limited financing opportunities and no end date

[4] The financing project team has begun recategorizing the proposed Conowingo WIP practices into this table, including modelled timelines. This process will be completed once the WIP itself has been officially accepted into the system.

It is hard to overstate the importance of this part of the portfolio development process. Establishing a thorough understanding of costs, cashflow needs, and financing risk profile is essential for any new business venture. It is even more so in regard to the Conowingo WIP due to the scarcity of revenue and fiscal resources. The project portfolio enables program managers to assess the key needs and issues related to the funding and financing process, including:

- Minimize and balance cashflows. Estimating annualized project costs is important for understanding the potential scale of the restoration effort, but it does not provide an accurate estimate of the annual cashflow needs required to implement the WIP. This is true even if cost estimates are completely accurate. Cashflow analysis is an essential step towards understanding what is possible, rather than theoretically possible.
- Minimizing restoration costs. The portfolio approach provides a much more accurate understanding of the total restoration costs. Annualized costs are important for planning purposes, but the primary cost-related priority should be to reduce total restoration costs and adapting to reduce those costs as much as possible. The portfolio financing approach provides the process and template for understanding how best to reduce total project costs over time.
- Understanding and adjusting for risk. The portfolio approach provides and effective process for understanding the inherent risks associated with each project (e.g., performance risk and funding risk) and how they impact the overall portfolio risk. A project portfolio needs to balance risk over time. This process will help identify and track performance.

The financial reasons for a balanced approach to developing the BMP portfolio—balancing cashflow and risk specifically—mirrors the ecological reasons for achieving the same type of balance. No type of practice is better than the others. A cursory analysis of the proposed Conowingo WIP shows that the portfolio of practices necessary for achieving a restored watershed mirrors the financial reasons for achieving the same balance.

Revenues supporting the Fund's project funding and investments. The Fund will receive revenues from public, private and philanthropic sources. While the scale of these revenues will have the most immediate and lasting impact on the Fund's activities and investments, the sources of these revenues will also impact how the Fund functions over time.

The Chesapeake Bay restoration effort is supported and defined by a complex, interconnected labyrinth of revenue flows that cross multiple jurisdictions, institutions, companies, agencies, practices and projects. Every year, hundreds of millions if not billions of dollars flow through the restoration financing system to support a myriad of restoration activities. Some revenues are embedded or ingrained within the financing system—either through the normal course of business, regulatory compliance, or both—while others are targeted to a variety of on-the-ground activities. The project team focused on four revenue sources that can have the most immediate and lasting impact on the Conowingo WIP and the Conowingo Financing Authority.

- *Voluntary public revenues* which support unregulated projects, activities, and programs.[5] These revenues can be generated at the local, state, or federal level.
- *Private capital* in the form of upfront project investment. These are revenue flows that originate from private investors in support of restoration infrastructure.
- *Philanthropic-based revenues* designed to reduce market failure.
- *Consumer-based revenues*, which are revenue flows that indirectly support restoration activities through consumer markets.

Each has an essential role to play in the financing process, and each is linked directly or indirectly to the others. The most important revenue source for the near future will be voluntary public revenues generated and appropriated by Bay jurisdictions in support of the Conowingo WIP.

The entire Conowingo WIP and the resulting portfolio of projects and practices it will ultimately contain is ***unregulated***. The entire responsibility of meeting pollution load reductions falls to the Bay jurisdictions. The Conowingo WIP was developed well after the other jurisdictional-based WIPs were developed. Pollution reductions attributed to regulated activities such as wastewater and stormwater treatment have already been accounted for. Without new regulations or further restrictions on these currently regulated activities, the Conowingo WIP must rely exclusively on voluntary public revenues. While those revenues may come from any level of government, including the federal government, most of the funding will come from the states themselves.

It is important to understand the role and function of state revenues to the Fund's process given that the primary source of funding will be voluntary state revenues. State-led commitment to fund restoration activities sends a signal through the entire restoration process that it is real and moving forward. State-led investments or the guarantee of investments is catalytic to the process. Because these are public revenues, mission is paramount. Though efficiency can be improved, the risk profile associated with these funds is low to moderate. These monies must result in credited pollution reductions. Lastly, these investments, whether local, state, or federal in their origins, have significant political strings attached. Public money is political, and this political risk must be accounted for in the investment process.

Public revenue or the commitment of public funding is catalytic to the financing process. Once committed, however, ***private capital investment*** becomes paramount. Private capital exists primarily (though not exclusively) to generate financial return. Private revenue can be deployed and targeted to restoration efforts once the public funding commitment has been made. In addition, private capital is invested upfront, which means that the institutions making these investments take on the various forms of associated investment risks. This is how these firms generate a financial return on investments. Private capital's primary role in the restoration financing process is to assume risk, accelerate implementation, and achieve permanent restoration and pollution reductions in the most efficient and cost-effective manner possible.

[5] To be clear, the TMDL requires pollution reductions to be achieved, so in that sense, the entire process is regulated. We refer here to those activities that are, or are not, regulated.

It is this connection and interaction between public revenue and private capital that will serve as the foundation of the Fund's investment activities. Philanthropic revenue will play an essential role in the process. The Chesapeake Bay restoration effort could best be described as a highly prescriptive, risk-averse process. Innovation and ingenuity in the restoration process, including financial innovation, are not incentivized directly. ***Philanthropic revenue*** plays a critical role in identifying and supporting new ideas, technologies, practices, policies, and funding/ financing schemes, all of which are critical to create a truly adaptive restoration finance process. Philanthropic investments in support of innovation can have an outsized impact on the process and will be essential to advance many of the innovations through the Fund's processes.

Consumer-based revenue may be one of the most important sources of long-term revenue for supporting the Fund specifically and the broader restoration effort more generally. The need to protect natural resources that are in the "public commons" exists because the broader economy itself is unable to do so. The need for public revenues decreases the more that consumers and businesses incorporate water quality and ecosystem protection into their daily lives. It is difficult to develop policies that effectively change consumer behavior, but there are examples of where this has and is working: oyster restoration; sustainable energy production; organic and sustainable farming; and open space protection and conservation. Consumer-based activities that drive these markets generate many millions of dollars per year in economic activity, which in turn results in water quality and ecosystem restoration, all without any regulatory requirements. Regulations have often pushed these markets along, but each exists and functions in and of itself. Creating and leveraging these consumer markets will be essential for sustaining the long-term restoration financing effort. An explicit goal of the Fund will be to invest in these innovative ideas and technologies into the future. Establishing consumer-based revenue sources will have very little impact on the Fund's cashflows but will ultimately reduce the need for public revenues and investment. This is central to the Authority's and the Fund's purpose and role.[6]

These four revenue sources: voluntary public revenues, private investment capital, philanthropic revenue, and consumer-based revenues are central to the mission and function of the Conowingo Financing Authority and the Restoration Fund. Ensuring that each revenue source work in concert will require an innovative and efficient procurement system.

Component 2: Innovative Procurement and Investment Processes

Important components of the Financing Authority will be its innovative procurement policies and processes. Its nonprofit and quasi-governmental corporate structure will be used to link the transparency and oversight policies inherent to public sector procurement systems with the speed, innovation and efficiency of the private sector. This will result in efficient and effective accelerated restoration activities.

Public sector organizations and agencies are essentially owned and run by the government.

[6] When these consumer-based markets are functioning well, the revenues supporting conservation and restoration will be embedded within the broader economy; there would/will be no need to direct revenues outside that system.

Everything that they do must be transparent and in support of the stated mission, in this case the restoration and protection of the Conowingo and Chesapeake Bay watersheds. It is important that the process be completely transparent with information in regard to bidding and access to the process be clear and open. In addition, there must be an equal opportunity provided by the government to each company or entity wishing to do business with them that meets the requirements.[7] While transparency and openness in the procurement process is essential, public procurement systems are not designed to address the risks and opportunities necessary for creating a more efficient, innovative implementation and financing system. That will require incorporating the benefits of private procurement processes.

Private organizations function much differently in that they draw revenue from sales, investments, and other business-related areas. Their money is more centralized, which speeds the procurement process along. Privately owned businesses can seek out different suppliers to find the best deal because they have more time and resources to do so. Their focus is more on saving the most money and getting things done quickly, which is exactly what the Conowingo WIP implementation process will need to succeed.

The Financing Authority will occupy a middle ground between public and private procurement processes as a nonprofit or nongovernmental organization. Certainly nonprofits must comply with transparency and procurement requirements inherent to the public agencies that support their missions. The Authority, like other nonprofits, will have more flexibility in regard to establishing procurement policies and procedures due to the diverse nature of its anticipated funding support. This provides opportunities to create innovation within the restoration financing process. The Authority will have the capacity to balance efficiency with project effectiveness in support of the public trust.

Achieving a balance between efficiency and effectiveness (restoration outcomes) requires enabling essential functions and capacities. First, the Authority must be able to ***purchase ecosystem services (PES) as they are delivered***. This is important for several reasons. PES procurement processes enable public institutions to transfer much of the implementation risk associated with restoration practices to the private sector. PES systems require private sector firms to use private capital to design, implement, and operate and maintain restoration practices. This provides certainty in regard to long-term project costs and performance. This is a significant departure from traditional request-for-proposal and public procurement systems.

The Authority must also have the ***capacity NOT to invest*** or fund practices that do not meet funding and financing goals and priorities. Public funding often must be expended on an annual basis or those funds may be pulled back. Even forward-thinking programs that do their best to utilize market and performance-based procurement processes are often limited in their impact by the need to ultimately spend out public revenue. In the private sector, services are procured *only* if they meet the needs of the firm. If they do not, then no contract is issued. Firms have the advantage of waiting for the right contract at the right time. The Authority must have the same

[7] See: https://www.concordnow.com/blog/private-vs-public-sector-procurement-practices/

flexibility imbedded into its procurement policies and processes.

The Authority must also have the capacity to ***pay for outcomes*** rather than outputs. In other words, procurement processes must have the capacity to balance fiscal efficiency with program effectiveness. In fact, the ability to balance and maximize efficiency and effectiveness within the procurement process by focusing on restoration outcomes will be fundamental to the success of the Conowingo WIP. Efficiency and effectiveness are often used interchangeably, but they mean very different things. As we defined earlier, efficiency refers to achieving a goal with the least amount of time, money, and labor. In other words, minimizing waste. As it relates to the Conowingo WIP, efficiency primarily means achieving pollution reduction goals at the least possible cost. Effectiveness on the other hand, can best be described as doing the right thing. In other words, the best management practices that are supported in the WIP actually achieve desired outcomes. When efficiency and outcomes or effectiveness are in balance, restoration success will be achieved.

The Authority must establish procurement processes that have the capacity to directly ***invest in*** *innovation and ingenuity* in the restoration process. As we've discussed, the Bay restoration effort in general is very prescriptive and risk averse; and while the regulatory reasons for this prescriptive approach are clear, equally clear is the need to identify new technologies, financing mechanisms, and overall restoration approaches that are not officially part of the Bay restoration processes and systems. A very key and impactful role for the Authority moving forward will be to directly incentivize potential innovations. This will often require evaluating and taking risks that public institutions are not designed for nor equipped to address.

It could be argued that investing in innovation and ingenuity is at the opposite end of the spectrum from paying for known ***modeled*** outcomes. This is because paying for innovative new approaches is risky and that risk can't be removed through the procurement process. However, in the long-term, financing innovation will improve performance and restoration outcomes, so the two investment approaches are actually interconnected. The capacity to balance risk with certainty defines one of the most important distinctions between public funding and private investment. Investors and capital managers in the private sector understand intuitively how to assess risk, minimize it as much as possible, and then make investments that account for risk where it exists. In fact, assuming and controlling risk is what drives profits (and explains why a 30 year mortgage has a higher interest rate than a 15 year mortgage). By identifying particular revenue sources as appropriate for taking the risks associated with advancing innovative new restoration approaches (philanthropic revenue, for example) the Authority will be able to create a restoration portfolio that is efficient, effective, and innovative; and that best describes the path forward to address this very difficult restoration challenge.

Another important priority for the Authority will be to reduce the administrative costs associated with the funding and financing processes. Public and nonprofit grant making agencies can be extremely bureaucratic and administratively burdensome, especially when engaging the private sector and the marketplace. This is specifically related to the procurement policies and rules that they must follow. As a result, the administrative costs to both the grantee and grantor can be significant and a major barrier to efficiency. The Authority's procurement policies will remove these administrative barriers without compromising the transparency and objectivity that are essential to the mission of public financing. Which brings us to the final point on procurement.

Transparency and objectivity are fundamental to public financing processes, as maximum public benefit is only achievable when expectations, disclosures, and performance metrics are clear and equitable. The Authority's procurement policies will be structured to ensure openness, independent of political ties as much as possible, guided by well-defined standards for implementation and performance so as to provide public and private entities with clear expectations for involvement. This is especially important as it relates to administrative costs. The administrative costs associated with public funding, especially grant funding programs, are often embedded and hidden within public budgeting and accounting processes. It can be difficult to understand how administratively burdensome these programs actually are. The procurement processes of the Financing Authority will be made transparent to ensure efficiency while maintaining integrity in the process.

Component 3: Long-Term Financing and Leveraging

The Financing Authority will require the capacity and the authority to facilitate debt transactions—directly or indirectly—in support of restoration projects and practices throughout the Bay watershed. The appropriate use of debt will be essential to keep annual implementation costs low over time. The Authority will focus on three types of leveraging tools and processes: bond financing; state revolving loan fund financing; and, mitigation banking financing.

- *Bond financing.* The use of municipal or publicly issued bonds is ubiquitous in regard to infrastructure financing. Borrowing is essential for large-scale infrastructure projects, and the use of tax-free bonds provides local and state governments with relatively inexpensive capital with long-term payback time horizons. Though the Authority will be incorporated in a single jurisdiction, it will require the authority and the capacity to issue debt in support of water quality projects in all of the Bay jurisdictions. The capacity to issue traditional tax-free revenue bonds will be important for many of the large-scale structural practices and projects in the Authority's portfolio, but it will be only one of several different options for leveraging private capital. In fact, issuing bonds should always be done as somewhat of a last resort. The Authority's bond financing capacity will also extend to innovative new financing mechanisms such as green bonds, resilience bonds, and grant-anticipation bonds.
- *State revolving loan funds.* The Clean Water State Revolving Fund (SRF) has been a very important financing tool associated with the Chesapeake Bay restoration effort for decades, especially for providing low-interest loans in support of more advanced wastewater treatment systems. Supporting point source upgrades will continue to be an important function of the SRF programs. The SRF is also becoming an increasingly important tool for financing nonpoint source pollution reductions. The Authority will work directly with SRF programs within the Bay to link SRF products and processes such as subsidized loans, and debt guarantees to projects in its portfolio.
- *Public-Private Partnerships.* The Authority's primary financing mechanism will be the application of strategic public-private partnerships (P3s). P3s can take a variety of forms and functions depending on the public sector needs. For the Fund, however, these partnerships will be focused on infusing private capital in support of restoration practices. This relationship between the guarantee of public funding in support of private upfront

investment is critical to addressing virtually all of the restoration financing challenges associated with the Conowingo WIP. Private capital generated through P3 contracts will accelerate investment and implementation, which is essential given the truncated timelines. Utilizing upfront private capital through PES financing mechanisms will provide the Authority and, by extension, the Bay jurisdictions with a buffer in regard to funding the investments (i.e. paying back investments). This funding "grace period" will be essential for Bay jurisdictions as they navigate the current difficult economic circumstances.

Long-term financing is exclusive to structural or long-term practices. It can only be a part of a more complex and comprehensive funding and financing system. But, the capacity of financing to level cashflows, balance risk, and generate permanent restoration projects on the ground is absolutely critical to ensuring successful implementation of the WIP.

Potential Corporate and Governance Structure

The Conowingo Financing Authority is anticipated to be an independent corporation with a mission to facilitate investment in water quality and ecosystem restoration projects. The Conowingo Financing Authority is intended to be an independent publicly chartered institution that will work in direct partnership with state leaders from across the watershed. Though the Authority will be domiciled in a single state (most likely Pennsylvania or possibly Maryland) it will be enabled to finance projects anywhere within the Chesapeake Bay watershed. Project partner Hogan Lovells, LLC, worked directly with the project team to create draft governing documents that will be necessary for launching this new venture; these include:

- Articles of Incorporation;
- Bylaws; and
- A proposed Conflict of Interest policy.

These draft documents are included in Appendix B of this report. How the corporation is ultimately structured and governed will be determined through discussions with executives in each state. However, our intention in drafting these documents at the beginning of this process was to provide an advanced starting point for those discussions. The project team believes that the most effective way to create an efficient, effective financing institution is to launch a large-scale financing demonstration and pilot project. A proposed strategy for launching a large-scale Conowingo WIP strategy is the focus of the next section.

Key Issues and Questions

A number of key questions and recommendations related to the Conowingo Financing Authority for financing the Conowingo WIP came up through the advisory committee and interview process.

How will the Authority collaborate and communicate with multiple partners? There is no single institution or process capable of implementing the Conowingo WIP. Partnerships, collaboration, and cooperation are the cornerstones of the Bay restoration effort and will be essential for addressing the challenges of the Conowingo WIP. The Authority will need to work in coordination with the extensive network of established leaders, institutions, and programs. The Authority must foster diverse partnerships and work collaboratively to develop solutions in line with the Conowingo WIP. This means that the Conowingo WIP will be implemented within the context of the broader Chesapeake Bay restoration effort. The Authority must be developed to ensure that interaction, communication, and engagement between the Authority and the myriad of experts, leaders, and partners is effective and integral to its operations. The Authority's role in the financing and implementation process will focus on those processes and activities that are directly associated with on-the-ground implementation. Its role will not be to replace or replicate the work of state and local agencies related to key public sector functions such as: regulatory or permit enforcement, monitoring, scientific evaluation, and/or policy development. The Authority will work directly with state agencies to expand capacity in each of these areas.

The project team's task was not to fix or change existing financing systems but was to specifically and myopically focus on the Conowingo WIP. However, the Conowingo WIP implementation and financing process offers the entire restoration community an opportunity to learn, adapt, and evolve their own restoration financing systems. The Authority specifically will serve as an incubator of sorts, thereby identifying new technologies and financing options capable of improving restoration processes everywhere.

How will water quality trading and credit financing work through the Authority? The project team does not believe that water quality trading will play a role in the Conowingo WIP in general or the Authority's investments more specifically. There are no regulated activities associated with the WIP. Any pollution reductions or credit for those reductions that are generated through regulated activities such as stormwater and wastewater management have already been accounted for in the state WIPs. The Conowingo WIP, which from a Chesapeake Bay restoration perspective functions like a new Bay State, has no buyers in a water quality trading system. While there is the possibility that one WIP can trade with another WIP in the future, this is not a near-term opportunity or concern.

Will the Authority invest in multiple ecosystem services such as climate change and carbon reductions? The Authority will invest in multiple ecosystem services, including those related to climate mitigation and adaptation. However, the Authority's participation in these markets will remain targeted on reducing the costs associated with water quality restoration. If there is an opportunity to fund best management practices through climate-based investments, then the Authority will willingly make those investments. This is directly related to the previous question. Though water quality trading at scale may never exist throughout the watershed, credit-based financing is the mechanism by which multiple ecosystem service financing takes place. The Authority will base many of its transactions on ecosystem service credits.

Will the Authority collect taxes and fees? It is important to be as clear about what the Authority will *not* do as what the Authority will do. The Authority will not collect taxes (there are no legal options for establishing a regional tax) nor will it directly assess and collect fees. All of the revenues, public and private, that support the Authority's restoration activities will be allocated to the Authority at the discretion of the revenue generating institutions. State-based funding supporting the Authority's investments will be forwarded to the Authority at each state's discretion. The Authority will not serve as a regulatory agency although it will serve to inform public policy and the debate and conversations associated with restoration financing.

Conowingo WIP Launch Strategy

The Center for Global Sustainability is preparing to implement Phase 2 of the Conowingo WIP financing project. The project team will implement a launch strategy within the next six months in direct coordination with the Chesapeake Bay Program Office, state leaders, and its own expert advisory committee. The goal will be to bring water quality investments to scale in the most efficient and innovative way possible. The final project launch strategy is dependent on having a Conowingo Watershed Implementation Plan in place and approved by the appropriate state and federal leadership. In general terms, our effort to establish the pilot project will include:

- Identifying institutional partners. The project team recommends establishing a new financing institution. However, implementing a demonstration project in partnership with an existing institutional partner(s) will be the most effective and conservative short-term approach.
- Establishing procurement processes designed to identify and engage investment partners. Identifying and engaging private investors and project managers is a priority, especially as it relates to accelerating investment. The demonstration project will provide a process for testing procurement process to determine the potential impact moving forward.
- Determining the geographic and investment scale of the pilot/demonstration project. Establishing both the geographic and investment scale of the pilot project will require an approved WIP; however, the project team will develop a series of options that can be modified to allow quick implementation once the WIP is approved.
- Establishing adaptive management processes. The purpose of the pilot project is to both demonstrate proof of concept of the financing plan itself and to develop a system for applying lessons learned moving forward. The project team will work with its expert advisors and the restoration community to evaluate and apply the successful financing elements that result from the pilot.
- Developing a project portfolio. The structure of the pilot project and the process for implementing that project will be determined by the structure of the final Conowingo WIP. The project team's research in Phase 1 suggests that implementing a demonstration project would effectively address some of the key challenges facing the restoration community, including accelerating implementation through private investment. The project team has interviewed dozens of private sector project implementers and investors over the past year. Most interviewed had a specific capacity and expertise in public sector financing, public/ private partnerships, and sustainable investment, with a specific focus on natural resource and water quality restoration. What became clear is that there are hundreds of millions of dollars in restoration capital available for investment. When the public sector makes the commitment to move forward and establishes the necessary mechanisms to procure ecosystem services, significant levels of investment are possible and very likely to occur.

A pilot/demonstration project provides an opportunity for moving forward at scale. It can also be structured in a way to take advantage of PES procurement processes, which would in turn significantly reduce cashflow needs in the short-term. This will be extremely important as the Bay jurisdictions navigate what will certainly be a very difficult economic and budget environment moving forward. Reducing short-term cashflow requirements will enable state leaders to accelerate economic growth and development by speeding up implementation while also developing long-term revenue plans to address the Conowingo WIP in its entirety. A pilot project in the scale of $50-$100 million dollars is doable and manageable within both the public and private sectors.

Conclusion

Implementing and financing the Conowingo WIP creates a significant challenge for public leaders throughout the Bay watershed. This is especially true given the economic environment and challenges that the next few years will bring. The financing strategy described in this report is not intended to gloss over these challenges but to ensure public leaders that every dollar of public capital invested in the WIP will have the most significant restoration impact. The Conowingo Financing Authority will serve as a unique organizing institution with the capacity to facilitate financial transactions in a variety of innovative and efficient ways. This plan provides what the project team believes to be the template for implementation success.

Appendix 1: Advisory Committee Members

The complexity and scale of both developing and executing the Conowingo WIP financing system and strategy required the engagement of experts from across an array of disciplines. To that end this project has been implemented under the guidance of an advisory committee comprised of industry experts from across multiple disciplines and policy issues.

Managing the advisory committee is an ongoing process, which will evolve over time. As we anticipated, representation on the committee was relatively fluid. Initial Advisory Committee members were joined by new experts as the process/project moved forward. The project team convened the committee on a regular basis both in person and electronically as appropriate. Advisory Committee members included:

- Bryan Van Wye, Washington D.C. Government, Energy and Environment (*former member)*
- Mark Bryer, The Nature Conservancy
- Gabe Cohee, Maryland Department of Natural Resources
- Travis Cooke, RES
- Jeff Corbin, Restoration Systems
- Jens H. Damgaard, Eckert Seamans
- Nick Dilks and Kyle Graham, Eco Investment Partners
- Joseph Gill, Prince George's County
- George Kelly, Earth and Water Strategies
- Sam Merill, Northgate Environmental Management
- Eric Michelsen, Anne Arundel County Government, Maryland
- Timothy Male, Environmental Policy Innovation Center
- Jake Reilly, National Fish and Wildlife Foundation
- Mindy Selman, USDA Office of Energy and Environmental Policy
- Kurt Stevenson, Virginia Tech

The advisory committee was vital to our work, especially at the beginning of the project. In addition, it is clear that the committee will be even more important as we move into the second phase of our work. The first year of the project focused on due diligence, information gathering, and assessment. The focus in year two will shift to crafting specific programmatic and policy recommendations, which in turn will require peer and expert review and feedback. To that end, we feel we have a tested and well-established peer review process in place.

<u>Targeted conversations with national financing experts</u>. The project team conducted direct interviews with the following institutions for the purpose of gaining a better understanding of governance, policy, innovation, investments, leveraging, durability, and implementation:

- New Jersey Infrastructure Bank
- Illinois Finance Authority
- Rhode Island Infrastructure Bank
- Indiana Finance Authority
- Iowa Finance Authority
- Wisconsin Finance Authority

- Pennsylvania Infrastructure Investment Authority (PENNVEST)
- Morgan Stanley Investment Banking Company
- Susquehanna River Basin Commission
- Delaware River Basin Commission
- Standards and Poor Global Ratings
- The Blue Water Fund
- The Delaware River Fund
- The Nature Conservancy

The conversations with these organizations provided invaluable insight into the potential role and structure of financing systems and institutions.

Case studies. In addition to the one-on-one conversations with experts from around the country, we developed a series of case studies, which focused on examples of successful financing systems and processes. Many of these case studies will have a direct impact on the finance team's recommendations moving forward. Case studies include:

- Philadelphia/EPA Green Infrastructure Partnership
- Public Finance Authority (PFA [incorporated in Wisconsin])
- Port Authority of New York and New Jersey (PANYNJ)
- Philadelphia/EPA Green Infrastructure Partnership
- The Great Lakes Compact (GLC)
- Iowa Finance Authority
- New Jersey Infrastructure Bank
- Rhode Island Infrastructure Bank
- Illinois Finance Authority

Appendix B: Draft Articles of incorporation, Bylaws, and Conflict of Interest

ARTICLES OF INCORPORATION

OF

CONOWINGO FINANCE CORPORATION

I, _________________________, whose address is _____________________, being at least 18 years of age, am hereby serving as incorporator of a nonstock corporation and adopt the following Articles of Incorporation for such corporation pursuant to the Corporations and Associations Article of the Annotated Code of __________.

ARTICLE I

The name of the Corporation is Conowingo Finance Corporation (hereinafter called the "Corporation").

ARTICLE II

The period of duration of the Corporation is perpetual.

ARTICLE III

The purpose for which the Corporation is organized is to operate exclusively for charitable, educational, scientific, and literary purposes, within the meaning of Section 501(c)(3) of the Internal Revenue Code of 1986 (the "Code") (or corresponding provisions of any subsequent federal tax laws); and within such limits, to serve as an interstate financing authority responsible for promoting the investment in pollution-reducing solutions that lower measured nutrient levels in the Chesapeake Bay; and consistent with the above, to exercise all powers available to nonstock corporations organized pursuant to the Corporations and Associations Article of the Annotated Code of ____________.

ARTICLE IV

The Corporation shall have no authority to issue capital stock. The Corporation shall have no members.

ARTICLE V

The affairs of the Corporation shall be managed by its Board of Directors. The number of directors may be increased or decreased in the manner provided in the Bylaws of the Corporation but shall never be less than three (3). The directors shall be elected by the affirmative vote of a majority of the then members of the Board of Directors in the manner fixed in the Bylaws.

The number of directors constituting the initial Board of Directors shall be three (3). The names of the persons who shall serve as the initial members of the Board of Directors until the first annual meeting or until their successors are elected and qualified are: ________________, ________________, and ________________.

ARTICLE VI

Except as provided in these Articles, the internal affairs of the Corporation shall be regulated and determined as provided in the Bylaws.

ARTICLE VII

In all events and under all circumstances, and notwithstanding merger, consolidation, reorganization, termination, dissolution, or winding up of the Corporation, voluntary or involuntary, or by the operation of law, or upon amendment of the Articles of the Corporation, --

(a) The Corporation shall not have or exercise any power or authority either expressly, by interpretation, or by operation of law, nor shall it directly or indirectly engage in any activity that would prevent it from qualifying (and continuing to qualify) as a corporation described in Section 501(c)(3) of the Code (or corresponding provisions of any subsequent federal tax laws).

(b) No part of the assets or net earnings of the Corporation shall inure to the benefit of or be distributable to its incorporator, directors, officers or other private persons having a personal or private interest in the Corporation, except that the Corporation shall be authorized and empowered to pay reasonable compensation for services actually rendered and to make reimbursement in reasonable amounts for expenses actually incurred in carrying out the purposes set forth in ARTICLE III hereof.

(c) No substantial part of the activities of the Corporation shall consist of the carrying on of propaganda, or of otherwise attempting to influence legislation, unless Section 501(h) of the Code (or corresponding provisions of any subsequent federal tax laws), shall apply to the Corporation, in which case the Corporation shall not normally make lobbying or grass roots expenditures in excess of the amounts therein specified. The Corporation shall not in any manner or to any extent participate in, or intervene in (including the publishing or distributing of statements), any political campaign on behalf of (or in opposition to) any candidate for public office; nor shall it engage in any “prohibited transaction” as defined in Section 503(b) of the Code (or corresponding provisions of any subsequent federal tax laws).

(d) Neither the whole, or any part or portion, of the assets or net earnings of the Corporation shall be used, nor shall the Corporation ever be operated, for objects or purposes other than those set forth in ARTICLE III hereof.

(e) In the event that the Corporation is a private foundation within the meaning of Section 509(a) of the Code (or corresponding provisions of any subsequent federal tax laws),

(1) The Corporation shall distribute its income for each taxable year at such time and in such manner as not to subject it to the tax on undistributed income imposed by Section 4942 of the Code (or corresponding provisions of any subsequent federal tax laws);

(2) The Corporation shall not engage in any act of self-dealing as defined in Section 4941(d) of the Code (or corresponding provisions of any subsequent federal tax laws);

(3) The Corporation shall not retain any excess business holdings as defined in Section 4943(c) of the Code (or corresponding provisions of any subsequent federal tax laws);

(4) The Corporation shall not make any investments in such manner as to subject it to tax under Section 4944 of the Code (or corresponding provisions of any subsequent federal tax laws); and

(5) The Corporation shall not make any taxable expenditures that would subject it to tax under Section 4945(d) of the Code (or corresponding provisions of any subsequent federal tax laws).

(f) Upon dissolution of the Corporation, all of its assets and property of every nature and description remaining after the payment of all liabilities and obligations of the Corporation (but not including assets held by the Corporation upon condition requiring return, transfer or conveyance, which condition occurs by reason of the dissolution) shall be paid over and transferred to one or more organizations which engage in activities substantially similar to those of the Corporation and which are then qualified for exemption from federal income taxes as organizations described in Section 501(c)(3) of the Code (or corresponding provisions of any subsequent federal tax laws).

ARTICLE VIII

The address, including street and number, of the Corporation's initial registered office in _________ is _______________, _______________. The Corporation's initial registered agent at such address is _________________________.

ARTICLE IX

(a) To the maximum extent provided by _________ law, the Corporation shall fully indemnify and advance expenses to any person made, or threatened to be made, a party to an action, suit or proceeding (whether civil, criminal, administrative or investigative) by reason of the fact that such person, or such person's testator or intestate, is or was a director or officer of the Corporation against all expenses (including attorneys' fees), judgments, fines and amounts paid or to be paid in settlement incurred in connection with such action, suit or proceeding. The Corporation may indemnify and may advance expenses to any present or former employee or agent of the Corporation or any other person who serves or served any other enterprise at the request of the Corporation, if and to the extent indemnification is authorized and determined to be appropriate, in each case in accordance with applicable law, by the Board of Directors or special legal counsel appointed by the Board of Directors.

(b) Any volunteer, including an officer, director, or any other person, who performs services for the Corporation without direct or indirect compensation, shall not be liable in damages beyond the limits of any personal insurance the volunteer may have in any suit that arises from the volunteer's actions or omissions in connection with any services performed for the Corporation, unless the actions or omissions constitute gross negligence, reckless, willful or wanton misconduct or intentionally tortious conduct.

(c) This article does not affect, and may not be construed as affecting, any immunities from or limitations on civil liability or any defenses established by any provision of the Annotated Code of ________ or available at common law, to which a volunteer may be entitled.

ARTICLE X

To the fullest extent permitted by the laws of the State of __________, no officer shall be liable to the Corporation for money damages.

IN WITNESS WHEREOF, the undersigned incorporator of ______________________, who executed the foregoing Articles of Incorporation, hereby acknowledges the same to be his act and further acknowledges that, to the best of his knowledge, information and belief, the matters and facts set forth therein are true in all material respects under penalties of perjury.

Dated the ____ day of ________ ____.

____

(Typed Name)_______________________

Registered Agent:

I hereby consent to my designation in this

document as resident agent for this Corporation.

____

Name

Address

PROPOSED **DRAFT** BYLAWS OF CONOWINGO FINANCE CORPORATION

ARTICLE I

Offices

Section 1. Principal Office. The principal office of Conowingo Finance Corporation (hereinafter called the "Corporation") shall be located in the State of _______.

Section 2. Other Offices. The Corporation may also have offices at such other places, both within and without the State of _______, as the Board of Directors may from time to time determine or the business of the Corporation may require.

ARTICLE II

Members

The Corporation shall have no members.

ARTICLE III

Board of Directors

Section 1. Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors, which may exercise all such powers of the Corporation and do all such lawful acts and things as are not prohibited by statute or by the Articles of Incorporation or these Bylaws, exclusively for charitable, educational, scientific, and literary purposes, within the meaning of Section 501(c)(3) of the Internal Revenue Code of 1986 (the “Code”) (or corresponding provisions of any subsequent federal tax laws); and within such limits, to serve as an interstate financing authority responsible for promoting the investment in pollution-reducing solutions that lower measured nutrient levels in the Chesapeake Bay; and consistent with the above, to exercise all powers available to nonstock corporations organized pursuant to the Corporations and Associations Article of the Annotated Code of _______.

Section 2. Number and Election. The number of Directors which shall constitute the entire Board of Directors shall be the number established from time to time by resolution of the Board of Directors which number shall be no less than three (3) and no more than ___ ( ). No decrease in the number of Directors shall have the effect of shortening the term of any incumbent Director. The Directors shall be elected (each for a two-year term) by the affirmative vote of a majority of the then members of the Board of Directors at the annual meeting of the Board of Directors, except as provided in Section 3 hereof, and each Director elected shall hold office until his/her successor is elected and qualified or until his/her earlier resignation or removal. Directors need not be residents of the State of ____________.

Section 3. Vacancies. Any vacancy occurring on the Board of Directors (including a vacancy resulting from an increase in the number of Directors) may be filled by the affirmative vote of a majority of the then members of the Board of Directors, although less than a quorum, or by a sole remaining Director, and each Director so elected shall hold office until his/her successor is elected and qualified or his/her earlier resignation or removal.

Section 4. Annual Meeting. A regular annual meeting of the Board of Directors shall be held without notice other than this Bylaw at ______ [a.m.][p.m.] on the first _________ following the first Sunday in ____ in each year or, if such date shall be a legal holiday, on the next succeeding business day at the same time, at the principal office of the Corporation, or on such other date or at such other time or place as shall be determined by the Board of Directors and designated in the notice of the meeting.

Section 5. Regular Meetings. The Board of Directors may provide by resolution the date, time and place for the holding of regular meetings, other than the annual meeting of the Board of Directors, without other notice than such resolution.

Section 6. Special Meetings. Special meetings of the Board of Directors may be called by the Chairperson upon ten days notice to each Director, except as provided in Article III, Section 10 hereof with respect to telephone meetings, and a special meeting shall be called by the Secretary on like notice upon the written request of two-fifths of the number of Directors then in office. Such meeting shall be held on such date and at such time and place as shall be designated in the notice of the meeting by the person or persons calling the meeting.

Section 7. Notice; Waiver of Notice. Whenever any notice of a meeting of the Board of Directors is required to be given under provisions of the Articles of Incorporation or these Bylaws, (a) such notice shall be given either personally, by telephone, by mail or by telegram, addressed to the Director at his or her address as it appears on the records of the Corporation and, unless otherwise provided in these Bylaws, at least ten (10) days before the date designated for such meeting, or (b) a waiver thereof in writing, signed by the person or persons entitled to such notice and filed with the records of the meeting, whether before or after the holding thereof, shall be equivalent to the giving of such notice. Notice shall be deemed given at the time when the same is personally delivered, deposited in the United States mail, with postage thereon prepaid, or delivered to a telegraph company. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the Board of Directors need be specified in the notice or waiver of notice of such meeting. Presence at any meeting without objection also shall constitute waiver of any required notice.

Section 8. Quorum and Vote at Meetings. At any meeting of the Board of Directors, a majority of the Directors in office shall be necessary and sufficient to constitute a quorum for the transaction of all business, provided, however, that in no event shall a quorum consist of less than one-third of the number of Directors fixed in accordance with these Bylaws. A majority of the votes cast at a meeting of the Board of Directors, duly called and at which a quorum is present, shall be sufficient to take or authorize action upon any matter which may properly come before the meeting, unless the concurrence of a greater proportion is required for such action by statute, the Articles of Incorporation, or these Bylaws. If, at any meeting of the Board of Directors, there shall be less than a quorum present, a majority of those present may adjourn the meeting, without further notice, from time to time until a quorum shall be present. At any adjourned meeting at which a quorum shall be present, any business may be transacted which might have been transacted at the meeting as originally notified.

Section 9. Action Without Meeting. Any action required or permitted to be taken at a meeting of the Board of Directors may be taken without a meeting if a consent in writing, setting forth such action, is signed by all of the Directors, and such written consent is filed with the minutes of proceedings of the Board. Such consent shall have the same force and effect as a unanimous vote.

Section 10. Telephone Meetings. Members of the Board of Directors or any committee designated by the Board may participate in a meeting of such Board or committee by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other. Participation in a meeting pursuant to this section shall constitute presence in person at such meeting.

Section 11. Resignation and Removal of Directors. Any Director may resign at any time. Such resignation shall be made in writing and shall take effect at the time specified therein, or if no time be specified, at the time of its receipt by the President or Secretary. The acceptance of a resignation shall not be necessary to make it effective. Directors may be removed with cause, at any meeting of the Board of Directors duly called and at which a quorum is present, by a majority of the votes cast at such meeting.

Section 12. Compensation and Reimbursement. Directors and members of any committee of the Board of Directors shall not be entitled to compensation for their services as Directors or committee members. Directors and members of any committee of the Board of Directors shall be entitled, to the extent authorized by the Board of Directors, to reimbursement for any reasonable expenses incurred in attending meetings of the Board or any committee of the Board, as the case may be.

ARTICLE IV

Committees of Directors

Section 1. Executive Committee. The Board of Directors may, by resolution adopted by a majority of the Directors in office, establish an Executive Committee to consist of three or more Directors appointed by the Board of Directors. When the Board of Directors is not in session, the Executive Committee shall have and may exercise all of the powers of the Board of Directors, except to the extent, if any, that such authority shall be limited by resolution of the entire Board of Directors; provided, however, that neither the Executive Committee nor any other committee shall have the power to amend the Articles of Incorporation or these Bylaws of the Corporation.

Section 2. Other Committees. The Board of Directors may, by a resolution adopted by a majority of the Directors present at a meeting at which a quorum is present, appoint from among its members one or more other committees, composed of two (2) or more Directors, for such purposes and with such powers as the Board of Directors may provide, except that no such committee or committees shall have or exercise the authority of the Board of Directors or the Executive Committee in the management of the Corporation.

Section 3. Tenure. Subject to the provisions of Section 8 of this Article IV, each member of the Executive Committee or any other committee shall hold office until the next regular annual meeting of the Board of Directors following his/her appointment and until his/her successor is designated by the Board of Directors.

Section 4. Meetings and Notices. Regular meetings of committees of the Board of Directors may be held without notice at such times and places as such committees may determine from time to time by resolution. Special meetings of committees may be called by any member thereof upon not less than one day's notice stating the place, date, and hour of the meeting, which notice may be written or by telephone or telegram. The notice of a meeting of a committee need not state the business proposed to be transacted at the meeting. Any member of a committee may waive notice of any meeting thereof, either before or after the meeting, by signing a waiver of notice which shall be filed with the records of such meeting, or by attendance at such meeting.

Section 5. Quorum. A majority of the members of a committee shall constitute a quorum for the transaction of business at any meeting thereof. The vote of a majority of the members of a committee present at a meeting at which a quorum is present shall constitute action of the committee.

Section 6. Action Without a Meeting. Any action required or permitted to be taken at a meeting of a committee may be taken without a meeting if a written consent, setting forth the action so taken, shall be signed by all of the members of the committee and filed with the minutes of proceedings of the committee.

Section 7. Telephone Meetings. Members of committees may participate in a meeting by means of a conference telephone or similar communications equipment by which all persons participating in the meeting can hear each other. Such participation shall constitute presence in person at the meeting.

Section 8. Vacancies. Any vacancy occurring on the Executive Committee may be filled by a resolution adopted by a majority of the Board of Directors in office. Any vacancy occurring on any other committee or committees may be filled by a resolution adopted by a majority of the Directors present at a meeting at which a quorum is present.

Section 9. Removal and Resignations. Any member of the Executive Committee may be removed at any time, with or without cause, by resolution adopted by a majority of the Directors in office. Any member of any other committee may be removed by resolution adopted by a majority of the Directors present at a meeting at which a quorum is present. Any member of a committee may resign from the committee at any time by giving written notice to the Board of Directors or the President or Secretary of the Corporation. Unless otherwise specified therein, such resignation shall take effect upon receipt thereof.

Section 10. Procedure. All committees established by the Board of Directors shall keep regular minutes of their proceedings and the chairperson of each committee shall report any actions taken to the Board of Directors at the next meeting thereof held after the committee meeting. The minutes of committee meetings shall be distributed to all members of the Board of Directors.

ARTICLE V

Officers

Section 1. Positions. The officers of the Corporation shall be a Chairperson of the Board of Directors, a Vice Chairperson, a President, a Secretary, and a Treasurer, and such other officers as the Board of Directors may appoint, including one or more Vice Presidents, Assistant Secretaries and Assistant Treasurers, who shall exercise such powers and perform such duties as shall be determined from time to time by the Board. Any number of offices may be held by the same person, unless the Articles of Incorporation or these Bylaws otherwise provide; provided, however, that in no event shall the President and the Secretary be the same person. The Chairperson, the President, the Secretary, and the Treasurer shall be members of the Board of Directors.

Section 2. Election and Term of Office. Each officer of the Corporation shall be elected annually by the Board of Directors and shall serve for one year, and thereafter until his/her successor shall have been chosen and qualified or until his/her death, resignation, or removal, but in no event shall an officer serve for a term exceeding three years. Election or appointment of an officer shall not itself create any contractual rights.

Section 3. Resignation and Removal. Whenever in the judgment of the Board of Directors the best interest of the Corporation will be served thereby, any officer may be removed from office by the affirmative vote of a majority of the Board of Directors. Such removal shall not prejudice the contractual rights, if any, of the person so removed. Any officer may resign at any time by delivering a written resignation to the Board of Directors, the President or the Secretary. Should a vacancy occur prior to election, the President shall appoint a successor to fill the unexpired term of said officer.

Section 4. Chairperson of the Board. The Chairperson of the Board shall preside at all meetings of the Board of Directors and shall perform such other duties and have such other powers as may be vested in the Chairperson by the Board of Directors. In the absence of the Chairperson, the Vice-Chairperson of the Board of Directors shall preside at meetings.

Section 5. Vice-Chairperson of the Board. In the absence of the Chairperson or in the event of the Chairperson's refusal or inability to act, the Vice-Chairperson of the Board shall preside at meetings of the Board of Directors and shall perform such other duties and shall have such other powers as may be vested in the Vice-Chairperson by the Board of Directors.

Section 6. President. The President shall be the chief executive officer of the Corporation, shall be a member of all standing committees, shall be the Chairperson of the Executive Committee, shall have general and active management of the business of the Corporation and shall insure that all orders and resolutions of the Board of Directors are carried into effect. The President shall execute bonds, mortgages and other contracts requiring a seal, under the seal of the Corporation, except where required or permitted by law to be otherwise signed and executed and except where the signing and execution thereof shall be expressly delegated by the Board of Directors to some other officer or agent of the Corporation.

Section 7. Vice President. In the absence of the President or in the event of the President's inability or refusal to act, the Vice President (or in the event there be more than one Vice President, the Vice Presidents in the order designated, or in the absence of any designation, then in the order of their election) shall perform the duties of the President, and when so acting shall have all the powers of, and be subject to all the restrictions upon, the President. The Vice Presidents shall perform such other duties and have such other powers as the Board of Directors may from time to time prescribe.

Section 8. Secretary. The Secretary shall attend all meetings of the Board of Directors, and shall record all the proceedings of the meetings of the Board of Directors in a book to be kept for that purpose, and shall perform like duties for the standing committees, when required. The Secretary shall give, or cause to be given, notice of all special meetings of the Board of Directors, and shall perform such other duties as may be prescribed by the Board of Directors or by the President, under whose supervision the Secretary shall be. The Secretary shall have custody of the corporate seal of the Corporation, and the Secretary, or an Assistant Secretary, shall have authority to affix the same to any instrument requiring it, and when so affixed it may be attested by the signature of the Secretary or by the signature of such Assistant Secretary. The Board of Directors may give general authority to any other officer to affix the seal of the Corporation and to attest the affixing by such officer's signature. The Secretary or an Assistant Secretary may also attest all instruments signed by the Chairperson of the Board, the President, or any Vice President.

Section 9. <u>Assistant Secretary</u>. The Assistant Secretary, or if there be more than one, the Assistant Secretaries in the order determined by the Board of Directors (or if there shall have been no such determination, then in the order of their election), shall, in the absence of the Secretary or in the event of the Secretary's inability or refusal to act, perform the duties and exercise the powers of the Secretary, and shall perform such other duties and have such other powers as the Board of Directors may from time to time prescribe.

Section 10. <u>Treasurer</u>. The Treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the Corporation, and shall deposit all monies and other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by the Board of Directors. The Treasurer shall disburse the funds of the Corporation as ordered by the Board of Directors, taking proper vouchers for such disbursements, and shall render to the President, and to the Board of Directors at its regular meetings, or when the Board of Directors so requires, an account of all transactions as Treasurer and of the financial condition of the Corporation. If required by the Board of Directors, the Treasurer shall give the Corporation a bond in such sum and with such surety or sureties as shall be satisfactory to the Board of Directors for the faithful performance of the duties of the Treasurer's office and for the restoration to the Corporation, in case of the Treasurer's death, resignation, retirement or removal from office, of all books, papers, vouchers, money and other property of whatever kind, in the Treasurer's possession or under the Treasurer's control and belonging to the Corporation.

Section 11. <u>Assistant Treasurer</u>. The Assistant Treasurer, or if there shall be more than one, the Assistant Treasurers in the order determined by the Board of Directors (or if there shall have been no such determination, then in the order of their election), shall, in the absence of the Treasurer or in the event of the Treasurer's inability or refusal to act, perform the duties and exercise the powers of the Treasurer, and shall perform such other duties and have such other powers as the Board of Directors may from time to time prescribe.

Section 12. <u>Compensation</u>. Any officer of the Corporation is authorized to receive reasonable compensation for services rendered, when authorized by the Board of

Directors, in its sole discretion.

ARTICLE VI

Indemnification

Unless expressly prohibited by law, the Corporation shall fully indemnify any person made, or threatened to be made, a party to an action, suit or proceeding (whether civil, criminal, administrative or investigative) by reason of the fact that such person, or such person's testator or intestate, is or was a director, officer, employee or agent of the Corporation or serves or served any other enterprise at the request of the Corporation, against all expenses (including attorneys' fees), judgments, fines and amounts paid or to be paid in settlement incurred in connection with such action, suit or proceeding.

ARTICLE VII

General Provisions

Section 1. Execution of Instruments. All checks or demands for money and notes of the Corporation shall be signed by such officer or officers or such other person or persons as the Board of Directors may from time to time designate.

Section 2. Seal. The Corporation may have a seal of such design as the Board of Directors may adopt. If so adopted, the custody of the seal shall be with the Secretary and he/she shall have authority to affix the seal to all instruments where its use is required.

Section 3. Fiscal Year. The fiscal year of the Corporation shall begin on January 1 and end on December 31 of each year, with the initial fiscal year to commence on the date of incorporation.

ARTICLE VIII

Amendments of Bylaws

These Bylaws may be amended, repealed, or altered, in whole or in part, and new Bylaws may be adopted, by a majority of the votes cast at any meeting of the Board of Directors, duly called and at which a quorum is present.

*   *   *   *   *

The foregoing Bylaws were adopted by the Board of Directors on ________, 202________.

____

Secretary

CONFLICT OF INTEREST POLICY

CONOWINGO FINANCE CORPORATION

Article I
<u>Purpose</u>

The purpose of this Conflict of Interest Policy (this "Policy") is to protect the interests of the Conowingo Finance Corporation (the "Organization") when it is contemplating entering into a transaction or arrangement that might benefit the private interest of an officer or key employee of the Organization or a member (whether a Director or committee member) of the Organization's Board of Directors (the "Board") or might result in a possible excess benefit transaction. This policy is intended to supplement but not replace any applicable state and federal laws governing conflicts of interest applicable to nonprofit and charitable organizations.

Article II
<u>Definitions</u>

1. Interested Person

Any Director, officer, or member of a committee with Board-delegated powers, who has a direct or indirect financial interest, as defined below, is an interested person.

2. Financial Interest

A person has a financial interest if the person has, directly or indirectly, through business, investment, or family:

a. An ownership or investment interest in any entity with which the Organization has a transaction or arrangement;

b. A compensation arrangement with the Organization or with any entity or individual with which the Organization has a transaction or arrangement; or

c. A potential ownership or investment interest in, or compensation arrangement with, any entity or individual with which the Organization is negotiating a transaction or arrangement.

Compensation includes direct and indirect remuneration as well as gifts or favors that are substantial in nature.

A financial interest is not necessarily a conflict of interest. Under Article III, Section 2 of this Policy, a person who has a financial interest may have a conflict of interest only if the Board, or committee of the Board to which the Board has delegated such powers, decides that a conflict of interest exists.

Article III
<u>Procedures</u>

1. Duty to Disclose

In connection with any actual or possible conflict of interest, an interested person must disclose the existence of the financial interest and all material facts to the Board and members of committees with Board-delegated powers considering the proposed transaction or arrangement.

2. Determining Whether a Conflict of Interest Exists

After disclosure of the financial interest and all material facts, and after any discussion with the interested person, he or she shall leave the Board or committee meeting while the determination of a conflict of interest is discussed and voted upon. The remaining Board or committee members shall decide if a conflict of interest exists.

3. Procedures for Addressing the Conflict of Interest

a. An interested person may make a presentation at the Board or committee meeting, but, after the presentation, he or she shall leave the meeting during the discussion of, and the vote on, the transaction or arrangement involving the possible conflict of interest.

b. The chairperson of the Board or committee shall, if appropriate, appoint a disinterested person or committee to investigate alternatives to the proposed transaction or arrangement.

c. After exercising due diligence, the Board or committee shall determine whether the Organization can obtain with reasonable efforts a more advantageous transaction or arrangement from a person or entity that would not give rise to a conflict of interest.

d. If a more advantageous transaction or arrangement is not reasonably possible under circumstances not producing a conflict of interest, the Board or committee shall determine by a majority vote of the disinterested Directors whether the transaction or arrangement is in the Organization's best interest, for its own benefit, and whether the transaction or arrangement is fair and reasonable to the Organization. In conformity with the above determination, the Board or committee shall make its decision as to whether the Organization shall enter into the transaction or arrangement.

4. Violations of the Conflict of Interest Policy

a. If the Board or committee has reasonable cause to believe a Board or committee member has failed to disclose actual or possible conflicts of interest, it shall inform the member of the basis for such belief and afford the member an opportunity to explain the alleged failure to disclose.

b. If, after hearing the Board or committee member's response and after making further investigation as warranted by the circumstances, the Board or committee determines the member has failed to disclose an actual or possible conflict of interest, it shall take appropriate disciplinary and corrective action.

Article IV

Records of Proceedings

The minutes of the Board and all committees with Board-delegated powers shall contain:

a. The names of the persons who disclosed or otherwise were found to have a financial interest in connection with an actual or possible conflict of interest, the nature of the financial interest, any action taken to determine whether a conflict of interest was present, and the Board's or committee's decision as to whether a conflict of interest in fact existed; and

b. The names of the persons who were present for discussions and votes relating to the transaction or arrangement, the content of the discussion, including any alternatives to the proposed transaction or arrangement, and a record of any votes taken in connection with the proceedings.

Article V

Compensation

a. A voting member of the Board who receives compensation, directly or indirectly, from the Organization for services is precluded from voting on matters pertaining to that Board member's compensation.

b. A voting member of any committee whose jurisdiction includes compensation matters and who receives compensation, directly or indirectly, from the Organization for services is precluded from voting on matters pertaining to that member's compensation.

c. No voting member of the Board or any committee whose jurisdiction includes compensation matters and who receives compensation, directly or indirectly, from the Organization, either individually or collectively, is prohibited from providing information to any committee regarding compensation. Such Board or committee member may present information as background or answer questions at a Board or committee meeting prior to the commencement of deliberations or voting relating to his or her compensation.

Article VI

Annual Statements

Each Director, officer, member of a committee with Board-delegated powers, and key employee shall sign a statement annually which affirms that such person:

a. Has received a copy of this Policy;
b. Has read and understands this Policy;
c. Has agreed to comply with this Policy; and
d. Understands the Organization is a charitable organization and in order to maintain its federal tax exemption it must engage primarily in activities which accomplish one or more of its tax-exempt purposes.

Article VII

Periodic Reviews

To ensure the Organization operates in a manner consistent with charitable purposes and does not engage in activities that could jeopardize its tax-exempt status, periodic reviews may be conducted. The periodic reviews may include the following subjects:

a. Whether compensation arrangements and benefits are reasonable, based on competent survey information, and the result of arm’s length bargaining.

b. Whether partnerships, joint ventures, and arrangements with management organizations conform to the Organization’s written policies, are properly recorded, reflect reasonable investment or payments for goods and services, further charitable purposes and do not result in inurement, impermissible private benefit or in an excess benefit transaction.

Article VIII

Use of Outside Experts

In complying with this Policy, the Organization may, but need not, use outside advisors. If outside experts are used, their use shall not relieve the Board of its responsibilities under this Policy.

ANNUAL CONFLICT OF INTEREST POLICY STATEMENT

CONOWINGO FINANCE CORPORATION

For Fiscal Year 20__

To: Conowingo Finance Corporation

From: _______________________________

Print Name and Title

As of the date set forth below, for the fiscal year referenced above, I hereby affirm the following to J Conowingo Finance Corporation:

1. I have received a copy of the Conowingo Finance Corporation Conflict of Interest Policy (the "Policy").

2. I have read and understand the Policy.

3. I agree to comply with the Policy.

4. I understand that the Conowingo Finance Corporation is a charitable organization and that in order to maintain its federal tax exemption it must engage primarily in activities which accomplish one or more of its tax-exempt purposes.

_______________________________________ ____________________

Signature **Date**