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A PAPER THAT CAN BE GIVEN TO PENNSYLVANIA COMMUNITY LEADERS AS THEY CONSIDER WAYS TO FINANCE WATER QUALITY PROJECTS THAT PROMOTE THE IMPROVEMENT OF THE CHESAPEAKE BAY

"PAY FOR SUCCESS" METHOD TO IMPLEMENT WATER QUALITY IMPROVEMENT PROJECTS IN PENNSYLVANIA

I. EXECUTIVE SUMMARY

- Pennsylvania municipalities recognize the need to address water quality issues both to comply with federal and state statutes from the Clean Water Act and for the health and safety of Pennsylvania residents.

- Municipalities' ability to raise funding is limited, because local, state and federal funds using traditional funding methods are difficult to obtain. These traditional funding methods include:

  - raising local taxes;
  - issuing municipal bonds;
  - securing grants or low-interest loans from semi-government agencies or programs like PENNVEST or Growing Greener Grants;
  - establishing local stormwater authorities that can assess fees on users.

- Municipalities have expressed interest in attempting to rely on alternative financing methods, including private sector investments, such as "Pay For Success" (PFS) models or "Public-Private Partnerships" (P3) to develop and finance water quality projects in local communities.

- Without express legislative authority, the Pennsylvania Constitution and state procurement rules limit municipalities' ability to raise funds using these alternative methods to engage in major design-and-build water quality projects. Legislative efforts have been proposed to allow alternative forms of financing for environmental projects but these measures have not passed.

- While municipalities in and outside of Pennsylvania have incorporated some aspects of a PFS or P3 model in water quality projects, the underlying funding and financing for these projects in Pennsylvania have still relied on traditional methods for securing financing (e.g., issuing municipal bonds or securing a low-interest loan). Until authorizing legislation is passed, municipalities' ability to rely on alternative financing methods is not a practical option at this time for major water quality projects. Alternative financing methods may be a good choice, however, for small water quality projects.

II. BACKGROUND

In its April 27, 2017 report on the status of Pennsylvania's efforts to clean up the Chesapeake Bay, the U.S. Environmental Protection Agency ("EPA") noted: "The Commonwealth faces a number of serious challenges in meeting its commitments to achieve the pollutant reductions called for in the Chesapeake Bay Total Maximum Daily Load."[1] In this report, the EPA specifically noted that Pennsylvania's limited financial resources was one of these challenges.[2] Recently, Pennsylvania has assured the EPA that it will work on developing new plans to bolster its Chesapeake Bay cleanup efforts.[3] Pennsylvania legislators have stated that they are searching for more ways to fund environmental projects.[4] For example, Pennsylvania Representative Evankovich has introduced a bill providing guidelines and requirements for the use of public-private partnerships by municipalities for environmental projects.[5] Although not without controversy, Pennsylvania Senator Alloway proposed a bill to create a new program that would allow the private sector to bid on and participate in Bay cleanup projects.[6] Pennsylvania communities have also been examining creative financing methods to pursue water quality/cleanup projects. The Stormwater Authority of the City of Chester and a private entity, Corvias Solutions, announced a community-based plan to design, construct, and maintain green infrastructure in the community using low-interest rate loans from PENNVEST.[7] Additionally, the Chesapeake Bay Foundation (CBF) and its contractual partner, Quantified Ventures (QV), will assist up to four municipalities/utilities in identifying, designing, structuring and obtaining access to private capital for public green infrastructure solutions through the issuance of municipal bonds. [8]

The Environmental Finance Center at the University of Maryland (EFC) collaborated with the EPA Chesapeake Bay Program to bring together a symposium that would identify innovative approaches to increasing private investment in Chesapeake Bay restoration and protection efforts.[9] While no set conclusions were reached, a number of resources were identified that

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[1] EPA Expectations for Pennsylvania's Phase III WIP (April 27, 2017); http://files.dep.state.pa.us/Water/ChesapeakeBayOffice/WIPIII/(13)Pennsylvania Phase III WIP Expectations.

[2] Id. at 1.

[3] Bay Journal (Karl Blankenship) June 12, 2017 ("PA Launches Effort To Write Cleanup Plan Addressing Bay Shortfall").

[4] Bay Journal (Donna Morelli) June 4, 2017.

[5] H. Bill 1891.

[6] S. Bill 799; The Sentinel (Mike Parker) July 7, 2017 ("Pa. bill would allow private sector companies to bid on bay cleanup efforts").

[7] See stormwater.wef.org (July 5, 2017).

[8] Green Infrastructure Opportunity; Environmental Impact Bond Services for Green Infrastructure Investments in the Chesapeake Bay Watershed; www.cbf.org.eib. See also Gettysburg Times, June 4, 2017 ("Conservation Innovation Grant to CBF will help municipalities").

[9] See Chesapeake Bay Environmental Financial Symposium: Recommendations and Final Report (August 2016).

could be used by local communities to investigate ways to engage the private sector in financing restoration projects in the Bay. The final report identifies resources that could assist Pennsylvania communities as they examine innovative ways to fund water quality projects.

The Chesapeake Bay Program's Local Government Advisory Committee ("LGAC") is seeking information about statutory conditions that may prevent Pennsylvania the use of a PFS model in Pennsylvania. The Chesapeake Legal Alliance has assisted LGAC in developing this document to support these efforts. This paper describes how a PFS model would work.

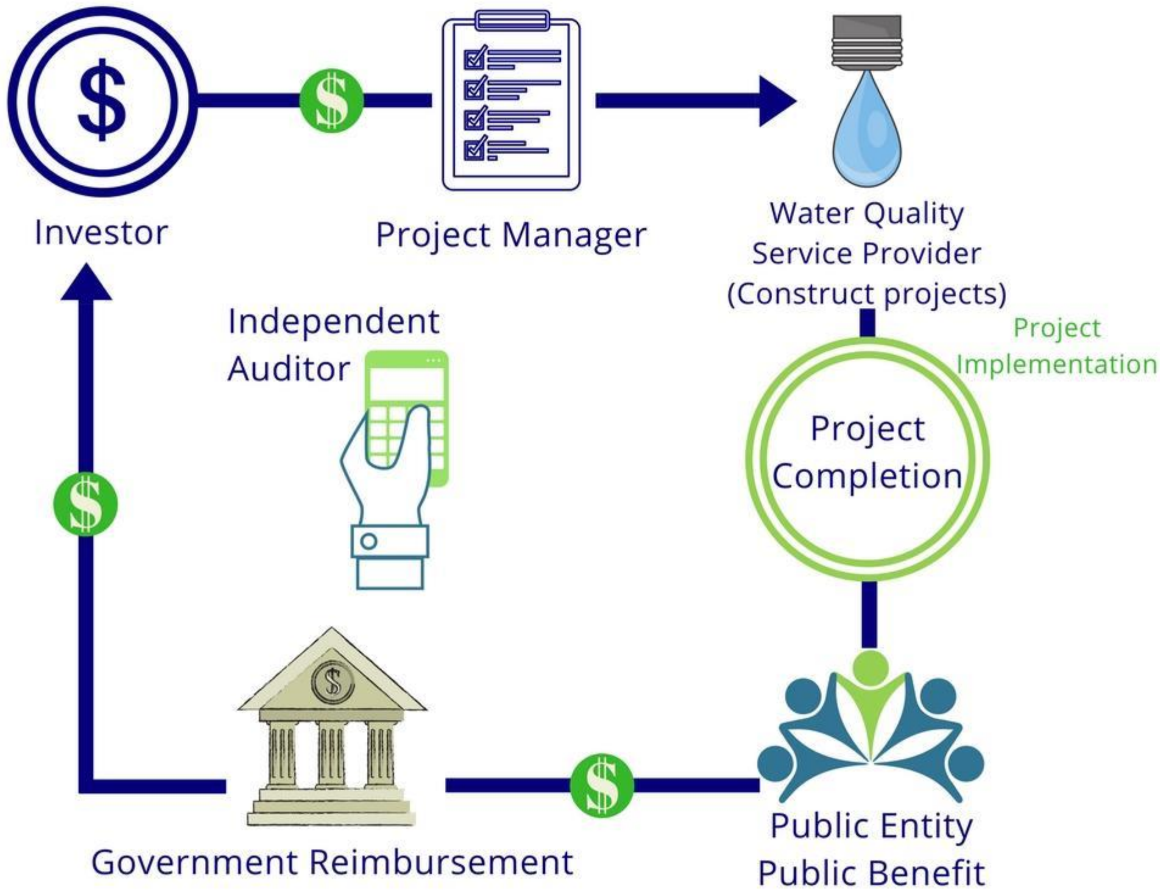
III. FIRST STEPS: IDENTIFY COMMUNITY AND PROJECT

Before deciding on an appropriate mechanism to fund an environmental project, the first step is to identify the community that needs assistance with funding and to identify the water quality issue that needs to be addressed in that community. A major water quality issue facing many small communities in Pennsylvania is stormwater runoff and the accompanying impact on water quality. In addition, communities may want to consider smaller projects, such as green infrastructure projects, that would require less capital investment. Regardless of the size of the project, the communities often lack the fiscal resources necessary to finance these projects. Given the need for these projects in terms of promoting the overall health of the local population, improving the health of the Chesapeake Bay, and the requirements of environmental laws (including requirements of the federal Clean Water Act), the communities need to explore all available methods for financing these projects. This paper explores one mechanism, the "Pay-For-Success" (PFS) model.

IV. "PAY-FOR-SUCCESS" PROGRAMS DEFINED AND DESCRIBED

A PFS program involves both the private and public sectors, whereby the government (e.g., a local municipality - the city or county government) agrees to provide a return to investors **only if and when** a capital improvement project achieves a pre-agreed-upon result.

The following graphic depicts a typical PFS program whereby investors provide the initial principal that will fund the project. The project manager is often a private organization that specializes in administering "pay-for-success" projects and this entity will structure, coordinate and manage the operation. This project manager may be responsible for managing the service provider that will undertake the project, for example, the construction of a stormwater runoff system. The target population in a water quality project is the local population that will benefit from the improved water quality. An independent auditor will evaluate the result of the project to determine whether the project has achieved the agreed upon outcome. If this outcome is not achieved, the government is not required to reimburse the investors. If the outcome is achieved, the investors will be repaid the principal and an agreed upon rate of return.



The PFS model has also been used in the environmental sector in the form of Environmental Impact Bonds ("EIB"). As a point of clarification, an EIB is not always a "bond" in the traditional sense. While it could involve the issuance of municipal bonds, it is primarily a financing mechanism that relies on private investment to provide initial funding for an environmental project for a governmental entity. An EIB can use a "pay for success" model to finance a project when investors are only repaid by the government if the project meets the agreed upon conditions of success. While an EIB is typically only a financing mechanism, the PFS model as a whole is a larger concept that involves a complete contracting mechanism that involves more than just financing and does not require a specified form of payment.[10]

V. NEXT STEPS FOR THE COMMUNITY: EXAMINING FINANCING OPTIONS

Once the local community has chosen the specific water quality project to be undertaken, the municipality must take Pennsylvania state laws into consideration as it decides how best to

[10] See Health Impact Bonds; Removing the Legal Barriers, 76 U. of Pitt. L. Rev. No. 1, p 113 at n. 1 (Fall 2014).

approach the project. In addition to procurement rules, the Pennsylvania Constitution imposes constraints on hiring private contractors for municipal design/build projects.[11] These laws are likely to be interpreted to prohibit an implicit delegation of authority to a private party to design and build municipal structures. Instead, such authority must be expressly granted by statute.[12] Currently, there is no express legislative authority for PFS programs in Pennsylvania that involve environmental projects. As noted earlier, legislation has been proposed that would allow municipalities to engage with private contractors to undertake environmental projects using alternative finance methods.[13] Rep. Evankovich's bill would allow Public-Private Partnerships (P3) to be used to go forward in the environmental sector. Rep. Alloway's bill would allow some private investment in water quality projects. To date, no legislation has been proposed that would authorize the use of PFS programs for environmental programs. Passage of this type of legislation would provide the surest way to enable city or local communities to use PFS programs to finance, build and construct water quality projects. In addition to providing legal authority for these programs, express legislation would also minimize the risk to investors because funding would be authorized by statute for a number of years and would be more difficult to change even if the legislative body changed. In the absence of express statutory authority, local city or county solicitors would need to be consulted for any major PFS project to ensure that it was structured in a way that did not run afoul of these constitutional constraints and to ensure compliance with local procurement rules.

Pennsylvania municipalities do have the legal authority to hire a consultant to help frame and scope the project and have the authority to engage in contracts to finance projects. Thus, express statutory authority may not be required if a municipality decided to rely on EIBs as a financing mechanism only rather than the broader PFS contractual mechanism. As alternative financing methods have grown in popularity, consultants with an expertise in PFS programs are available to help navigate the intricacies of financing these projects. A consultant can help the community

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[11] See, e.g., PA Constitution Article 3, Section 31 "**Delegation of certain powers prohibited** The General Assembly shall not delegate to any special commission, private corporation or association, any power to make, supervise or interfere with any municipal improvement, money, property or effects, whether held in trust or otherwise, or to levy taxes or perform any municipal function whatever." Article 9, Section 9, "**Appropriation for public purposes.** The General Assembly shall not authorize any municipality or incorporated district to become a stockholder in any company, association or corporation, or to obtain or appropriate money for, or to loan its credit to, any corporation, association, institution or individual. The General Assembly may provide standards by which municipalities or school districts may give financial assistance or lease property to public service, industrial or commercial enterprises if it shall find that such assistance or leasing is necessary to the health, safety or welfare of the Commonwealth or any municipality or school district. Existing authority of any municipality or incorporated district to obtain or appropriate money for, or to loan its credit to, any corporation, association, institution or individual, is preserved.

[12] The use of the PFS model for environmental projects, including EIBs, is relatively new in the United States. Accordingly, we are not aware of legal precedent that outlines the legal parameters of their use.

[13] See Notes 5 and 6.

determine the best process for financing the project and can assist in quantifying the cost and scope of the project. Nonprofit organizations include the Pay For Success Learning Hub or Third Sector Capital Partners (see resources) and independent financial institutions. Organizations can also assist local communities in finding appropriate intermediaries to manage the PFS project. Once the local community decides upon an appropriate intermediary, this intermediary can help establish the parameters of the project. The government will also contract with the independent auditor/evaluator whose function it will be to evaluate whether the project is a success such that the investors will receive a rate of return on their initial investment.

Using alternative financing methods to undertake small water quality projects (such as green infrastructure projects) may be a more realistic approach in the short-term for municipalities. As noted earlier, the CBF is providing assistance to communities to raise private capital for green infrastructure, using a PFS approach.[14] In addition to being able to use an EIB as a financing mechanism without express statutory authority, Pennsylvania restrictions do not appear to prohibit a stormwater project on private agricultural land that could involve financial incentives, for example, through the nutrient trading credit program. Accordingly, as the community decides on the project that it wants to pursue, legal counsel would need to be obtained by the municipality to ensure that the project will comply with Pennsylvania state laws.

VI. ALTERNATIVE FINANCING PROJECTS IN PRACTICE

The use of alternative methods for financing water quality projects is a relatively new concept; examples of some recent alternative financing projects are discussed below. A principal difference between PFS projects and other financing alternatives is that the private sector investors bear the risk if a PFS project is not successful.

A. Environmental Impact Bond in Washington, D.C.

A recent pay-for-success water quality project has been launched in Washington, D.C. The DC Water and Sewer Authority (DC Water) relied on the nation's first Environmental Impact Bond to finance a green infrastructure project, its DC Clean Rivers Project, a $2.6 billion program to control stormwater runoff and improve the District's water quality.

The funds from this EIB will be used to construct green infrastructures designed to mimic natural processes to absorb and slow surges of stormwater during periods of heavy rainfall, reducing the incidence and volume of combined sewer overflows (CSOs) that pollute the District's waterways. The cost of installing the green infrastructure is paid for by DC Water, but the performance risk of the green infrastructure in managing storm water runoff is shared amongst DC Water and the investors. As a result, payments on the EIB may vary based on the proven success of the environmental intervention as measured by a rigorous evaluation. By financing this project through the EIB, DC Water is seeking to create a model funding mechanism that other municipalities can leverage to advance the use of green infrastructure to address storm water management in their communities.

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[14] See Note 8.

B. Low-Interest Loans

The Pennsylvania Infrastructure Investment Authority (or PENNVEST) services Pennsylvania communities by funding sewer, stormwater and drinking water projects by offering low-interest loans and some grants to finance these projects. As one example, in Waynesboro, the local community completed a $5.4 million stormwater project in 2014 using a low-interest loan from the Pennsylvania Infrastructure Investment Authority.[15] Most recently, as noted earlier, the community in Chester, PA announced that it would work with Corvias Solutions to develop a stormwater management system, in cooperation with EPA, PENNVEST and the Chester Water Authority.[16] Although this project has been labeled a "P3" project, the financing for this project has come only from PENNVEST in the form of grants and low-interest loans. This type of financing would likely be simpler to use for small communities, especially in terms of legal restrictions, but there are limits on the amount of funds available. Furthermore, the community would be required to pay back the loan regardless of the success of the project, in contrast to the PFS model whereby the community is only required to pay investors after an agreed-upon result is achieved.

C. P3 Projects

A public–private partnership (PPP, 3P or P3) is a cooperative arrangement between two or more public and private sectors, typically of a long-term nature. The "P3" phrase can cover hundreds of different types of long-term contracts with a wide range of risk allocations, funding arrangements and transparency requirements. The P3 concept is also closely related to concepts such as privatization and the contracting out of government services.

In Pennsylvania, P3 projects have had a mixed history. Certain P3 projects in nonenvironmental projects have been allowed to go forward based on express legislation by the state legislature. For example, Act 88 of 2012 authorized public private transportation projects in Pennsylvania. This allowed the Pennsylvania Department of Transportation (PennDOT) and other transportation authorities and commission in the state to enter into agreements with the private sector to participate in the delivery, maintenance and financing of transportation-related projects. As referenced earlier, although there is no existing statutory authority to allow for P3 projects in the environmental sector, Rep. Evankovich has proposed a bill that would authorize these projects.[17] If this bill passes, the P3 option may be very useful to Pennsylvania municipalities for large water quality projects.

Communities outside of Pennsylvania have used public private partnerships to fund water quality projects. For example, the U.S. Fish and Wildlife Service has established a public private partnership that provides funding for water quality projects in the Great Lakes (www.sustainourgreatlakes.org). Maryland's Prince George's County Council entered into an agreement with Corvias Solutions for a 30-year stormwater management public-private partnership (P3). Under the terms of the deal, Prince George's County will invest $100 million in an initial three-year retrofit of the County's water systems, and Corvias will manage the

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[15] See Herald Mail Media (Jennifer Fitch) August 6, 2014.
[16] Corvias.com (June 6, 2017).
[17] See Note. 5.

design, construction, and long-term maintenance of stormwater management systems for up to 4,000 acres (jdsupra.com).

VII. BARRIERS TO SETTING UP ALTERNATIVE FINANCING PROJECTS

As discussed above, the principal benefit of the PFS program is that the government only pays for the services provided if the program is successful. Moreover, as also discussed above, the PFS model can potentially work without requiring state or federal legislation under a variety of circumstances. For example, if the project takes place on private agricultural land then authorizing legislation would not necessarily be required. In addition, in its initiative to finance green infrastructures, CBF has indicated that while local procurement rules would apply, express statutory authority would not be required by the Pennsylvania state legislature because EIBs can be limited to financing a project only, as opposed to encompassing an entire design/build project.[18]

While EIBs have advantages over other types of financing methods, there are some barriers that must be considered. First, while express statutory authority by the state legislature may not be required, investment may carry some risk if future state legislation specifically defunds the project in question. To this end, express statutory authority allowing funding to go forward would thus provide greater assurance and minimize the risk to investors. In addition, while private investors use their own capital to start the project, if the project is successful, ultimately the government pays for the project and so PFS projects do not in the long-run provide a private source of capital to fund projects. Also, PFS projects require a significant amount of upfront work to get the project going and then require a significant commitment by agency staff in following through with the project.

VIII. ADDITIONAL RESOURCES

A number of resources are available that provide more information on PFS projects both in terms of general definitions and in terms of initiating a PFS in the local community:

The Pay For Success Learning Hub (by membership): The Nonprofit Finance Fund, with the support of Mission Investors Exchange member the Rockefeller Foundation, describes itself as "providing resources to help service providers, governments, investors, and other stakeholders and interested parties work towards making Social Impact Bonds, Pay for Success Projects and closely related innovative social financing approaches ... feasible in the United States on a systemic scale." www.payforsuccess.org

www.thirdsectorcap.org

www.sustainourgreatlakes.org

www.pennvest.pa.gov

[18] See Note 7.

Chesapeake Bay Environmental Financial Symposium: Final Report and Recommendations (August 2016)