

Calvert County, MD

Background

Calvert County, located in Southern Maryland, is a mix of suburban and rural landscapes with a population of approximately 90,000. The Environmental Finance Center (EFC) at the University of Maryland began working with Calvert County in 2012. Although the County lacked a regulatory driver, it faced unique challenges and opportunities with regards to stormwater management. Though much of the policy development and debate regarding Chesapeake Bay restoration and protection has occurred at the federal and state levels, it is local communities like Calvert County that will bear the brunt of water quality financing and funding obligations. Many of the decisions affecting nutrient pollution – policy; planning and zoning; stormwater management; transportation; and erosion control – are made locally. Chesapeake Bay restoration obligations have the potential to result in significant financing obligations for local governments. By example, initial estimates indicated that Calvert County was facing a cost of \$1.2 billion associated with achieving its Watershed Implementation Plan (WIP). Clearly, addressing restoration costs of this scale would have required revenue increases that were, by all measures, impracticable for this community.

Though Calvert County does invest in stormwater activities, there was no codified stormwater program, and the County did not have a stormwater permit. While this created WIP implementation and water quality challenges, it offered a number of opportunities as well.

The goal of the project was to provide Calvert County leaders with the framework for a financing system that will enable the community to achieve water quality restoration and protection goals in the most efficient and effective way possible. Specifically, the EFC and its partners developed a methodology that would enable Calvert County leaders to target investments in water quality restoration and protection in a way that reduces costs, increases benefits, and improves environmental performance.

Approach

The first step in this project was to generate an accurate planning-level estimate of the costs associated with achieving the County's WIP. This was important for a variety of reasons. First, as discussed below, effective financial management requires an accurate understanding of necessary levels of service and associated revenue needs. In other words, it is necessary to understand implementation costs to develop an accurate estimate of revenue needs. Local estimates of WIP-related costs, generated through the MAST scenario tool, have varied widely from community to community across the state; this has created confusion among local decision makers and leaders. The EFC's goal was to provide some clarity and consistency to the cost evaluation process.

HIGHLIGHTS

Location: Maryland

Jurisdiction Type: County

Population: 537,656 (2010)

MS4 Permit: Phase II

Project Period: 2012-2013

Funder: National Fish and Wildlife Foundation

The second step in this project was to assess the capacity of Calvert County to adequately and effectively achieve water quality restoration goals and potential requirements. Included in this assessment was a review of the County's annual operational and capital improvement budgets. In addition, the EFC assessed how well coordinated and effective agencies and departments currently responsible for stormwater had been in addressing existing stormwater needs.

Finally, the EFC outlined a process for generating sufficient revenue to support restoration programs. This specifically focused on stormwater management and the establishment of fee-based programs. The goal was to find a way for Calvert County leaders to effectively reduce the costs associated with restoring and protecting water quality by finding opportunities to create efficiencies and maximize the environmental return on program investments.

Key Findings and Recommendations

Existing WIP cost estimates appear to be dramatically overestimated. In parallel research, Main Street Economics and Jessica Rigelman developed a means to estimate annual costs of achieving the County's nutrient and sediment load allocation using the Maryland Assessment Scenario Tool (MAST) and Chesapeake Bay Program annualized cost estimates for approved pollution abatement practices. Their estimate suggests that the County's current WIP requires annual expenditure of just under \$20 million. Though this estimate is an annual number, it is far less than any reasonable annualization of the County's \$1.26 billion estimate. Regardless, with a current fiscal budget of \$250 million, financing the 2025 WIP requirements would still require an 8% increase in fees and/or taxes.

Flexibility is key for reducing implementation costs. Enabling flexibility in how the County allocates and invests fiscal resources would allow the community to achieve even greater cost reductions. Specifically, if the community were allowed to offset stormwater emissions through an investment in agricultural best management practices (within the County and above baseline), then costs would drop to around \$3.8 million annually. Meeting these costs would require a more reasonable 2% increase in County revenue.

Costs can be reduced even further through a focus on performance. It is the EFC's belief that the County has an opportunity to further reduce water quality restoration costs in two ways: 1) by consolidating stormwater programming into a single agency and program; and, 2) through the use of performance-based financing systems that target investments to those activities that actually result in the greatest environmental benefit. Such a system would be highly innovative and would ultimately reduce the impact on County taxpayers and ratepayers.

For more information, please visit the [EFC website](#).

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