

## Salisbury, MD

### Background

Salisbury is a historic city of just over 30,000 people across 13.8 square miles in Wicomico County on the Eastern Shore of Maryland. Like many cities across the United States, Salisbury's stormwater system suffered from a lack of infrastructure upgrades and repairs, minimal maintenance, and an underfunded and understaffed stormwater program. The compounding impacts of a stormwater system that has been underserved for many years left Salisbury in the position of needing a significant investment to bring its program to a level of service that meets current and new regulations, as well as the community's water quality goals. Much of what Salisbury needed included filling the gap in services and repairing and upgrading the old system, as future regulations were becoming more stringent in their guidelines.

At a special event held at Schumaker Pond in the summer of 2011, City of Salisbury Mayor James Ireton announced the "Salisbury Environmental Summer," demonstrating the community's eagerness to embark on several new environmental initiatives focusing on reducing the municipality's carbon footprint and energy costs, and improving the health of the Wicomico River. During this event, City officials expressed hope that Salisbury would be selected to receive technical assistance from the Stormwater Financing and Outreach Unit (Stormwater Unit) at the University of Maryland's Environmental Finance Center (EFC) to help improve their capacity to initiate these new environmental efforts. Following the City's acknowledgement of the need for assistance in meeting its regulatory and nutrient reduction requirements, as well as local goals for improved water quality, the EFC met with Mayor Ireton and key staff from the Department of Public Works and other City departments to discuss the City's long-term stormwater management needs.

City staff reported that the municipal budget did not include dedicated funding for stormwater management activities and funds were being drawn on an as-needed basis from the general fund. The compounding impacts of a stormwater system that had been underserved for many years left Salisbury in the position of needing a significant investment to bring its program to a level of service that met both the escalating costs associated with the City's National Pollutant and Discharge Elimination System Municipal Separate Stormwater System (NPDES MS4) permit (anticipated to be reissued in early 2013), as well as the community's water quality goals.

In September 2011, the EFC was contracted by the City of Salisbury to conduct a stormwater financing feasibility study as part of the Stormwater Unit, an effort made possible through the support of the Chesapeake and Coastal Service of Maryland's Department of Natural Resources (DNR). Additional funds from the Town Creek Foundation were provided for the project team to conduct outreach and education activities to support these efforts.

The immediate goal of the EFC's stormwater efforts in Salisbury was to recommend a long-term dedicated funding stream that was equitable and effective in generating sufficient revenue for the City

### HIGHLIGHTS

**Location:** Maryland

**Jurisdiction Type:** City

**Population:** 30,343 (2010)

**MS4 Permit:** Phase II

**Project Period:** 2012-2013

**Funder:** National Fish and Wildlife Foundation

to maintain a comprehensive stormwater program. Such a financing stream is necessary to address the specific control measures that the City must implement in order to meet its MS4 permit requirements and local and regional water quality regulations, all of which come with significant costs. Other outputs of the study included outreach and educational activities targeted at the various stakeholders throughout the community to inform the public of the significance of addressing local stormwater management needs. The overall goal of the effort was to provide the City guidance for implementing a self-sustaining stormwater management program.

## Approach

This year-long study incorporated information from various sources including City staff and officials, Salisbury University staff, business leaders, and the Wicomico River project team, as well as EFC's independent research. Information was collected on the City's stormwater management needs and current stormwater activities, other taxes and fees charged to City businesses and residents, budget allocations, and the monetary costs of improving the stormwater program. Throughout the project period, the project team also engaged citizens through a series of public meetings, presentations to key stakeholders, and a presence at community events. Promotional materials such as flyers and a fact sheet were developed and distributed at these events.

As part of the study, the project team evaluated a series of funding options in terms of what would best fit Salisbury's needs for a fair, equitable, dedicated, and sustainable revenue source to support a comprehensive stormwater management program. While the community had proven skillful at obtaining grants to cover the expenses of some projects, these funds were becoming more and more difficult to secure and did not provide a sustainable, long-term financing solution.

## Key Findings and Recommendations

Based on the City's unique characteristics, the project team narrowed the field of potential financing mechanisms to two options: general fund allocation and a stormwater utility. At the end of the evaluation, the project team found a stormwater utility to be the most appropriate approach, while recommending that the City continue to use its general fund as well as access grants.

Based on the needs assessed by the project team in this study, the City of Salisbury would need to spend approximately \$23.2 million over the next 10 years for repairs and improvements to its stormwater system. It is important to note that the approximate revenue needed to support a stormwater program is conservative, since it does not include costs associated with green infrastructure (GI) and Watershed Implementation Plan (WIPs) activities, as this data was not available to the project team during the course of this analysis. In addition, it is important to note that it will be necessary for Salisbury staff to reevaluate program costs as the stormwater program unfolds, as the \$23.2 million represented the best estimate at the time and may change in the future.



*Children at a stormwater outreach event in Salisbury during April 2012*

The EFC project team recommended distributing the costs of paying for repairs and improvements in proportion to the types of land uses that were contributing to the problem. Just as a building owner or tenant is responsible for paying his or her share to process the wastewater and potable water it uses, or to provide the electricity it consumes, the project team recommended that building owners and tenants recognize and be accountable for the stormwater that is created from their portion of the built environment. However, since the current capacity within the City is limited in its ability to calculate the runoff from each property, the project team came up with a rate structure that balances administrative ease with a fee system that is both fair and equitable.

A stormwater utility fee allows for the assessment of the amount of impervious surface contributing to the stormwater problem on a per property basis. Creating a stormwater utility would allow Salisbury to:

- Allocate the costs of stormwater management in a manner that is fair and equitable;
- Assist in the reduction of stormwater runoff to address flooding and water quality issues;
- Generate adequate revenues for stormwater management activities;
- Have stronger accountability for stormwater management spending; and
- Address and reduce water quality stressors.

The project team recommended the use of a rate structure based upon Equivalent Residential Units (ERUs) where 1 ERU equals 3,344 ft<sup>2</sup>. It was further recommended that each ERU on a property be assessed at \$40 per year. The project team calculated revenue based on a flat rate fee for residential properties and a fee structure for non-residential units based on land area in years 1 and 2 and impervious surface beginning in year 3.

The residential fee was based on the fact that an average property has about 3,344 ft<sup>2</sup> of impervious surface and, therefore, all properties would be billed for 1 ERU per year. The average impervious surface for residential properties was determined using the data provided by City staff. Thus, it was recommended that all residents would be charged \$40 per year regardless of property size or amount of impervious surface. Revenue from residential properties would yield a total of \$319,960 per year based on \$40 multiplied by 7,999 properties.

Due to capacity issues and the administrative and technical burden of calculating impervious surface for all non-residential properties, the project team recommended that the non-residential fee be based on a tiered system in years 1 and 2, and slowly transition to a fee based directly on the amount of a property's impervious surface. In years 1 and 2, the tiered fee would allow for properties to be billed based on their land area, increasing in increments of 20,000 ft<sup>2</sup>. Once City staff collected the impervious surface data, the non-residential tiered system would transition to an impervious fee structure. Thus, if a commercial property was estimated to be 15,000 ft<sup>2</sup> with an impervious surface of 10,000 ft<sup>2</sup>, the property would be charged \$200 per year in years 1 and 2 and \$120 (3 ERUs) per year in year 3. All commercial properties, regardless of status (governmental, non-profit, etc.) would be assessed a stormwater utility fee based on its contribution to the problem. Revenue from all non-residential properties would yield an estimated total of \$1,742,280 per year in the first two years and \$1,982,173 per year beginning in year 3, based on 2,464 non-residential properties each paying an average fee of approximately \$615 per year (beginning in year 3). EFC's recommendations were provided to the City in 2013, and the City subsequently instituted a stormwater fee program at a lower fee rate.

***For more information, please visit the [MOST Knowledge Center](#).***

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