Stormwater Financing
Feasibility Study:
Salisbury, Maryland

Presentation to City Council
Stormwater Financing & Outreach Unit
Environmental Finance Center
University of Maryland
Federal & State Regulations Driving Stormwater Management

- Under federal Clean Water Act, Environmental Protection Agency (EPA) issues National Pollutant Discharge Elimination System (NPDES) Permits
  - Permit can be Phase I or Phase II, general or individual
  - Depends on size and nature of community
- In Maryland, Maryland Department of Environment (MDE) administers all NPDES Permits
- Salisbury is regulated under NPDES General Permit from small Municipal Separate Storm Sewer Systems (MS4)
Who is included in the MS4 Permit?

Source: A User’s Guide to Watershed Planning in Maryland, December 2005, Prepared by Center for Watershed Protection for the Maryland Department of Natural Resources
What is included in the MS4 Permit?

Permit addresses 6 minimum control measures (MCMs)

1. Public Education & Outreach
2. Public Involvement & Participation
3. Illicit Discharge Detection & Elimination (IDD&E)
4. Construction Site Stormwater Runoff Control
5. Post Construction Stormwater Management
6. Pollution Prevention & Good Housekeeping
Goal of the Salisbury Stormwater Program

Chesapeake Bay communities are facing:

- More stringent MS4 permits
- Significant nutrient reduction expectations from TMDL and WIP activities

**EFC’s Goal**

Enhance Salisbury’s existing program, raising the level of service in a way that enables the City to meet permit requirements more thoroughly, address community water quality priorities, and prepare for future nutrient reduction expectations.
Project Objectives: Develop Equitable, Adequate, and Dedicated Funding Mechanism for City

- Fairly and equitably allocate the stormwater management costs
- Generate annual revenue sufficient for delivery of desired level of stormwater management service
- Recommend funding mechanism that is accountable, realistic, and transparent
- Inform the community in a way that develops a demand for improved stormwater management and engages them in decision-making and implementation
Identifying Stormwater Concerns in Salisbury

- Aging infrastructure
- Increasing water quality expectations
- Increasing stormwater management costs
- Need for enhanced operations and maintenance
FINDINGS & RECOMMENDATIONS
## Possible Stormwater Funding Mechanisms

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Coverage of Cost</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Capital</td>
<td>O&amp;M</td>
</tr>
<tr>
<td>Grants</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Maryland Loan Programs</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Bond Financing</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>General Fund</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Permit Review Fees</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Inspection Fees</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Stormwater Utility Rates</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Salisbury Stormwater Program Funding Needs

Relevant Findings

- Budgeting practices currently **significantly underfund** the stormwater program in order to meet the City’s MS4 Permit.
- 10-year revenue stream totaling ~$23.2 million is needed to fully support required MS4 Permit activities.
- A comprehensive program will include additional costs associated with the City’s WIP activities.
Proposed Stormwater Budget, Years 1-10

FY 2013 (Year 1)  FY 2014 (Year 2)  FY 2015 (Year 3)  FY 2016 (Year 4)  FY 2017 (Year 5)  FY 2018 (Year 6)  FY 2019 (Year 7)  FY 2020 (Year 8)  FY 2021 (Year 9)  FY 2022 (Year 10)

- Personnel Costs
- Capital Improvement Costs
- Operations & Maintenance Costs
- Total Costs
Salisbury Stormwater Utility Revenue Recommendations

- $25.1 million revenue generated from stormwater utility over next 10 years
  - Residential revenue based on flat rate fee
  - Non-residential revenue based on tiered system (years 1 and 2) and then Equivalent Residential Unit (ERU)-based fee structure (beginning in year 3)
Residential Flat Rate Fee Structure

- Not a large spread among sizes of residential units
- Based on fixed yearly rate for 7,995 properties
- Residential fee based on the average impervious surface of residential properties

<table>
<thead>
<tr>
<th>Year</th>
<th>Flat Rate Fee</th>
<th>Yearly Revenue Generated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years 1-4</td>
<td>$40</td>
<td>$40 x 7,995 = $319,960</td>
</tr>
<tr>
<td>Years 5-7</td>
<td>$45</td>
<td>$45 x 7,995 = $359,955</td>
</tr>
<tr>
<td>Years 8-10</td>
<td>$50</td>
<td>$50 x 7,995 = $399,950</td>
</tr>
</tbody>
</table>
Non-Residential ERU-Based Rate Fee Structure

- Based on ERU-based rate calculated for 2,464 properties
- Utilize a tiered rate structure in years 1-2
- Begin to utilize parcel data beginning in year 3

<table>
<thead>
<tr>
<th>Year</th>
<th>ERU-based Rate</th>
<th>Yearly Revenue Generated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years 1-2</td>
<td>$40</td>
<td>$1,742,280</td>
</tr>
<tr>
<td>Years 3-4</td>
<td>$40</td>
<td>$1,982,173</td>
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<tr>
<td>Years 5-7</td>
<td>$45</td>
<td>$2,229,945</td>
</tr>
<tr>
<td>Years 8-10</td>
<td>$50</td>
<td>$2,477,716</td>
</tr>
</tbody>
</table>
Proposed Stormwater Budget vs. Total Revenue, Years 1-10

- **FY 2013 (Year 1)**
  - Proposed Stormwater Program Budget

- **FY 2014 (Year 2)**
  - Total Revenue

- **FY 2015 (Year 3)**
  - Total Revenue

- **FY 2016 (Year 4)**
  - Total Revenue

- **FY 2017 (Year 5)**
  - Proposed Stormwater Program Budget
  - Increase to $45/ERU

- **FY 2018 (Year 6)**
  - Total Revenue

- **FY 2019 (Year 7)**
  - Total Revenue

- **FY 2020 (Year 8)**
  - Total Revenue

- **FY 2021 (Year 9)**
  - Total Revenue

- **FY 2022 (Year 10)**
  - Total Revenue

Key Points:
- Begin impervious-based fee ($40/ERU)
- Tiered system
- Increase to $45/ERU
- Increase to $50/ERU
Questions?

FORE MORE INFORMATION
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