“A How-to Guide to Funding Stormwater Projects for Small Cities/Rural Communities.”

2016 PWX
Minneapolis
August 29, 2016

PART 1

WHAT IS A STORM WATER UTILITY?
OVERVIEW

Stormwater Utility – Definition
Authority
Benefits
Challenges
Development
Rate Structure
Billing
Implementation

Stormwater Utility – Definition

• A "stand-alone" service unit within the city or county government, which generates revenues through fees for service.
• Responsible for funding stormwater system planning and management, and for the operation, construction and maintenance of stormwater programs and projects.
• Generates its revenue through user fees with the revenues from the stormwater fees going into a separate fund that may only be used for stormwater services.
Authority

• Most states allow municipalities to create a stormwater utility, or at least to enact service charges for stormwater management programs
• Typically two ordinances are required to (1) establish the utility and (2) set the rates
• Laws vary from state to state

Benefits of a Stormwater Utility

• Provides a source of funding that is
  – Predictable and stable
  – Dedicated
  – Equitable
• Provides funding to:
  – Develop and implement Stormwater Master Plans
  – Funds NPDES requirements
  – Address long neglected stormwater projects
  – Pay for staffing for stormwater programs and projects
Challenges

• Often difficult to obtain community or political support
• Viewed as just another tax
• More visible to property owners than taxes
• Billing can be costly and difficult
• Can lead to legal challenges

Development

Database Development
Public Involvement
Cost of Service Analysis
Rate Structure
Credits and Exemptions
Setting Fees
Establishing a Billing System
Implementation
DATA BASE DEVELOPMENT

- Inventory sources:
  - GIS data
  - Databases
  - Subdivision plans
  - Interviews with municipal staff
- Determine maintenance responsibility

PUBLIC INVOLVEMENT

- DOA without it
- Establish advisory committee to help develop utility and become community advocates
COST OF SERVICE ANALYSIS

- Stormwater management system inventory (GIS/database product)
  - BMPs
  - Drainage System
- NPDES costs
- Staffing needs and costs
- Maintenance needs and costs
- Capital Project needs and costs
- Provide varying levels of service
- Determine final cost

RATE STRUCTURE

- Use impervious area as basis for fee
- May assume a uniform impervious area for single family residential parcels to establish Equivalent Residential Unit (ERU)
- May established tiered rate structure for residential parcels
- Ensure rate structure is equitable
EQUIVALENT RESIDENTIAL UNIT (ERU)

Calculate base unit ERU size

- Use GIS impervious surface layer if available
- Use real estate/tax assessment database to determine structure square footage
- Select sample area to digitize other impervious features from aerial photos and rectified tax maps

IMPERVIOUS AREA
EXEMPTIONS

• Some may be mandated by law
  – Colleges and universities
  – Churches
  – Government Buildings
• If none are mandated, governing bodies decide on exemptions

CREDITS

• Usually apply only to non-residential properties
• Based on improvements that
  – Protect against different levels of flood events
  – Improve water quality
• Determined by governing body
• May be capped
SETTING FEES

• Calculate total impervious surface adjusted for exemptions and credits (if given)
• Determine total number of ERUs in municipality

\[
\text{Total Impervious Surface (sq. ft)} = \text{No. of ERUs} \\
\text{Base ERU Size (sq. ft)}
\]
• Calculate ERU rate needed to generate required revenue

BILLING SYSTEM

• Add to existing monthly utility bills
  – Most common
  – Least costly
• Add to annual property tax bill
IMPLEMENTATION

• Public involvement, education and support
• Political Support
• Ongoing advisory committee
• Periodic review of rate structure

PART 2

A CASE STUDY
Lessons Learned in St. Augustine, Florida
LESSONS LEARNED

BACKGROUND

• Est. utility in 1993
• Billed with monthly water and sewer bill
• Annual collections - $750,000
• Equivalent residential unit (ERU) used
• 1 ERU = 2,000 sq. ft. of impervious area
• Commercial properties capped at 10 ERUs
• Utility rate review conducted in 2011
UTILITY RATE REVIEW

• Findings
  — Rate review conducted as part of the City’s Stormwater Master Plan Update
  — Utility rate found not to be equitable
  — ERUs not equal for residential and commercial
  — ERUs capped at 10 for commercial
  — Annual collections only able to fund maintenance activities
  — No rate increase in 18 years
  — BMP changed, GIS

UTILITY RATE REVIEW

• Recommendations
  — Restructure utility rate
  — Create geodatabase of impervious areas for commercial properties using GIS
  — Look at a tiered rate for residential properties
  — Increase rate to fund CIP and O&M
  — Formation of stormwater committee to help guide implementation
STORMWATER ADVISORY COMMITTEE

- 14 Members
- Diversify!
- Educate
- Steer towards recommendation for City Commission
- Be patient

SWAC Goals and Operation

- Four monthly meetings
- Outreach and education regarding the current stormwater problems
- SWAC represents the concerns of multiple city groups
- SWAC will evaluate funding alternatives
- SWAC will present results to the City Commission
- Communication guidelines
- Substitutions for dates when you are not available

LESSONS LEARNED

STORMWATER ADVISORY COMMITTEE

SWAC wanted to include smaller neighborhood projects

Very important to show how the fund is or will be utilized

LES S S LEARNED
ROLL OUT

Public information & outreach
Move slowly
Keep it simple
Provide avenue for customer feedback
FAQ

LESSONS LEARNED

PART 3

Stormwater Utility Trends and Best Practices
Is A Stormwater Utility Right for You?

Data Source: Western Kentucky University Stormwater Utility Survey 2014

• Nearly 1,500 documented stormwater utilities nationally (40 states and the District of Columbia)

• Large range in size
  – Smallest: Indian Creek Village, Florida (pop: 88)
  – Largest: Los Angeles, California (pop: over 3 million)
  – Average Population: 73,900
  – Median Population: 19,200

General Project Approach

• Generally, stormwater utility fees are justified and implemented in 2 phases:
  – Phase 1 – Feasibility
    • What is the desired LOS ($)?
    • What is the best way to pay for it?
  – Phase 2 – Implementation
    • How do I collect the fee?
    • What is the ordinance needed?
    • How do I get the public to agree to the new fee?
Need for Funding

• Identify the drivers that are pushing you to look at new revenue.
• Characterize your existing program (activities and revenues)
• Analyze the level of service (LOS) you provide the citizens today. Remember LOS is not a measure of effort; rather it is a measure of resources.

Need for Funding

• Identify what you need to do to increase your LOS to the level you and your citizens want.
• Only after you do this should you start focusing on how you pay for the higher level of service.
The Bar Has Been Set
Where Do We Go From Here?

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Program Management</th>
<th>Regulatory Compliance</th>
<th>Operation and Maintenance</th>
<th>Capital Improvement Projects</th>
<th>Total Program Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>$465,000</td>
<td>$381,000</td>
<td>$1,000,000</td>
<td>$885,000</td>
<td>$2,731,000</td>
</tr>
<tr>
<td>Comprehensive Planning &amp; Full Implementation Capabilities</td>
<td>Exemplary Permit Compliance</td>
<td>Fully Preventative/100% Routine</td>
<td>Prioritized/Fully-Funded</td>
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<tr>
<td>4</td>
<td>$315,000</td>
<td>$336,000</td>
<td>$850,000</td>
<td>$535,000</td>
<td>$2,036,000</td>
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<tr>
<td>Pre-Active Planning &amp; Systematic CIP Implementation Capabilities</td>
<td>Pro-Active Permit Compliance</td>
<td>Mixture of Routine and Inspection Based</td>
<td>Phased Implementation/Allocated Budgets</td>
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<td></td>
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<tr>
<td>3</td>
<td>$215,000</td>
<td>$240,000</td>
<td>$569,000</td>
<td>$435,000</td>
<td>$1,459,000</td>
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<tr>
<td>Priority Planning &amp; Partial CIP Implementation Capabilities</td>
<td>Full Permit Compliance</td>
<td>Mixture of Inspection and Responsive Based</td>
<td>Compliant, Inspection-Based/Moderate Budget</td>
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<td></td>
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<tr>
<td>Existing LOS (2.0)</td>
<td>$115,000</td>
<td>$227,000</td>
<td>$489,000</td>
<td>$185,000</td>
<td>$996,000</td>
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<tr>
<td>Adequate Staffing for Today/Minimal Long Range Planning</td>
<td>Minimum Permit Compliance</td>
<td>Partially Dedicated Crew/Routine-Based System Maintenance</td>
<td>Critical Needs Only/Minimum Budget</td>
<td></td>
<td></td>
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</table>

Gaining Public Support

- The public must want the service (i.e. don’t hang your hat on regulations alone)
- Know your community; each community is unique
- Establish a common message across all project partners
### Have Your Stakeholders Tell You What They Want

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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Program Components</td>
<td>Program Components</td>
<td>Stakeholder Voting Tally</td>
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<tr>
<td>A</td>
<td>Fully Preventative/100% Routine</td>
<td>Comprehensive Planning, NPDES Compliance, Full Implementation</td>
<td>9</td>
</tr>
<tr>
<td>B</td>
<td>Mixture of Routine and Inspection Based</td>
<td>Pro-Active Planning, NPDES Compliance, Systematic Implementation</td>
<td>7</td>
</tr>
<tr>
<td>C</td>
<td>Inspection Based Only</td>
<td>Priority Planning, NPDES Compliance, Partial Implementation</td>
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</tr>
<tr>
<td>D</td>
<td>Responsive Only</td>
<td>-</td>
<td>0</td>
</tr>
</tbody>
</table>

- **Level of Service**
- **Operation and Maintenance**
- **Program Management and Compliance**
- **Capital Improvement Projects**

### Gaining Public Support

- Stakeholder involvement projects have the highest percentage of success
- Education should continue after implementation
Stakeholder Meeting Agenda Example

• Meeting No. 1 –
  – Existing Program Issues
  – Storm Water Utility Concepts
• Meeting No. 2 –
  – Program Needs, Issues and Priorities
  – Level of Service
• Meeting No. 3 –
  – Planned Programs
  – Level of Service Feedback

• Meeting No. 4 –
  – Funding Options
• Meeting No. 5 –
  – Base Rates or Charges
  – Policy Issues
• Meeting No. 6 –
  – Rate Recommendations
  – Outstanding Policy Issues
• Meeting No. 7 –
  – Development of Final Recommendations

Rate Structures

• Equity is key…the benefits must equal the charge
• A sampling of customer classes is all that’s required to establish a rate structure
• Complicated rate structures increase administrative cost
Billing and Collections

- Understand the pros and cons of each billing option
- Begin coordination on billing early in the process
- Budget for the cost of implementation

Method of Sending the Bill

Data Source: Southeast Storm Water Association Utility Survey 2015

- Combined Utility Bill 48%
- Annual Property Tax Bill 40%
- Separate Mailing 6%
- Other 6%
Billing Practices for Government Properties

Data Source: Southeast Storm Water Association Utility Survey 2015

|----------------|-------------|-------------|-----------------------|-----------------------|-----------------------------|-----------------------------|----------------|----------------|}
| Federal        | 10%         | 3%          | 80%                   | 83%                   | 8%                          | 11%                         | 3%             | 3%             |
| State          | 13%         | 4%          | 68%                   | 81%                   | 13%                         | 9%                          | 8%             | 6%             |
| County         | 7%          | 3%          | 83%                   | 94%                   | 5%                          | 3%                          | 5%             | 0%             |
| City           | 10%         | 6%          | 79%                   | 88%                   | 0%                          | 3%                          | 10%            | 3%             |
| School District| 8%          | 6%          | 93%                   | 92%                   | 0%                          | 1%                          | 0%             | 1%             |
| Special District| 0%         | 2%          | 96%                   | 93%                   | 0%                          | 0%                          | 4%             | 4%             |

Increasing

Decreasing

Billing and Collections

- Always err on the side of the customer
- Acknowledge that there will be errors and omissions in the first few cycles
- Define consistent procedures for making changes
Compare and Contrast

• Compare the SWU fee to the tax assessment for an average sized (valued) home in your community.
• Also compare the fee to the normal utilities payment – that is, compare the fee for commercial to the other commercial utility fees.

The Stormwater User Fee Approach Results in a Shift of the Cost Burden on the Customer Class

Example: City of Lynchburg, VA
Thank You for Your Time and Attention!

Questions?

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