Exploring the Development of a Stormwater Utility
Three Case Studies in Albany County, New York:
Town of New Scotland
Town of Colonie
Village of Menands

April 2020

Stormwater Coalition of Albany County
“Education, Participation, Compliance”

What is stormwater management?

PUBLIC EDUCATION  ILLICIT DISCHARGE DETECTION  SYSTEM MAPPING  WATER QUALITY TESTING
CONSTRUCTION SITE RUNOFF CONTROL  UPGRADE AND MAINTAIN AGING INFRASTRUCTURE  INSTALLING NEW INFRASTRUCTURE
STORMWATER MANAGEMENT GOALS

Reduce Stormwater Flooding

Invest in the Future

Control Water Pollution/Improve Water Quality

Meet Regulatory Requirements

SOME EXISTING FINANCIAL MECHANISMS

- General Fund (property tax)
- Capital Funding Grants

Competition between departments
Why is a dedicated stormwater fund necessary?

- **No competition** with other priority items for funding
- **Reliable & Predictable**
- Fee is **based upon use** of the stormwater system
- Increasing opportunities to **update stormwater infrastructure**

What is a stormwater utility?

A stormwater utility is a **FEE based on IMPERVIOUS SURFACES** on a parcel.

- **Impervious surfaces**: Ex: roofs, roads, parking lots, patios, large areas of pavement
- **Pervious surfaces**: Ex: natural landscapes, green roofs, rain gardens, grass pavers, parking lots, infiltration trenches
**HOW IS A STORMWATER UTILITY EQUITABLE?**

A stormwater utility aids in funding stormwater projects

A stormwater utility is based on the impervious surface of a residential parcel with three units or less

Parcels which produce more stormwater runoff pay a higher fee

- Greater Impervious
- More runoff to the sewer system
- Higher stormwater fee

**STEPS TO SETUP A STORMWATER UTILITY**

1. Determine existing & future stormwater budget needs ✅
2. Delineate parcel impervious surface area by land use type ✅
3. Assess rate structure options and fees ✅
4. Meet with stakeholders to review findings, assess feasibility, and determine best way to move forward
5. Pass enabling legislation at Town Meeting
**Town of Colonie 2020 Budgetary Needs: $2,053,209**

- **Capital Projects**: $950,000 (46%)
- **Non-Capital Items (MS4 Compliance, including associated O&M, staffing)**: $1,111,399 (54%)

**Town of New Scotland 2020 Budgetary Needs: $172,100**

- **Capital Projects**: $124,600 (72%)
- **Non-Capital Items (MS4 Compliance, including associated O&M, staffing)**: $47,500 (28%)
EQUIVALENT RESIDENTIAL UNIT (ERU) METHODOLOGY

All parcels (excluding government) are billed an amount proportional to the impervious area on a parcel, regardless of the parcel's total area. The rate is based on an ERU, which is the average impervious area of 1-3 family residential parcels.

How are the ERU fees determined?

- Program cost is evaluated and determined
- Average Impervious Area of a three family or smaller residential property is determined
- This becomes the EQUIVALENT RESIDENTIAL UNIT (ERU)

OR

- A set fee is determined for 1-3 family residential lots and a fee is calculated per ERU for all other lots
- A set fee is determined for 1-3 family residential lots and a Tiered Fee is determined for all other lots based on impervious area

The fees can be adjusted for budgetary requirements
Recommended Fee Structure

Residential
Flat Fee

Commercial
Impervious Area Tiers or using ERU

Fairness
Cost of Implementation
Budgetary Needs
New York Models

EXAMPLE
New Scotland ERU calculation

IMPERVIOUS AREA
(BASED OFF 1 – 3 FAMILY RESIDENTIAL PARCELS)

TOTAL: 14,269,171 square feet

AVERAGE: 7,040 square feet

1 ERU = 7,040 square feet
### Commercial Property A (ERU Method)

<table>
<thead>
<tr>
<th>Amount of Impervious Area</th>
<th>20,983 square feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equivalent Residential Unit (ERU)</td>
<td>$\div 7,040$ square feet</td>
</tr>
<tr>
<td></td>
<td>$\div 7,040$ square feet</td>
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<tr>
<td></td>
<td>$\div 7,040$ square feet</td>
</tr>
<tr>
<td>Rate per ERU</td>
<td>$40$ per year</td>
</tr>
<tr>
<td>Commercial Property A</td>
<td>$\times 3$ ERUs</td>
</tr>
<tr>
<td>Stormwater Utility Fee</td>
<td>$120$ per year</td>
</tr>
</tbody>
</table>

### Commercial Property A (Tiered Method)

<table>
<thead>
<tr>
<th>Amount of Impervious Area:</th>
<th>20,983 square feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 4 (15,000 SF &lt; IA &lt; 25,000 SF):</td>
<td>$150$ flat rate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commercial Property A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stormwater Utility Fee:</td>
</tr>
</tbody>
</table>
Estimated Cost per Household

- Small Residential
  - $40 per year = $3.33 per month

- Commercial/Large Residential
  - $40 dollars per ERU

Revenue Generated in New Scotland

- Small Residential
  - $40 per year
  - X 2,027 parcels
  - $81,080 revenue generated per year

- Commercial/Large Residential
  - $40 dollars per ERU
  - X 2,186 ERUs
  - $87,440 revenue generated per year
<table>
<thead>
<tr>
<th>Residential Type</th>
<th>Revenue Amount</th>
<th>Number of Parcels</th>
<th>Revenue Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Residential</td>
<td>$40 per year</td>
<td>22,694 parcels</td>
<td>$907,760</td>
</tr>
<tr>
<td>Commercial/Large Residential</td>
<td>$40 dollars per ERU</td>
<td>40,429 ERUs</td>
<td>$1,617,160</td>
</tr>
</tbody>
</table>

Revenue Generated in Menands

<table>
<thead>
<tr>
<th>Residential Type</th>
<th>Revenue Amount</th>
<th>Number of Parcels</th>
<th>Revenue Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Residential</td>
<td>$25 per year</td>
<td>863 parcels</td>
<td>$17,260</td>
</tr>
<tr>
<td>Commercial/Large Residential</td>
<td>$75 dollars per parcel</td>
<td>243 parcels</td>
<td>$12,150</td>
</tr>
</tbody>
</table>
$40 fee per household and per ERU
Town of New Scotland

$172,100
Stormwater Cost
Permit Year 1

98%
of approximate budgetary needs in Permit Year 1 could be covered by the Stormwater Utility Fee

$40 fee per household and per ERU
Town of Colonie

$2,061,359
Stormwater Cost
Permit Year 1

100%
of approximate budgetary needs in Permit Year 1 could be covered by the Stormwater Utility Fee
$25 fee per household and $75 fee per other parcels
Village of Menands

$39,800
Revenue generated annually

INTENSITY OF DEVELOPMENT (ID) METHODOLOGY

All parcels (excluding government) are charged a fee based on percentage of impervious area. Level of development is categorized, and parcels in each category are charged a fee based on the "total served area" - meaning total area of the parcel.
Intensity of Development Methodology

Fees are calculated based on the percentage of impervious area of a parcel

<table>
<thead>
<tr>
<th>Category (impervious percentage range)</th>
<th>Rate per month per 1,000 square feet of total served area (impervious plus pervious)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacant/Undeveloped (0%)</td>
<td>$0.08</td>
</tr>
<tr>
<td>Light development (1% to 20%)</td>
<td>$0.12</td>
</tr>
<tr>
<td>Moderate development (21% to 40%)</td>
<td>$0.16</td>
</tr>
<tr>
<td>Heavy development (41% to 70%)</td>
<td>$0.24</td>
</tr>
<tr>
<td>Very heavy development (71% to 100%)</td>
<td>$0.32</td>
</tr>
</tbody>
</table>

Revenue Generated in the Town of New Scotland

<table>
<thead>
<tr>
<th>Impervious Percent Range</th>
<th>Annual Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacant/Undeveloped (0%)</td>
<td>$211,270</td>
</tr>
<tr>
<td>Light Development (1% to 20%)</td>
<td>$1,715,333</td>
</tr>
<tr>
<td>Moderate Development (21% to 40%)</td>
<td>$18,033</td>
</tr>
<tr>
<td>Heavy Development (41% to 70%)</td>
<td>$4,059</td>
</tr>
<tr>
<td>Very Heavy Development (71% to 100%)</td>
<td>$1,058</td>
</tr>
</tbody>
</table>

TOTAL REVENUE GENERATED ANNUALLY $1,949,754
### Revenue Generated in the Town of Colonie

<table>
<thead>
<tr>
<th>Impervious Percent Range</th>
<th>Annual Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacant/Undeveloped (0%)</td>
<td>$91,175</td>
</tr>
<tr>
<td>Light Development (1% to 20%)</td>
<td>$916,172</td>
</tr>
<tr>
<td>Moderate Development (21% to 40%)</td>
<td>$570,067</td>
</tr>
<tr>
<td>Heavy Development (41% to 70%)</td>
<td>$354,976</td>
</tr>
<tr>
<td>Very Heavy Development (71% to 100%)</td>
<td>$172,072</td>
</tr>
</tbody>
</table>

**TOTAL REVENUE GENERATED ANNUALLY**  $2,104,462

### Revenue Generated in the Village of Menands

<table>
<thead>
<tr>
<th>Impervious Percent Range</th>
<th>Annual Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacant/Undeveloped (0%)</td>
<td>$2,393</td>
</tr>
<tr>
<td>Light Development (1% to 20%)</td>
<td>$39,052</td>
</tr>
<tr>
<td>Moderate Development (21% to 40%)</td>
<td>$20,490</td>
</tr>
<tr>
<td>Heavy Development (41% to 70%)</td>
<td>$23,525</td>
</tr>
<tr>
<td>Very Heavy Development (71% to 100%)</td>
<td>$30,698</td>
</tr>
</tbody>
</table>

**TOTAL REVENUE GENERATED ANNUALLY**  $116,158
Intensity of Development Method
Town of New Scotland

$172,100
Stormwater Cost
Permit Year 1

>100%
of approximate
budgetary needs in
Permit Year 1 could be
covered by the
Stormwater Utility Fee

Intensity of Development Method
Town of Colonie

$2,061,359
Stormwater Cost
Permit Year 1

100%
of approximate
budgetary needs in
Permit Year 1 could be
covered by the
Stormwater Utility Fee
Intensity of Development Method
Village of Menands

$116,158
Revenue generated annually

Credits and Incentives

Credits and incentives are received when a property owner reduces the amount of impervious area on their property.

Credits = permanent (or semi-permanent) reduction of stormwater fees
Incentives = one-time rebate
Examples

CREDITS
- Stormwater Detention Basins/Vaults
- Infiltration Basin

INCENTIVES
- Rain Barrels
- Rain Gardens
- Permeable Pavement

THANK YOU!
Questions or Comments?