Municipal Stormwater Utility
ERU / Impervious Area Method

Downers Grove, Illinois

Karen Robbins
GIS Specialist
Fee Structure

➢ Flat Fee
➢ Gross Area
➢ Impervious Area
➢ ERU Based
➢ Drinking Water Usage
➢ Residential Equivalent Factor (REF) (MN)

Residential Tiered Structure
Rate Base … ERU

Equivalent Runoff Unit / Equivalent Residential Unit

Unit of measure for billing

Average Impervious Area of 100 SFR

Downers Grove: ERU = 3300
Impervious Area

Parcel Boundary = Cookie Cutter

Driveway

Private Sidewalk

House (including eaves)

Deck or Patio
Rate Structure

➢ Vacant
➢ Residential
  ● Tiers
➢ Non-Residential

➢ Multi-Owner Buildings
➢ Condominium Complexes
➢ Multiple Units/Tenants on a single-owner parcel
Average residential parcel has 3,300 sf of impervious

1 ERU = 3,300 sf
Residential Rates 2013 / 2017

- **Tier 1**: 1 – 2,500 square feet, $6.30/mo, $7.90/mo, .75 ERU
- **Tier 2**: 2,501 – 4,000 square feet, $8.40/mo, $10.53/mo, 1 ERU
- **Tier 3**: 4,001 – 7,000 square feet, $12.60/mo, $15.80/mo, 1.5 ERU

Treated like Non-Residential parcels due to the large amount of impervious area.
Tier 1
1 – 2,500
.75 ERU

Tier 2
2,501 - 4,000
1 ERU

Tier 3
4,001 – 7,000
1.5 ERU

M $8.57
Bi-M $17.14
A $102.84

M $11.43
Bi-M $22.86
A $137.16

M $17.15
Bi-M $34.30
A $205.80

M $11.43
Bi-M $22.86
A $137.16
Non-Residential

> Residential parcels with greater than 7,000 sf
  These are considered having significant impact and are charged like Non-Residential parcels

> All Non-Residential parcels

Fee is based on the number of ERUs or portion thereof.
Residential with Significant Impact

18,090 / 3,300 = 5.48 \ldots \text{ round UP to } 6 \text{ ERUs}

M $68.58
Bi-M $137.16
A $822.96
Non - Residential Examples

37,511 / 3,300 = 11.37 … round
UP to 12 ERUs

M $137.16
Bi-M $274.32
A $1,645.92

46,744 / 3,300 = 14.16 … round
UP to 15 ERUs

M $171.45
Bi-M $342.90
A $2,057.40
Condominium Example

\[
\frac{67,602}{3,300} = 20.48
\]

\[
\frac{20.48}{120} = 0.1706
\]
Round to \(0.18\) ERUs

For each of the 120 Condos

- M $2.06
- Bi-M $4.12
- A $24.72
Large Non-Residential Example

350,977 / 3,300 = 106.36 … round
UP to 107 ERUs

M $1,223.01
Bi-M $2,446.02
A $14,676.12
Non-Residential Distribution

336 * 11.43 * 2 = $7,680.96 bi-monthly or $46,085.76 annually
1. **SINGLE FAMILY RESIDENTIAL** parcels are charged based on a tiered system:

<table>
<thead>
<tr>
<th>Single Family Residential</th>
<th>2017 Monthly Fee</th>
<th>2018 Monthly Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 (1-2,500 s.f. of impervious area) = .75 ERU</td>
<td>$7.90</td>
<td>$8.57</td>
</tr>
<tr>
<td>Tier 2 (2,501 - 4,000 s.f. of impervious area) = 1 ERU</td>
<td>$10.53</td>
<td>$11.43</td>
</tr>
<tr>
<td>Tier 3 (4,001- 7,000 s.f. of impervious area) = 1.5 ERU</td>
<td>$15.80</td>
<td>$17.15</td>
</tr>
</tbody>
</table>

*Table 2: Stormwater utility residential tier.*

2. **NON-SINGLE FAMILY RESIDENTIAL** parcels and **RESIDENTIAL PARCELS with greater than 7,000 s.f. of impervious area** are charged based on the actual amount of impervious area, measured in ERUs, rounded to the next whole ERU:

<table>
<thead>
<tr>
<th>Non-Single Family Residential</th>
<th>2017 Monthly Fee</th>
<th>2018 Monthly Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per ERU (3,300 s.f.)</td>
<td>$10.53</td>
<td>$11.43</td>
</tr>
</tbody>
</table>

*Table 3: Stormwater utility non-residential tier.*

3. **VACANT PARCELS** are charged .3 ERU.

<table>
<thead>
<tr>
<th>Vacant (unimproved) Parcels</th>
<th>2017 Monthly Fee</th>
<th>2018 Monthly Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.3 ERU</td>
<td>$3.16</td>
<td>$3.43</td>
</tr>
</tbody>
</table>

*Table 4: Stormwater utility vacant parcel tier.*
# City of Greenville, SC

## Single-Family Property Annual Fee

<table>
<thead>
<tr>
<th>Type of Residence</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Residential - Less than 1,640 square feet</td>
<td>$40.92</td>
<td>$41.86</td>
</tr>
<tr>
<td>Developed Residential - Greater than 1,640 square feet</td>
<td>$71.85</td>
<td>$73.50</td>
</tr>
<tr>
<td>Undeveloped Residential</td>
<td>$40.92</td>
<td>$41.86</td>
</tr>
</tbody>
</table>

## Multi-Family Property Annual Base Rate per ERU

<table>
<thead>
<tr>
<th>Type of Unit</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed Commercial / Industrial</td>
<td>$71.85</td>
<td>$73.50</td>
</tr>
<tr>
<td>Undeveloped Commercial / Industrial</td>
<td>$71.85</td>
<td>$73.50</td>
</tr>
</tbody>
</table>

* Equivalent Residential Unit (ERU) - total impervious area of the parcel in square feet / 2,389 sf
Billing Questions / Issues

➢ Fee Structure?
➢ Independent Utility Bill?
➢ Add to existing Water Bill?
➢ Add to Tax Bill? - *Never a discussion @ DG*
➢ Who gets the Bill?
  Owner? Tenant? Management Company?
➢ How to handle …
  Bill by parcel or utility account
  Vacant Parcels
  Multi-Owner Buildings
  Condominium Complexes
  Multiple Units on a single-owner parcel
Municipal Stormwater Utility
Downers Grove, Illinois

Karen Robbins
GIS Specialist
Downers Grove, IL
krobbins@downers.us
630-434-5492