# Storm Water Utility Fee Apportionment for the City of Birmingham

# Storm Water Overview

- **Legal Considerations – Tim Currier, City Attorney**
- **How rates are calculated – Mark Gerber, Finance Director**
- **Apportionment Report – James Surhigh, Senior Project Engineer, HRC**
- **Billing Considerations – Mark Gerber, Finance Director**

# “WHY ARE WE HERE?”

**STATE OF MICHIGAN**
**OAKLAND COUNTY CIRCUIT COURT**

***LAURENCE WOLF v CITY OF BIRMINGHAM***

**Case No.: 14-141608-CZ**

**EXCERPT FROM THE COURT APPROVED**
**SETTLEMENT AGREEMENT**

"17. The City will commission a study to confirm the current and future usage of stormwater disposal based on estimates of the amount of impervious surface present on the properties in the City and following the guidelines for allocating such costs consistent with the tests for distinguishing a fee from a tax prescribed by the decision in *Bolt v City of Lansing*, 459 Mich 152; 487 NW2d 264 (1998). Based on the results of the study, the City may adopt one or more new ordinances authorizing the imposition of a fee or fees to defray the cost of the City's stormwater system. Any fees or charges imposed under such newly enacted ordinances will be calculated on the basis of the study's results and thereby actually quantifying and recovering all of the costs of the City.

18. Beginning on January 1, 2017 and for the duration of the Prospective Relief Period, the City will recover the costs it incurs from the County for stormwater disposal solely through charges to property owners that are established, implemented, imposed and collected in a manner that is based on the methodology of the study described in paragraph 17."

# HISTORY

In 2014, the water-usage basis for billing for the storm water charges from Oakland County WRC was challenged in Circuit Court as violating the "*Bolt* criteria." A synopsis of the *Bolt* criteria (*Bolt v City of Lansing*, 459 Mich 152 –1998) is as follows:

> *Background:*
> *A property owner challenged Lansing's newly imposed storm water utility fee, arguing that the fee was a tax levied without voter approval in violation of the Headlee Amendment to the Michigan Constitution (Mich Const 1963, art 9, sections 25 and 31). Lansing had imposed the storm water fee on virtually all properties in the city to pay for the City's storm water and sanitary sewer separation project costs as permitted under state statute.*
>
> *What was the outcome?*
> *The Michigan Supreme Court ruled that the storm water service charge imposed by Lansing was unconstitutional and void on the basis that it was a tax for which voter approval was required and not a valid use fee. The Court established three criteria for distinguishing between a fee and a tax: 1) a user fee must serve a regulatory purpose rather than a revenue-raising purpose; 2) a user fee must be proportionate to the necessary costs of the service; and 3) a user fee must be voluntary ---property owners must be able to refuse or limit their use of the commodity or service. The Court found that the charge failed to satisfy the first and second criteria.*

The City is modifying the basis of billing for storm water charges by using a method that meets the three aspects of the *Bolt* criteria.

# WATER, SANITARY SEWER, STORM WATER

**WATER USAGE METERED**

**WATER USAGE IS AN ACCURATE MEASUREMENT OF SANITARY SEWAGE DISPOSAL**

**WATER USAGE HAS NO RELATIONSHIP TO STORM WATER**

## *Wolf v Birmingham* IS NOT THE ONLY CASE:

| | |
|---|---|
| Ferndale | Taylor |
| Dearborn | Detroit |
| Royal Oak | Oak Park |
| Canton | Oakland Twp. |
| Livonia | Westland |
| Bloomfield Twp. | |

* * * * * * * * * * * * *

**PENDING LEGISLATION**

**House Bill 5991 (2016)**

# Current 2016-2017 Sewer Rates

| Rate Component | Who Determines Cost? | Costs |
|---|---|---|
| Sanitary Sewer Disposal Costs | GLWA/OCWRC | $3,322,620 |
| **Storm water Disposal Costs** | **GLWA/OCWRC** | **2,470,420** |
| Maintenance | City | 864,400 |
| Depreciation | City | 884,300 |
| Capital | City | 675,000 |
| Total Costs | | $8,216,740 |
| Less: Other Revenue | | (92,130) |
| Net Costs | | $8,124,610 |
| Est. Units of Water | | 839,400 |
| Rate/1,000 gallons of water used | | $9.68 |

# Storm Water Utility Fee Apportionment

**Storm Water Utility Fee Apportionment Report:**

- Section 1 – Executive Summary
- Section 2 – Background
- Section 3 – Purpose and Summary
- **Section 4, 5, 6 – Methodology**
- Section 7 – Apportionment
- **Section 8 – Administrative Recommendations**

# Storm Water Utility Fee Apportionment

**How does Storm Water enter Sewer?**

- **Surface runoff to public drainage structures (catch basins & inlets)**
- Inflow through private foundation drains & yard drains
- Infiltration into private & public sewer pipes & structures

# Storm Water Utility Fee Apportionment

**What is Surface Runoff?**

- When precipitation occurs…
  - Some is intercepted by trees/plants
  - Some collects and evaporates
  - Some is absorbed
  - Some infiltrates into soil
  - Remainder becomes surface runoff

# Storm Water Utility Fee Apportionment

**How is Surface Runoff generated?**

- Primarily from Impervious surfaces
  - Building roofs
  - Pavements
- Also from Pervious surfaces to a smaller degree
  - Grass lawns & gardens
  - Landscape areas w/out membranes
- Runoff Coefficients developed for each type of surface

# Storm Water Utility Fee Apportionment

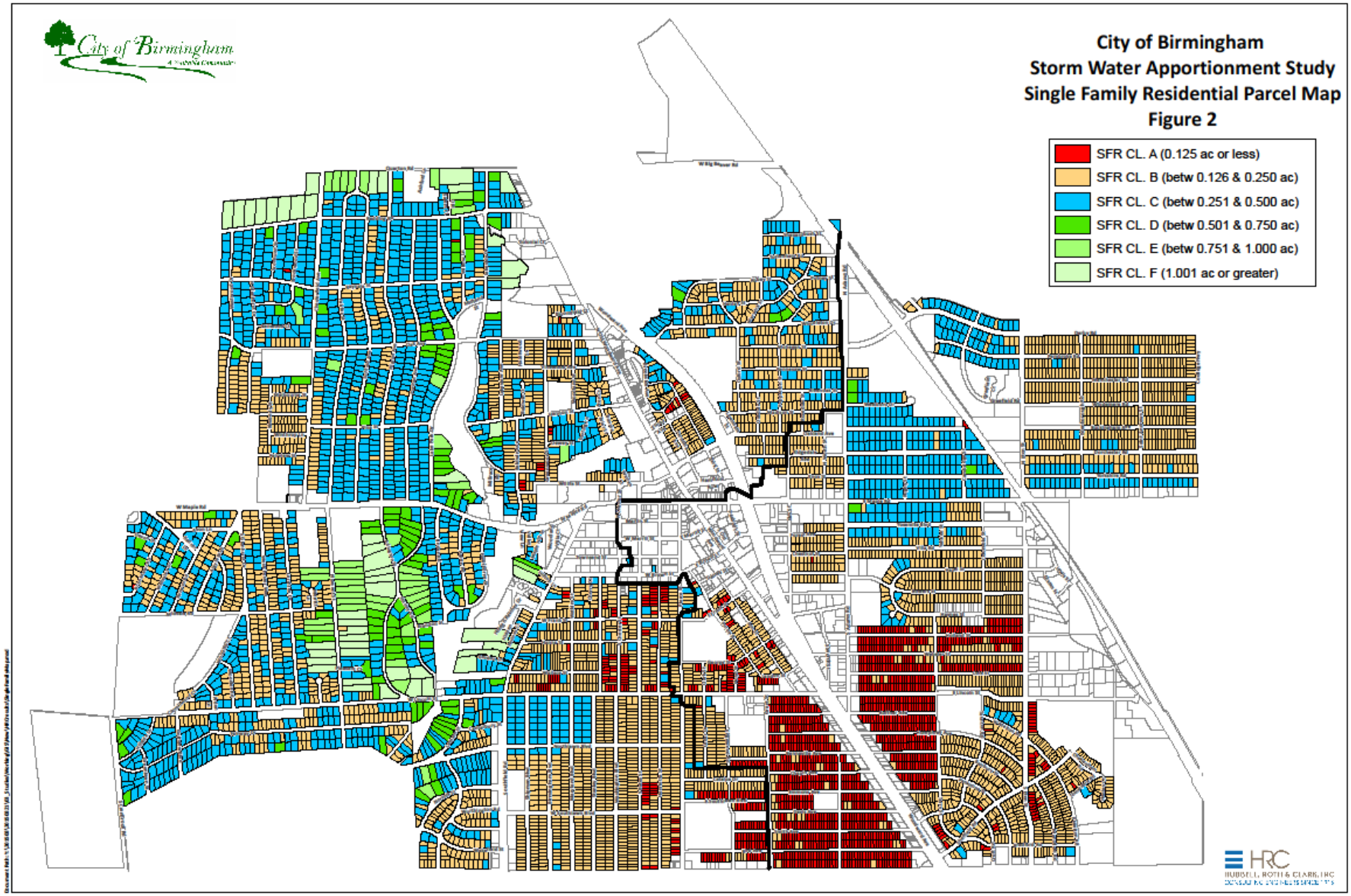
**General Methodology:**

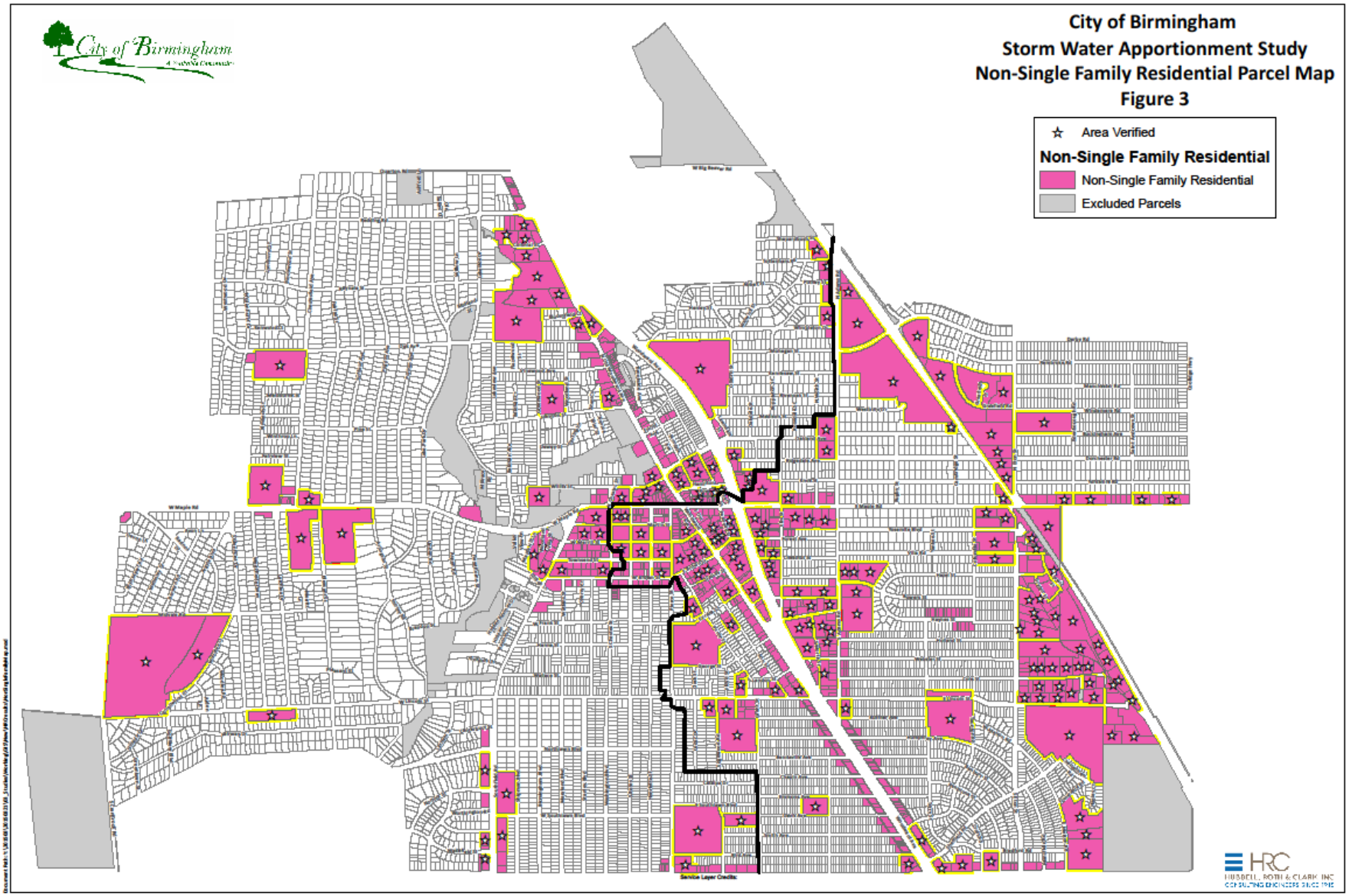
- Categorize similar types of properties
- Define a “standard unit”
- Determine Runoff Potential for the properties
- Equate particular Runoff Potential to the “standard unit” – Equivalent Storm Water Unit (ESWU)

# Storm Water Utility Fee Apportionment

**How are Properties Categorized?**

- Single Family Residential properties (SFR)
- Non-Single Family Residential properties (NSFR)
- SFR make up 91% of all properties by number, 72% by area
- See maps in Appendix A


City of Birmingham
Storm Water Apportionment Study
Single Family Residential Parcel Map
Figure 2
SFR CL. A (0.125 ac or less)
SFR CL. B (betw 0.126 & 0.250 ac)
SFR CL. C (betw 0.251 & 0.500 ac)
SFR CL. D (betw 0.501 & 0.750 ac)
SFR CL. E (betw 0.751 & 1.000 ac)
SFR CL. F (1.001 ac or greater)
HRC
HUBBELL, ROTH & CLARK, INC


City of Birmingham
Storm Water Apportionment Study
Non-Single Family Residential Parcel Map
Figure 3
Area Verified
Non-Single Family Residential
Non-Single Family Residential
Excluded Parcels
HRC
HUSSELL, ROTH & CLARK, INC
CONSULTING ENGINEERS SINCE 1946

# Storm Water Utility Fee Apportionment

**Single Family Residential Properties:**

- Six classifications based on lot area;
  - Class A 0.125 ac or less 1,375
  - Class B 0.126 to 0.250 ac 3,949
  - Class C 0.251 to 0.500 ac 1,716
  - Class D 0.501 to 0.750 ac 115
  - Class E 0.751 to 1.000 ac 43
  - Class F 1.001 ac or greater 47
- Average development characteristics determined for each SFR classification

# Storm Water Utility Fee Apportionment

**Non-Single Family Residential Properties:**

- Includes ALL other types of properties:
  - Two-family & multi-family residential, condominiums
  - Public properties, schools, churches
  - Commercial, business, office, parking
- Number of NSFR properties – 719
- Development characteristics uniquely determined for each NSFR property

# Storm Water Utility Fee Apportionment

**What is Runoff Potential?**

**RP = 0.9 x IA + 0.15 x (TA-IA)**]

IA = Impervious Area TA = Total Area

0.9 = Runoff Coefficient for Impervious Area

0.15 = Runoff Coefficient for Pervious Area

- Part of standard engineering calculation for determining runoff from an area

# Storm Water Utility Fee Apportionment

**How are these areas measured?**

- Total Area is based on Oakland County property data
- Public road right-of-way area deducted from TA for “metes & bounds” parcels
- Impervious Area based on SEMCOG GIS data, confirmed by visual check of aerial imagery for larger parcels

# Storm Water Utility Fee Apportionment

**How is using RP Proportional?**

- Comparing physical characteristics of each property that impacts how runoff is generated from that property to the District as a whole
- Independent of precipitation
- Each property's share of the total RP of the District – simplify by using ESWU concept

# Storm Water Utility Fee Apportionment

**What is the ESWU concept?**

- Convert RP to ESWU value (Equivalent Storm Water Unit)
- RP for “standard unit” = 4,317 sq. ft.
- ESWU for “standard unit” = 1.0
- ESWU for other parcels calculated by dividing their RP by 4,317 sq. ft.

# Storm Water Utility Fee Apportionment

**ESWU for Single Family Residential Parcels:**

- Average impervious area & total area for each SFR classification used to calculate the RP for that classification
- ESWU calculated by dividing RP for each classification by 4,317 sq. ft.
- ESWU value assigned to all properties within each classification

# Storm Water Utility Fee Apportionment

**ESWU for Non-Single Family Residential Parcels:**

- Unique impervious area & total area for each property used to calculate the RP for that property
- ESWU calculated by dividing RP for each property by 4,317 sq. ft.

# Storm Water Utility Fee Apportionment

**How is Apportionment Share Determined?**

- Sum the ESWU's for each District
- Divide the ESWU for each property in the District by the sum of ESWU's
- ESWU value and calculated apportionment share listed for every property (Appendix B)

# Storm Water Utility Fee Apportionment

**Credits & Methods for Reducing Fees:**

- Certain credits will be offered – measures must reduce amount of storm water that enters the sewer
  - Rain Barrels / Cisterns (intercept)
  - Rain Gardens / Bio-Swales (infiltrate)
  - Dry Wells / Infiltration Trenches (infiltrate)
  - Porous Pavement (infiltrate)
  - Disconnect Footing Drains (infiltrate)

# Storm Water Utility Fee Apportionment

**Credits & Methods for Reducing Fees:**

- Measures that rely on infiltration – percolation testing
- Property owner responsible for applying for credits & certifying continued use and performance
- Low Impact Development (Appendix C)

# Comparison of Quarterly Water and Sewer Bills Old vs. New Methodology

| | Old Methodology | New Methodology Evergreen-Farmington | New Methodology South Oakland County |
|---|---|---|---|
| Water Consumption | 20 units | 20 units | 20 units |
| | | | |
| Water | $87.20 | $87.20 | $87.20 |
| Sewer | 193.60 | 134.80 | 134.80 |
| Meter Charge | 8.00 | 8.00 | 8.00 |
| Storm water Fee * | | 45.75 | 59.50 |
| | | | |
| Total Quarterly Bill | $288.80 | $275.75 | $289.50 |

* Based on Residential Class B property

# What will this mean for me?

- Everyone's situation is different.  It depends on how much water you use, which drainage district you are in and size of your property.

- To find out how this may impact you:
  - Locate your property on the assessment roll and see which drainage district you are in and the number of ESWU's assessed to your property.
  - Take the number of ESWU's X the rate per ESWU ($183 for EF or $238 for SO) X .25 to get your quarterly fee for storm water disposal.
  - Find your most recent water bill and find the number of units of water you were billed.
  - Take the number of units of water X $6.74 to get your new sewer charge.
  - Take the storm water disposal fee calculated above + the new sewer charge calculated above + water charge on your water bill + water meter charge on your water bill = Your quarterly water and sewer bill using the new methodology.

# Questions?

**For additional information, please visit:**

**Bhamgov.org/stormwater**