

**CITY OF NEWARK  
STORMWATER UTILITY PROGRAM****POLICY: SERVICE CHARGE CALCULATION IN WHOLE OR PARTIAL  
ERUs****DISCUSSION:**

The Equivalent Residential Unit (ERU) will be used as the common denominator in the algorithm for all non-residential classes of properties using the selected rate structure, with the exception of assigning 1 ERU (flat rate) for all single-family residential class customers. The process can be summarized as follows:

The impervious area of a randomly selected and representative sample of single-family residential (SFR) properties is measured to determine the average impervious area. The average impervious area of those measured SFR properties represents one (1) Equivalent Residential Unit (ERU). The ERU is then used to calculate bills for all single-family residential and non-residential customer classes.

2. All SFR properties are charged a flat rate charge that is equal to one ERU.
3. The charge for a non-residential properties (not single-family residential as determined by the single-family residential property definition) is determined by first measuring the total impervious area for a particular property. The measured impervious area is then divided by the ERU (determined in Step 1 above) to determine the total number of ERUs for that particular property. **The mathematical division process will generally yield a fractional number (versus a whole ERU total).** The total number of ERUs for that property is then multiplied by the SFR flat rate to determine the charge for that non-residential property.

**ISSUE:**

Shall the product of the division be rounded to whole numbers? If so, what rounding protocol will be followed?

**or**

Shall fractional products be utilized in the calculation of bills?

The first option simplifies calculation of and explanation of bills.

The second option will significantly complicate the administration of the programming and its entire process. The project team believes the fractional ERU approach may also lend itself to a potential legal challenge. For example, a non-residential property that is actually measured for impervious area is calculated to be less than 1/2 of an ERU, may in fact, challenge that they should be assessed "0" or no charge simply on the grounds of rounding down.

### RECOMMENDATIONS:

The Project Team recommends the City of Newark implement a rate system that only recognizes complete or whole ERUs. Moreover, the following rounding protocol should be followed in rounding to whole numbers:

- 0.49 and below, is rounded down to the nearest whole ERU; and
- 0.50 through 0.99, is rounded up to the nearest whole ERU.
- All properties should receive at least 1 ERU – with the only exception being two-unit properties (duplexes) with two water meters and two billing accounts. Under this situation, each billing account will be charged 1/2 of the monthly stormwater service charge, or 1/2 ERU per month (See Billing Policy #5 – Duplexes).

### ACTION:

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