



Enterprise Fund.

City of Newark, Delaware

The City of Newark, DE Department of Public Works is responsible for providing drinking water services within the City and to retail customers outside the City. In addition, the City provides wastewater collection and conveyance, and stormwater management services within the City’s municipal jurisdiction. The City operates the water, wastewater and stormwater utilities under an

In January 2018, the City implemented a Stormwater User Charge as an equitable system of recovering costs associated

System Profile:

- Municipal Separate Storm Sewer System (MS4)
- Service Area: 9.3 square miles
- Population: 32,000
- Largest Property Holder: University of Delaware

Financial Profile:

- Annual Stormwater Utility Revenues: \$1.7 Million
- Monthly Equivalent Stormwater Unit (ESU) Rate = \$3.54 per ESU
- One ESU = 1,620 Square Feet of Impervious Area

with the City’s stormwater management program.

What are the City’s Key Drivers for Stormwater User Fees?

- Transition stormwater costs out of the water utility budget
- Sustainable annual revenues dedicated to stormwater management
- Equitable and fair approach to cost recovery
- Need for long-term sustainable financing

What costs are recovered via fees?

- Stormwater management Operations & Maintenance, and MS4 regulatory compliance
- Stream and habitat restoration
- Capital expenditures to rehabilitate & improve drainage infrastructure
- Administrative costs associated with program management, stormwater billing, credit program and customer service

Key Benefits to the Community

- Dedicated funding source for stormwater management.
- Increased fairness in cost recovery with an impervious area based fee structure.
- Sound legal foundation for a fee-based funding mechanism as the stormwater utility is authorized by the State of Delaware.
- Fee reduction opportunities to properties that implement stormwater best management practices.
- Stormwater grants to residential customers.

Fee Methodology and Impervious Area Determination

- The Stormwater User Charge is based on a property’s impervious area, which is expressed in terms of ESUs. One ESU is equivalent to 1,620 sq. ft. of impervious area. The ESU value represents the median impervious area of all single family residential parcels in the city.

- **Residential Parcels:** The City computes each parcel’s impervious area based on the actual footprint of (i) the main building area, (ii) any attached structures, and/or (iii) detached structures. The footprint information is obtained from [New Castle County’s Tax Assessment System](#).
- **Non-Residential Parcels:** The City has defined 12 stormwater classes. Each stormwater class has a designated Run-off Factor. Every non-residential parcel is assigned to a specific stormwater class. The Run-off Factor of that specific stormwater class is applied to a parcel’s total lot size to estimate that parcel’s Impervious Area. The total impervious area per non-residential parcel is divided by the ESU value of 1,620 square feet, to determine total billing units.
- **Condominium Parcels:** The City determines the impervious area associated with an entire condominium complex using the Geographic Information System (GIS) tool, and based on county parcel information and aerial imagery. The total impervious area per condo parcel is divided by the ESU value of 1,620 square feet, to determine total billing units.

Rate Structure

- A single-family residential property is designated to one of four tiers based on the property’s impervious area, and is assessed the corresponding monthly charge.
- The monthly charge for each non-residential property, including multi-family residential and condominium properties, is calculated based on the parcel’s ESUs and the monthly ESU rate.
- The fees are billed monthly using the City’s water utility billing system.

Tier	Impervious Area (sq ft)	ESU* Factor	Monthly Fee**
1	0 to 1,289	0.60	\$2.12
2	1,290 to 1,950	1.00	\$3.54
3	1,951 to 2,610	1.30	\$4.61
4	2,611 or more	1.80	\$6.37

* Equivalent Stormwater Unit
 ** Monthly fee as of January 1, 2019

Credit Program

The purpose of the stormwater credits program is to enable non-residential and condominium parcel owners to seek reduction in stormwater charges, if specific onsite stormwater management measures have been implemented, [which exceed](#), the City’s defined development regulations.

- Quality Credits for pollutant reduction - 15 percent (max credit)
- Quantity credits for peak rate reduction – 10 percent (max credit)

Total maximum aggregate fee credit that a property can obtain is 25%.

Public Education and Involvement

During the implementation of the Stormwater Utility Fee the City engaged in the following outreach activities:

- A campaign titled “Explain the Drain”
- A video on the stormwater system
- Series of public open houses, City Council workshops, and targeted customer notifications
- Interactive stormwater customer web portal



For additional information: <https://newarkde.gov/877/Stormwater->

Challenges and Success Factors

The critical challenge was in convincing the elected officials on the need for dedicated funding to conduct proactive infrastructure condition assessments and to enhance the integrity of the drainage infrastructure. Ultimately, the compelling success factors included (i) large impervious area properties paying their fair share, (ii) ability to cash finance over \$240,000 in stormwater capital investments to mitigate flooding and improve water quality, (iii) ability to support stormwater bond financing, (iv) funding to address deferred O&M; (v) a user-friendly stormwater billing data management application and (vi) successful integration of stormwater user fee billing in to the City’s water/sewer billing system.