

COMMUNITY SPOTLIGHT

City of Newton: Stormwater Rate Structure

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Newton, like many communities in New England, is a NPDES Phase II Municipal Separate Storm Sewer System (MS4) community and is required to submit annual reports to the Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) on their progress towards reducing pollution to its brooks, ponds and the Charles River. After a slow start, the city received an Administrative Order from the EPA in November 2004 for unacceptable levels of bacteria discharging to the Charles River at five locations. With the Department of Public Works' budgets shrinking and drainage infrastructure needs growing, it was time for a drastically different approach.

Newton had previously covered the cost of drainage maintenance and capital improvements under the city's general operating budget, supplemented with the efforts of the sewer maintenance crews. Drainage issues competed for funds with schools, and the police and the fire departments. With the passage of the Massachusetts Stormwater Management Bill in 2004, specific language was added to MGL Chapter 83, Section 16 which states: "In establishing quarterly or annual charges for the use of main drains and related stormwater facilities, the city, town, or district may either charge a uniform fee for residential properties and a separate uniform fee for commercial properties, or establish an annual charge based upon a uniform unit method; but the charge shall be assessed in a fair and equitable manner." A minimum needs assessment and budget was first prepared for FY2007 of \$700,000 and included funding for personnel salaries and training, water quality sampling, illicit discharge investigation, corrective actions, public education, pollution prevention and maintenance projects.



The city then evaluated the methods for distributing these costs among the beneficiaries. For simplicity and expediency, a uniform fee structure was created. The city measured impervious surfaces from a representative subset of residential and non-residential properties (e.g., commercial) within the community and calculated a median impervious area for the residential sample set

equal to 3,034 sq. feet (282 sq. meters) or 31 percent of the median lot size. A similar survey was conducted for 15 commercial properties and generated a median commercial impervious area to be 19,138 sq. feet (1,778 sq. meters). This is approximately six times the impervious area of the median residential lot. Utilizing this information the city established the following funding equation: $\$700,000 = 23,760(x) + 848(6x)$, where \$700,000 is the needed funding, 23,760 is the number of developed residential parcels and 848 is the number of developed commercial, institutional and industrial parcels in 2006. Solving this equation for "x" equals \$24.28, which we rounded to \$25.00 to allow for credits sought reducing the stormwater fee. Therefore, \$25.00 became the annual residential rate and \$150 became the annual non-residential rate. Since this is a fee, not a tax, various credits are offered for residential and commercial properties that install on-site drainage improvements approved by the city. These credits range from 10 to 50 percent, but when combined could not exceed 75 percent of the stormwater fee.

Minor revisions were proposed to the sewer ordinance, which would give the city authority to charge a stormwater fee. However, the downside of incorporating stormwater fees into a sewer ordinance is that properties on septic systems could not be assessed the stormwater fee. On May 24, 2006, a mere 5 months from concept development, the full Board of Alderman approved the ordinance changes.

The uniform/flat fee approach worked well for several years, but the city began to realize that the rate structure was insufficient to generate enough funds to tackle the needs of larger capital improvement projects. Despite following Massachusetts General Law, it was also becoming evident that a uniform fee structure for commercial, institutional and industrial zoned properties is inherently imbalanced. For these reasons, the city began developing a new rate structure and a new stormwater ordinance that was independent of the sewer regulations. The proposed changes were based upon a re-assessment of all single- and two-family residences, re-defining the median impervious coverage for this sub-class of properties which was determined to be 2,600 sq. feet (242 sq. meters). This area measurement becomes the base billing unit for which all other property classifications were assessed. The base billing rate will initially remain at \$25.00 per year for each 2,600 sq. feet (242 sq. meters). This proposed rate structure will increase the programs annual revenue to \$1.08 million, enough to sustain annual maintenance and set aside slightly more funds for capital improvements.



In conclusion, a simplified approach worked well in Newton. The program provided suitable financial support for the maintenance and staged improvement of drainage infrastructure, helping to improve water quality to receiving waterbodies, reduce flood losses and educate the public on pollution prevention. The new ordinance and fee structure will further ensure an equitable distribution of costs, strengthen the stormwater management program and put the city in a better position to address new and upcoming NPDES permit requirements. ■

City of Newton Expected Stormwater Revenue by Customer Class, FY 2013		
FY 2013	Billing units	Revenue – fully funded
Small Residential	23,796	\$594,900
Large Residential	4,275	\$106,887
Commercial	7,667	\$191,681
Tax Exempt	7,511	\$187,782
Total	43,674	\$1,081,250