



TOWN OF SHREWSBURY
100 MAPLE AVENUE
SHREWSBURY, MASSACHUSETTS 01545-5338

STORMWATER UTILITY
FREQUENTLY ASKED QUESTIONS

BACKGROUND

The Stormwater Phase II Final Rule was promulgated in 1999, and was the next step after the 1987 Phase I Rule in the United States Environmental Protection Agency's (USEPA) effort **to preserve, protect, and improve the Nation's water resources from polluted stormwater runoff**. The Phase II program expands the Phase I program by requiring additional operators of municipal separate storm sewer systems (MS4s) in urbanized areas and operators of small construction sites, using National Pollutant Discharge Elimination System (NPDES) permits, **to implement programs and practices to control polluted stormwater runoff**. Phase II is intended **to further reduce adverse impacts to water quality and aquatic habitat by instituting the use of controls on unregulated sources of stormwater discharges** that have the greatest likelihood of causing continued environmental degradation. Under the Phase II rule, all MS4s with stormwater discharges from Census-designated-Urbanized-Areas are required to seek NPDES permit coverage for those stormwater discharges.

On May 1, 2003, EPA Region 1 issued its Final General Permit for Stormwater Discharges from Small MS4s (MS4-2003 Permit) consistent with the Phase II rule. The MS4-2003 Permit covered "traditional" (i.e., cities and towns) and "non-traditional" (i.e., Federal and state agencies) MS4 operators located in the state of Massachusetts and New Hampshire. This permit expired on May 1, 2008, but remained in effect until operators were authorized under the MS4-2016 Permit, which became effective on July 1, 2018.

Both the MS4-2003 and MS4-2016 Permits are **unfunded federal mandates** with the MS4-2016 Permit being far more comprehensive and demanding than the previous MS4-2003 Permit. This Permit requires over 200 communities in Massachusetts to bolster and provide additional services to their stormwater management program including:

- Annual seasonal messages to educate residents and businesses on stormwater;
- Proactive management of illicit discharges;
- A map and investigation of the entire drainage system;
- Dry/wet weather screening/sampling of all outfalls and interconnections;
- Management of stormwater runoff from and after construction activities;
- Additional street sweeping in the fall; and
- Development/implementation of a plan to manage phosphorus loads to local water bodies.



STORMWATER

What is stormwater runoff, and how is it different from water/sewer?

Stormwater runoff is water from rain or melting snow that “runs off” across the land an impervious surface instead of seeping into the ground. The runoff flows directly or indirectly (via street drainage) into the nearest stream, creek, river, or lake. The runoff typically is untreated and can become polluted with various contaminates such as nutrients (phosphorus and nitrogen), sediments (sand and silt), pathogens (pet waste and wastewater effluent), toxics (heavy metals, polycyclic aromatic hydrocarbons, volatile organics), chlorides (salts), and temperatures (increase temperatures due to increased impervious surfaces).

Stormwater differs from water and sewer as water is the treatment and distribution of potable water for consumption, fire protection, cooling, and commercial applications. Sewer is the collection, transportation, and treatment of human and industrial waste suitable to be discharged into a receiving stream, creek, or river.

Why is stormwater runoff a problem? How do we (and the environment) benefit from stormwater management?

Pervious areas allows a portion of stormwater to infiltrate into the ground, and recharge the groundwater. Impervious areas prevents stormwater from infiltrating the ground, and they must be directed through a storm drainage system (e.g. catch basins, detention basins, rain gardens, swales, etc.). Stormwater runoff picks up debris and pollutants from roofs, driveways, sidewalks, streets, parking lots, yards, gravel parking areas, and other surfaces and carries them (typically untreated) into our local waterways. Improper management of stormwater can lead to flooding (e.g. property damage and erosion), drainage system malfunctions, and adverse impacts to local waterways (e.g. algae blooms).

IMPERVIOUS AREA

What is an impervious area?

Impervious area, as defined in Section 4 of the [Stormwater Management Rules & Regulations](#), is any material or structure on or above the ground that prevents water from infiltrating the underlying soil. This includes roads, paved parking lots, sidewalks, walkways, rooftops, pools, decks/porches, sheds, and areas with compacted dirt/gravel. While impervious, public streets and sidewalks will not count against a property owner’s impervious area for the purposes of determining their tier and annual rate.



How is impervious area related to stormwater pollution?

Runoff from impervious surface cannot infiltrate in the ground and flows directly or indirectly (via street drainage) into the nearest stream, creek, river, or lake. The runoff typically is untreated and can become polluted with various contaminants such as nutrients (phosphorus and nitrogen), sediments (sand and silt), pathogens (pet waste and wastewater effluent), toxics (heavy metals, polycyclic aromatic hydrocarbons, volatile organics), chlorides (salts), and temperatures (increase temperatures due to increased impervious surfaces).

Why are decks/pools included as impervious area?

Our aerial maps cannot distinguish between decks with pervious or impervious ground underneath nor does the Town find it to be cost-effective to inspect every deck or porch. Therefore, decks are assumed impervious.

In most cases, the area of a deck is not likely to bump a property up one tier. However, if (1) your impervious area is close to one of the benchmarks, (2) your deck allows water to infiltrate, and (3) the ground underneath your deck is pervious, then you can file a Petition for Adjustment to have your deck reviewed, and your stormwater utility bill adjusted, if appropriate.

Pools, whether above or in-ground, prevent the infiltration of water from the underlying soil, and it is not a dedicated stormwater treatment structure. Therefore, it is considered impervious.

How can I estimate the impervious area of my property?

Property owners can estimate their impervious area using the Shrewsbury GIS website found [here](#) and using the Measure Area tool.

FUNDING

How has Shrewsbury funded its stormwater management program prior to the stormwater utility? What has Shrewsbury been doing with those funds?

The Town's stormwater management program is funded through a combination of the Highway and Engineering Division, both under the Department of Public Works. Highway Division funded maintenance items such as street sweeping, and catch basin cleaning. Engineering Division funded capital improvement projects, and MS4 Permit compliance activities.

Why implement a stormwater utility fee?

The Town estimated the average cost to comply with the MS4-2016 Permit to be \$1.75 million per year for the first 5 years, and recognizes that a dedicated stormwater funding source is needed to comply with the extensive requirements.



How is the stormwater utility fee different from a tax?

The Town of Shrewsbury uses charges and fees to help fund services. When certain services provided especially benefit a particular group (or the cost thereof is tied directly to the use or requirement for the Town to provide a particular service), it is a well-established practice for government to consider charges and fees on the direct recipients of those that receive benefits from such services. Well-designed charges and fees not only reduce the need for additional revenue sources, but also promote service efficiency.

The Town's stormwater management requirements are tied directly to water runoff from impervious surfaces, which are quantifiable. The Town is required to provide additional services as impervious surfaces are created and direct more runoff to the Town's stormwater management system.

Why not absorb the cost of stormwater management into the Real Estate Tax?

The Town of Shrewsbury is limited in its ability to increase general property taxes by 2 ½% from one year to the next. This limitation makes it nearly impossible for the Town to be able to absorb new mandates that have significant costs (like stormwater) through the general property taxes especially when accounting for general inflation while continuing to provide the same level and quality of services provided in Town. So, a Proposition 2 ½% Override would be required.

However, if the Town were to add the cost to comply with the MS4-2016 Permit to the General Tax Fund, then the average single-family home would have to pay \$141.31 a year as opposed to the \$90 annual fee that 90% of single-family homes (or at least 70% of all properties in Shrewsbury) would pay under the stormwater utility.

What happens if a stormwater utility is not implemented?

The funds needed to comply with the Permit will be drawn from the General Tax Fund, taking away from other needs such as public safety and education. If the Town chooses not to act at all, the USEPA would impose fines of up to \$50,000 per day.

Why bill in advance? Why pay for a possible future owner's stormwater runoff?

The cost of compliance for the MS4-2016 Permit varies from year to year as the required tasks also vary from year to year. So, rates were set based on peak and average costs over the next 5 years with a contingency for credits, market demands, and to build a small reserve for the anticipated increase in costs following Permit Year 6 (July 1, 2023).

What will the revenue generated from the stormwater utility be used on?

Revenue generated from the Stormwater Utility will be used for the operation and maintenance of stormwater systems, administrative/implementation costs, regulatory compliance, an illicit discharge program, education and outreach, inspections and enforcement.

You can find more information in Section 9 of the [Stormwater Management Rules & Regulations](#).



RATES

Why not also set rates based on outdoor water usage, ratio of pervious to impervious areas, or other pervious areas (e.g. lawns)?

The Town of Shrewsbury finds it inequitable to set rates based on outdoor water usage to be inequitable since most of the outdoor water usage is provided by private wells, which is not regulated by the Town. In addition, the Town does not find it to be cost-effective to set up their infrastructure to distinguish between indoor and outdoor water usage.

The Town of Shrewsbury finds it to be inequitable to set rates based on the ratio of pervious to impervious area (or impervious to property size or any combination thereof) as a small lot with 5,000 square feet of impervious area would have to pay more than a large lot with the same amount of impervious area.

In addition, the Town finds that setting rates based off of hydraulic acreage (e.g. including pervious areas such as lawns) to not be cost-effective as it would add a significant amount of time, cost, and administrative complexity to implement and accurately maintain such a database.

Why is there such a large discrepancy between Tier 1 (\$90 Annual Rate) and Tier 2 (\$200 Annual Rate)?

Our GIS data shows that about 90% of single-family homes fall under Tier 1 with the average residential property at about 3,200 square feet of impervious area, and single-family homes account for about 80% of all properties in Shrewsbury. The utility rate structure strives to minimize the burden for most properties while charging higher rates to those who are more than 50% above average. The average cost per 1,000 square feet of impervious area for each tier is fairly consistent (in the range of \$20-40 per 1,000 square feet of impervious area).

BILLING

Do I still have to pay the fee...

- **If my street does not have a catch basin;**
- **If the entirety or portion of my impervious area does not discharge to the storm drainage system;**
- **If I manage all the stormwater on my private road; and/or**
- **If the stormwater runoff on my property is entirely self-contained?**

Yes. The MS4-2016 Permit requires the Town to address stormwater runoff in 99.7% of its jurisdictional boundary, and every property discharges stormwater within that boundary. Whether or not parts of (or the entirety of) a property owner's stormwater runoff discharges into the storm drainage system, or directly into a local waterway/waterbody, or is infiltrated into the ground, the Town is held accountable for ensuring that those runoffs do not have an adverse impact to water quality and aquatic habitat, or cause other problems such as flooding and erosion.



What if I do not have a water and/or sewer bill?

Property owners without a water or sewer bill will still receive a stormwater bill along with their water or sewer bill. Property owners without a water and sewer bill will receive a separate stormwater bill, and will be billed quarterly.

How will condominiums (>2 units) be billed?

Bills will be sent to the association based on the total impervious area of the entire association. If we do not have an association on record, then the fee will be divided evenly amongst the unit owners.

Can I apply for credit?

The Town of Shrewsbury offers credits against up to 50% of the stormwater utility fee for property owners who undertake specific actions that exceed the minimum requirements of any applicable stormwater management guidelines including the [Zoning Bylaw](#), [Subdivision Rules & Regulations](#), [Stormwater Management Rules & Regulations](#), and [Wetlands Protection Act](#).

You can find more information in the [Stormwater Management Credit Policy](#).

The Stormwater Management Credit Application Form will be available soon.

Why is the maximum credit only 50%?

All properties utilizes (directly or indirectly) the Town's drainage system (whether from their property or public property), and the Town is responsible for maintaining functional operation of the drainage systems associated with public property, including sidewalks, roads, parks, the police station, the fire station, town hall, and schools.

What do I do if I have been billed incorrectly?

The Town of Shrewsbury offers a Petition for Adjustment to ensure accurate billing of the Stormwater Utility. If you believe you have been billed incorrectly, you can submit a petition to the Department of Public Works, with supporting documents, if:

- There was an error in the billing amount (e.g. incorrect tier, approved credit applied incorrectly);
- There was an error in calculating your impervious area (e.g. deck with pervious ground underneath, a building was demolished and the area is now grass, entire/portion of impervious area on property is related to an easement);
- The identification of the property owner was invoiced in error (e.g. change in ownership, closings); and/or
- Other similar circumstances.

You can find more information in Section 12 and 13 of the [Stormwater Management Rules & Regulations](#).

The Stormwater Utility Petition for Adjustment Form will be available soon.



What if I have an easement (e.g. separate/common driveway) on my property?

All impervious area on your property will count towards your stormwater bill. However, if (1) you have an easement on your property, and (2) the impervious area on your property relates to the purpose of the easement, then you can submit a Petition for Adjustment with proof of that easement to have the impervious area on that easement (or a portion thereof) apply towards the owner(s) of said easement.

For example, if your neighbor has an easement on your property for a paved driveway and they use it to access their home, then you can submit a Petition for Adjustment to have the impervious area of that driveway applied to your neighbor.

MISCELLANEOUS

How much are other communities impacted by the MS4-2016 Permit?

Over 200 communities in Massachusetts are required to comply with the MS4-2016 Permit, and each one is impacted differently by the Permit.

First, the scope of the tasks differ between each municipality as the MS4-2016 Permit only regulates urbanized areas (though municipalities free to apply the Permit to the entire Town). A community that is nearly 100% urbanized is likely to have a high cost of compliance than a community with far less urbanized areas. The following table shows the regulated area (by acres and by percentage) of municipalities located near Shrewsbury.



*Municipalities in Worcester County within 2 degrees of Shrewsbury
 sorted by Percent of Area Regulated by the MS4-2016 Permit*

Municipality	Jurisdictional Area [acres]	Regulated Area [acres]	Regulated Area [%]
Worcester	24,600	24,545	99.8%
Shrewsbury	13,904	13,862	99.7%
Auburn	10,528	8,768	83.3%
Millbury	10,519	8,490	80.7%
Southborough	9,961	7,582	76.1%
Westborough	13,724	9,241	67.3%
Northborough	11,996	7,398	61.7%
Northbridge	11,564	7,046	60.9%
Grafton	14,933	8,141	54.5%
West Boylston	8,836	4,296	48.6%
Oxford	17,547	8,446	48.1%
Leicester	15,769	6,723	42.6%
Holden	23,250	6,615	28.5%
Paxton	9,904	2,202	22.2%
Sterling	20,231	3,115	15.4%
Upton	13,951	1,798	12.9%
Boylston	12,646	1,315	10.4%
Sutton	21,798	1,853	8.5%
Berlin	8,421	533	6.3%

Under the MS4-2016 Permit, the Town of Shrewsbury has the highest regulated area, both in acres and in percentage, within Worcester County (excluding Worcester as they are operating under a different permit).

In addition, the type of tasks required by the Permit varies between each municipality based on:

- The watershed they discharge to;
- The waterbodies they discharge to;
- Whether they discharge to a waterbody with an approved TMDL; and
- Whether they discharge to a waterbody where there is a specific cause of impairment (e.g. nitrogen, phosphorus, bacteria, chloride, oil/grease, solids, and/or metals).

Some of these additional tasks include:

- Annual seasonal messages;
- Additional street sweeping in the fall; and
- Development and implementation of a plan to reduce specific nutrient loads based on the waterbody (e.g. phosphorus).



What are other communities doing to fund and comply with the MS4-2016 Permit?

There are several other communities in the Commonwealth of Massachusetts who have implemented or are beginning to implement a stormwater utility, totaling at least 20.

Communities who have implemented stormwater utilities include Chicopee, Chelmsford, Fall River, Milton, Newton, Northampton, Reading, and Westfield.

Other communities are funding the MS4-2016 Permit through the General Tax Fund, or through other revenue sources such as marijuana.

What if I still have other questions?

You can contact the Department of Public Works – Engineering Division by phone at 508-841-8502, or by e-mail at stormwater@shrewsburyma.gov.