



# TOWN OF FRANKLIN

## DEPARTMENT OF PUBLIC WORKS

257 Fisher Street  
Franklin, MA 02038

January 13, 2021

Mr. Jamie Hellen, Town Administrator  
Town of Franklin  
355 East Central Street  
Franklin, MA 02038

Re: Stormwater Utility Recommendations

Dear Jamie,

Based on discussions, thoughts, and conversations of data presented over three meetings to the Town Council Stormwater Ad-hoc Committee a vote was taken on September 9<sup>th</sup>, 2020, of said committee, to present to the full Franklin Town Council the following findings and recommendations. These findings and recommendations are needed to implement a stormwater fee and program as previously established in the Town Charter and as required by federal law under the MS4 Permit.

**Set the stormwater user fee at \$18.66 per billing unit, per year:** This would mean the fee for an “average single family household” (with 3 billing units) would be \$56.00 per year, and billed at \$14.00 per quarter. The fee would begin on January 1st, 2022. The public may go to this website and review their personal property, how many billing units for their land and estimate the fee impact. [Stormwater & Impervious Area Map](#).

**Billing Units:** The available billing units were updated and recalculated using natural rounding (after the first 1000 square feet (SF)). Some additional points:

- Properties with less than 200 SF are considered undeveloped and will not be billed a fee (as defined in the Stormwater Utility By-law, Section 153-21).
- For properties with impervious area of 200 SF to 1,499 SF, they will be assigned one billing unit.
- Since the Stormwater Utility By-law defines an individual billing unit equal to one thousand (1,000) square feet of impervious surface, each increase of 1,000 SF will increase the number of billing units by 1.

Here is an example table showing the rate structure and how billing units will be assigned:



Amount of Impervious Area (IA) on a Billable Parcel	Number of Billing Units
200 SF to 1,499 SF	1
1,500 SF to 2,499 SF	2
2,500 SF to 3,499 SF	3
3,500 SF to 4,499 SF Each additional 1000 SF range will be rounded as above.	4 - Adding one billing unit for each additional 1000 SF range.

Based on this approach, the number of available stormwater billable units would be approximately **75,000** in the entire Town.

**Projected Stormwater Utility Revenue:** With the billing of approximately 75,000 billing units (household, commercial and industrial), this stormwater utility fee will generate about \$1,344,497.00 annually. The cost of operating the utility includes billing, impacts of delinquencies, and a credit program, and is estimated at \$140,000 a year. Including funding of an emergency reserve of \$100,000 per year.

**What this means:** Not all of the Town's existing stormwater costs could be transferred from the existing Public Works operating budget (general fund) to the Stormwater Utility. But the critical expenses and expenditures would be in FY22 (attached sample budget). I feel the following services are critical to maintaining the current level of service and meeting the existing MS4 federally-mandated regulatory requirements. These expenses are recommended to be paid annually from the stormwater utility revenues (like water, sewer and trash).

Please note, if this program begins in FY22, establishing a stormwater utility will also free up operating budget capacity in FY22 and FY23 and beyond as the program transitions from the operating budget to the utility. A sample budget summary:

1. **Operations and Maintenance: \$432,000**
  1. Catch Basin Cleaning
  2. Street Sweeping
  3. Storm Sewer and Culvert Maintenance & Repairs
  4. BMP Maintenance
  5. General Stormwater Service Expenses (gas, uniforms, safety equipment)
  6. Training
2. **MS4 and Other Regulatory Compliance and Enforcement: \$170,000**
  1. MS4 Compliance (IDDE Program, Outfall Inspections, SW Pollution Control Plans, Tracking
  2. Annual Stormwater Management Plan and Updated Permit Filings
  3. Development Oversight: Stormwater Plans

4. Engineering and Planning
3. **Capital Improvements and Equipment: \$294,000**
  1. BMP Retrofits/Capital Construction
  2. Capitalized Stormwater Equipment
4. **Salaries: \$348,497**
5. **Establishment of Reserve Fund: \$100,000.** All enterprise funds have a reserve emergency fund.

**Total Program Expenses to be funded from Utility Fee: \$ 1,344,497 Please see Attachment for a more comprehensive breakdown of salaries and expenses.**

**Credits:** Establish a credit program that all property owners can apply for to reduce their utility fee up to 50%. Credits would be given to properties that have already installed recharge systems and for future projects that are installed to reduce run off and improve recharge. Rain barrels would have a simple reduction of ½ billing unit for each rain barrel with a limit of four rain barrels per property or no more than a 2 billing unit credit.

**Community Assistance Program (CAP):** The stormwater utility fees will be waived in full for anyone who qualifies for the CAP. In [Chapter 82 of the Town Code](#), residents would be eligible based on income levels and other governmental assistance. The eligibility will be consistent with other DPW fees, Fire Department and Recreation Department.

**Program Implementation:** Start the collection of funds for the stormwater utility on January 1st, 2022. This would allow funds to be available for work Fiscal Year 2023.

**Public Education and Outreach:** The Stormwater Division website (linked below) has been updated and maintained and will continue to be a source of educational resources. The website includes links to informational flyers, brochures, past presentations, quick facts on our MS4, a rain garden tour brochure, the Franklin Rain Barrel Program, all Franklin's stormwater management documents and a link to the Stormwater and Impervious Area story map (linked below).

This story map includes a section "My Property" in which residents can look up their individual property to assess their impervious area and will be updated frequently to ensure accuracy.

<https://storymaps.arcgis.com/stories/e45452a3047e4c83b27170a8f4f79aa5>

<https://www.franklinma.gov/stormwater-division>

Thank you,

Robert Cantoreggi  
Director of Public Works

# Franklin Stormwater Division Utility Discussion

Robert "Brutus" Cantoreggi  
*Director of Public Works*

Kate Sjoberg  
*GIS Analyst, Public Works*

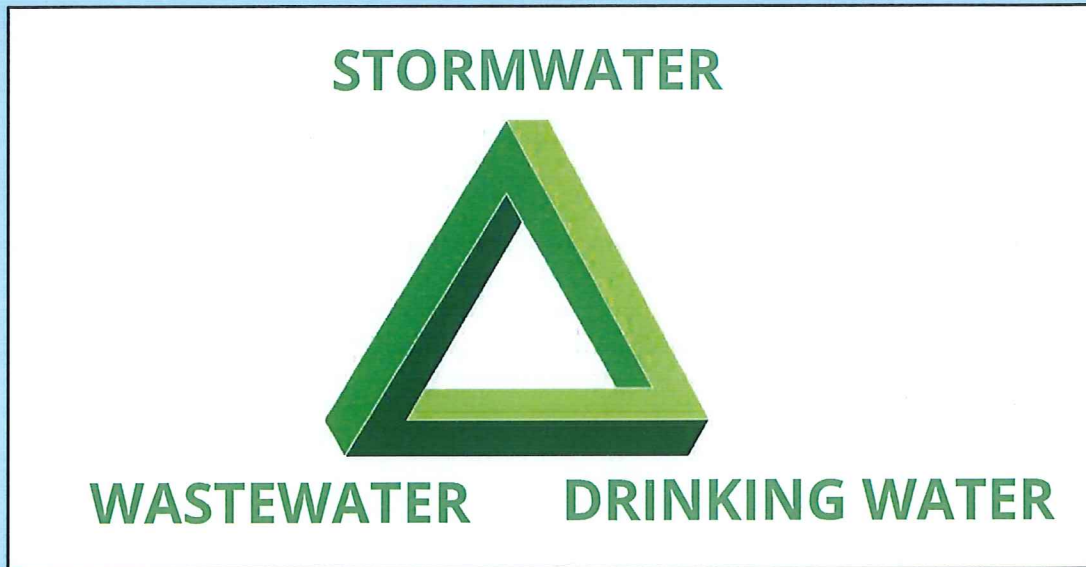
Jean Haggerty

<https://www.franklinma.gov/stormwater-division>

## Discussion History

- Continue to educate the residents about stormwater, what it is, and the importance of what we are doing. Discuss Franklin's storm water work to date. ***Unfunded federal mandate.***
- Stormwater Website One-Stop Shop here:
  - <https://www.franklinma.gov/stormwater-division>
- Discuss a proposed framework for the creation of an enterprise fund utility. Town Council established a utility in January 2020.
- Ad Hoc committee of the Town Council to evaluate the financial structure and assist in educating the public on storm water.
  - Councilor Hamblen, Chair; Councilor Earls, Councilor Dellorco and Councilor Jones.

# TRIADIC APPROACH



## STORMWATER...



...is water originating from precipitation events rain, snow, and ice melt



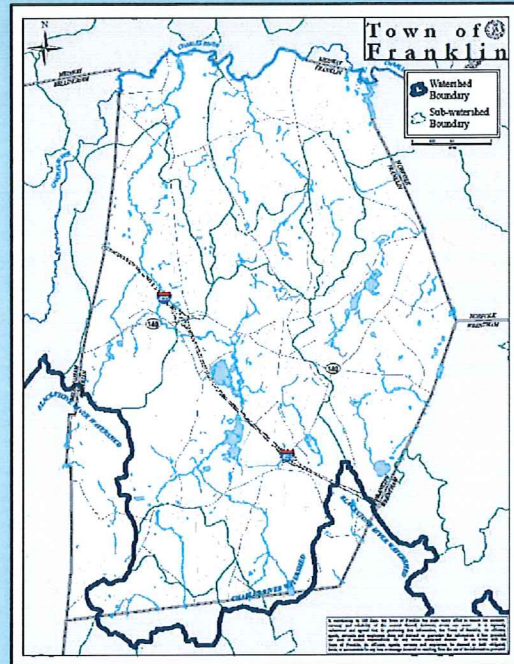
# STORMWATER IN FRANKLIN

## Groundwater Recharge

- Critical point to remember
- Franklin gets all of its drinking water from groundwater.

## Protection of Charles River Basin

- Phosphorus Loading
- Bacteria control
- Total suspended solids "TSS" run-off



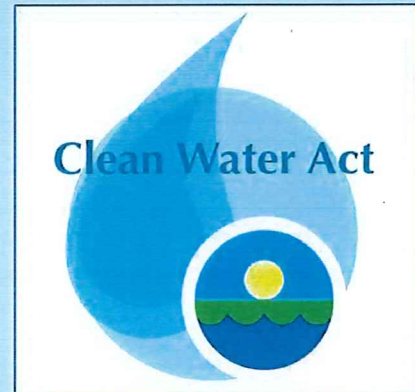
## Municipal Separate Storm Sewer System "MS4"



# Municipal Separate Storm Sewer System “MS4”

The MS4 Permit from the EPA is the next step in large scale systematic environmental cleanup --

- 1973 Clean Water Act
- Title V
- 1990 - Phase I MS4s - medium and large cities and counties have to comply with permit
- 1999 - Phase II MS4s - small MS4 communities have to comply with permit
- Boston Harbor Cleanup & Deer Island
- Charles River Cleanup from pollutants.

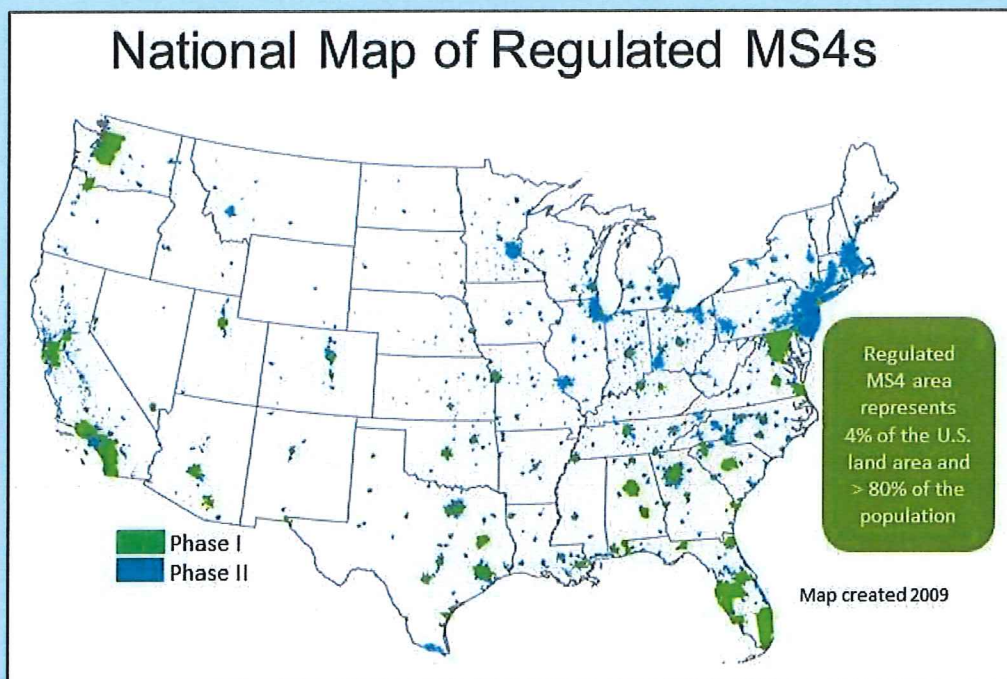


Franklin is considered a “small” MS4 community. There are 6,695 small MS4 communities across the US (over 200 in Massachusetts). The Criteria:

- have a separate storm sewer system
- population of less than 100,000
- located within a Census Bureau designated urbanized area

# Municipal Separate Storm Sewer System “MS4”

## National Map of Regulated MS4s

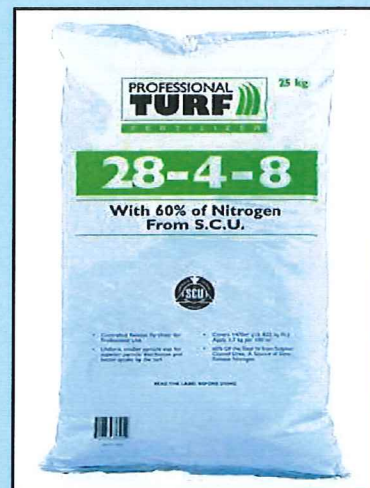


## What have we already done about MS4 and stormwater in Franklin?

## What have we already done about MS4?

Offered Solutions, Invested locally and  
Pushed back! Went After  
“Low Hanging Fruit”

- Phosphorus Fertilizer Ban - “Brutus’ Bill”.
- Grants and Matching Funds **\$1,206,650!**
- Passed strong Local By-laws in 2008.
- Road Narrowing / Sidewalk Removal Program.
- Invested in award winning programs (Rain gardens).
- Public Education & Outreach.
- Working With Other Towns - Regionalization.
- Working With Environmental Groups.
- Testified in Public Events, Appealed and Sued the Federal Government.



  
**CHARLES RIVER  
WATERSHED  
ASSOCIATION**



## What have we already done about MS4?

- **The Town of Franklin sued the EPA!**
- The Town of Franklin was the lead Plaintiff with the City of Lowell, Conservation Law Foundation, Charles River Watershed Association and Homebuilders of Massachusetts Association.
- Franklin was chosen to be the lead Plaintiff because we are *THE* leader on stormwater.
- The Town was in federal court against the EPA and mediation for several years.
- Very little cost to the Town -- \$10,000 taxpayer expense
- Outcomes? We were successful in achieving:
  - A delay in the start of the permit
  - The ability to renegotiate the timeline of phosphorus reduction
  - Credit for work completed under the extended permit
  - All of these outcomes saved taxpayers additional money over the life of the permit.

## What Are The Problems?

- Aging stormwater infrastructure
- System maintenance needs
- Water quality impacts
- Increase in Best Management Practices (BMPs)
- Flooding and drainage system capacity
- MS4 permit/regulatory requirements
  - Charles River Phosphorus Control Plan
- Mapping and condition assessment of the storm drain assets
- Increasing costs (staff and equipment)
- Backlog of capital improvements

Franklin	
Town area (sq. miles)	27.03
Miles of stormwater pipe	137
Number of catch basins	5,835
Number of outfalls	626
Estimated replacement value of existing infrastructure	~ \$175M



# Implementation

Every Project = Stormwater Element

## Roadway Reconstruction

- Sidewalk Removal / Narrow Roadway
- BMPs
- Rain Gardens
- Tree Wells
- Bioretention Areas
- Residential Rain Garden Program



## Existing Major Expenditures

### Franklin:

- Storm sewer and culvert maintenance - \$88,000
- Catch basin and inlet cleaning – \$110,000 (~1800 CBs per year)
- Street sweeping - \$109,000 (all streets once/year; downtown area twice/year)
- System Inspections - \$55,000 (infrastructure, post-construction BMPs, E&S controls)
- Stormwater design and development permitting assistance - \$73,500 (~ 5 projects per year)
- MS4 Permit compliance requirements  
**\$100,000** (SWMP and IDDE plans, public education and outreach, mapping and outfall data updates)
- Capital Improvement projects - **\$267,000** (varies annually)
- Major Equipment



## Current Annual Program Expenditures

Estimated FY2019 Stormwater Cost of Services		
Functional Area	Description of Services	Franklin
Program Administration	Budget, staff, grant management, MS4 NOI and SWMP preparation, Public Ed/Outreach, training, interagency coordination	\$135,330
Regulatory Compliance/ Enforcement	MS4 compliance and reporting, BMP and infrastructure inspections, IDDE program development, GIS and outfall ranking, E&S oversight	\$119,370
Drainage Engineering & Stormwater Planning	Master plans, stormwater design and permitting, data management/GIS, field engineering support, Hazard Mitigation/FEMA updates, contract oversight	\$100,570
Operations and Maintenance	Infrastructure O&M, catch basin and inlet cleaning/repairs, street, parking lots, and sidewalk sweeping, leaf pick-up, BMP facility maintenance, IDDE tracking/removal, infrastructure repairs, emergency response	\$469,700
Capital Improvements & Equipment	New and expanded stormwater infrastructure, new capitalized equipment	\$324,700
<b>Estimated FY 2019 Annual Costs</b>		<b>\$1,149,670</b>

## Current Stormwater Funding Sources

- Stormwater services currently funded by General Fund under DPW and other programs
- Residential Properties account for ~80% of tax base for general fund revenue
- But residential properties have less burden on the stormwater system based on impervious area
  - Residential properties ~ 45% of Franklin's impervious area (non-road)
  - Commercial/Industrial properties, such as retail, businesses, and colleges ~55% (non-road)



# Projected Future Stormwater Costs

Average over the next 5 years

## Stormwater Utility Division Proposed Program

Functional Category	5 year average (FY20-FY24)
Program Administration	\$160,200
Regulatory Compliance/ Enforcement	\$146,490
Engineering and Master Planning	\$315,030
Operations and Implementation	\$998,100
Capital Projects and Equipment	\$374,700
<b>Total</b>	<b>\$1,994,520</b>

### What does this buy?

- Fund Roads Program annually, operating budget
- Drainage improvements
- Drinking water protection
- Street Sweeping
- Curbside Leaf Collection

## Funding Options: Taxes vs Utility Fee

- **Property taxes** – based on assessed value of the property; Tax-exempt properties do not pay property tax; no relationship to the impact of the property to the amount of stormwater generated by development on the site; no opportunity to provide credits for on-site stormwater management; revenue can support any town need.
- **Stormwater utility fees** – fee is proportional to the estimated stormwater generated from the property, as measured by impervious area; all properties, including tax-exempt pay their share of the fee; allows for credits to be granted for on-site controls; operates as an Enterprise Fund and revenue is dedicated to stormwater management only.



## Taxes vs Utility Fee: Pros & Cons

### Property Taxes

#### → Cons

- ◆ Not every property pays, many are tax-exempt
  - State and Federal buildings
  - Religious institutions
  - Colleges
- ◆ Based on assessed value of property, not amount of impervious area
- ◆ No opportunity for credits
- ◆ Tax funding would compete with other town needs
  - Schools, Library, Police, Fire, DPW, Recreation, etc

#### → Pros

- ◆ ???

### Utility Fee

#### → Pros

- ◆ All properties pay the fee, including tax-exempt institutions
- ◆ Fee is based on the amount of impervious surface on your property
  - roof, driveway, patio, etc
- ◆ Opportunity for credits
- ◆ Revenue generated goes into an Enterprise Fund which can only be used for stormwater management

VS

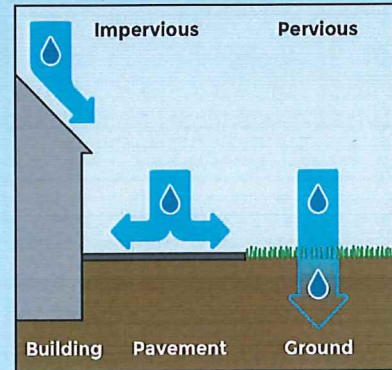
#### → Cons

- ◆ Still a cost to property owners
- ◆ More???

## Stormwater Utility Fee Option

**Rate Structure** = Metric used to distribute costs among users. It determines who pays and how much each property will pay.

- Recommended Structure: Flat Billing Rate of 1,000 SF
- All property types in town pay based on the square footage of impervious area on their parcel divided by 1,000 SF. Fairly distributes the cost of managing the public stormwater based on a property's share of total impervious area town-wide. For an average home in Franklin, there is ~3,000 SF of impervious area (IA) or 3 billing units.
- Based on analysis of GIS and aerial photography, the IA for all parcels in town was calculated. The analysis resulted in an estimate of 82,000 billing units.



## Stormwater Utility Fee Option Preliminary Rate for Franklin

Annual Revenue Needs/Billing Units = Annual Rate per Year

Stormwater Program Costs	\$1,968,190
Allowances for Credits, Billing, and Delinquencies	\$140,000
Operating/emergency reserves	\$200,000
Total Revenue	\$2,308,190
Available Billing Units	82,000
Preliminary Rate per Billing Unit	<b>\$28.15</b>

# Examples of Franklin Properties

Dean College: 802 BUs

Municipal Properties: 3,595 BUs

Single Family



4 billing units x \$28.15  
\$122.60/year

Single Family



2 billing units x \$28.15  
\$56.30/year

Commercial Property



550 billing units x \$28.15  
\$15,482.50/year

## Credit Policy

- Similar to abatements in water and sewer enterprise funds
- Could apply to any residential or commercial properties
- Credit will assist those businesses who have already complied with the Town's stormwater bylaw over the past ten years
- Example: Big Y story



# Phosphorus

- Major source of phosphorus pollution = leaves
- Implement a curbside leaf pick-up program
- Provides a service to our customers, while preventing pollution



## What if we do not do this?

- Make no Mistake, this is an unfunded federal mandate
- Franklin has two choices:
  - Begin to implement slowly over time (treat this like OPEB); or
  - Do nothing. Result will be fines ranging from **\$2,500 - \$37,500 PER DAY**. Criminal penalties can be imposed if non-compliance is found to be purposeful
- Swampscott, MA - was fined **\$65,000** in 2015 for not identifying and eliminating illicit discharges
- Boston Water and Sewer - paid a civil of penalty of **\$235,000** for failing to separate their stormwater system as scheduled
- Rhode Island DOT - paid a civil penalty of **\$315,000** for not implementing their SWMP and are now subject to a court-ordered consent decree to fast-track compliance at a cost of **\$200M**



- Franklin has already led and fought the fight. There is no more fight.
- The Cost of Inaction is greater than the cost of action
- To date, 14 communities in MA have already established a utility. Nearby examples are Millis, Bellingham, Milton, Shrewsbury, Westford

Municipality	Year Adopted	Typical Rate/Year (2019)
Northampton	2014	\$95
Millis	2018	\$66
Shrewsbury	2019	\$90
Chelmsford	2018	\$40
Milton	2016	\$44
Westfield	2018	\$30
Westford	2019	\$75
Newton	2012	\$100
Bellingham	2019	\$60
Franklin		\$84

## Discussion