

Franklin Stormwater Division Utility Discussion

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<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



WASTEWATER

DRINKING WATER

STORMWATER...



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



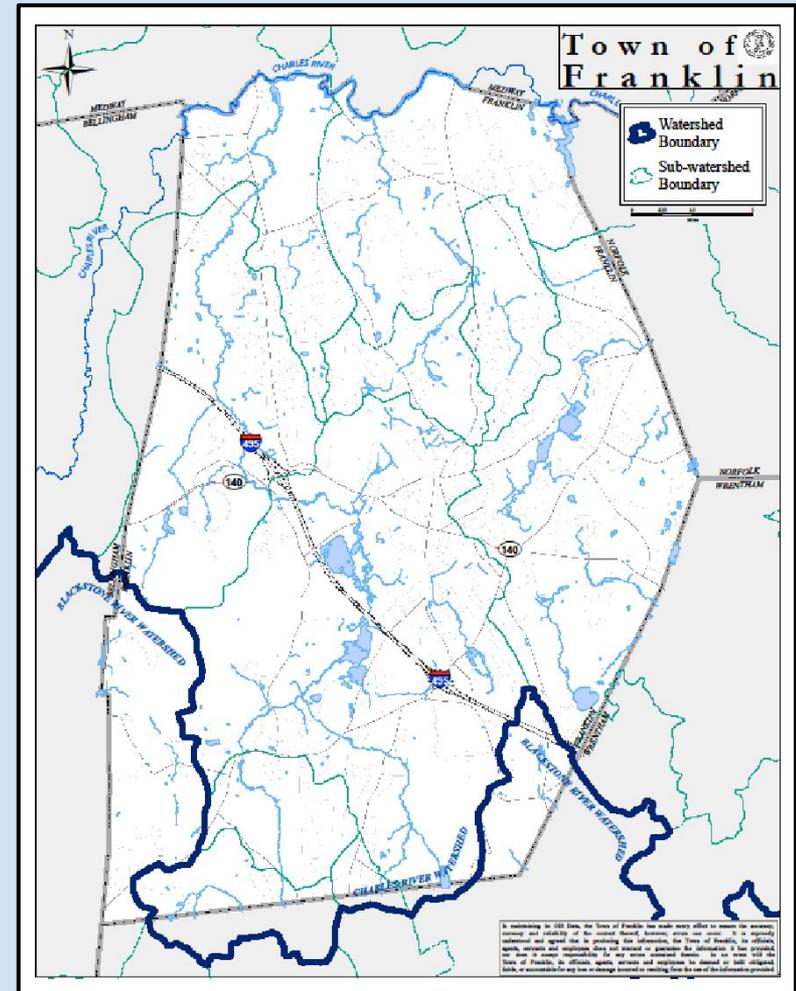
STORMWATER IN FRANKLIN

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”



<https://www.epa.gov/npdes-permits/massachusetts-small-ms4-general-permit>

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

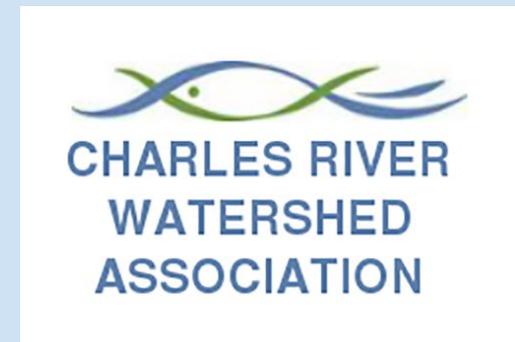


What have we already done about
MS4 and stormwater in Franklin?

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.



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
Estimated FY 2019 Annual Costs		\$1,149,670

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
Total	\$1,994,520

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

→ Cons

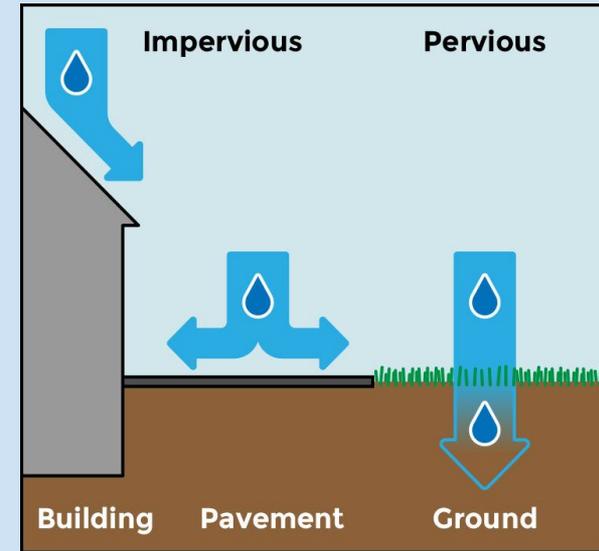
- ◆ Still a cost to property owners
- ◆ More???

VS

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	\$28.15

Examples of Franklin Properties

Dean College: 802 BUs

Municipal Properties: 3,595 BUs

Single Family

Single Family

Commercial Property



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

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

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