

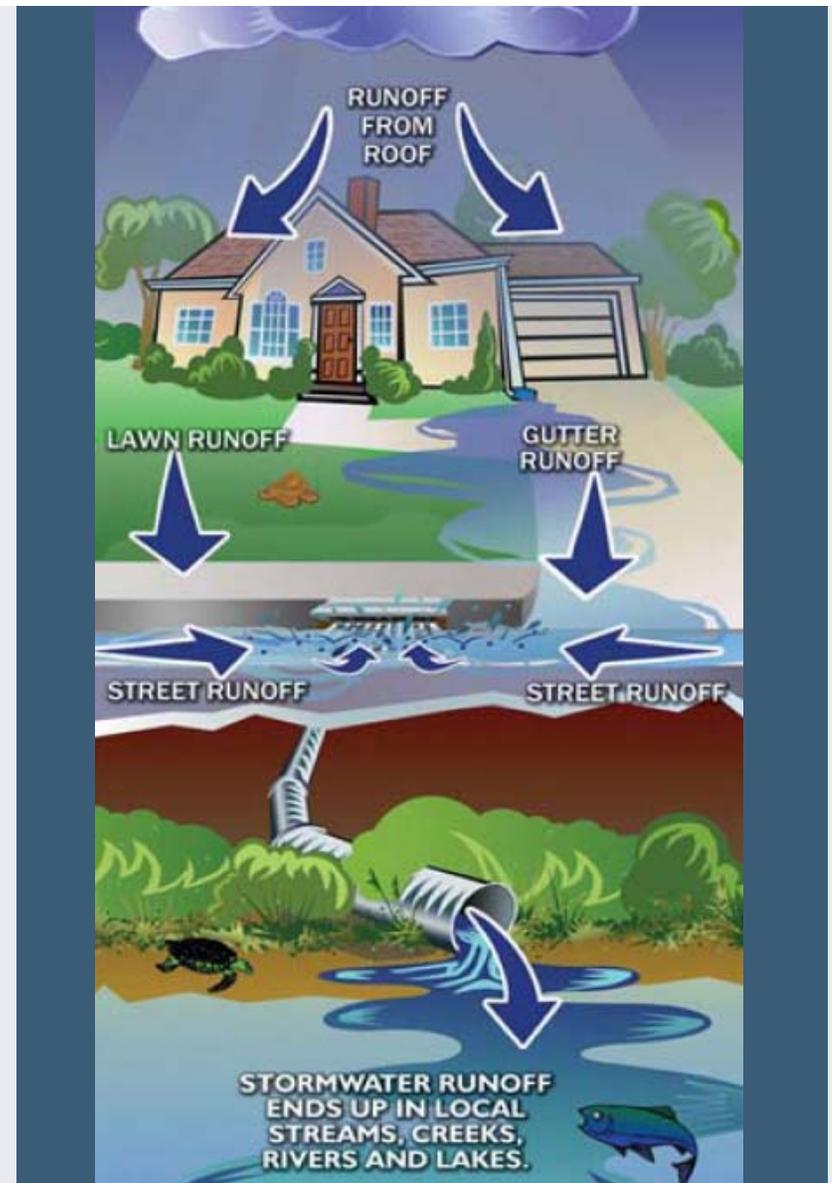
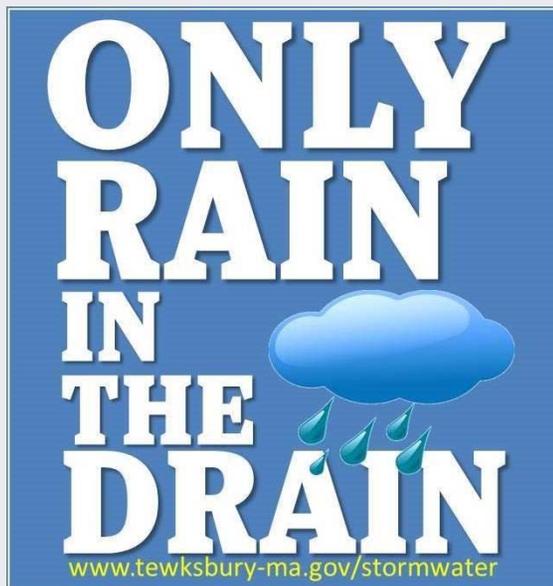
# STORMWATER FINANCING



TOWN OF  
TEWKSBURY

Weston & Sampson

# What is stormwater?



# What is stormwater management?



**PUBLIC  
EDUCATION**



**ILLCIT  
DISCHARGE  
DETECTION**



**SYSTEM  
MAPPING**



**WATER  
QUALITY  
TESTING**



**CONSTRUCTION  
SITE RUNOFF  
CONTROL**



**UPGRADE AND  
MAINTAIN AGING  
INFRASTRUCTURE**



**INSTALLING NEW  
INFRASTRUCTURE**

# STORMWATER MANAGEMENT GOALS



**Reduce  
Stormwater  
Flooding**



**Invest in the  
Future**



**Control Water  
Pollution/Improve  
Water Quality**



**Meet Regulatory  
Requirements**



# STORMWATER FLOODING



Weston & Sampson

# CONTROL WATER POLLUTION



# **CONTROL WATER POLLUTION**

**in places we recreate,**

**Long Pond  
Shawsheen River  
Merrimack River**





**INVEST IN THE FUTURE**

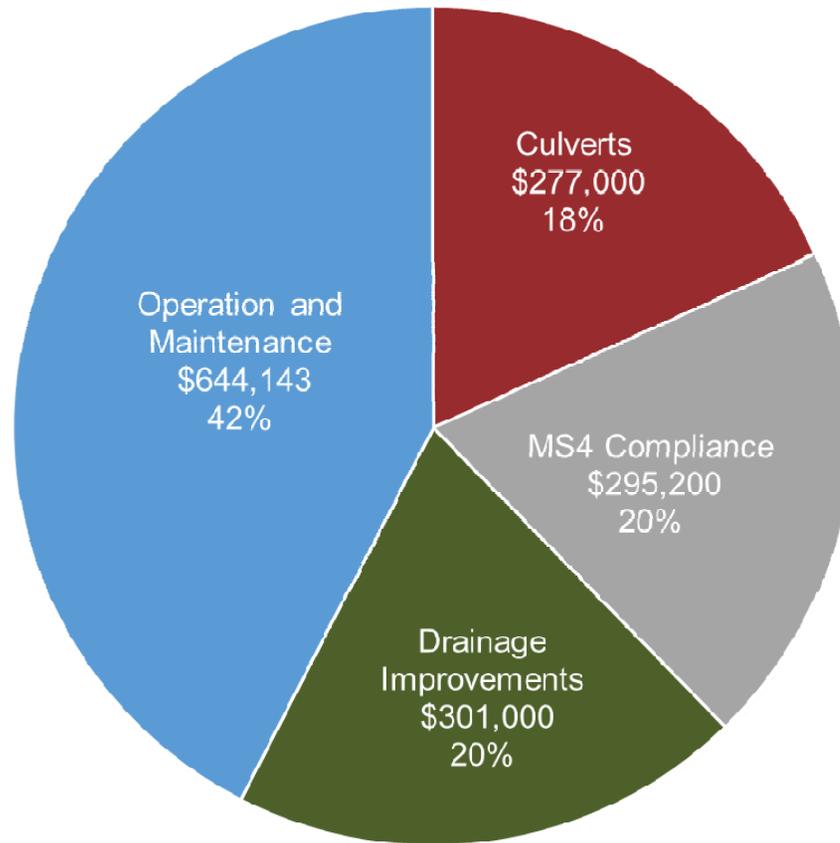
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# REGULATORY REQUIREMENTS: MUNICIPAL SEWER STORM SYSTEM (MS4) PERMIT COMPLIANCE

- **36 requirements** in 2003
- **200+ requirements** in 2016
- **\$1.476+ million** needed for permit compliance
- Failure to meet these requirements will result in **finances for non-compliance**

# Average Annual Budgetary Needs= \$1.52 million

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# FINANCING MECHANISMS

## Current Financing

- General Fund (property tax)
- State Transportation Funds
- Grants

## Ideal Financing Mechanism

- Reliable
- Predictable
- Doesn't impact other departments
- Fair

## Future Options

- Increase Taxes/ Use a Larger % of General Fund
- Loans and Bonds
- Private Public Partnerships
- Grants
- Stormwater Enterprise Fund

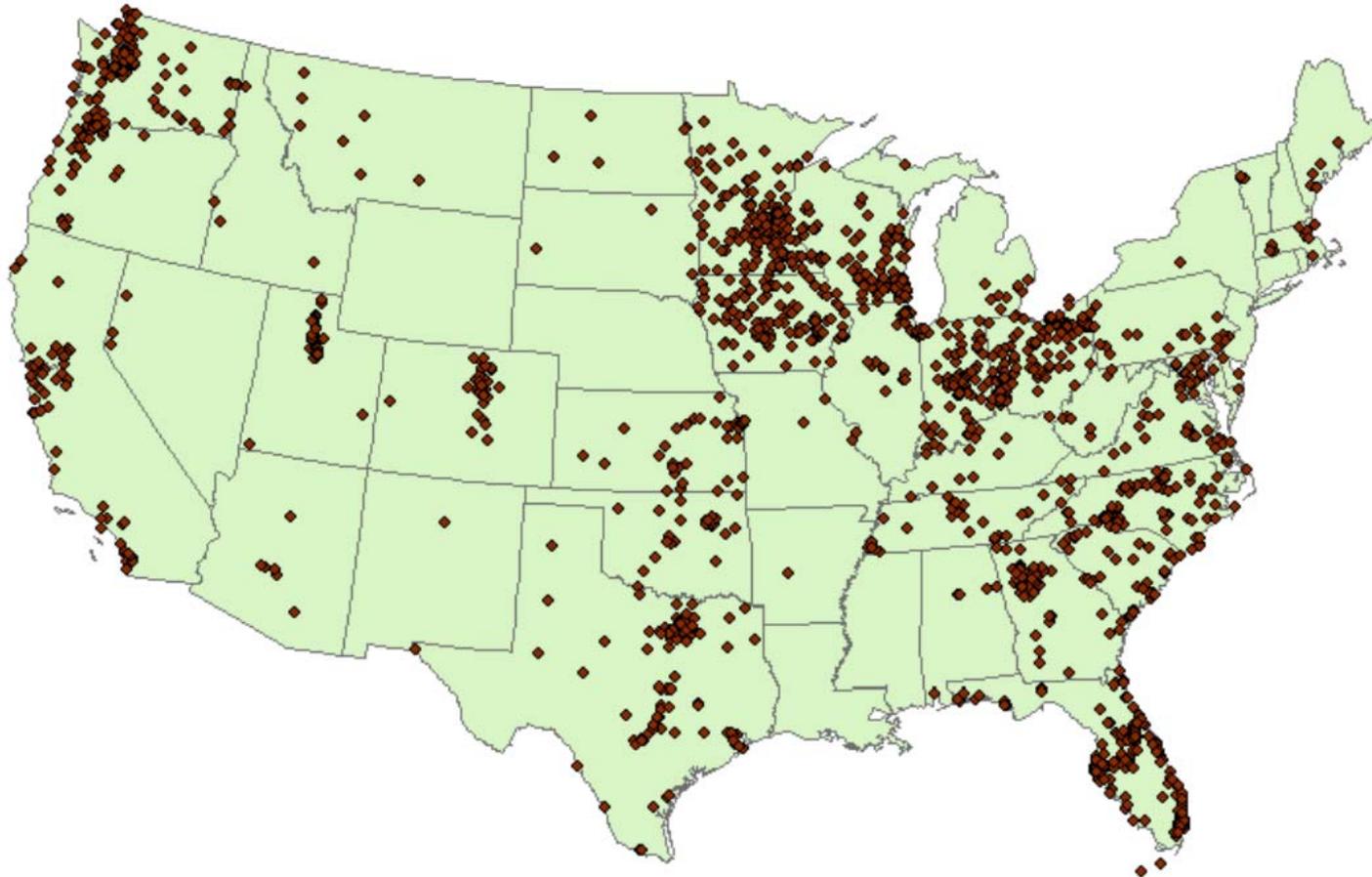
# MASSACHUSETTS STORMWATER ENTERPRISE FUNDS

- Ashland
- Braintree
- Chicopee
- Chelmsford
- Fall River
- Longmeadow
- Millis
- Milton
- Newton
- Northampton
- Pepperell
- Reading
- Shrewsbury
- Westfield

\*Many more are exploring the feasibility of adopting a stormwater enterprise fund.



## Stormwater Enterprise Funds, 2018



Campbell, C. Warren. (2018). Western Kentucky University Stormwater Utility Survey. Western Kentucky University, Bowling Green, KY. pp.2  
<https://www.wku.edu/seas/undergradprogramdescription/swsurvey2018.pdf> .

# STEPS TO SETUP A STORMWATER ENTERPRISE FUND

1. Determine existing & future stormwater budget needs ✓
2. Delineate parcel impervious surface area by land use type ✓
3. Assess rate structure options and fees ✓
4. Meet with stakeholders to review findings, assess feasibility, and determine best way to move forward
5. Pass enabling legislation at Town Meeting





# Impervious Surface Examples

Parking lots

Rooftops

Patios

Sidewalks

# EQUIVALENT RESIDENTIAL UNIT (ERU)

Used to compare impact to the stormwater system across different land use types

Typically based on the impervious area of the dominant land use type

**In Tewksbury, the ERU would equal the average impervious surface of a residential parcel with three units or less**

$$4,359 \text{ average square feet of residential sample} = 1 \text{ ERU}$$



# Recommended Fee Structure

 Residential

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Flat Fee

 Commercial

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Impervious Area  
using ERU

Fairness

Cost of Implementation

Budgetary Needs

Massachusetts Models

# Billing

Line item on water/sewer bill will:

- Reduces administrative costs
- Be convenient for customers

Properties without sewer will receive a separate bill

# Abatements

Adjustment to bill for incorrect measurement of impervious surface

Applies to commercial properties only

Applications will be received at the Department of Public Works

# Credits

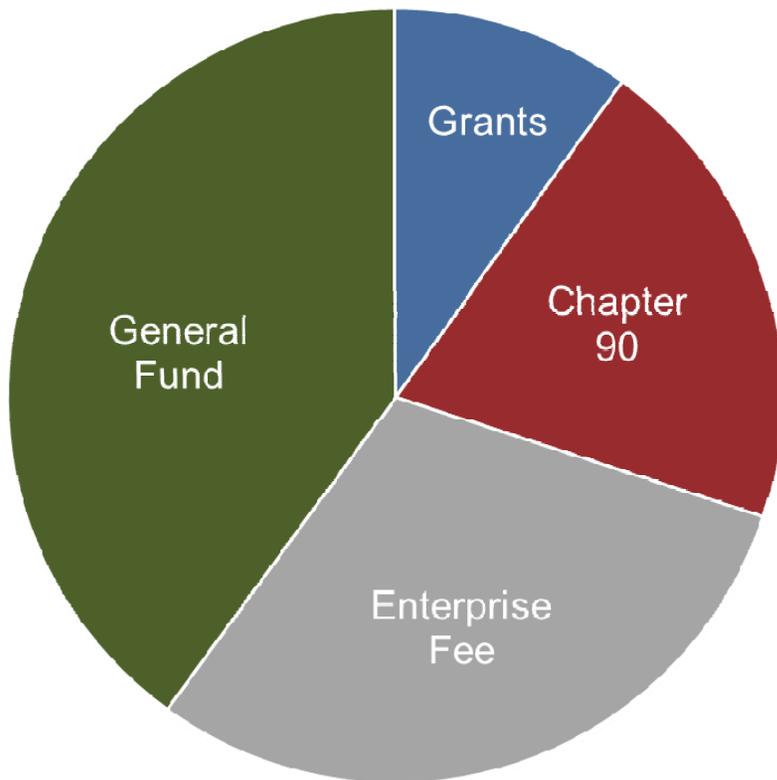
Considering a credit system to reduce fee upon:

- Implementing stormwater management best practices
- Maintaining operation and maintenance
- Annual application

Usually ranges in a 10-50% fee reduction

## \$30 fee per household and per ERU

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**\$480,000**

approximate  
annual revenue

**1/3**

of approximate  
budgetary needs could  
be covered by the  
Enterprise Fee

# Estimated Cost per Household



Small  
Residential

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- \$30 per year =  
\$2.50 per month



Commercial/  
Large Residential

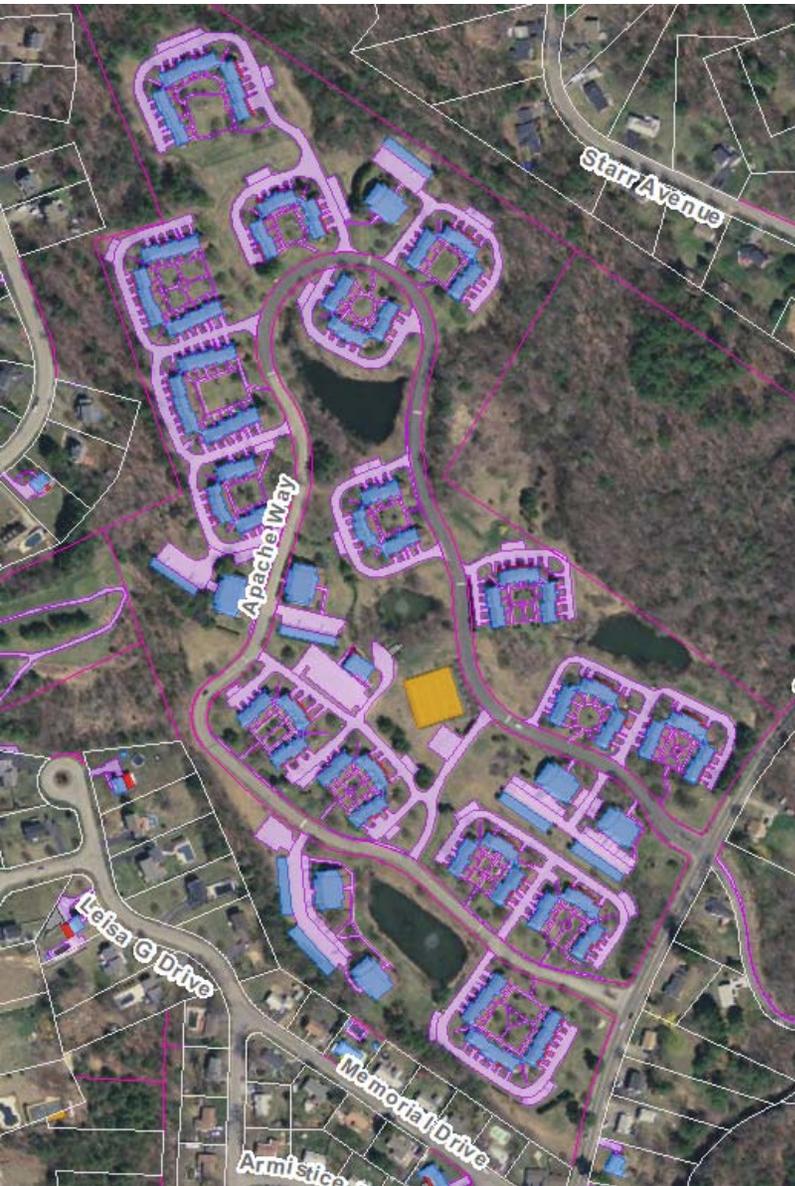
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- \$30 dollars per ERU

## Commercial Property A

Amount of Impervious Area	8,718 sq. ft.
Equivalent Residential Unit (ERU)	÷ 4,359 sq. ft.
	<hr/>
	2 ERUs

Rate per ERU	\$30 per year
Commercial Property A	× 2 ERUs
	<hr/>
Stormwater Enterprise Fee	\$60 per year



# ERU/Fee Calculation for Condominium Complex

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$$\begin{array}{r} 617,669 \text{ SF of impervious area} \\ \div 4,359 \text{ SF (1 ERU)} \\ \hline 141.7 \text{ ERUs} \end{array}$$

$$\begin{array}{r} 141.7 \text{ ERUs} \\ \times \$30/\text{ERU} \\ \hline = \$4,251 \text{ for entire complex} \end{array}$$

# Projected Revenue Generation

~based on \$30 rate~



Small  
Residential

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\$30 per year  
X 7,855 parcels  
\$235,650 revenue  
generated per year



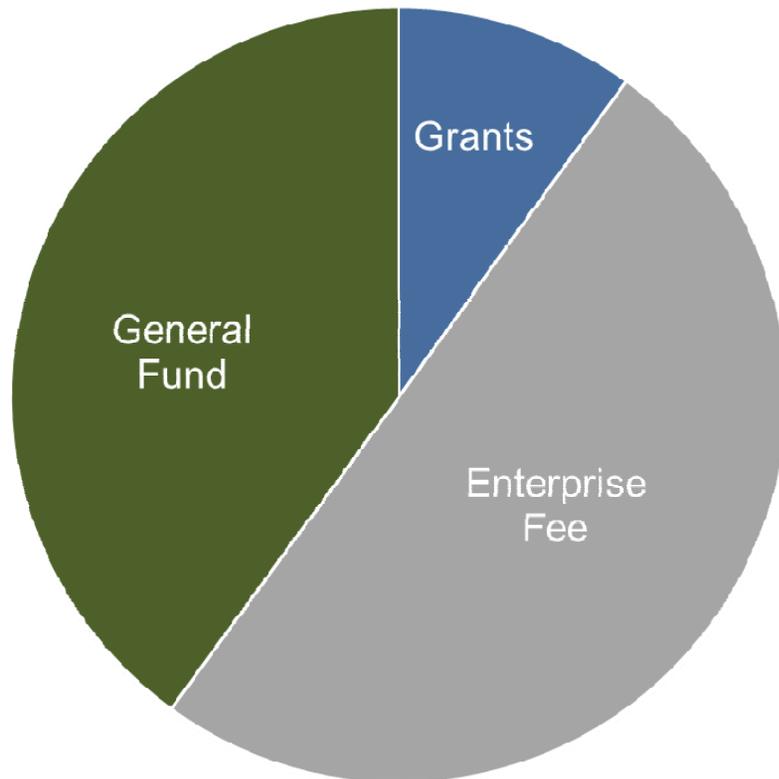
Commercial/  
Large Residential

---

\$30 dollars per ERU  
X 8,174 ERUs  
\$245,250 revenue  
generated per year

## Set rate at \$45 per household and per ERU

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**\$721,305**

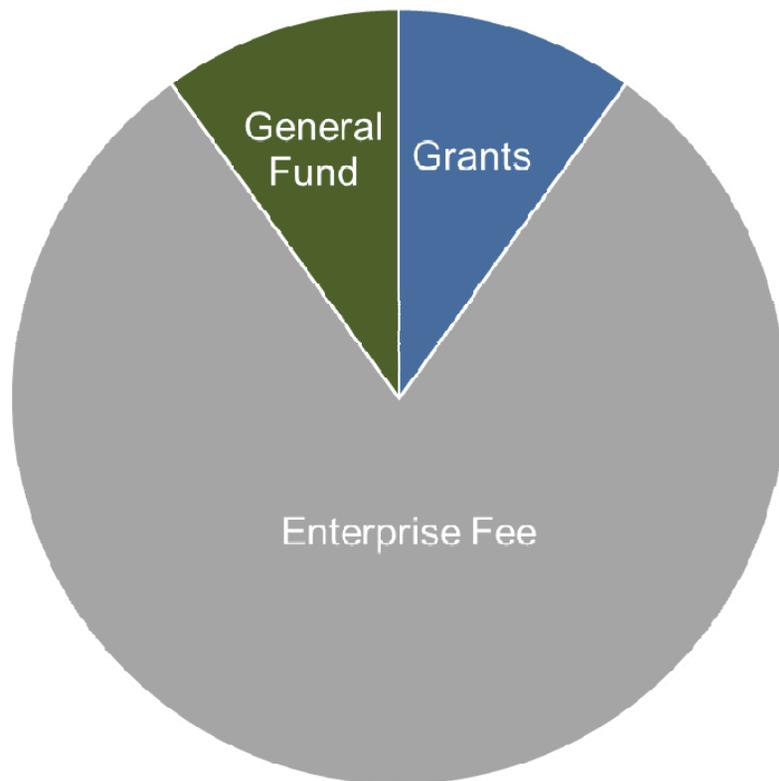
approximate  
annual revenue

**1/2**

of approximate  
budgetary needs could  
be covered by the  
Enterprise Fee

## Set rate at \$75 per household and per ERU

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**\$1,202,175**

approximate  
annual revenue

**80-100%**

of approximate  
budgetary needs could  
be covered by the  
Enterprise Fee

# Future Stormwater Funding Presentations

Join us for the next  
community meetings

**Sept 10th**  
**10:00 am-11:00 am**  
**Senior Center**

**Sept 16th**  
**6:30 pm- 7:30 pm**  
**Town Hall**

**Sept 30<sup>th</sup>**  
**6:30 pm- 7:30 pm**  
**Town Hall**

Learn more <https://www.tewksbury-ma.gov/stormwater>

# THANK YOU!

## Questions or Comments?



<https://www.tewksbury-ma.gov/stormwater>

Weston & Sampson