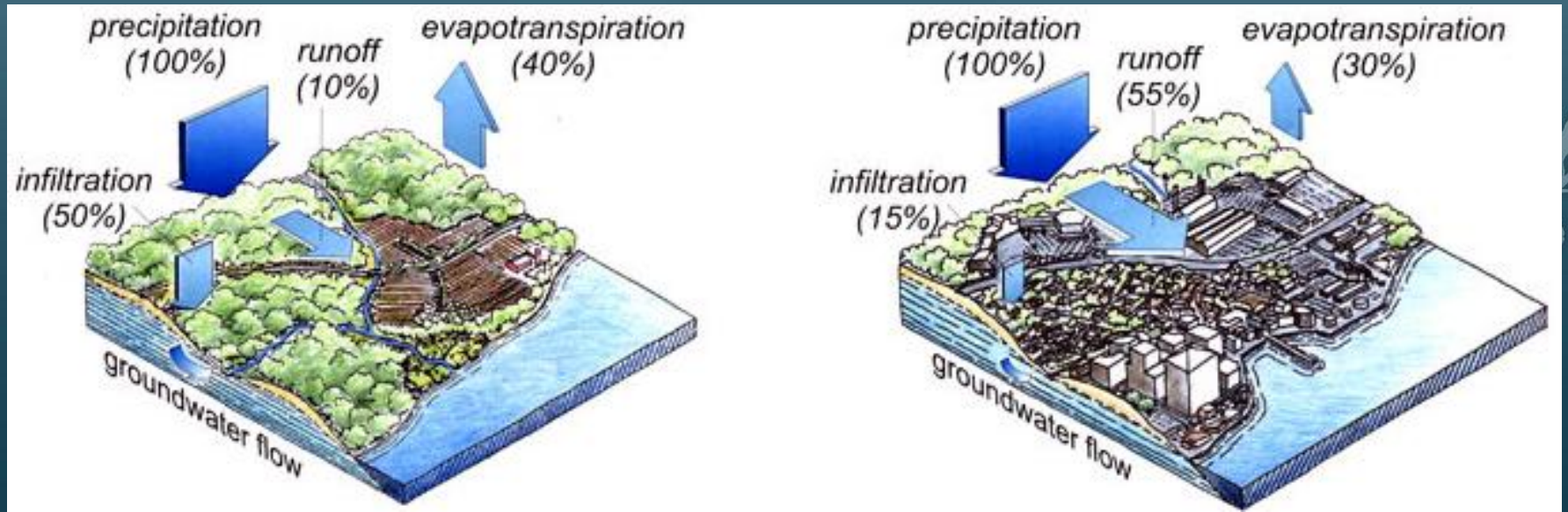
Funding Stormwater Management

Strategies to support stormwater management at the municipal level

Stormwater Overview

Stormwater is a natural result of rain storms and other wet weather events.

However, with an increase in impervious surfaces, stormwater has become an issue that increasingly affects people's lives and the environment.



DRINKING WATER

FLOODING

INFRASTRUCTURE

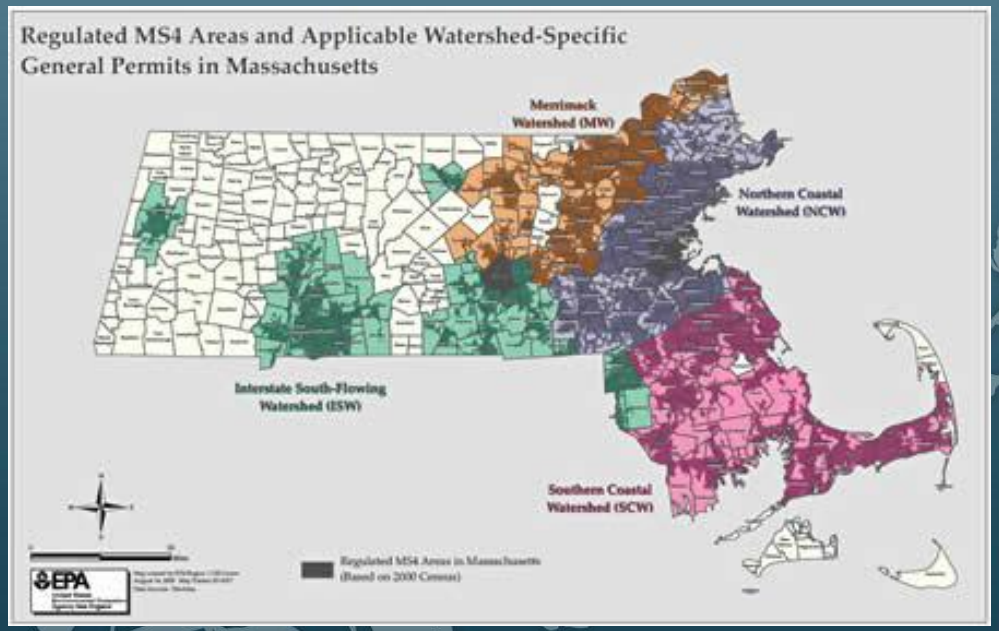
WATER RECREATION

NATURAL RESOURCES

Stormwater Management Regulations

Due to these potential impacts, stormwater has come under more scrutiny and regulation.

Since 2003, National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer Systems (MS4) general permit.



Local Stormwater Management under MS4

Public Outreach and Involvement

Illicit Discharge Detection and Elimination (IDDE)

Construction Site Runoff Control

Local Stormwater Management under MS4

Post-Construction Runoff Control

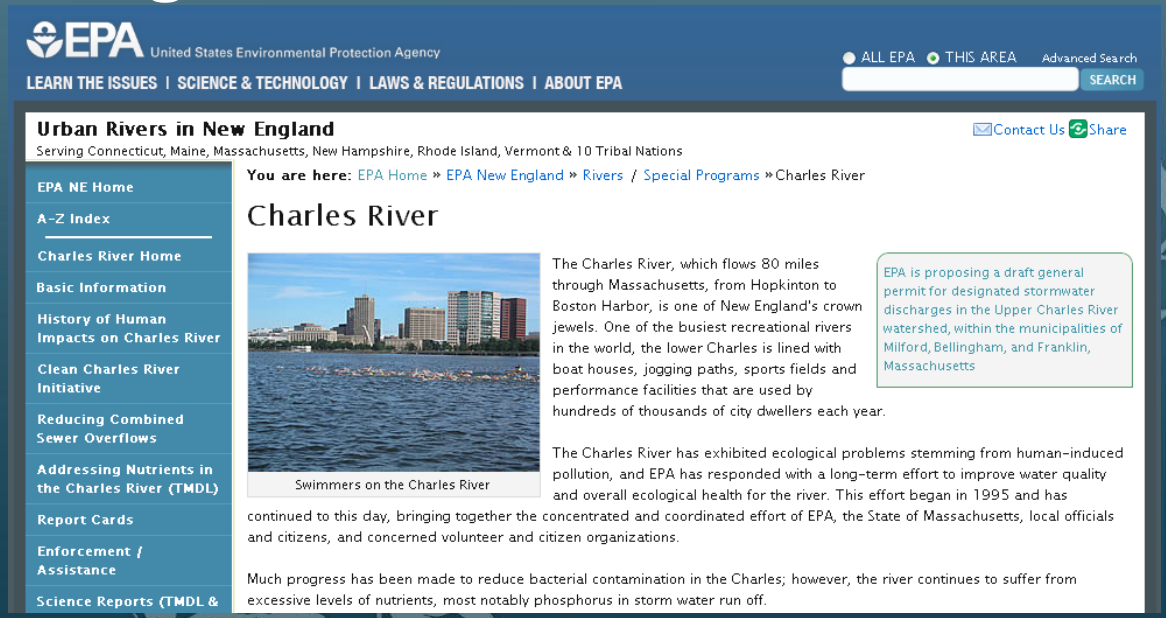
Pollution Prevention/Good Housekeeping

Additional requirements anticipated as EPA prepares new NPDES MS4 general permit.

Draft Residual Designation for the Charles River

Due to continued impacts of phosphorous through stormwater runoff, Charles River is focus of possible additional regulations.

Use of Residual Designation Authority (RDA) is now under consideration by the EPA.



Overview of Draft RDA for the Charles River

- Designation would cover Milford, Bellingham and Franklin.
- Proposed for stormwater discharges from areas of the towns in the Charles River watershed.
- Proposed to include properties with impervious surfaces equal to or greater than 2 acres.
- Certain land uses would be exempted, e.g., single family residential, government properties, specified land uses such as recreational camps, mobile home parks, etc.

Funding Alternatives for Stormwater Management

Funding Alternatives for Stormwater Management

- **Property Taxes/General Fund**
  Current source, competitive, does not reflect the true cost of stormwater impacts.
- **Grants**
  Available, competitive, typically one-time, local match.
- **Bonds/Loans**
  Available, project readiness, require full repayment.
- **Stormwater Permit/Connection Fee(s)**
  New developments, new connections, site specific.

Funding Alternatives for Stormwater Management

- **Special Assessment/Benefit Districts**
  Area specific improvements, limited availability.
- **Local Option Sales Tax on Meals**
  In addition to state tax, relation to general fund, competing demands.
- **Stormwater Utility/Enterprise Fund**
  Dedicated fund, operated like a public service (e.g., electricity), assessment based on stormwater impacts.


Focus on
Stormwater Utilities

Focus on Stormwater Utilities

- **Legal Framework**

  MGL Chapter 83 (sec. 16): Provides authority for locality to develop a utility and charge fees to support stormwater management activities.

  MGL Chapter 40: Defines a district for purposes of water pollution abatement, water, sewer, etc.

- **Administrative Structure**

  A utility can be established as a new department or integrated into existing department (e.g., DPW).

Focus on Stormwater Utilities

- **<u>Establishing a Work Program and Budget</u>**

  As part of developing a stormwater utility, staffing needs, capital projects (ongoing and proposed), and operations and maintenance activities should be inventoried (e.g., MS4 activities).

  This provides a stormwater program overview and funding; should be performed in coordination with the establishment of stormwater fees in order to balance costs with projected revenue.

Focus on Stormwater Utilities

- **Establishing Stormwater Fees**

  A stormwater utility fee can be structured in a variety of methods. Typically, the fee is calculated in relation to the amount of impervious surface on a property, since these surfaces are the primary element influencing the volume of stormwater runoff contributed to a system.

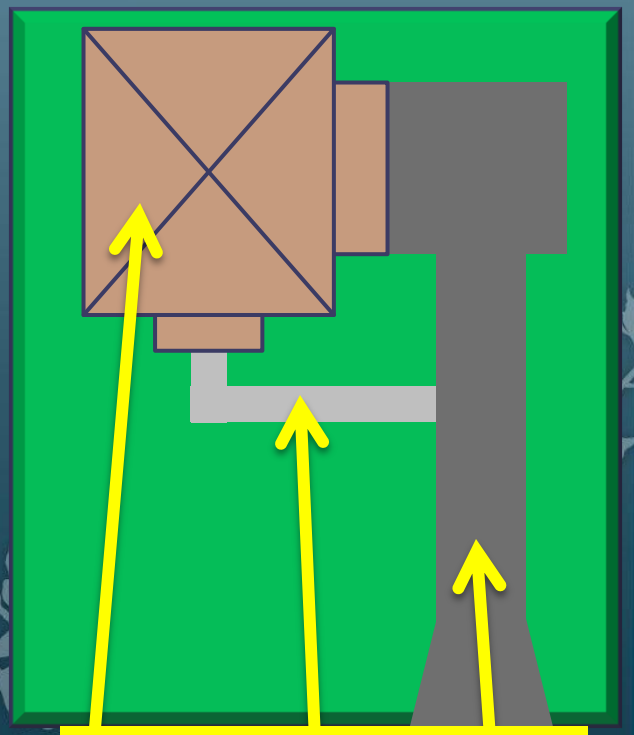
Focus on Stormwater Utilities

➢ Establishing Stormwater Fees

The Equivalent Residential Unit (ERU) is most common fee method used.

Based on the effect/runoff from a typical Single Family Residential home's impervious area (= 1 ERU).

Fees for Commercial, Industrial and possible larger Residential parcels (Two-Family, Multi-Family, etc.) are calculated relative to ERU.



Impervious Areas

Focus on Stormwater Utilities

- **Establishing Stormwater Fees**

  Example Stormwater Fee Structures:

Town / *Property Type*	Town A	Town B	Town C
Single- or Two-Family	$25/quarter	$6.25/quarter	$25/quarter
Multi-Family	$40/ 3,210 sq. ft. (annually)	$6.25/quarter	$25/quarter
Industrial or Commercial	$40/ 3,210 sq. ft. (annually)	$37.50/quarter	$0.45/1,000 sq. ft./quarter

Focus on Stormwater Utilities

- **Credits for Stormwater Mitigation Measures**
  Provide incentives for certain practices and opportunities for reductions in fee (e.g., installation of additional BMPs and increased maintenance).
- **Methods of Billing**
  A stormwater fee can be handled through separate billing or inclusion with existing water and sewer bills. Most existing stormwater utilities integrate billing with existing water and wastewater bills.

Focus on Stormwater Utilities

- **Public Involvement**

  Public education and engagement is critical during development of utility. Outreach necessary to communicate benefits of a well-funded and managed stormwater program to local quality of life. Specific actions include outreach to properties that generate significant amounts of runoff and distribution of projected fee amounts to property owners in advance of actual billing.

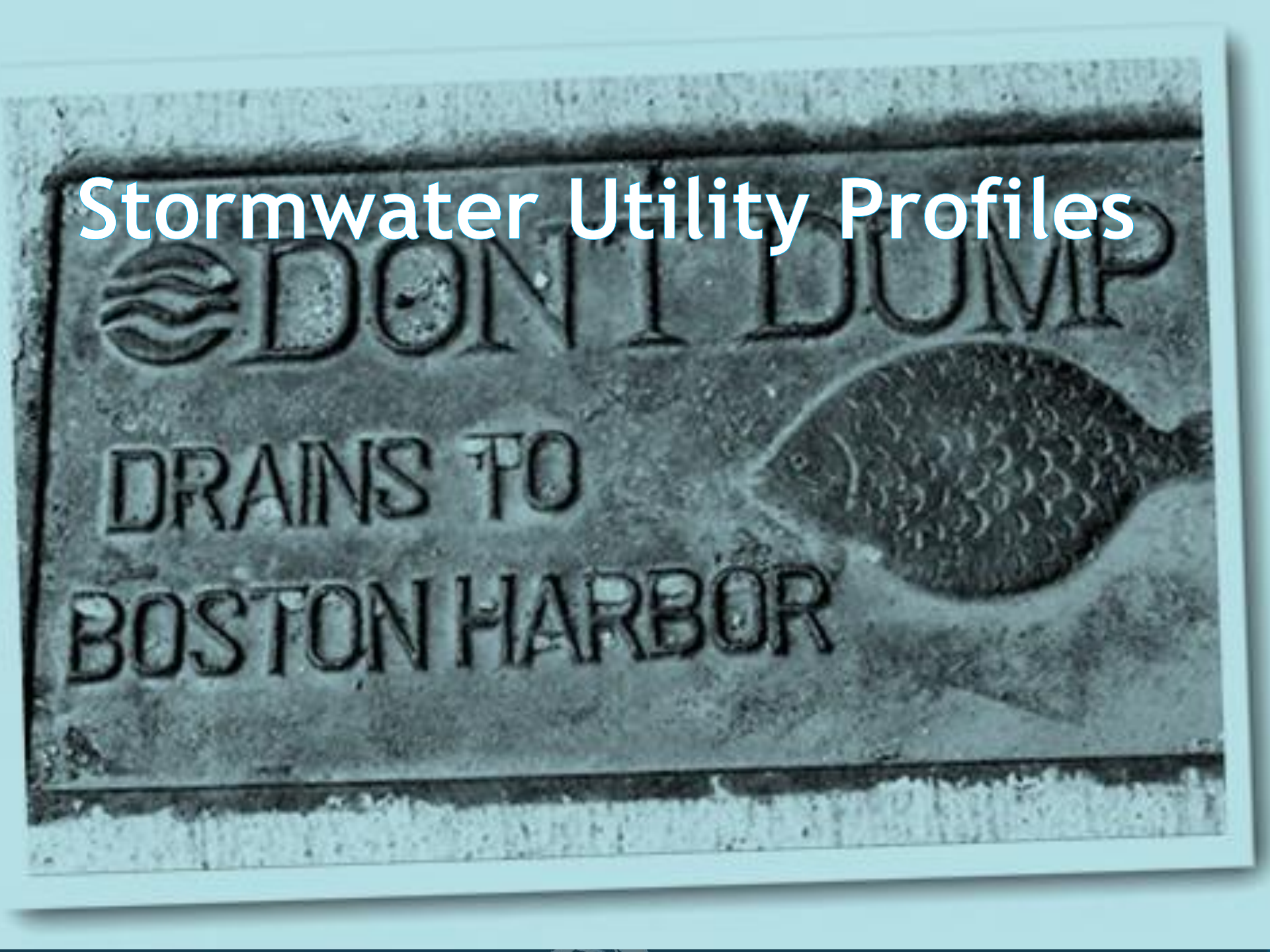
Focus on Stormwater Utilities

- **Town Utility vs. Regional Utility**

  Although most utilities in the US are municipal, in states like Florida and Washington there are regional utilities.

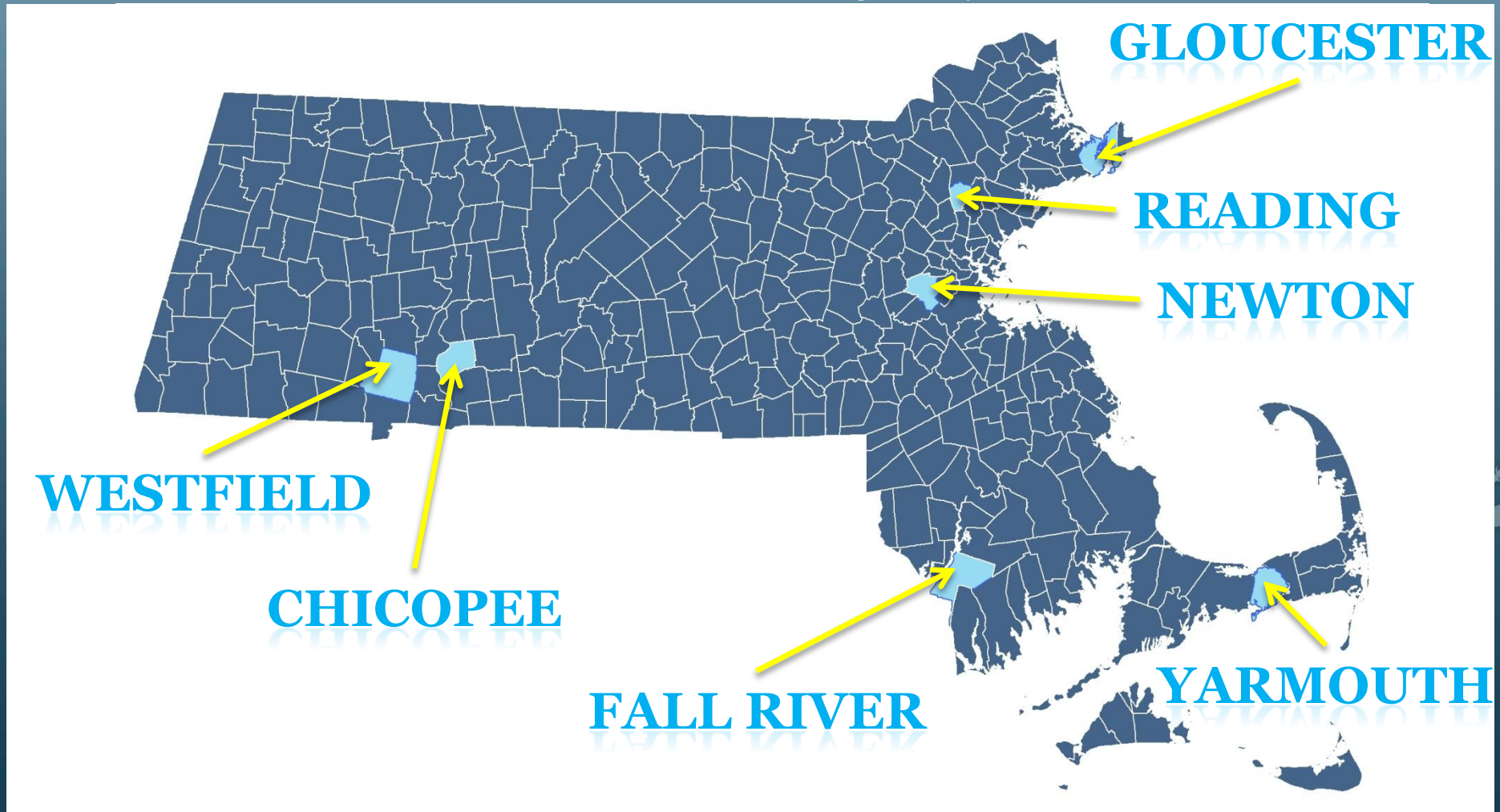
  An Inter-Municipal Agreement could be a potential tool for undertaking and administering a regional stormwater utility service in Massachusetts (e.g., formal contract, joint service agreement, or service exchange agreement).

Stormwater Utility Profiles



Massachusetts Stormwater Utility Profiles

Locations that have advanced or are considering use of stormwater utilities



Primary Impetus for Stormwater Utility

- **Chicopee**
  CSO elimination*
- **Newton**
  Locally identified needs /MS4 regulations
- **Fall River**
  CSO elimination*
- **Westfield**
  MS4 regulations
- **Gloucester**
  CSO elimination*
- **Yarmouth**
  MS4 regulations

**** Combined Sewer Overflows (CSOs)***

Reading Municipal Stormwater Utility

- Developed between August 2003 and January 2006.
- Several financing options were considered (e.g., service fees, property taxes, etc.).
- A Stormwater Utility was chosen since it would provide a stable funding source and an equitable method for assessing impacts.
- Approved by Town Meeting in April 2006.

Reading Municipal Stormwater Utility

- Single and two-family properties are assessed a flat fee (calculated average of impervious surface).
- Other properties including condominiums are charged fees based on the total amount of impervious surface on their lot.
- Undeveloped property is not assessed a storm water fee.
- Includes abatement program for addressing/ treating stormwater – Up to 50% reduction in fee.

Reading Municipal Stormwater Utility

Single and Two-Family Properties	**$10 per quarter ($40 annually)**
Multi-Family/ Commercial/ Industrial Properties	**$40.00/ 3,210 sq. ft. (annually)**
Annual Budget	$350,000 - $400,000

Reading Municipal Stormwater Utility

- Utility supports a variety of activities including:
  - Street Sweeping and Catch Basin Cleaning
  - Ditch and Detention Basin Maintenance
  - General Drainage Improvements (e.g., infiltration systems, repair of deteriorated or collapsed pipes, etc.)
  - Mapping of Drainage System and Outfalls
  - Illicit Discharge Detection Program
  - Equipment purchases

National Stormwater Utility Profiles

Locations in the United States that have implemented stormwater utilities

Lewiston Maine

Setting the Pace

SEAL OF BREVARD COUNTY FLORIDA

1513 1854 1969

South Burlington Stormwater Services

Brevard County Regional Stormwater Utility

- The Brevard County Stormwater Program (BCSP) was created in 1990; Accompanied by a stormwater utility fee to fund program activities.
- In 1999, joined by the City of West Melbourne and the Town of Malabar.
- Administered by the County.
- Uses an ERU approach based on the typical impervious square footage of a single family home.
- Features a credit program that provides a reduction in assessments for stormwater BMPs and maintenance.


Funding Stormwater
Management