

The State of Water Infrastructure

A briefing for ACECMA members

#InvestInWaterMA



Don't let out of sight mean out of mind

February 6, 2025

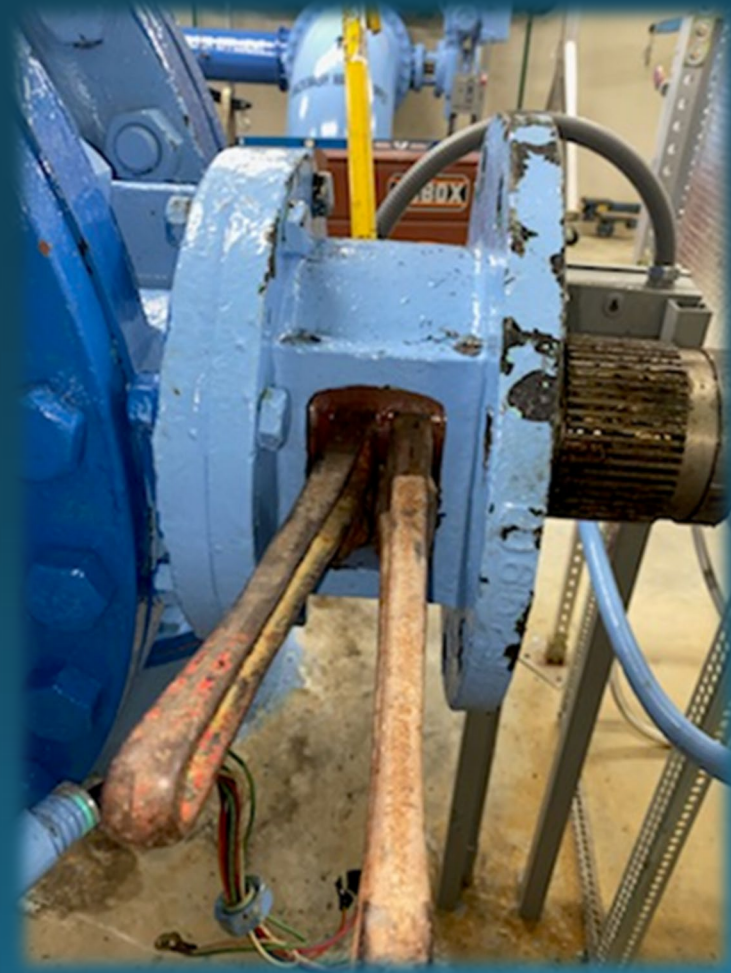
Briefing Overview

- 💧 History
- 💧 State of Infrastructure
- 💧 Water Infrastructure Funding Needs & Gap
- 💧 Economic Impacts
- 💧 What you can do to help

Key Takeaways

- 💧 Water Infrastructure has been woefully underfunded for decades
- 💧 We are reaching a crisis point where continued reliable service is threatened
- 💧 Increasing regulatory and legislative mandates are unsustainable
- 💧 Water infrastructure funding is a shared obligation – we need additional state and federal funding to keep water and wastewater services affordable for the Commonwealth's residents and businesses

Aging infrastructure needs attention



Cost of service

Infrastructure (pipes, pumps, treatment plants)

Staff

Chemicals

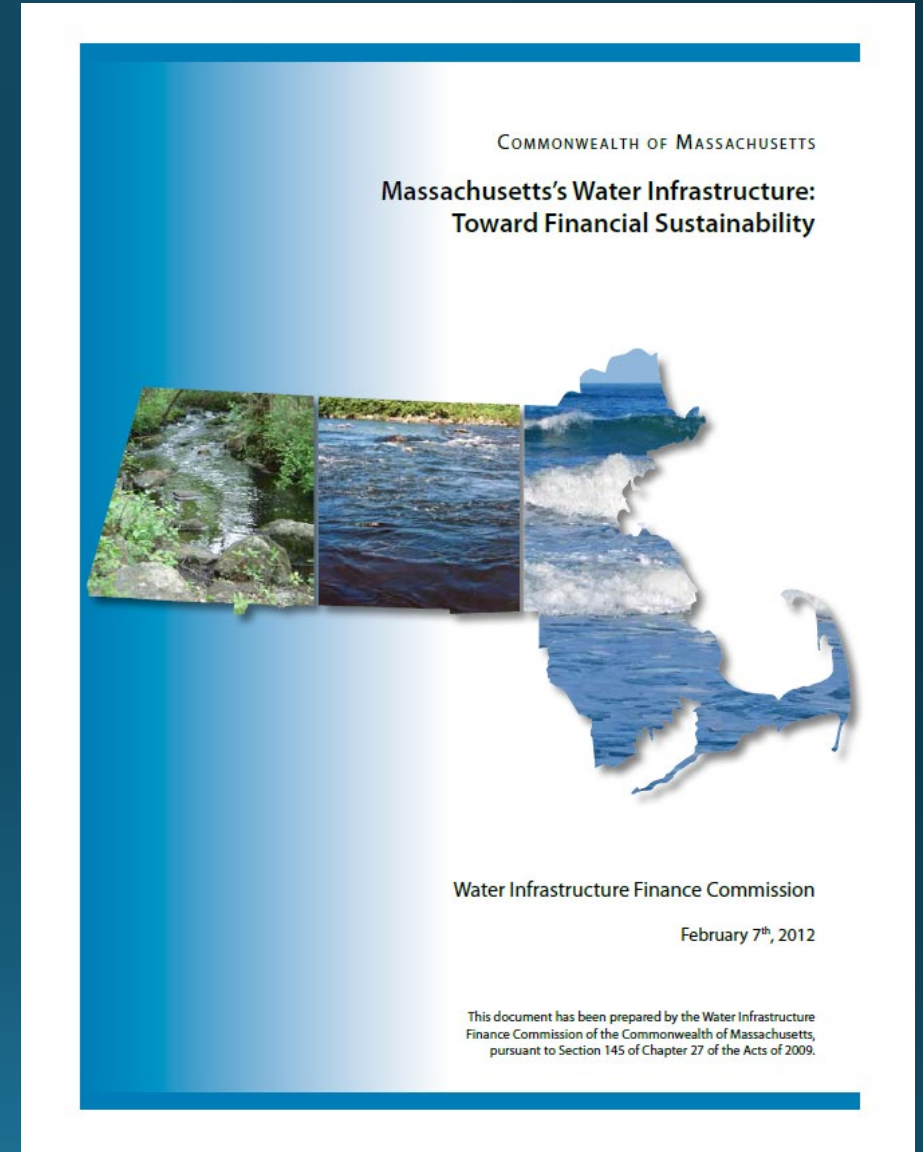
Energy

Compliance with Regulatory Mandates



History

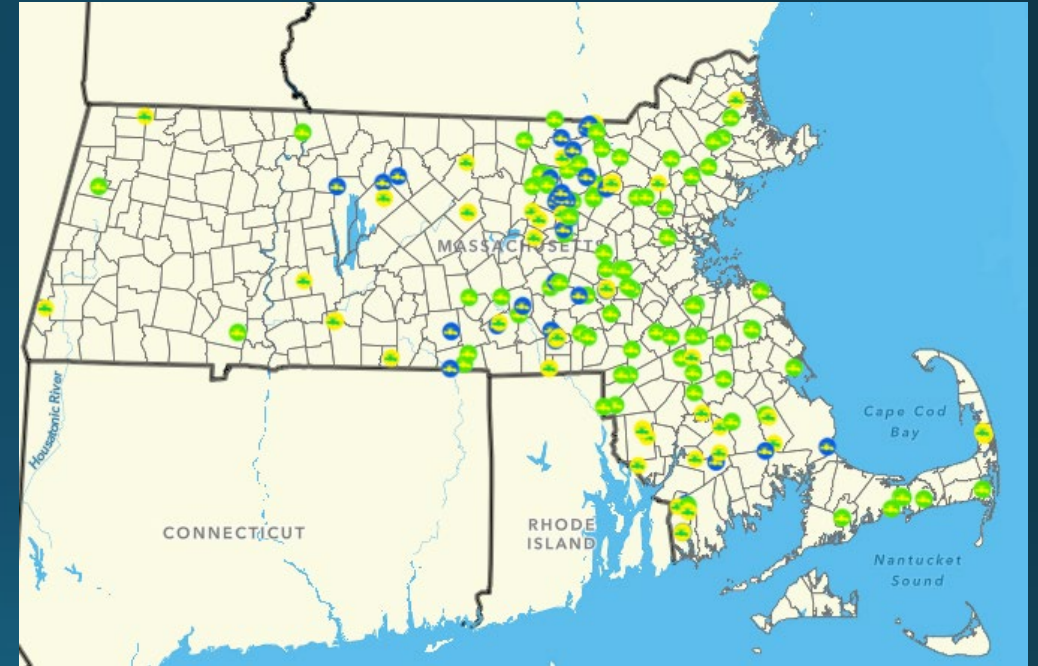
- 💧 2009 – Water Infrastructure Finance Commission Created
- 💧 2012 – Report released documenting close to \$40 billion gap (stormwater estimated)
- 💧 2014 – Legislation passed to implement recommendations (Chapter 259 of the Acts of 2014)



Some Current Challenges

Drinking Water

- 💧 Infrastructure Repair and Replacement Needs
- 💧 Lead Service Line Removal
- 💧 PFAS
 - 💧 MA has standard for PFAS in drinking water (Maximum Contaminant Level) of 20 parts per trillion for any one or combination of six PFAS compounds – EPA has lowered that to 4 ppt with compliance required by 2029.
 - 💧 Drinking water treatment is possible, but expensive



From MassDEP

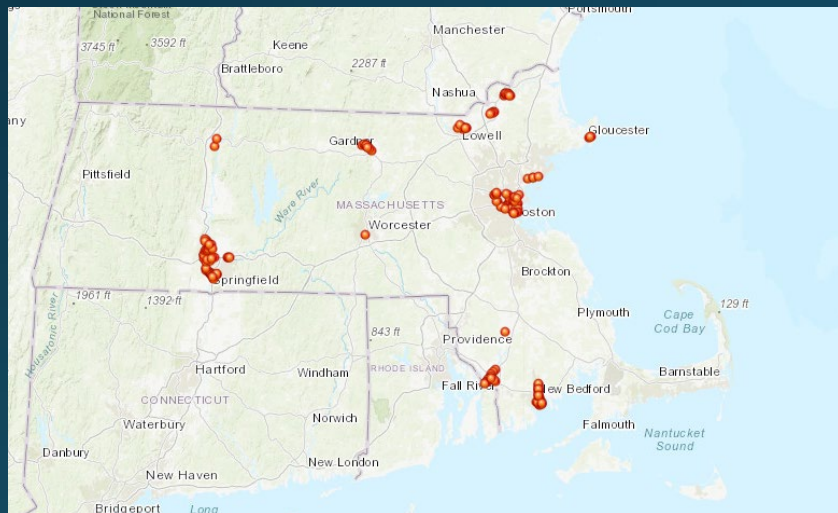
170 Public Water Systems have detections over 20 ppt

<https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas#pfas-detected-in-drinking-water-supplies-in-massachusetts->

Some Current Challenges

Wastewater

- 💧 Biosolids Crisis
- 💧 Infrastructure Repair and Replacement Needs
- 💧 Combined Sewer Overflows
 - 💧 19 communities still have combined sewer systems

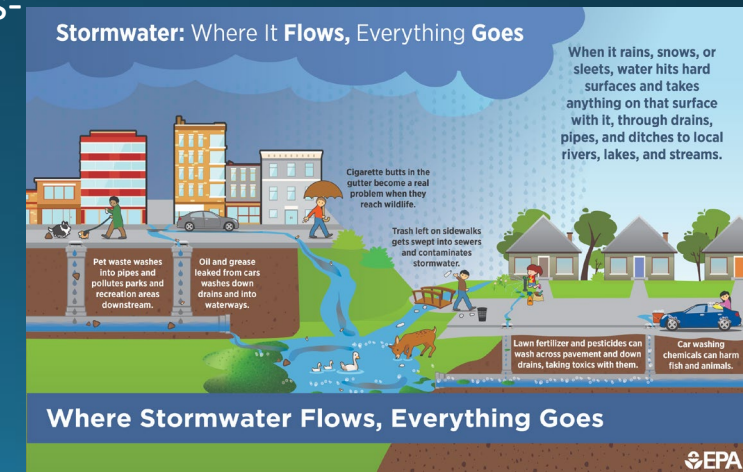


From MassDEP Combined Sewer Outfalls
<https://mass-eoeea.maps.arcgis.com/apps/webappviewer/index.html?id=08c0019270254f0095a0806b155abcde>

Stormwater

- 💧 Increasing Storm Intensity
- 💧 New Draft MS4 Permit from EPA Region 1 (out for comment)
 - 💧 Affects over 250 communities
- 💧 Draft Permit for Commercial, Industrial, Institutional Properties in Charles, Neponset and Mystic River Watersheds (out for comment)

- 💧 Unique to Massachusetts- Federal permit that only applies to select properties in one state
- 💧 Puts burden for phosphorus reduction from stormwater on private property owner with 1 acre or more of impervious surface



Why is it important to support water infrastructure investment?

- ◆ Utilities play a key role in protecting public health by maintaining water quality from the source through the distribution system to the customer, and then through the sanitation process, returning clean water to the environment.
- ◆ Utilities, with the support of their engineers and their contractors, construct and maintain the infrastructure needed to collect, treat, store, and distribute the drinking water and treat the wastewater.
- ◆ The public expects dependable water and wastewater services. Reliable infrastructure enhances the economy and supports the overall quality of life we enjoy in the Commonwealth.



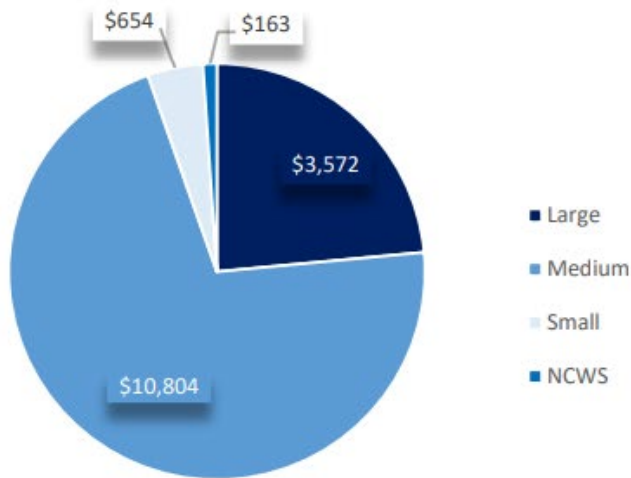
How much money is needed?

EPA's Drinking Water Infrastructure Needs Survey and Assessment, 7th Report to Congress. September 2023

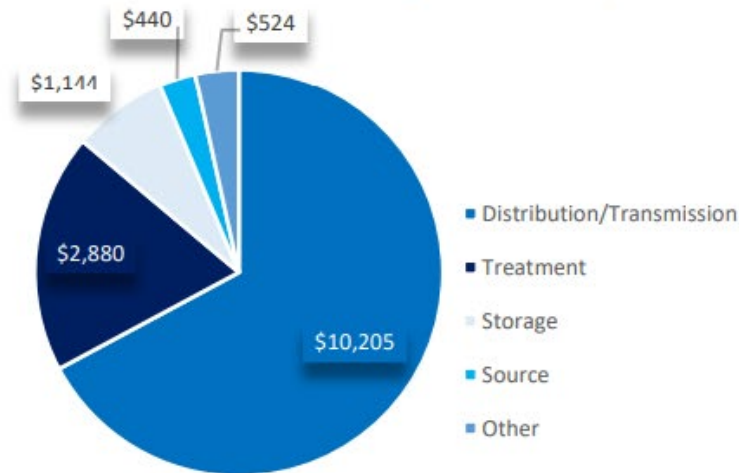
(The findings are based on data collected in calendar year 2021)

Massachusetts

Massachusetts Total Need by System Size
(in millions; January 2021 dollars)



Massachusetts Total Need by Project Category
(in millions; January 2021 dollars)



\$15.2 Billion

How much money is needed?

Clean Watersheds Needs Survey Report to Congress. April 2024

Wastewater, Stormwater

(This Report was designed to capture needs as of January 1, 2022, that are expected to occur within the next 20 years)

Massachusetts
Needs Category



\$21.7 Billion

- Secondary Wastewater Treatment
- Advanced Wastewater Treatment
- Conveyance System Repair
- New Conveyance Systems
- CSO Correction
- Stormwater Management
- NPS Control
- Water Reuse
- Decentralized Wastewater Treatment Systems
- Desalination

<https://www.epa.gov/system/files/documents/2024-05/2022-cwns-report-to-congress.pdf>

What about recent Federal Funding Opportunities?

American Rescue Plan Act (ARPA)

- ◆ Only six areas that ARPA could be utilized, and Water Infrastructure was one of them
- ◆ The Commonwealth received \$5.3 Billion in discretionary funding
- ◆ 2021 – the Legislature authorized **\$100 million** for water/sewer infrastructure from the State's ARPA funds (emphasis on addressing PFAS and CSOs)
 - ◆ \$12 million earmarked to specific projects
 - ◆ \$67 million distributed to projects **already funded** on 2021 IUP
 - ◆ \$20 million held for CSO projects 2022 IUP
- ◆ 2022 - Economic Development/ARPA 2.0 authorized **\$115 million** to the Clean Water Trust

Bipartisan Infrastructure Law (BIL) / Infrastructure Investment and Jobs Act (IIJA)

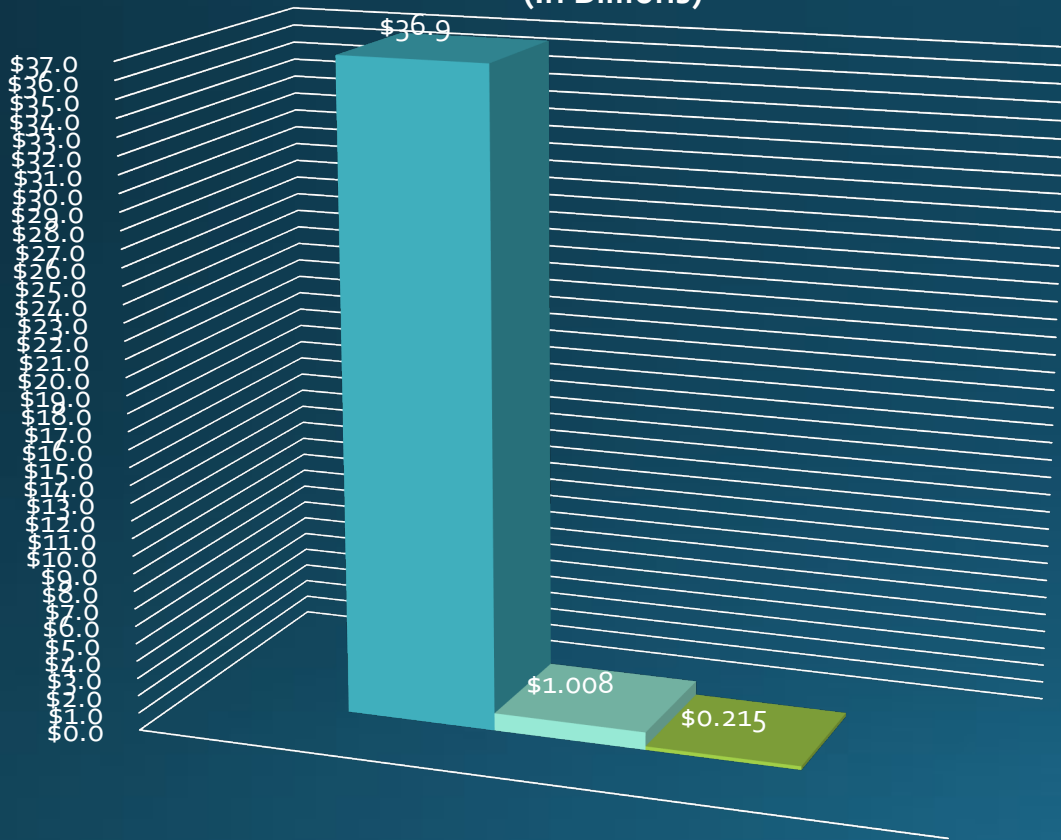
- ◆ Drinking Water Bucket = \$618 million
 - ◆ General Projects, Lead Service Line, Emerging Contaminants
- ◆ Clean Water Bucket = \$391 million
 - ◆ General Projects, Emerging Contaminants
- ◆ **Total = \$1.008 billion - distributed over 5 years**
- ◆ Emphasis on loan forgiveness for "Disadvantaged Communities"
- ◆ **The only way to access BIL funding is to apply through the Clean Water Trust**

Funding Gap

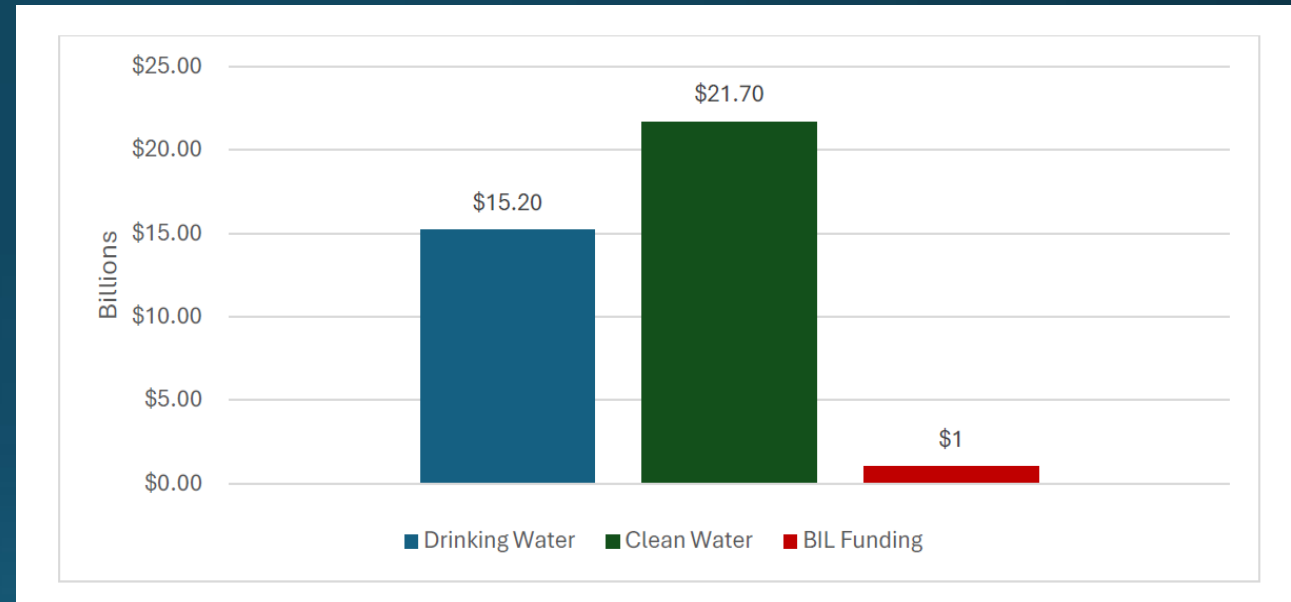
EPA Funding Gap for MA Drinking Water & Wastewater Infrastructure

vs.

New Federal Funding for Massachusetts
(In Billions)



■ EPA Funding Gap ■ BIL ■ ARPA



\$1 billion BIL Funds represents just shy of 3% of the identified needs

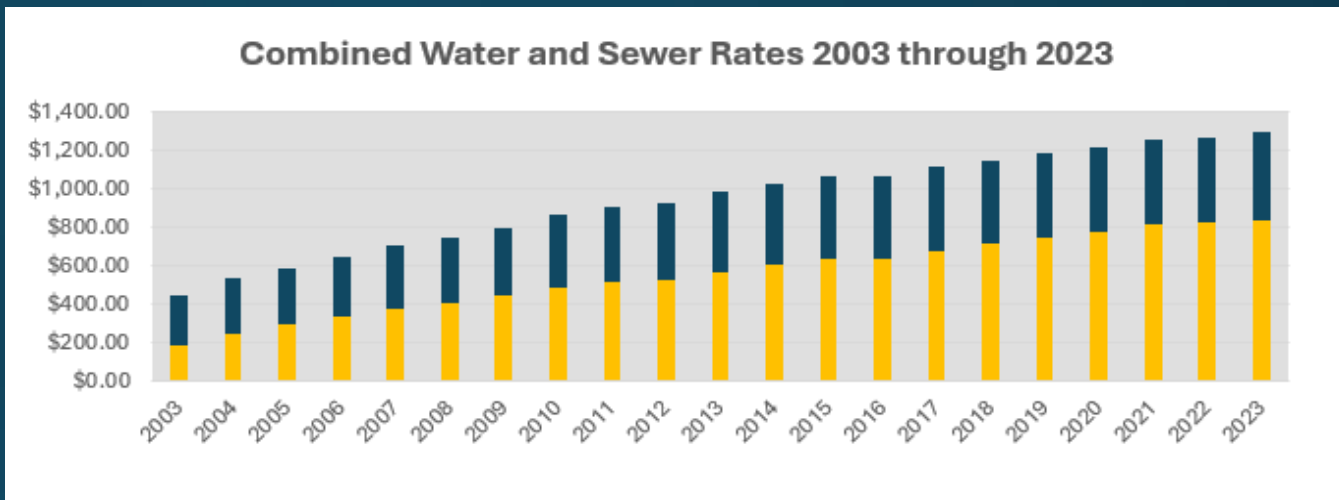
Economic Impacts

- 💧 Water-related infrastructure & capacity is critical to achieving **Housing** goals
- 💧 Economic Loss
 - 💧 MWRA estimated that the 2010 water main break economic impacts were nearly \$300 million per day. Important to note that the incident led to a boil order, but that a true loss of water to the Boston area would have significantly greater impacts
- 💧 Rate Increases
 - 💧 More debt exclusions/overrides needed, especially for water treatment to address PFAS
 - 💧 EPA Water Affordability Needs Assessment, Dec. 2024 (EPA 830-R-24-015) estimates that rates are already unaffordable for 9-15% of households (12-19 million households)
 - 💧 <https://www.epa.gov/system/files/documents/2024-12/water-affordability-needs-assessment.pdf>

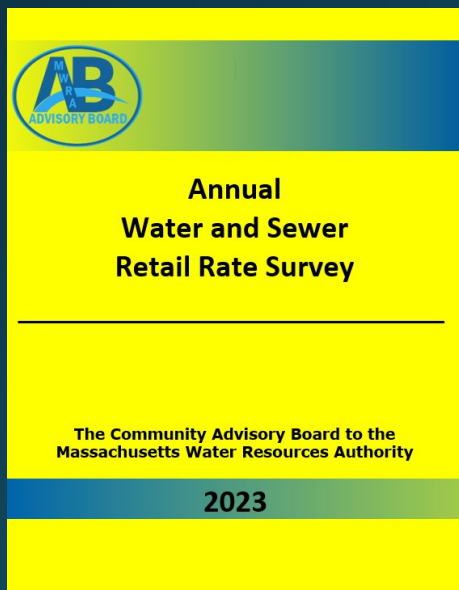
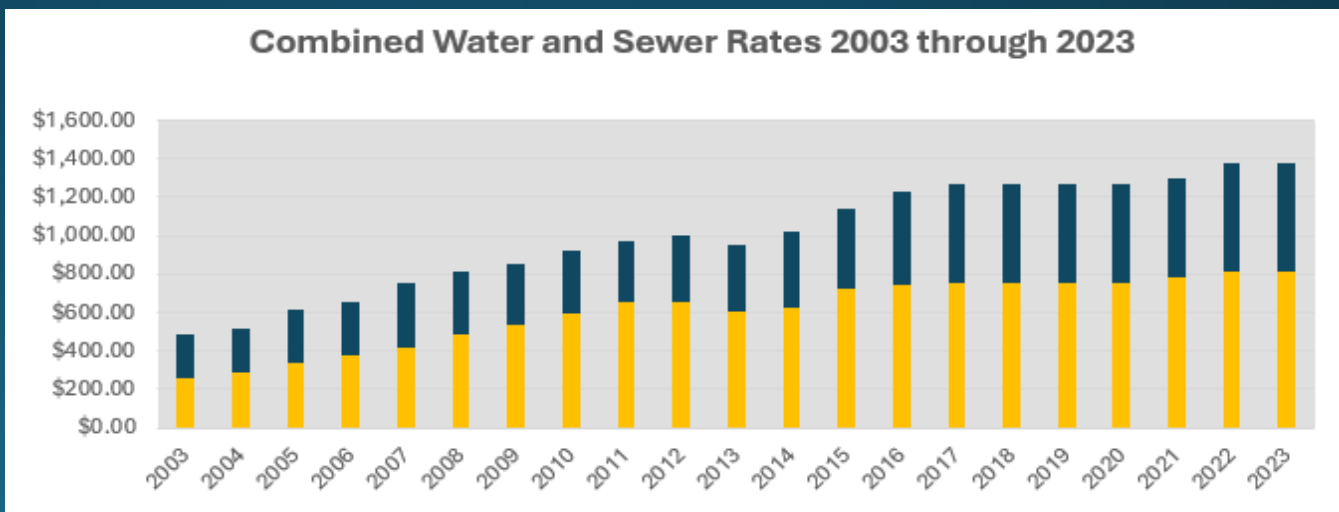


What has been the impact on ratepayers?

Worcester

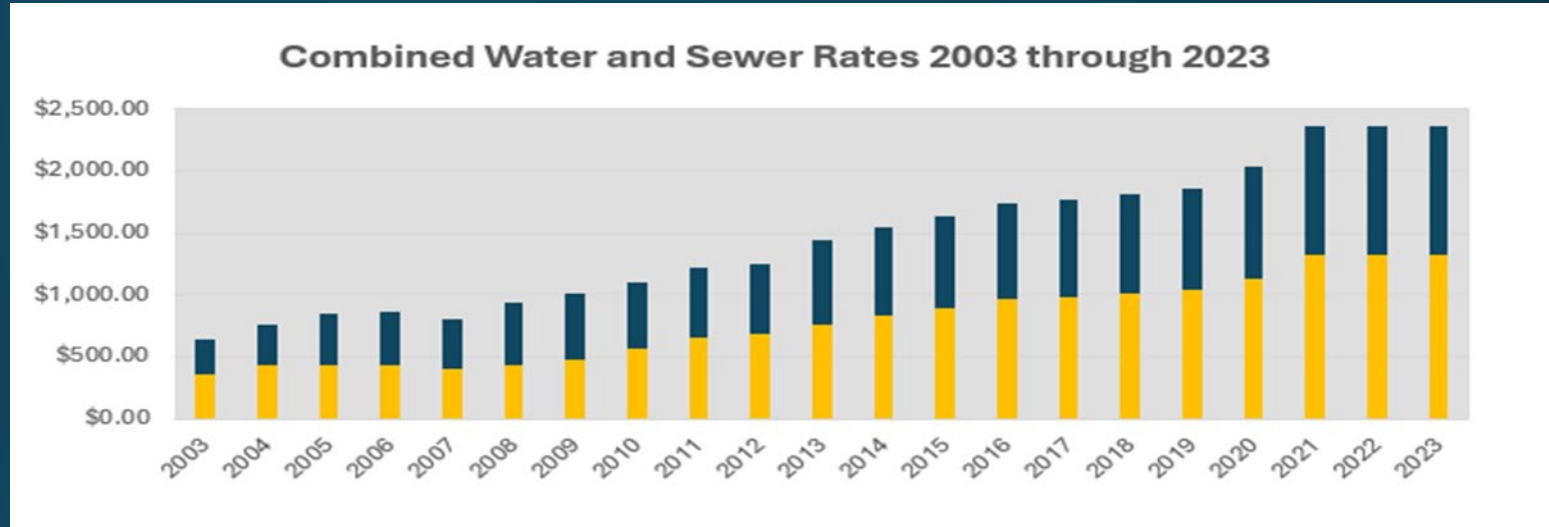


Chicopee

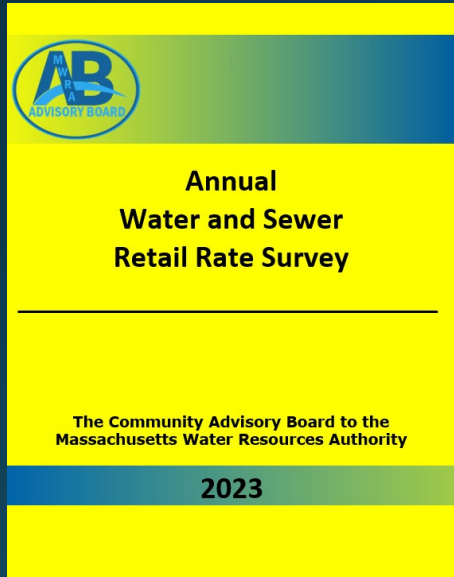
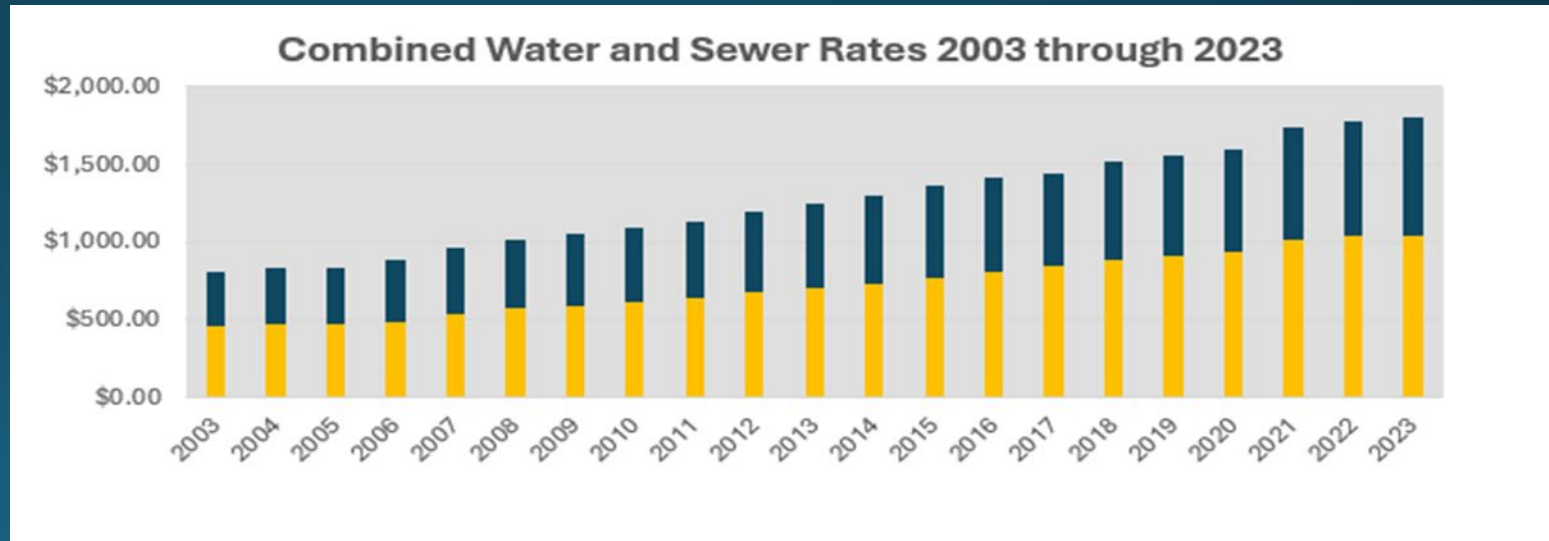


What has been the impact on ratepayers?

Framingham



Boston



How do infrastructure projects get addressed?



Clean Water Trust distributes the federal funding



Multi-step process to get projects ready

Communities must have needs identified, capital improvement plans
Projects must get local approval
Projects must be designed and put out to bid
Construction must be awarded



Could take a couple of years for a community to get through this entire process

SRF

2025 Drinking Water SRF IUP Summary

2025 Drinking Water SRF IUP Summary	
Total Drinking Water Projects Offered Funding	\$344.6 million
11 New Construction Projects	\$103.8 million
20 Previously Approved Multi-year Projects	\$185.0 million
14 Asset Management Planning Grants	\$1.3 million
SET-ASIDES	
Emergency projects	\$5.0 million
Planning projects and PFAS design	\$10.0 million
Lead Service Line Replacement Construction	
Project Loans	\$29.5 million
Lead Service Line Replacement Planning Loans	\$10.0 million

2025 Clean Water SRF IUP Summary

2025 Clean Water SRF IUP Summary	
Total Wastewater Projects Offered Funding	\$840.8 million
25 New Construction Projects	\$450.8 million
10 Previously Approved Multi-year Projects	\$357.3 million
14 Asset Management Planning Grant Projects	\$4.7 million
3 Sewer Overflow and Stormwater Reuse Municipal Grant Projects	\$0.56 million
SET-ASIDES	
Emergency Projects	\$3.0 million
Emergency PFAs or Other Emerging Contaminant	\$2.0 million
Planning Projects Rolling Applications	\$13.0 million
Community Septic Management Program	\$5.0 million
Sewer Overflow and Stormwater Reuse Municipal Grant Program (OSG) Rolling Applications	\$4.4 million

Infrastructure Investment Challenges

- Costs of construction have increased
- Competition for Water infrastructure dollars is increasing with mandatory **Lead Pipe** removal and **PFAS treatment**, leaving little available for essential infrastructure projects such as water main and sewer replacements, pump station repairs, tank replacements, and meter upgrades
- Federal funding will be reduced as ARPA and BIL funding ends
- We need to redouble our commitment to Water and Sewer investments across the Commonwealth before it'd too late

Infrastructure Investment Challenges

Water
Infrastructure
can be literally
out of sight and
out of mind.



Winning Support For Your Local Water Infrastructure Project

A PR and Social Media Playbook

Spring 2022



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Infrastructure Investment Opportunities



Protects Public Health



Increases Climate Resilience



Improves the Environment



CREATES JOBS!!

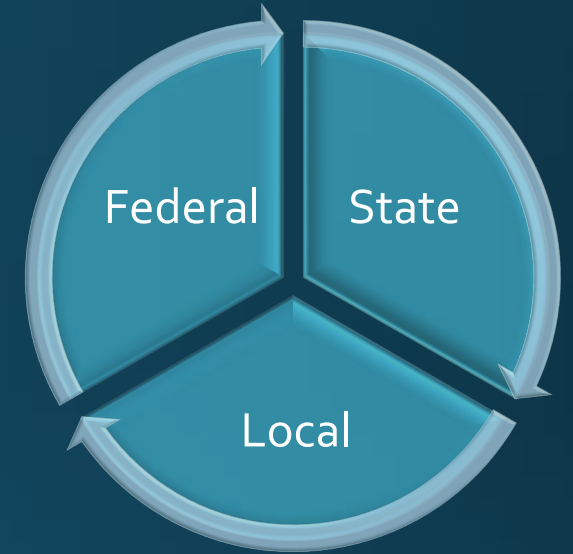
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What can you do to help?

- 💧 Only a shared partnership can address the challenges we face
- 💧 Help direct more state funds to water infrastructure projects
- 💧 Support Water Infrastructure-Related Legislation
 - 💧 Water Bond, Omnibus Water Funding, Environmental Bond Bill
- 💧 Urge Congress to make water infrastructure funding a priority beyond the BIL funding years
- 💧 Consider carefully the impacts of legislation which may add additional cost or burden to utilities and their ratepayers
- 💧 **Don't let water infrastructure remain out of sight and out of mind any longer!**



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An Act relative to meeting the Commonwealth's water infrastructure future

- [House Docket 2634/Senate Docket 1195](#)
- Sponsors: Representatives Ted Philips, Jessica Giannino, Meg Kilcoyne, Mike Kushmerek / Senator John Cronin
 - Fully fund Sewer Rate Relief @ \$78.5 Million
 - Fully fund Contract Assistance @ \$138 Million
 - MWRA Expansion @ \$2 Billion
 - HousingWorks @ \$375 Million
 - Matching Program for regional connection @ \$10 Million
 - Matching Program for MWRA rehab of collection systems @ \$13.8 Million
 - Additional State appropriation @ \$200 million annually
 - Biosolids research @ \$200,000
 - POTW Grant Program for adaptation planning required by NPDES @ \$10 Million
 - IBTA Review Commission
 - Change the charge of the WIFAC
 - Cost/Benefit Task Force
 - Workforce Training
 - Requirement for MassDEP to review SRF Scoring Criteria
 - Eliminate bathroom requirement in Plumbing Code for unoccupied structures

An Act Relative to Municipal Assistance for Clean Water and Economic Development Infrastructure

- **House Docket 1539**

Sponsor: Representative Jay Livingstone

Authorizes creation of a \$1 Billion Water Infrastructure Bond for a capital outlay program of maintenance and improvements to municipal drinking water, wastewater and stormwater infrastructure. The grant funding would be distributed to municipalities based on a formula similar to Chapter 90 transportation funding.

For Questions:

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