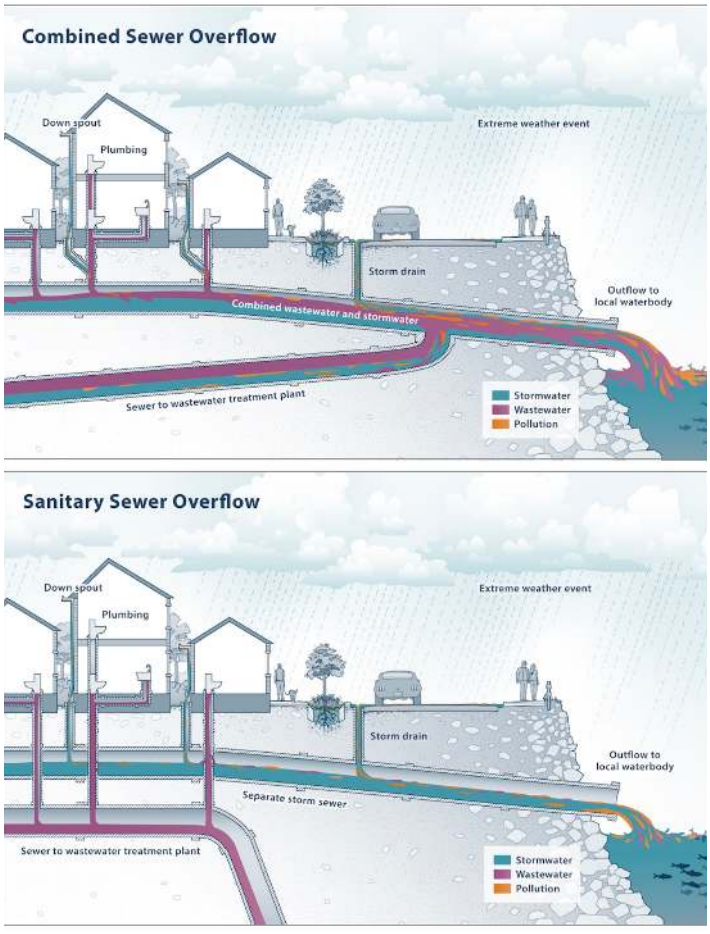
Sewage Spills Near You! What to Know About the Sewage Notification Law

KEY POLICY MESSAGES

- Massachusetts's centuries-old water infrastructure threatens public health and water quality.
- When raw sewage enters local waterways, the public has a right to know.
- While the cost to repair and replace this infrastructure is high, the cost of inaction is higher. State and federal lawmakers must significantly increase funding to municipalities for upgrading our outdated water infrastructure.
- Sewage pollution is a climate change issue. The more rain we get, especially in heavier storms, the more sewage will enter our waterways.
- Public knowledge of this problem increases public health and safety, especially for environmental justice populations.

THE PROBLEM: COMBINED SEWER OVERFLOWS (CSOS)



CSO Diagram by Fiona Martin, for NOAA Climate.gov

Most people assume sewer systems consist of dedicated sewer pipes that take sewage to treatment plants and that separate pipes convey stormwater runoff to local waterways. Yet many Massachusetts cities still have old systems that **combine rain and snowmelt from the street with the sewage from our homes and businesses in one pipe** leading to a wastewater treatment plant. On a dry day the sewage travels to the treatment plant where it is cleaned before being discharged to a river or the ocean. However, when it rains, to prevent that sewage/rain mixture from backing up into homes or overloading the wastewater treatment plant, engineers designed combined sewer overflows (CSOs), which **release the untreated sewage/rain mix into a nearby waterway.**

Raw sewage in our water is bad for people and for wildlife. Fecal bacteria and viruses pose many public health threats, including ear and eye infections, skin rashes, hepatitis, and inflammation of the intestines. CSOs also send metals and toxic chemicals into rivers. To stay safe from these risks, the public should avoid contact with sewage-polluted water for at least 48 hours after a CSO event.[1]

In Massachusetts most of our sewers were built in the early 1900s (some even earlier), so CSOs still occur in many of our cities today. **That means untreated sewage enters our local waterways nearly every time it rains.** These discharges are happening more frequently as climate change increases the frequency and severity of storms in the region.

ISSUE ANALYSIS

As of 2024 Massachusetts had 187 CSO outfalls, or discharge pipes, and 19 CSO permittees (the sewer operators who control the outfalls).

In a typical year, Massachusetts's waterways receive millions of gallons of untreated and partially treated sewage and stormwater from CSOs.

In a rainier-than-normal year such as 2023, our water bodies received just over four million gallons of untreated sewage and three million gallons of partially treated sewage.[2]

CSO outfalls are concentrated in urban areas, making sewage-related pollution an environmental justice issue. The waterways closest to residents of Massachusetts's most urban neighborhoods are likely to be contaminated every time it rains, and this pollution can lead to poor public health outcomes for river users or beach-goers, including gastrointestinal illness, often with diarrhea and vomiting. Pregnant people, infants, and children are particularly susceptible.[3]

CSOs are a climate change issue. New England is projected to receive more precipitation in heavier, quicker storms in the coming decades. Increasing rain means increasing sewage pollution.

Despite the many problems associated with CSOs, **until July 2022 there was no way for the public to know when these discharges occurred** in most Massachusetts waterways, leaving people downstream at risk of contact with contaminated waters.

SEWAGE NOTIFICATION LAW

In 2021, then-Governor Charlie Baker signed a sewage notification bill into law. The law originated about a decade earlier, when State Representative Denise Provost joined staff from the Mystic River Watershed Association (MyRWA) for a trip on the river.

Dismayed by what they saw, MyRWA and Rep. Provost drafted a bill to establish a notification system to alert the public about sewage contamination in local waterways. The Massachusetts Rivers Alliance made the bill a top priority in a subsequent legislative session, and with the help of an active coalition of watershed organizations and municipalities, succeeded in getting the bill passed in 2020 with a unanimous vote of the legislature.

Legislative Briefing on CSOs

THE NEW CSO LAW AND REGULATIONS

The law's notification requirements apply to any discharge of raw or partially treated sewage into a waterway, not just CSOs. It contains requirements for sewer operators to create an opt-in text and email public notification system, signage at public access points downstream of CSOs, and a database of statewide sewage pollution.

The new law provides residents and policymakers - for the first time - with data on just how much sewage is entering our waters, where it enters, and when it enters those waters.

In the fall of 2021, the Massachusetts Department of Environmental Protection (MassDEP) released draft regulations to implement the sewage notification law. The new regulations require warning signage and notification in locally appropriate languages. Now, people can know when a sewage discharge occurs: through text & email alerts, local news stories, board of health updates, and posted signs at public access points downstream of CSOs. For many people, this was the first time they had heard of a "combined sewer overflow." MassDEP also established a CSO database, which now gives the public a clear picture of sewage pollution in the Commonwealth.

POLICY RECOMMENDATIONS

Passage of the sewage notification law is an important achievement, as it helps to keep the public safe from the health risks posed by sewage-contaminated waters, and educates Massachusetts residents about this important issue.

However, it is only a first step toward the goal of keeping our waterways clean and free of sewage.. While the cost to repair and replace outdated sewers is high, the cost of inaction is higher, especially because climate change brings us heavier storms, increasing the amount of sewage entering rivers. To safeguard both public health and the environment, the Massachusetts Rivers Alliance recommends that:

- **MassDEP modify and improve the current CSO notification system so that messages use clear language, are easily accessible to diverse populations, and include information about river uses such as fishing, boating, etc.**
- **State and federal lawmakers significantly increase funding to municipalities for upgrading our outdated water infrastructure, and provide a higher share of funding in the form of grants rather than loans.**
- **The U.S. Environmental Protection Agency and the federal government more robustly enforce compliance directives to municipalities to fix their CSO systems to comply with federal Clean Water Act water quality standards.**
- **Municipalities strongly consider altering water and sewer rate structures to at least partially cover the cost of separated sewer projects.**

Public notification of sewage discharges is an important first step, but the journey is not over. Mass Rivers believes **raw and partially treated sewage should never be discharged into our waters.**

The more the general public becomes aware of CSOs, the more people will be willing to drive change, pushing their communities to invest in much needed water infrastructure, including separating combined sewer systems.

Sending untreated sewage into waterways is terrible enough, but when water infrastructure fails, the results can be even more catastrophic — water supply interruptions, water and sewer main breaks, and sewage backed up into homes and yards.

Massachusetts must invest in water and sewer infrastructure to protect our environment, ensure our public health and safety, and prepare environmental justice communities for climate change. It is past time for us to modernize our water infrastructure to meet the challenges of the 21st century.

Endnotes

1 This 48 hour standard is used by several states with sewage pollution notification requirements. In Massachusetts it was adopted with approval from the state's Dept. of Public Health.

2 Commonwealth of Massachusetts, Dept. of Environmental Protection, Annual Sewage Notification Report 2023, p. 6.

3 US Environmental Protection Agency. Report to Congress on Impacts and Control of Combined Sewer Overflows and Sanitary Sewer Overflows. pp. 6-17.

Key Partners

Mass Rivers gratefully acknowledges the work of our lead partners in working on CSOs:

the Mystic River Watershed Association, the Neponset River Watershed Association, the Connecticut River Conservancy, the Nashua River Watershed Association, Merrimack River Watershed Council, Environment America, the Charles River Watershed Association, and the City of Newburyport

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