Fitchburg Easterly Wastewater Treatment Plant & Combined Sewer Overflows

U.S. EPA | DRAFT CLEAN WATER ACT PERMITS

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From December 15, 2023 to January 29, 2024 the U.S.

Environmental Protection Agency (EPA) Region 1 and the Massachusetts Department of Environmental Protection (MassDEP) are soliciting public comments on the draft reissuance of the NPDES permit for the Fitchburg Easterly Wastewater Treatment Facility (WWTF) that discharges treated wastewater and combined sewer overflow (CSO) discharges. The facility serves the City of Fitchburg and portions of the Town of Westminster and the City of Lunenburg.

The permit is trying to prevent harm to the environment and people's use of water by controlling how treated wastewater and CSOs are released. The permit requires the sewage to be treated to a certain level and sets limits on how much organic matter, bacteria, and other substances can be in the water. There are rules in place to limit the amount of CSOs and to let the public know when they happen. The permit covers a total of 9 CSOs.

WHAT ARE CSSs & CSOs?

Fitchburg is served by a combined sewer system (CSS) that combines rainwater, sewage, and industrial waste into one pipe. Normally, everything goes to a treatment plant before it's released into the river. But when there's a lot of rain or snowmelt, the system can't handle all the water. So, some of the untreated sewage, along with stormwater, gets released into the river through CSOs. This waste can contain things like human waste, industrial waste, toxins, and debris. Figure 1 shows a generic CSO diagram (see page 2).

RECEIVING WATER

The Fitchburg Easterly WWTF discharges through Outfall 063 and six CSOs into the North Nashua River; two CSOs into Punch Brook, and one CSO into Birch Brook, all within Segment MA81-03 of the Nashua River Watershed. The North Nashua River is part of the Nashua River Watershed, which flows to the Merrimack River and discharges to the Merrimack River Estuary. The WWTF and CSO outfalls are shown on the map on Figure 2 (see page 3).

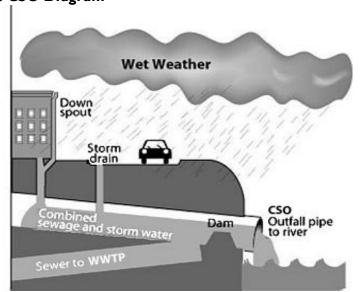
The segment of the receiving water that receives the discharges from the WWTF and the CSOs is polluted with bacteria, according to MassDEP. The City of Fitchburg has been working towards the elimination of CSO outfalls and anticipates that ongoing work will significantly reduce and/or eliminate untreated discharges from CSOs.

Down spout

Storm drain

Sewage from domestic, commercial, and industrial sources

Sewage and converse barn of the converse of



NEW PERMIT REQUIREMENTS IN DRAFT PERMIT

Proposed Changes

Sewer to WWTP

The proposed changes to the permit for the Fitchburg Easterly WWTF include:

- Monitoring for total nitrogen to inform a future decision on whether a nitrogen limit should be included in the next permit.
- New operation and maintenance requirements designed to prepare the facility for major storm and flood events.
- More stringent limits for total phosphorus and ammonia.
- Quarterly monitoring and reporting for Per- and Polyfluoroalkyl Substances (PFAS) chemicals.

Proposed Enhanced Notification Requirements

• The proposed changes to the permit include enhanced requirements for notifying the public about CSO discharges. If there is a probable CSO discharge, notice will be given to the public within two hours. Within 24 hours of the end of the discharge, a supplemental notification confirming the occurrence of the discharge, the CSO outfall number, and the start and stop times of the discharge will be given. Additionally, an annual report summarizing CSO activation information will be posted by April 30th of each year.

HOW TO REVIEW AND COMMENT ON THE DRAFT PERMIT

Copies of the draft permit and fact sheet can be obtained through EPA's website at https://www.epa.gov/npdes-permits/ massachusetts-draft-individual-npdes-permits. During the public notice period, EPA will receive comments from interested parties and encourages your participation in the public process and this opportunity to provide comments during this period. Once EPA considers and responds to all public comments, these permits will be finalized and will replace the existing permits for these facilities. Please contact Meridith Finegan at 617-918-1533 or Finegan.Meridith@epa.gov with any questions regarding the draft permits or the public comment process.

Figure 2: Location of the Fitchburg Easterly WWTF and CSOs

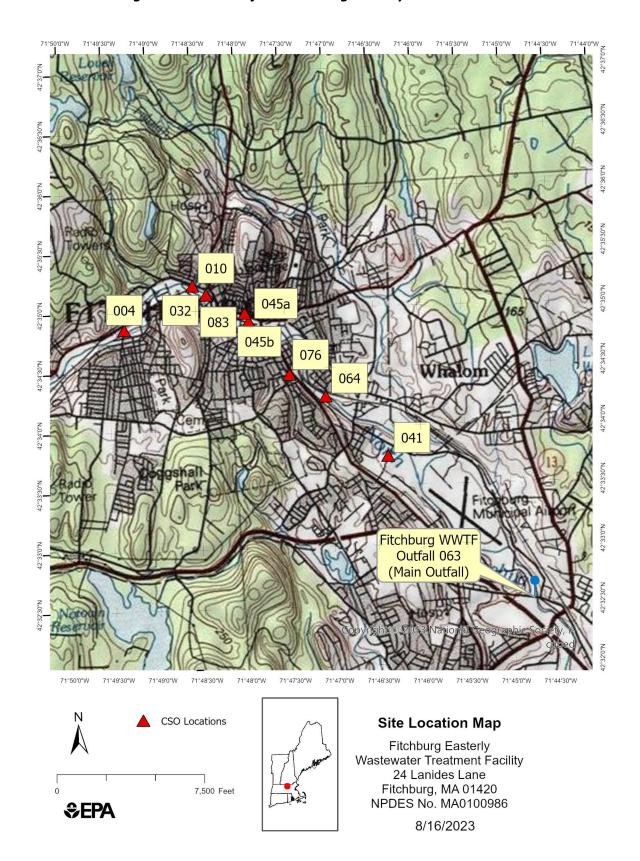


Figure 1: Generic CSO Diagram – This diagram illustrates a rainy, wet weather day. Only a limited amount of effluent can fit through the wastewater piping system. Since the wastewater and stormwater pipes are connected, excess untreated flow is discharged directly into the river or other receiving waters. The flow through the underground combined piping system during wet weather includes rainwater from downspouts, parking lots, roadways, groundwater infiltration, raw domestic sewage, and effluent from commercial and industrial sources. Some of this untreated flow, including raw sewage, can sometimes backup into residential homes.

Figure 2: Location of the Fitchburg Easterly WWTF and CSOs – This map shows the discharge from the wastewater treatment facility, called Outfall 063, into the North Nashua River as well as nine CSO outfalls that are all located within the City of Fitchburg. Six of the CSO outfalls, called Outfall 004, 010, 032, 041, 064 and 083, discharge into the North Nashua River. Two of the CSO outfalls, called Outfall 045a and 045b, discharge into Punch Brook. One CSO outfall, called outfall 076, discharges into Birch Brook.