

Background Information for the Petition

Combined Sewer Overflows Explained

Recently we have seen prominent coverage in the press which claims that untreated human waste was released into streams and rivers for more than 1.5 million hours.

There are a number of points that are important to put this article into context.

England has a combined sewage system made up of hundreds of thousands of kilometres of sewers, built by the Victorians, in many urban centres. This means that clean rainwater and waste water from toilets, bathrooms and kitchens are conveyed in the same pipe to a sewage treatment works.

During heavy rainfall the capacity of these pipes can be exceeded, which means possible inundation of sewage works and the potential to back up and flood peoples' homes, roads and open spaces, unless it is allowed to spill elsewhere. **Combined sewer overflows (CSOs) were developed as overflow valves to reduce the risk of sewage backing up during heavy rainfall.**

Overflows of diluted sewage during heavy rainfall are not a sign that the system is faulty. Combined sewer overflows (CSOs) are a necessary part of the existing sewerage system, preventing sewage from flooding homes and businesses.

Weather 2023

According to the Met Office 2023 had the wettest October/November in 2023 since the 1800's. The average rainfall for Dorset was between 115-120% of the average annual rainfall.

According to local records for Dorset rainfall records were broken in 2023. January experienced torrential rain. 3.3 inches fell during March/April/May which is above the 10 year average. July August experienced heavier than usual rainfall this continued into November with Storm Cieran.

As an example *"Weymouth started the year with a rainfall annual deficit of 70.2 mms. The year ended with an annual rainfall surplus of 210 mms or over eight inches."*

Mill Lane CSO

This is a sewage discharge monitoring station, which is usually a type of Event Duration Monitor (EDM).

These stations themselves are designed to mitigate the impact of heavy rainfall by discharging, under permitted conditions, any overflow into a water body. They are often actively discharging during flood events.

The declared body of water receiving this discharge is the River Yeo.

The worst year on record for Mill Lane was 2021, discharging for a total of 31 hours in the year

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Operational Summary for Mill Lane 2024

River Yeo | **11 Spills** | **83.1 hours** | **0.23**

The declared body of water receiving this discharge is the "River Yeo"

This station has discharged sewage 11 time(s).

The station has discharged for a total of 83.1 hour(s).

This is 0.23% of the time which we have data for.

In total: 3 day(s)* of elapsed time.

This monitor has been operational for 98% of its total time we have data for.

There are 701.28 hours unaccounted for due to downtime of the monitor

Operational Summary 2023

River Yeo | **2 Spills** | **15 hours** | **0.17**

The declared body of water receiving this discharge is the "River Yeo"

This station discharged sewage 2 time(s) during 2024.

The station discharged for a total of 15 hour(s).

This is around 0 day(s)* or 0.17% of the year.

This monitor was operational for 100% of the year.

Leaving 0 hours unaccounted for in the data.

Operational Summary 2022

River Yeo | **1 Spills** | **9.5 hours** | **0.1**

The declared body of water receiving this discharge is the "River Yeo"

This station discharged sewage 1 time(s) during 2022.

The station discharged for a total of 9.5 hour(s).

This is around 0 day(s)* or 0.1% of the year.

This monitor was operational for 99.3% of the year.

Leaving 60.4 hours unaccounted for in the data.

Operational Summary 2021

River Yeo | **4 Spills** | **31 hours** | **0.35**

The declared body of water receiving this discharge is the "River Yeo"

This station discharged sewage 4 time(s) during 2021.

The station discharged for a total of 31 hour(s).

This is around 1 day(s)* or 0.35% of the year.

This monitor was operational for 93.2% of the year.

Leaving 595.6 hours unaccounted for in the data.

Source from <https://www.floodmapper.co.uk>