

2022 EDM Annual Return Supplementary Information

Our commitment

At Thames Water we recognise that all discharges of untreated sewage are unacceptable. We are committed to a 50% reduction in the total annual duration of spills in our region by 2030 against a 2020 baseline, and an 80% reduction within sensitive catchments such as chalk streams or SSSI's.

Transparency is really important to us at Thames Water. That is why at the end of 2022 we launched our Storm Overflow Discharge map which shows near real-time data of where a storm discharge has occurred. This map can be found on the River Health pages of our website ([EDM Map | Storm discharge data | River health | Thames Water](#)).

Storm overflows take place at our sewage treatment works and sewer network. They allow us to deal with excess flow due to rainfall and prevent sewer flooding in our homes, gardens and streets. These discharges are regulated by the Environment Agency through the issuing of Environmental Permits which set out the circumstances when storm discharges can occur. Further information on storm discharges and overflows can be found on the River Health pages of our website ([Storm discharge and event duration monitoring | Thames Water](#)).

We are committed to responding to all requests for information through the Environmental Information Regulations ([Requesting environmental information | Regulation | About Us | Thames Water](#)), and working in a collaborative and transparent manner with our regulators.

We are also investing nearly £4 billion in the 'Super Sewer', Thames Tideway Tunnel. The tunnel will capture all of the 'first flush' from the big London sewers after heavy rain and reduce discharges by around 95% in a typical year to the tidal River Thames. The project started on site in 2016 and is due to finish in 2025.

Further details of our plans and investment priorities related to storm discharges can be found on our website by following the below links.

- [Drainage and wastewater plan | Regulation | About us | Thames Water](#)
- [Drainage Plans | Regulation | About us | Thames Water](#)
- [Pollution incident reduction | Regulation | About us | Thames Water](#)

Differences between our 2022 and previously reported EDM Annual returns

On the 28th of February 2023 we submitted our EDM Annual Return data for the calendar year 2022 to the Environment Agency. This return includes information on the frequency and duration of storm spills from locations across the Thames Water region.

There are key differences between our 2022 Annual Return and those which have been published previously. As per our previous annual submissions, we have included information on overflows which have a permit requirement to monitor storm discharges which had an event duration monitor (EDM) in place.

We recently conducted a reconciliation of our asset data and permit requirements and have identified further overflows that require investigation to determine whether EDM monitoring is required. Therefore, in our drive to be fully open and transparent, the total number of locations listed in our 2022 submission differs from previous submissions. For clarity we have broken down these changes into the following categories:

- 196 Combined Sewer Overflows (CSOs) assets, where further investigation is required to determine if EDM monitoring is required. Our expectation is that following the investigation this number may reduce
- Following the permit reconciliation exercise:
 - The addition of 48 permitted locations which do not currently have an EDM
 - The addition of 47 permitted locations which do not currently have an EDM, and the permit is due to be surrendered
- Separation of sites with multiple overflows with one line per overflow where previously these have been combined at the outfall location to the environment for reporting purposes. This has added a further 17 locations to the Annual Return
- The addition of 5 locations where an Environmental Permit and EDM are present
- The removal of 1 location which was previously stated in the 2021 Annual Return, where the Environmental Permit has been surrendered

As a result of these changes the number of overflows listed in 2022 has increased. In 2021 we reported on 465 permitted Storm Overflows, in 2022 we have reported on 777 Storm Overflows.

This change in approach has been made to provide the most transparent picture of storm overflow discharges and monitoring in the environment. We will continue to deliver on our commitment to reduce the frequency and duration of storm overflow discharges and be open and transparent on our performance and improvement plans.

2022 EDM Summary

In 2022 we experienced prolonged periods of dry weather and drought conditions. Storm overflow discharges are closely correlated with rainfall and groundwater conditions, and we therefore experienced a reduction in the frequency and duration of storm discharge events. Table 1. highlights the key differences in our storm data over the previous three years.

Table 1. EDM Annual Summary Comparison

	2020	2021	2022	3 Year Rolling Average
Number of locations	469	465	777 (480 with EDM installed) *	N/A
Total duration (hours)	213,924.46	163,089.85	74,693.25	150,569.18
Total spill count	16,654	14,713	8,014	13,127

*Data is not available for locations where Event Duration Monitors are programmed to be installed

In a typical year we would expect a spill frequency in the region of 13,000 events, however this is not a static number as it is highly influenced by weather conditions. Likewise, the duration of spill events can also vary by location and local weather patterns. Full details of our EDM data can be found in our 2022 Annual Return document located on the River Health pages of our website ([Storm discharge data | River health | Thames Water](#)).