

Annual publication of Event Duration Monitoring data from storm overflows in England

Event Duration Monitoring (EDM) provides a robust way of monitoring the frequency and duration of spills. Introduced by the Environment Agency, EDM measures how often and for how long storm overflows are used. The number of overflows with spill data in 2022 was 13,323; the equivalent of over nine in 10 storm overflows now with monitoring devices. We expect water companies to ensure that all 15,000 overflows will have them by the end of this year.

It is only through EDM that we can accurately see what is happening and take action to reduce the impact of storm overflows on the environment. EDM data underpins our planning, compliance, and enforcement work. It provides the necessary intelligence we need to inform permit compliance and delivers a robust and consistent way of monitoring how often and for how long storm overflows are used.

We require water companies to provide annual returns of their EDM data and we publish the full, quality-assured dataset by 1 April each year. This is the information which we have published today, and it is the most comprehensive account of storm overflow discharges last year.

The data for 2022 shows that although there has been a decline in the number and total hours of discharges, water companies continue to allow far too many sewage spills from storm overflows into rivers and coastal waters. The reductions in spills are largely down to the drier-than-average weather that many parts of the country experienced last year. We have not seen any evidence to suggest that the reduction in spills is substantially due to any actions taken by water companies. There is no room for complacency and water and sewerage companies must do more to reduce their use.

We welcome the spotlight that campaigners are shining on important issues affecting water quality. There are, however, many references to the 'illegal dumping of raw sewage' in much of the coverage generated by these campaigns and ensuing social media content. We know that there is a huge amount of public concern about the environmental impact, and legality, of storm overflow discharges and we share this concern. We want to see much more being done to reduce water company reliance on storm overflows, and the publishing of EDM data is a vital step in doing this. But it's important to note that the vast majority of storm overflow discharges are legal and therefore to say that they're illegal and refer to sewage being dumped is inaccurate and misleading. EDM analysis helps us identify non-compliance, permit breaches, or illegal discharges. When we identify these, we investigate them and take action in line with our Enforcement and Sanctions Policy, up to and including prosecution for the most serious offences.

Main findings from 2022 Event Duration Monitoring data

The data from the 2022 EDM storm overflow annual returns from water and sewerage companies is summarised in the table below. The full dataset and summary tables can be found at data.gov.uk.

- 13,323 storm overflows now have monitoring devices covering about 91% of the total number of overflows operating in English waters. We expect all water companies to achieve 100% by the end of this year.
- The data shows that the average number of monitored spills per overflow has reduced from 29 in 2021 to 23 in 2022, with significant variance between water and sewerage companies (min/max average 15/35 spills).

- The total number of monitored spill events in 2022 was 301,091 - a 19% decrease from 2021. Similarly, the total hours of monitored spills decreased by 34% to 1,754,921.
- The average duration of each monitored overflow event was 5.8 hours (min/max average 3.4/9.3 hours)
- 3% of storm overflows spilled more than 100 times in 2022; 82.5% of storm overflows had at least one spill in 2022; and 17.5% of storm overflows did not spill in 2022
- 48% of storm overflows discharged 10 or less times in 2022, an increase from 40% in 2021. Though this is a welcome move in the right direction it is still far too low (52% of storm overflows discharged over 10 times in 2022).

The data published today allows everyone to easily identify the location of overflows and understand which waterbody they affect. The increased transparency required by the EA to make water company data more easily accessible and open to scrutiny allows progress to be tracked in reducing the use of storm overflows. It also means that water companies take more responsibility for their data and can be held to account when storm overflow use is too high.

There are some discrepancies in the data we have received from water companies this year. The addition of hundreds of newly reported storm overflows has resulted in the overall network coverage of monitors increasing only slightly from 89% to 91%. While progress is being made towards achieving 100% coverage, these extra storm overflows mean progress has slowed slightly. Some companies' monitoring data is also incomplete.

Last year the Government published the Storm Overflow Discharge Reduction Plan which contains measures to improve the performance, and reduce the operation, of storm overflows. This plan sets stringent new targets to protect people and the environment. This will require water companies to deliver the largest infrastructure programme in water company history. We expect to see water companies work towards achieving the targets set out in this plan and EDM will be essential for ensuring that these targets are met.

The evidence clearly shows that there is not enough tangible progress from water companies. They must go further to improve and focus their investment on investigations and improvements. If, by using EDM, water companies identify storm overflows that are discharging due to operational or maintenance issues, then they should be fixed as soon as practicable.

With around 15,000 storm overflows in England, the Environment Agency has directed water companies to make significant improvements through the PR19 Water Industry National Environment Plan (WINEP) and water company business plans, including upgrading over 7,000 storm overflows in successive price reviews since 1989. This has resulted in water companies investing £3.1 billion to improve storm overflows between 2020 and 2025, including £1.9 billion of investment to reduce sewage discharges by building the Thames Tideway Tunnel 'super sewer'. The upcoming PR24 is anticipated to see further investment in storm overflows through the WINEP.

For more details on the figures released today: [Storm overflow spill data shows performance is totally unacceptable - Creating a better place \(blog.gov.uk\)](https://www.blog.gov.uk/2023/03/22/storm-overflow-spill-data-shows-performance-is-totally-unacceptable-creating-a-better-place)