

Storm overflow spill data report – 2022

Introduction

In line with NRW's actions set out in the storm overflow action plans and storm overflow roadmap, we have set out our current regulatory position on storm overflow spill data for 2022. We are also including details of current and future actions on our regulation of storm overflows.

Natural Resources Wales, Welsh Government, Ofwat, Dŵr Cymru Welsh Water and Hafren Dyfrdwy recognise the need for action and have established a Better River Quality Taskforce to evaluate the current approach to the management and regulation of overflows in Wales. It also sets out detailed plans to drive rapid change and improvement.

Across Wales, there are over 2,000 permitted [storm overflows](#) on the sewer network. They were designed to relieve pressure during periods of heavy rainfall when the capacity of the sewers becomes overwhelmed.

Storm overflows (also known as combined sewer overflows) are at the forefront of the public debate on river and bathing water quality. The role of water companies in providing a sewerage system that is properly managed in line with legislation and has appropriate investment planned is also being called for.

As Wales's environmental regulator, we recognise the public's concern about the number of spills from storm overflows and the potential impact on our rivers. Our commitments under the action plans are to increase monitoring, gather evidence to evaluate the impact of storm overflows and tighten our regulatory control over these discharges.

Storm overflows need a permit from NRW to legally discharge into the environment. The permit contains conditions to protect the environment, which water companies must comply with.

NRW was the first environmental regulator to require water companies to install Event Duration Monitors (EDMs) on all storm overflows operating in Wales. These monitors measure how often, and for how long, overflows discharge into the environment.

The majority of EDMs were installed by 2020, with only a small number remaining, so coverage is over 99% across the network. The permit conditions require water companies to submit data returns for each site on an annual basis.

At the end of February each year, Dŵr Cymru Welsh Water and Hafren Dyfrdwy submit their EDM data to NRW for scrutiny and publish it on their websites. Dŵr Cymru Welsh Water also submit EDM data related to Bathing Waters at the end of November annually.

[View Dŵr Cymru Welsh Water's EDM data web page.](#)

[View Hafren Dyfrdwy's EDM data web page.](#)

Findings from the 2022 data

The data in the table below summarises the 2022 EDM summary returns submitted by Dŵr Cymru Welsh Water and Hafren Dyfrdwy.

2022 EDM Headlines	Dŵr Welsh Water	Hafren Dyfrdwy
Total no. of storm overflows listed in the annual return in 2022	1946	49
Total no. of storm overflows with EDM commissioned	1942	49
% storm overflows listed with EDM commissioned	99.8%	100%
Total no. of storm overflows with spill data	1886	49
Average no. of spills per storm overflow with spill data in 2022	39.6	29.0
Average duration (hrs) per monitored spill event in 2022	7.1	7.5
% storm overflows spilled 10 or less times in 2022	34.6%	36.7%

In addition, looking at how often the storm overflows spilled, the 2022 data tells us:

- 4% (70) had no data provided;
- 12% (247) had 0 spills;
- 21% (416) spilled between 1 and 9 times;
- 26% (517) spilled between 10 and 39 times;
- 27% (538) spilled between 40 and 99 times;
- 10% (202) spilled between 100 and 299 times;
- Less than 1% (5) spilled more than 300 times.

To improve transparency, for 2022 data onwards we asked water companies to provide more information in their EDM data submissions. For example, we now require the type of asset to be specified; this could be a storm overflow on the sewer network, at a wastewater treatment works or at a pumping station.

What EDM data tells us

The EDM data provides us with evidence:

- Where storm overflows are operating too frequently
- Where storm overflows are operating for long periods

We report EDM data as part of the annual environmental performance review of both water companies, published each July.

View our water company performance reports for [Dŵr Cymru Welsh Water](#) and [Hafren Dyfrdwy](#).

Our ongoing work programme

The Better River Quality Taskforce has collaboratively developed action plans to gather greater evidence on the impact of storm overflows on our rivers, to evaluate and reduce the impacts they cause, to improve regulation and to educate the public on sewer misuse.

[View the actions plans on the Welsh Government website.](#)

We are working to improve our regulatory approach, focussing on the impact of storm overflows.

In order to achieve our aims we are:

- Refining our regulatory guidance including the definition of a heavy rainfall event and the definition of a dry day spill. This strengthens our ability to act against poorly performing storm overflows. Our regulatory activity is focussed on achieving the best environmental outcome and ranges from advice and guidance to enforcement action.
- Improving our analysis and tools to examine the regulatory returns, including checking the completeness and accuracy of the entries in the returns.
- Increasing our regulatory compliance activity in 2023/24 across all water quality discharge permits, focussing on those which pose the highest risk to the environment.
- Carrying out an evidence review for storm overflows with a view to developing and implementing an improved monitoring programme in 2024.
- Improving education and communication on sewer misuse, in collaboration with Better River Quality Taskforce members.
- Improving public accessibility of the submitted EDM data via our website. Through the work of the Taskforce, water companies have committed to work towards making EDM data available in near real-time via their websites. This is currently in development, but is expected to be available during early 2024.

- Developing further reporting metrics for storm overflows as part of the annual Environmental Performance Assessment (EPA) report. Work is already underway with Ofwat and the Environment Agency on EPA developments for 2026 onwards.