

CEN briefing: Water quality and sewage

- **Water quality in the natural environment is poor.** In England, just **15%** of rivers, **16%** of waterways (rivers, lakes, and streams), and **45%** of coastal waters are in good ecological condition. English rivers are a ‘**chemical cocktail**’ of sewage, agricultural waste, and plastic. Other significant sources of water pollution include road runoff and chemicals.
- **Pressure on the sewage system is growing, leading to more storm overflow usage but historical data is unavailable to provide a clear idea of change over time.** As of December 2023, **100%** of England’s storm overflows are now fitted with monitors. With a roll out instigated in 2013, monitoring has increased from just 7% in 2010. In 2023, Scotland’s rate was still **less than 4%**. The collection of this data has driven public awareness and outrage about sewage discharges into waterways and also provided the government with the necessary information to take appropriate action.

Storm overflows and sewage discharges

- **Storm overflows are an intentional part of our sewage system’s design.** Storm overflows are **automatic outlets** designed to act as a relief valve for the sewage system to deal with periods of heavy rainfall. England has 15,000 storm overflows. It is legal for water companies to use storm overflows, subject to strict conditions. Without storm overflows in place, sewage would back up into homes and streets.
- **Rainfall is the primary driver of storm overflow spills.** Most of England’s network is ‘combined’, meaning rainwater and raw sewage go into the same pipe. Where the ground could have once absorbed rainwater, the rise of impermeable surfaces has led it to enter the sewage system instead. The **average number of spills** per overflow was 33 in 2023. This figure was 23 for 2022 because we experienced less rainfall that year. Heavy rainfall does not affect a water company’s responsibility to manage storm overflows in line with legal requirements and it is already illegal to exceed their permits for doing so. Water companies can face civil and criminal prosecution for exceeding their permits.
- **The sewage system is under increasing pressure from factors such as climate change and population growth.** Climate change increases the frequency of extreme weather events, including rainfall. If left unchanged, this will lead more water to enter the sewage system. As the population increases, so too does the use of the sewage system. Flushing disposable plastic products such as wet wipes down the toilet causes blockages, reducing pipe capacity. This costs water companies **£100 million annually** to resolve.
- **Investment into the water companies, as well as water bills and profit levels, is decided by Ofwat, the water regulator.** The highly regulated nature of water company privatisation means that, every five years, water companies submit business plans to Ofwat as part of a price review. This process determines the service customers can expect to receive and at what cost. This lack of investment in reducing the use of storm overflows, therefore, is also the responsibility of Ofwat. Through this price review process, water bills have experienced a decade of below-inflation increases. Water companies submitted their latest business plans (PR24) last year and the initial feedback on them from Ofwat has been postponed until after the general election.

PR24

- **Water companies are proposing to spend £100 billion between 2025 and 2030 as part of PR24.** The [business plans](#) submitted by water companies in England and Wales amount to an 88% spending increase on the previous five years. This investment is equivalent to more than 40% of total investment in the rest of Europe combined. If approved by Ofwat, the plans will include: tripling the current rate of investment in storm overflow reductions, at a cost of £10.2 billion; creating more than 30,000 new jobs and 4,000 new apprenticeships; cutting leakages by 28% by 2030, to make England among the top five countries. PR24 would see bills increase by around £13 a month by 2030, but highly variable depending on each water company.

Government action

- **Privatisation of water companies in the 1990s has delivered higher levels of investment, lower bills, and a better service.** Water companies in England have invested [£190 billion since 1989](#). This figure is almost [250% larger](#) than the dividends that have been paid out in the same time period and, according to Ofwat, bills are [£120 lower](#) than they would have been otherwise.
- **The Environment Act 2021 placed new duties on water companies and legally-binding targets to reduce water pollutants.** Water companies now have a legal duty to progressively reduce harm from storm overflows and to provide near real time information on their operation. There are also now legally-binding [targets](#) to reduce different sources of pollution, like nitrogen and phosphorus, by 40% by 2038.
- **The Storm Overflows Discharge Reduction Plan will unlock £56 billion of capital investment.** By 2050 water companies will need to ensure there is no local adverse ecological impact from the use of storm overflows and discharges will not be permitted above an average of 10 rainfall events per year. Progress will be reported on in 2025 and every five years afterwards, with a review of the targets in 2027.
- **A Water Restoration Fund using water company fine revenue has been created.** The [£250,000 cap](#) on civil penalties has been removed, meaning civil *and* criminal fines imposed on water companies for environmental harm are now unlimited. Fines are already paid out of water company operating profits, and are not added to customer bills. The first round of the fund made £11 million available to communities.
- **The government has empowered Ofwat to link water company dividend pay-outs to environmental performance and place restrictions on executive bonuses.** This will ensure that shareholders, not customers, will pay for water company executive bonuses where these companies are unable to demonstrate their pay award decisions reflect performance expectations. Ofwat [published guidance](#) on how it would exercise these new powers and will be [consulting on a potential ban](#) on bonuses for water company executives if their company has committed a serious criminal breach.
- **The Bathing Water Regulations were passed in 2013.** In the early 1990s, just 28% of bathing waters met the highest standards in force at that time. Last year, 96% of bathing waters in England met minimum standards and 90% of bathing waters in England were rated as 'good' or 'excellent', up from 76% in 2010, despite the classification standards becoming stricter in 2015. In May 2024, the government designated [27 new in-land bathing waters](#) in England.