

Wessex Water - Overflow Problems and Plans for Improvement

Overflows operate as designed to avoid flooding during very heavy rainfall and all operate within consents set by the Environment Agency. Most overflows discharge dilute screened sewage that is unlikely to have any significant impact on the receiving water body.

Storm overflows have always been part of the sewerage network in the UK because the majority of sewers carry both rainwater and foul sewage. As a result of global warming, we are now getting more intense rainfall storms and more and more impermeable areas are being connected to the sewers, which means the frequency of overflow operation is increasing.

Whilst storm overflows have little impact on water quality, they are clearly not appropriate in a twenty first century sewerage network. There are three ways to eliminate overflows:

- separation of storm water to stop it entering a combined sewer in the first place
- constructing large storage tanks adjacent to the overflow, so that storm sewage can be held back until the storm is over and then treated
- using nature-based solutions to treat the storm sewage at the point of overflow.

The problem with storage solutions is that as rainfall patterns change, the storage volume will need to increase and these tanks are very carbon intensive - a large hole lined with concrete. These are also very expensive and disruptive to construct. In urban areas, often the only space available is in roads. The estimated cost of dealing with all overflows in England and Wales in this way is in excess of £300 billion.

We believe that the best long-term solution, both in terms of carbon emissions and cost, is to separate surface water before it combines with foul water. However, this requires government legislation changes in two areas:

- Stopping new developments connecting surface water to combined sewers, so making the current problems worse
- Giving water companies powers to retrospectively disconnect surface water from privately owned roofs and driveways and discharge it locally to the ground or to a nearby watercourse.

Wessex Water has recently published its plan for dealing with storm overflows. The plan can be viewed on the 'Info on storm overflows' button.

Key points are:

- We are committing to a multimillion pound programme to tackle storm overflows, investing £3 million a month, with work already underway.
- Sewage treatment will be upgraded at 42 of our sites to increase capacity and introduce more nature-based, low carbon treatment.
- Every overflow in the region will be monitored by 2023.
- We will make a 25% reduction in the number of hours of storm overflow discharges by 2025 and increase environmental and public health monitoring at key locations.
- Capacity is being increased at Wessex Water's two largest water recycling centres, serving Bristol and Bournemouth, to enable more stormwater to be stored and treated, with work due to start early next year.

New storm tanks will be built and nature-based solutions, like wetlands and reed-beds implemented in rural locations where land is available. Work will also be carried out to separate rainwater from the sewer system.

It is worth noting the water companies are not free agents when it comes to deciding on investment priorities. The Environment Agency sets standards that we have to meet and the economic regulator, Ofwat, has to approve any investment proposals. Having said that, since

privatisation, investment levels have risen by 70% and, for Wessex Water, a significant part of this has been on improving sewerage systems, including new systems for 13 coastal towns that had no sewage treatment at all and improvements of over 600 storm overflows.

We are currently spending £3 million each month improving overflows, starting with those overflows that discharge most frequently and those that have any environmental impact. Our planners are currently working with the regulators to confirm a programme of improvement for 2025 to 2030. However, all overflows will not be eliminated by 2030; this is physically impossible.

Please see this web page for more information:
[storm-overflows-improvement-plan-2023.pdf \(wessexwater.co.uk\)](#)

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