

Factsheet: Combined Sewer Overflows



When South West Water was privatised in 1989, the raw sewage from half a million residents in our region (and more in the tourist season) was being discharged untreated into the sea. Since then our Clean Sweep programme has transformed bathing water quality in the South West by investing over £2 billion in sewerage and sewage treatment infrastructure. This includes over 200 million gallons of new storm water storage to limit the operation of Combined Sewer Overflows (CSOs). Because of our investment the bathing waters in our region are now among the cleanest in Europe, with over 98% meeting the Government's targets.

CSOs, also known as stormwater overflows, play an important role in areas where the sewer network was originally built some time ago. In these areas surface and roof water drainage are connected and are called 'Combined Sewers'. In combined systems sewage leaves homes and businesses and, if it rains, is mixed with any rainfall in the same pipe. If an area is hit by very heavy rain, the sewerage system can become overloaded and starts backing up. If this happens, CSOs help prevent homes and public spaces being flooded by allowing a controlled release from the sewerage system.

Because this only occurs when there has been heavy rain, any sewage discharged is very diluted, and any effects are limited and temporary. The Environment Agency issues permits for CSOs and regulate what we do to ensure we comply with strict environmental laws. In addition, through our BeachLive system, we voluntarily provide warnings to beach managers, the Environment Agency and Surfer Against Sewage (SAS) when CSOs discharge at many of our bathing waters. It is this data that SAS use in their Safer Seas Service.

CSOs are not the only risk to bathing water quality. During periods of heavy rainfall, bathing water quality may also be affected by animal waste being washed off the fields into rivers, and from urban drainage from roads and buildings. [This short video](#) explains how wet weather temporarily affects bathing water.

Whilst recognising that there are now serious calls to remove CSOs entirely from the sewerage system they do act as vital safety valves to protect homes and property from sewer flooding. To remove them would require the full separation of all surface water from the sewerage system and would incur significant disruption to towns and villages costing many billions across the UK significantly increasing customer bills.

Given the above, work continues to improve CSOs. The water industry is working with the Environment Agency to identify and target improvements to CSOs, where required, to help protect water quality, not only for bathing and coastal waters but also for river and streams. This programme of work will be ongoing over the next few investment periods.

As a regional company we take our role in helping to protect bathing waters in the South West very seriously. We are continuing to make major investment, with a further £483 million planned between now and 2025 on our sewerage network, including more storm water storage. This investment will be delivered alongside significant cuts to the average customer bill, which is already lower than it was a decade ago. Our aim is to become the best water company for wastewater compliance by 2025.