Southern Water
Plans to Reduce Storm Overflows

What are you doing to improve your performance?

In April 2023, we set out an ambitious plan to deliver a step-change in our performance. Our Turnaround Plan covered the key priorities for improving our performance between 2023 and 2025. The overall goal was to provide a better service to our customers and to make sure we're doing everything we can to protect our environment in the years ahead.

We know that there's still a lot of work to do; however, our committed teams of scientists, engineers, operatives and support professionals are getting ready to deliver the company's largest programme of work to date. We'll be investing billions over the next five years, and more than a third of the investment will be spent on projects to protect and enhance the environment.

Informed by thousands of customers who told us the improvements they wanted to see; the plan will see us invest £8.5 billion to:

- **Build new water sources** like reservoirs and water recycling plants, making your supply more resilient today and for future generations
- **Minimise flooding** by upgrading sites and sewers and increasing the number of natural drainage solutions
- **Find and fix more leaks** - replacing 300km of pipework and installing more sensors for better prevention
- **Reduce storm overflow releases** at almost 300 locations along our coastline, investing £1.1 billion in the environment and bathing waters
- **Deliver excellent customer service** - providing increased support for customers who need it most
- **Limit our impact on rivers** by reducing the amount of water we take from them, protecting wildlife and habitats across the region

What does the long term look like and what are your plans to reduce storm overflow releases?

We aren't just focusing on the here and now; we're looking ahead to ensure we're taking the best steps for future water resilience. Between 2025-2030, we plan to invest at least £700m in storm overflow reduction, which forms part of the business plan we recently submitted to Ofwat.

We have almost 1,000 storm overflows in our region and 50% of these are already hitting the Government's new 2050 target of releasing 10 times or less a year. Our Clean Rivers and Seas Plan sets out how we'll tackle the remaining storm overflows that need attention in our region.

We're prioritising overflows in line with Government and regulatory targets to first reduce the impact on shellfish waters, environmentally sensitive sites, and bathing waters. While we're also trying to include high frequently release sites, we have a significant number of outfalls going into shellfish areas (The Solent and North Kent), which we've been instructed to work on first. By 2035, 75% of our high priority overflows will meet the Government's 2050 target, therefore, reducing storm overflow releases by an average of 8,000 a year. This represents an 81% reduction in releases in bathing water areas and an 80% reduction in releases in shellfish areas by 2035.

Our plan includes a record investment of £1.5 billion between 2025 and 2035, focusing on delivering long-term solutions that get to the root cause of storm overflow releases. We'll introduce nature-based solutions in our communities to prevent and slow the volume of rainwater overwhelming the network, combined with making infrastructure improvements to increase our capacity and using wetlands to act as natural treatment solutions.

What are storm overflow releases and why are they happening in the UK?

While we work on upgrading our assets, reducing storm overflow releases requires an entirely different approach.

During heavy or prolonged rain, local sewer networks can struggle to cope with the amount of water entering pipes and storage tanks. When they fill up, pressure relief valves built into the network, known as storm overflows, activate to release the excess water into rivers and seas - to prevent homes, roads, and local businesses from flooding.

As storm overflow releases typically happen when there's a huge amount of rainwater and/or groundwater in the system, the water is heavily diluted and often put through a filtering process before being released.

Overflows are used in areas that were built to carry both wastewater from homes and businesses, and rainwater from roofs and roads; we call this a combined sewer system. Separating the combined sewer completely would be extremely expensive and disruptive. We, therefore, need to look at alternative, sustainable and scalable methods to reduce storm overflow releases. This recognises the need to look beyond the traditional ways of building more carbon-intensive infrastructure, which, in many cases, won't provide a long-term solution.

Storm overflows are a standard feature in world-wide sewer systems. The UK has recently started monitoring overflows and when we reduce the number of storm overflow releases, it's expected that other countries will follow suit.

Why has there been an increase in storm overflow releases despite all the work you're doing?

The main driving force behind storm overflow releases is rain, and over the past year the weather has been more challenging than ever before. With more frequent extreme weather events and rainfall, and ever-increasing impermeable areas like car parks, driveways, roofs and roads, the complexity of resolving storm overflow releases is increasing by the day.

Groundwater also contributes to storm overflow releases and is made worse by extreme rainfall. We've seen some of the highest groundwater levels recorded at some of our sites, contributing to an already complex issue.

However, we're showing resilience to these changes and we're currently rolling out a host of innovative and long-term solutions to slow the flow of water into the network and reduce storm overflow releases. Despite the huge increase in rainfall, we're already seeing a significant reduction in storm overflow releases at this early stage in our mass roll-out.

What are you currently doing to reduce storm overflow releases?

This year we'll be scaling up our storm overflow reduction programme considerably, rolling out the most effective solutions from our pilots during Pathfinder, including:

1. **Optimisation:** working on both public and private infrastructure to reduce infiltration and ensure it's working as effectively as possible, as well as reconfiguring our permits and existing sites to help us manage more stormwater

2. **Misconnections:** redirecting surface water that's been misconnected into the foul/combined sewer, which causes the system to become overwhelmed leading to storm overflow releases

3. **Household sustainable drainage systems (SuDS):** rolling out 'slow the flow' measures at scale on properties across our region to manage roof run-off

4. **Non-household SuDS:** targeting large roof areas and car parks with sustainable 'slow the flow' measures to significantly reduce surface water run-off

5. **Highway schemes:** large amounts of surface water come from public highways, so we're working with local authorities to influence future designs and improvements to reduce their impact.

Early results have been positive. Our sealing work in the Pan Parishes has put an end to noisy and disruptive tankers and over pumping, and a dual-approach upgrade in Cowes on the Isle of Wight has completely stopped storm overflow releases from the local outfall. We've optimised our Swalecliffe site to work more effectively, which has reduced storm overflow releases by 36%.

In another example, we've worked with the Department of Education to install SuDS, such as raingarden planters and swale drains in nearly 100 schools across the south, removing tonnes of rainwater from school sites every time it rains. The SuDS have managed over 117 million litres of rainwater and groundwater so far.

For further examples and to find out what the Task Force has been up to, please visit our Task Force webpage.

Why is customer money being spent paying shareholders?

We haven't paid any external dividends to our shareholders for the last seven years, to ensure we're investing as much as possible into our network.

When we've received fines in the past, they've been paid to the Treasury from our shareholders; no customer money is used to pay them. Further to this, customer bills have been discounted below the market rate for several years due to poor past performance.

We understand the burden that the rising cost of living is having on our customers, so we have a range of support options available. These include maintaining our social tariff discount at 45% and more than doubling the extent of our support, increasing the value of our Hardship Fund from £250,000 annually to £1.25 million.

Who else is involved?

With so much of the network being private and out of our jurisdiction, partnerships are vital for our planned improvements. We need our regulators, the Government, local authorities, and community groups to work together to better manage water in towns and cities. We'll also need to work closely with customers and business owners, to install 'slow the flow' measures on their land.

If you want to find out how you can help slow the flow of rainwater getting into the system, please visit the how can I get involved pages on our website.

How do I know if there has been a storm release?

We provide near real-time updates on all storm overflow releases in our region through Rivers and Seas Watch, our storm overflow monitoring service.

We're also running citizen science projects and have deployed two water quality buoys and other monitoring equipment to better understand water quality. We hope in the longer term, we'll be able to provide important data to allow us to better understand the contributing factors to water quality, including agricultural run-off, seabird and animal matter and marine activity.

I hope the above helps to reassure you we're committed to reducing our reliance on overflows and doing more to protect our environment. Rest assured this is the beginning of the end of storm overflow releases.

Why have you not done more and invested enough into the wastewater system?

We're not starting from scratch. We're building on the progress we've made since privatisation, where £10 billion has been spent to increase the volume of wastewater that's fully treated before being released back into the environment (previously only around 50% was treated, compared to around 95% today). This has helped improve the quality of our bathing waters from only 28% meeting public health standards pre-privatisation, to 84% now rated as 'good' or 'excellent'.

To support this, our shareholders have invested £1.6 billion into the company in recent years, to enable us to deliver a significant improvement programme, especially around solving storm overflow releases sustainably, for the long term.

Why is Westborn Road and this part of Fareham a priority?

Fareham is a regulatory priority catchment because:

- It impacts Portsmouth Harbour and shellfish waters, which are environmentally sensitive.
- Government targets require action by 2027 to reduce storm overflow spills in this area.

- Surveys show significant surface water entering combined sewers here. We've already made progress locally- for example, removing 4,000 m² of surface water at Hoeford Bus Station, preventing over 65 spills in 2025.

Why are we using highway SuDS?

Highway SuDS are effective because:

- They capture and manage rainwater at source, reducing pressure on sewers.
- They deliver multiple benefits: flood resilience, cleaner water, and improved biodiversity.

What other measures are Southern Water delivering in Hampshire:

- Large-scale sewer separation- diverting rainwater sewers from the foul network to surface water systems that discharge to the environment where possible.
- Smart control systems at pumping stations to maximise storage and resilience.
- Upgrades to pumping stations to increase storage or pumping capacity.
- Partnership projects like SuDS in Schools, helping manage roof and surface water runoff.

What are the benefits for the community and environment?

- Cleaner rivers and seas for wildlife and recreation
- Reduced pollution and improved water quality
- Lower flood risk and more resilient infrastructure
- Nature-based solutions that enhance local biodiversity
- Studies show retrofit SuDS can increase property value by 10–20%

Where can I find more information?

Visit Southern Water's Clean Rivers and Seas Plan to learn more about what we're doing and future plans:

- Clean Rivers and Seas Plan
- Storm overflow webpage: https://www.southernwater.co.uk/our-performance/storm-overflows/what-are-storm-overflows
- Sustainable drainage solutions - Southern Water
- How Southern Water is reducing storm overflows at Portsmouth Harbour
- Clean Rivers and Seas Plan | Southern Water