



South West
Water

Event Duration Monitoring

Bathing Water Return 2022





new
deal

River and sea health – being open about our performance and our ambition.

Our purpose outlines our commitment to delivering for our customers, our communities and our environment across our region.

Bringing water to life – supporting the lives of people and the places they love for generations to come.

Our c.3,000 people and continued investment in our infrastructure will deliver the step change we all want to see in improving water quality.

Introduction

34% of all England's designated bathing waters are within South West Waters area of responsibility, we recognise the importance that they are to the 2.2 million residents and the 10 million visitors to our area each year. It is our responsibility to protect and enhance the quality of the environment including all bathing waters.

As such we continue to increase investment in the region's infrastructure as part of our ongoing commitment to protecting and enhancing the natural environment. This includes a significant programme to reduce usage and improve monitoring of storm overflows across our region. The majority of storm overflows now have monitoring in place and we are installing monitors on the remainder by the end of 2022.

The Bathing Season Data Return

The bathing season return is a sub-set of the annual return which covers the period 1 May to 30 September inclusive. It is a permit requirement to submit spill and duration data to the Environment Agency (EA) by the 31 October following the end of the bathing season.

The spill numbers being submitted in the 2022 bathing water return will be incorporated into the annual 2022 return due to be submitted in February 2023.

South West Water has been required to provide a seasonal bathing water return since 2011. We were one of the first Water and Sewerage Companies (WaSCs) with this requirement due to the high number of bathing waters in our operational areas.

For South West Water's operating region the EA currently identify assets which may potentially impact water quality at a given bathing water. The overflow point can be directly into the bathing water, along the coast into an estuary or inland (some are far up in the catchment).

Summary

We are taking steps to reduce our impact on Bathing Water quality.

Our region has a vast network of pipes, over 22,000km long, the equivalent length from here to Australia. Each year, we balance investment to maintain it, to make sure that sewage doesn't flood homes, businesses and gardens. At the same time, ensuring quality drinking water is there when you need it, whenever you turn on the tap.

We know we have a vital role to play in making our streams and rivers, and the ocean they flow into, clean and free from pollution. Our resident population is growing, up by 20% in the last 30 years. We're also a region that sees huge population swings through the year due to tourism which, is up by 50% in the last 15 years putting further pressure on our network.

We want to improve water quality. On the back of successive investments in coastal areas, for the second consecutive year, 100% of our regions' Bathing Waters achieved stringent bathing water standards, up from c.28% in 1991. We intend to keep it this way. To do so we recognise that we must go further and keep investing in our assets to reduce our impact on the rivers and seas in our region.

The 2021 Environmental Audit Committee (EAC) inquiry into river quality acknowledged that a great deal of progress had been made in cleaning up and monitoring Bathing Waters to ensure they are fit for bathing. However, our rivers are under pressure. Agricultural run-off, chemicals and plastics were identified as having a large impact on the health of our rivers along with the water industry. South West Water has a vital role to play; but so too does everyone who lives, works and visits the region. Partnerships are the key to progress and we want you to keep working with us to improve the environment.

We already share data with our partners and are looking for ways to increase transparency and access to this. This data is also used to help target investment to ensure that we are making the improvements which protect our rivers and coastal waters. Through creating additional wastewater treatment and stormwater storage capacity, water quality continues to improve in the South West. We are also working on and developing more sustainable solutions that support the environment and provide longer term solutions. We are already taking action, and in addition to investing in our assets we are installing hundreds of monitors on our rivers and investing in technology and innovative solutions, to learn much more about river health.

Our Event Duration Monitoring (EDM) data for 2022 shows a reduction in the number and duration of spills compared to 2021 of c.50% and 75% respectively. However, this increase in monitoring may in some circumstances inevitably create more data on spills as we extend our monitoring network.

SOUTH WEST FACTS

DID YOU KNOW?

We have invested **£9bn** to improve water and wastewater infrastructure over the last 30 years

There are **860 miles of coastline** in the South West



We have improved over **298 stormwater overflows** to Bathing Waters since 1989, by investing in additional stormwater storage across the region

Our 2021 EDM data can be found at this address: southwestwater.co.uk/edm-return-2021

The 2022 Bathing Season

The main driver of storm overflow operation is weather.

During 2022 the number of assets reported in the bathing season return is at an all-time high of 312. Despite this, it is notable that total duration, total spills and average duration of spills are all at an all-time low.

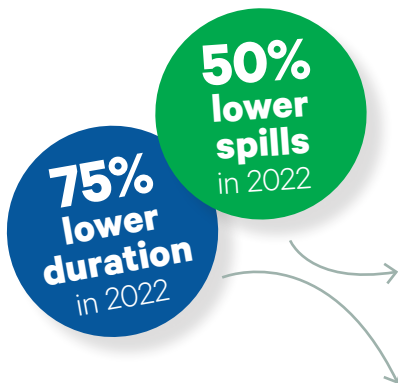
Our EDM data for 2022 shows a reduction in the number of spills compared to 2021 of c.50%. We have increased the number of bathing water monitors across our network by from 298 in 2021 to 312. This increase in monitoring will provide us with more data on spills as we extend our monitoring network. However, even with this increase in the number of monitors, the total duration of spills fell from 7,871 in 2021 to 2,007 hours in 2022, a reduction of 5,864 hours c.75%.

Individual site performance has also improved in 2022, for example, 94 EDMs recorded 0 spills in 2022 compared to 72 in 2021, and 76% of all EDMs recorded less than 5 spills in 2022 compared to 136, in 2021.

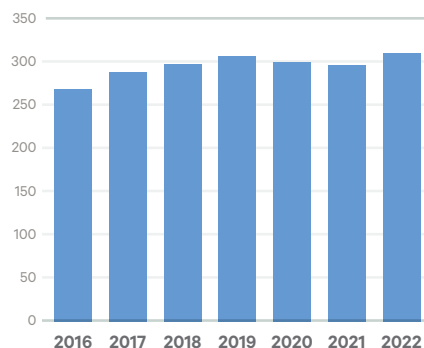
The 2022 Bathing Season data

Overall spill numbers recorded from our EDMs at storm overflow and emergency overflows are summarised below.

Storm and emergency overflow data	2021	2022	Difference
Number of overflows in return	298	312	+14
Number of spills	2,543	1,249	-1,294
Average number of spills	8.53	4.00	-4.53
Duration of spills (hours)	7,871	2,007	-5,864
Average duration of spills (hours)	26.41	6.43	-19.98
Operability	93.20%	93.91%	+0.71%



Reportable EDMs (number per reporting year)



The delivery of our WaterFit programme is helping drive the reductions in storm overflow duration. During the 2022 bathing season (May - September) there were 3 spills from storm overflows resulting in a Category 3 (minor) pollution compared to 6 in 2021.

The overall number of spills has decreased and the average number of spills taking place at our sites has reduced from 8.53 to 4.00 per asset. Similarly the average duration of spills has reduced from 26.14 to 6.43 hours.

What we are doing for the future

Our programme for 2020-2025 includes:

- A £500m programme in wastewater improvements
- £330m investment in our wastewater assets to deliver the six WaterFit commitments
- This investment will support the delivery of our new set of commitments, which outlines how we will look after our seas and rivers in the South West.

Our commitments include:

- **Reducing by one third, our impact on rivers**
- **Helping everyone to enjoy our 860 miles of coastline** by achieving bathing water quality standards all year around
- On our bathing waters, **we will target no more than 10 spills, by 2025**
- **We will target zero serious pollutions by 2025**
- **We will achieve the region's first ever river bathing waters** using learnings from our pilots on the Rivers Dart and Tavy
- **We will plant a quarter of a million trees** to support river health and help tackle climate change.

Further to this:

- **We will continue to work with our regulators on legislative change**, campaigning for a ban on wet wipes, and championing the removal of the automatic right to connect to our network, by new building and housing developers.
- **Our 'Downstream Thinking' catchment management programme will help reduce sewer flooding risk and storm overflow discharges** through the application of sustainable drainage schemes and wider landscape management.
- **We will work with partners who are key to resolving catchment drainage issues** and we will develop Drainage and Wastewater Management Plans for our whole region to create more joined up solutions.
- **We have put in place a new EDM and flow team**, and enhanced performance monitoring to review overflow numbers and quickly identify potential problems and issues.
- **We are trialling a new software system and service** called Meniscus that allows EDM data to be used proactively to identify issues on the wastewater network.

