



Improving designated bathing waters

A report on Southern Water's approach to improving designated bathing water quality.



from
**Southern
Water** 

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Introduction

Improving our designated bathing waters is a priority for us and we want to tell you about the work we're doing to make improvements across our region.

Our customers depend upon the sea for health, leisure and – in some cases – their livelihoods. It is vital that we invest in water quality to support our communities, protect the environment and secure long lasting social benefits. Customers rightly expect us to use the money from their bills wisely and improving water quality is a critical part of our commitment.

Designated bathing waters are those classified by the Environment Agency each year through their weekly water quality sampling programme that takes place between May and September. There are 87 such bathing waters in our region, and we have set out in this report how we are managing our responsibilities to them. Of course, we do much more than concentrate on just those locations that fall into the designated category, however we also know how important the classifications are for our local communities.

How bathing water is classified?

A designated bathing water is an official way to recognise that a body of water is popular for swimming or other water-based leisure activities. And each designated bathing water is managed by the relevant local authority for that area. Designated bathing waters are classified as Excellent, Good, Sufficient or Poor. Southern Water does not set the classification, this is the responsibility of the EA.

At the end of last year, in our annual Bathing Water Report we talked about some of the work we do to protect our coastal environment throughout the year. We touched on the activities of the Clean Rivers and Seas Task Force, reducing the use of storm overflows, and showed how the Illegal Connections team is tracking down misconnections in Bognor. We saw some of the innovative techniques we're exploring to monitor water quality and looked at the 2023 bathing water classification results and what they mean for our region.

This report focuses on the specific work we're doing to improve the water quality of our 'priority' bathing waters.

There are currently **87 designated bathing waters** in the Southern Water operational area – only South West Water's region features more

88% of designated bathing waters in our region are currently classified as **Good or Excellent**

The multi-million-pound Bathing Water Enhancement Programme has improved the classifications for six bathing waters bringing two up to the **Excellent** classification and four up to **Good**

Improving water quality is a priority for us and we are committed to doing everything that we can

The Improvement Plan Strategy

The work to improve bathing water quality has been defined in a new Improvement Plan Strategy, which prioritises key locations for targeted work. There are 87 designated bathing waters in the Southern Water operational region, three of these were included for the first time in 2024. Prioritising them by certain criteria means we can coordinate our resources in the most effective way.

What is the strategy?

The improvement plan strategy sets out how to identify a priority bathing water based on four criteria. It also describes the areas of work, or workstreams, within which all our interventions and further investigations are divided. It highlights the process of delivering the activities, how we monitor progress, and who we need to make it all happen.

Using this approach, we've identified 18 priority bathing waters, which you can read about on page 8.

Criteria to identify a priority bathing water

A bathing water is a priority if it meets one of four criteria:

- It is currently classified as Poor
- It is currently classified as Sufficient and it is at risk of dropping down to Poor
- It has the potential to recover in classification by 2025
- It is at risk of dropping from Excellent to Good by 2025.

We have written an Improvement Plan for each priority location. Each plan describes what we need to do to improve water quality based on local evidence.

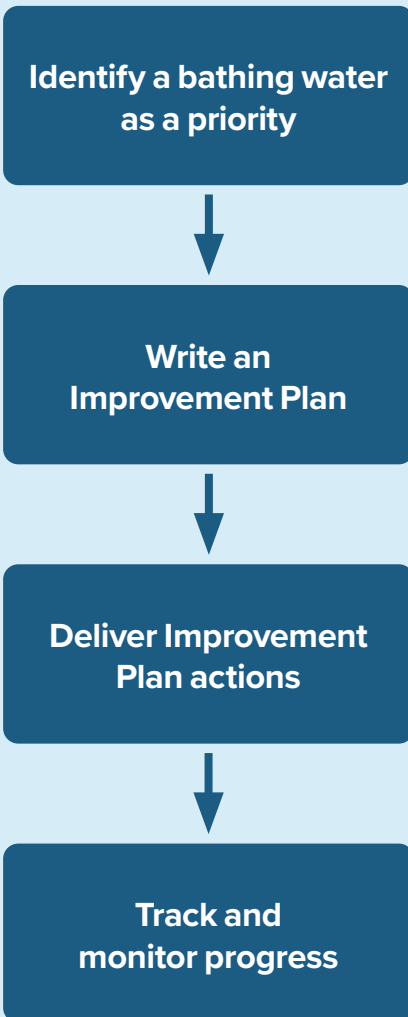
The work always begins with the performance of our own pumping stations, sewers and treatment works.



“ I'M AN EMPLOYEE OF SOUTHERN WATER AND A CUSTOMER TOO. I LIVE VERY CLOSE TO THE SEA AND SWIM, PADDLE BOARD AND SOMETIMES EVEN SURF, SO THE BATHING WATER IS REALLY IMPORTANT FOR MY WAY OF LIFE, AS IT IS FOR SO MANY OTHER PEOPLE IN OUR COMMUNITY. ”

Tom Gallagher is the Open Water Improvement Lead and is coordinating the improvement plan strategy.

The Improvement Plan Strategy process:



Improvement Plans

The Improvement Plans are detailed documents which characterise each bathing water and allow us to target the most likely impacts on local water quality.

We study geographical information, analyse past Environment Agency sample data, and review the performance of our own assets, to establish where improvements or further investigations might be needed.

The improvements or investigations that follow begin with our own pumping stations, sewers, treatment works or storm overflows. That's our fundamental responsibility and what we have the most control over.

We also work closely with local councils and the Environment Agency to share the details of our Improvement Plans and set about investigating those impact factors outside of our immediate control, such as illegal connections.

The improvement plan work is organised under four workstreams:

1. Asset Performance
2. Sewer Condition
3. Illegal Connections
4. Third party issues

What is a sewer relining?

The process to line a sewer starts by using a CCTV drain camera to establish the structural condition of the sewer and locate any issues. We then clean the sewer with a high-pressure jet – this is to avoid any damaged areas being hidden by debris or sludge.

A liner is then inserted into the pipe, which contains a special resin. Once the liner is in the correct place, it is inflated with air. The next step is to cure the resin in the lining. There are several different methods for this, including UV light, steam, hot water and ambient temperature.

Once the resin is cured, it creates a new pipe within the original damaged or broken pipe, restoring the integrity of the original sewer.

Asset performance

For each bathing water, there is a network of sewers, as well as several wastewater pumping stations, treatment works and storm overflows that have the potential to impact bathing water quality. If you've used our online storm release activity tool, Beachbuoy, you may be familiar with those nearest your own beach.

We refer to them as our 'bathing water sites' and, alongside the standard maintenance schedule, they are subject to additional health checks before the bathing season begins. Skilled engineers perform a series of checks and, if necessary, fix any problems to make sure everything is working as it should be. These 'bathing water sites' are treated as a priority in the months leading up to the start of a new season.

The wet-well cleaning programme also takes place throughout the winter up to the start of the season, and forms part of our pre-season work.

A wet well is a storage tank which holds wastewater before it's pumped away for treatment. Wet wells help us to manage the level of water in the network. Cleaning them every year – hosing down and removing the build-up of fat, oil and grease, or cleaning out the debris that collects inside them like wet wipes and nappies – prevents blockages and flooding.

The issue of storm overflows is being addressed through the work of the Clean Rivers and Seas Task Force. You can see our plan [here](#).

Sewer condition

The complicated network of sewers needs to be maintained. There are thousands of kilometres of sewers across our priority locations. We send CCTV cameras into the pipes to assess their condition and then repair any issues that we find. Generally, this is done through relining or patch lining a pipe or section of pipe.

We also check the air valves and search for anomalies like cross connections, when a foul sewer has been connected at some time in the past to a surface water line. This isn't the same as a misconnection, which occurs at a property.

Over 1 kilometre of sewer has been relined in Ramsgate Sands

Improvement Plans (cont.)

Illegal connections (misconnections)

Wastewater from a home or business is sometimes incorrectly connected to surface water sewers. Surface water sewers discharge directly into a watercourse, which means that they can have a really big impact on bathing water quality, especially if they are close to the coastline. We have a responsibility to find and resolve these illegal connections when they occur. They are often difficult to locate but we have a dedicated team of experienced staff carrying out a range of techniques to find them. Activities of the team can include a method called caging, to establish an illegal connection is close by collecting sewer debris in a cage positioned in the sewer. They also carry out dye testing, which helps to narrow down the search radius. Entire

homes, including toilets, that have been misconnected this way have been found by the team just metres from the coastline. Their impact on water quality is significant.

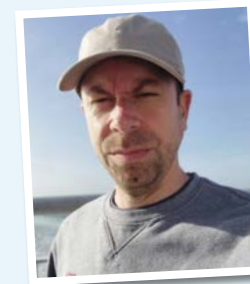
We have a responsibility to find and resolve these illegal connections when they occur. The team work closely with local authorities and will escalate cases, for enforcement under section 59 of the buildings act 1984, if we think it's appropriate.



Third party issues

Private drainage, litter, seaweed and animal waste are factors that we can't control and are described as third-party issues. Our relationships with our stakeholders, customers and communities are vital in these situations. Partnership working means that we can work together to reduce the impact of private sewers that drain directly into the sea or poorly maintained cess pits that leak into the nearest watercourse.

We have resolved many of these problems through working closely with our partners and the Environment Agency. To ensure these solutions will continue to be effective in the long-term, we've established steering groups with the councils that look after all our priority locations. We know that improving bathing water quality takes time and dedication. We work closely with councils in this way so that we can deliver the improvements needed and adjust our focus when we need to.



“ I ENJOY SUMMER DAYS AT THE BEACH WITH MY YOUNG SONS. IT'S REALLY IMPORTANT TO ME THAT OUR SEAS ARE CLEAN AND HEALTHY FOR MY FAMILY. ”

Rob Butson, leads the Illegal Connections team.

A leaking sewer

has been fixed and five illegal connections have been made good in Bognor Aldwick

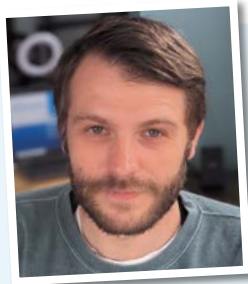
Working in partnership

Bathing water quality across Romney Marsh is a concern for customers who live and work in the area. St Marys Bay and Littlestone are currently classified as 'Poor' bathing waters.

At a public meeting in April this year, we joined members of Folkestone & Hythe Council, the Internal Drainage Board and the Environment Agency to present our respective Improvement Plan approach.

Each agency expressed the common goal, to make things better and then maintain the standards. For several years now, we have worked together in a dedicated bathing water steering group to do just that. The meetings, held once a month, give us the opportunity to pool resources, share data, explore joint investigations, and tackle emerging issues faster.

This collaboration between different groups means we can combine the knowledge of both regional and industry experts so we can work more effectively. We work in similar ways with councils and community groups across the region. We'll soon be opening up the steering group to community and campaign representatives.



“ I WAS BORN AND RAISED BY THE SUSSEX COAST. I KNOW HOW IMPORTANT THE COAST IS TO OUR COMMUNITIES. ”

Mike Harkness, is a Project Manager who is supervising the sewer CCTV and Rehabilitation Programme at all our priority locations.

We have surveyed almost **700m of sewer** at Broadstairs Viking Bay and have lined the sewer in key locations

32 illegal connections have been discovered in Folkestone





























We've surveyed and relined over **500m of sewer** in Littlestone

Our priority locations are:

Key: ● L Low ● M Medium ● H High

Bathing water and classification	Workstream and low/medium/high risk to water quality				Summary of investigations and work completed so far
	Illegal connections	Asset performance	Sewer condition	Likely third-party issues	
Bexhill – Sufficient	M	M	H	L	Bexhill is currently classified as Sufficient but is at risk of slipping to Poor. We are focussing on finding and resolving misconnections and assessing our own sewers.
Bognor Aldwick – Good	M	M	L	H	We are surveying 1.5km of sewer, and have resolved several issues. We have found and resolved a number of illegal connections and are conducting further investigations. We are working with the local council to address third party issues.
Broadstairs Stone Bay – Good	M	M	L	M	We are carrying out illegal connection investigations and have identified some sewer rehabilitation work.
Broadstairs Viking Bay – Sufficient	M	H	L	L	We have surveyed almost 700m of sewer and have subsequently carried out lining in key locations with more to complete. We have also conducted an illegal connections investigation.
Deal Castle – Sufficient	M	H	L	L	We are currently investigating illegal connections and have identified three properties. We have also identified a piece of sewer rehabilitation work to be complete.
Dymchurch – Sufficient	H	H	M	L	Illegal connections investigation has found and resolved four misconnections. Investigations are ongoing and sewer CCTV is to be completed.
Folkestone – Sufficient	H	H	M	L	Sewer CCTV investigations are currently underway and an illegal connections investigations has been completed. 32 illegal connections have been discovered. We are working closely with the council.

Key:  Low  Medium  High

Bathing water and classification	Workstream and low/medium/high risk to water quality				Summary of investigations and work completed so far
	Illegal connections	Asset performance	Sewer condition	Likely third-party issues	
Hillhead – Good					An illegal connections investigation has been completed. We have found and resolved eight illegal connections. A CCTV analysis of sewers will be carried out.
Littlestone – Poor					A number of properties with poor private drainage haven been connected to the mains network. We have conducted CCTV analysis of our sewers and carried out some lining work.
Margate the Bay – Good					We are carrying out illegal connection investigations and have identified some sewer rehabilitation work
Margate Fulsam Rock – Excellent					We are carrying out illegal connection investigations and have identified some sewer CCTV to be completed.
Ramsgate Sands – Good					A programme of sewer CCTV and rehabilitation is underway.
Ryde – Good					We are carrying out illegal connection investigations and have identified some sewer CCTV to be completed.
Sandown – Good					We are carrying out illegal connection investigations and have identified some sewer CCTV to be completed.

Our priority locations are:

Key: ● L Low ● M Medium ● H High

Bathing water and classification	Workstream and low/medium/high risk to water quality				Summary of investigations and work completed so far
	Illegal connections	Asset performance	Sewer condition	Likely third-party issues	
Southsea East – Poor	● L	● M	● L	● H	We have completed an illegal connections investigation and have been working with the council and owners of private drainage infrastructure to resolve outstanding issues close to the beach.
St. Mary's Bay – Poor	● M	● M	● L	● M	Sewers were relined in 2019. An illegal connections investigation is underway and we're investigating a potential cross connection at Jefferson Lane.
Stokes Bay – Excellent	● M	● L	● L	● M	An illegal connections investigation has been completed. Sewer CCTV is to be completed.
West Beach Whitstable – Good	● M	● L	● L	● M	We are carrying out illegal connection investigations and have identified some sewer CCTV to be completed.

Conclusion

Improving designated bathing water quality is not straightforward. We hope that in this report we've shown you that the approach we're taking is comprehensive.

There is no single factor that affects bathing water quality, as several issues combine to varying degrees that have to be considered. Our approach – to produce an improvement plan and to work through that plan in a systematic way via four central workstreams – provides a method to tackle issues holistically, and we'll continue to adapt and learn from this approach.

We are taking responsibility for the impact that we have and are working closely with partners across our region. We'll be sharing updates with our customers throughout this process.

Eight properties
with illegal connections that were discovered by our team in Bexhill have been fixed

Our sewers in Ryde, Sandown are being **surveyed**



“IT'S SO IMPORTANT FOR ME TO BE ABLE TO KEEP OUR BATHING WATER SITES WORKING RELIABLY. I'VE ALWAYS HAD A CLOSE CONNECTION TO THE SEA.”

Nina Downes - Wastewater Planning Manager and leads on Asset Performance



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