



**South West
Water**



CUSTOMER OUTLINE 2023

DRAINAGE AND WASTEWATER MANAGEMENT PLAN

WHAT IS OUR DWMP?

Our Drainage and Wastewater Management Plan – or DWMP – outlines how we will manage our drainage and wastewater assets for the next 25 years, as we evolve our water recycling system into one that future generations can be proud of.

Our DWMP sets out the actions we need to take, to ensure our drainage and wastewater system is resilient to future pressures such as population growth and climate change.

Our DWMP will:

- Protect people, homes and businesses from flooding
- Prevent pollution incidents and the damage caused by plastics, fats and wet-wipes
- Increase the use of nature-based solutions, innovating to protect our unique environment and reducing our carbon footprint
- Support tourism and the long-term economic health of the region.

By publishing this document, we welcome further opportunities to partner and innovate. The affordability of customer bills is of paramount importance, so we hope to encourage debate about how we can fund the environment we all want to see without anyone worrying about how they will pay their bill.

Above all else, our DWMP is a plan for the environment. We understand the challenges our wastewater and sewerage networks face over the next 25 years – and we are committed to investing and working in partnership with our communities to meet these challenges.

FIND OUT MORE

You can find more detailed information about our plans by clicking [here](#)



OUR JOURNEY SO FAR

Each and every day, we operate a water recycling system for the region. We take in wastewater draining from our homes, businesses and roads, we treat it to make it safe for all, and we release it back into the environment where it travels to the sea and the cycle repeats.

Our wastewater systems stem from the innovative thinking of the Victorians. But much has changed since the Victorian sewage system was designed and built.

The Victorian system successfully removed sewage, but it relied on storm overflows and sea outfalls to prevent homes and businesses being flooded with sewage when the system became overwhelmed by rain.

CHANGING TIMES

Over the last two years our customers, politicians, regulators, policy makers, the media and our stakeholders have all rightly made their frustrations clear that the current system with its reliance on storm overflows, is no longer acceptable.

We have been installing technology and monitoring devices which have helped us to understand far more about the performance of our network and its limitations, than ever before.

New environmental laws and the way that we are regulated have also changed, helping us to plan action and investment at the scale required to tackle the challenge, in the wider context of climate, ecological and cost of living crises.

In June 2022 we launched a consultation on our draft plans and engaged extensively with customers, stakeholders, regulators and businesses through face-to-face meetings, online workshops and written consultation responses and we are grateful to all who took part.

THE FEEDBACK IS CLEAR. A STEP CHANGE IS NEEDED.

So, whilst the investment we have made to date has delivered improvements, the feedback has been consistent – we need to take more action to reduce our reliance on storm overflows, and at pace, if we are to rebuild trust in the performance and ethical motivations of the water sector.

As a direct result of the consultation, we've listened and changed our plans, accelerating our investment to reduce the average number of spills to minimal, if at all, within 15 years – 10 years ahead of the Government target.

Whilst we do not directly measure the volume of sewage leaving our network, we know around 2-3% is discharged through storm overflows. We agree that treating around 97% of wastewater is not enough – and we need to go further.

This plan will close the gap, aiming to treat all wastewater which enters the system.

You also told us that you want us to do things differently, taking a “Green First” approach. We will work with natural processes and nature-based solutions, which provide wider public benefits with a lower carbon footprint and collaborate with partners, where possible.

INVESTING IN THE SOUTH WEST

Our plan is ambitious and we estimate it will cost around £7.5 billion between now and 2050, which means we will need to raise more investment, a proportion of which will impact on customer bills. However, if we change how we charge for wastewater services we can make bills fairer.

The plan will deliver environmental improvements across the region, and its implementation will also bring significant opportunity for the regional economy and our communities as jobs and careers are created and local places enhanced.

A WATER RECYCLING SYSTEM THAT FUTURE GENERATIONS CAN BE PROUD OF

We are determined to deliver the change that people and the planet deserve now and for future generations, and we look forward to working with local communities, stakeholders, regulators and businesses to make it happen.



WHAT CHALLENGES DO WE FACE?

DWMPs build on our long-established business planning processes, ensuring we can plan for the future challenges and mitigate demands placed on our systems.

The South West is particularly vulnerable to climate change, given its 860 miles of coastline, and closeness to the western approaches of the Atlantic Ocean. We are already experiencing the impacts of climate change and expect future rising sea levels and more intense storms.

Our drainage and wastewater system now copes with 25% more wastewater and rainwater than it did 15 years ago and we know we need to invest even more to manage the impacts of climate change.

Across the South West, the annual damage due to floods is forecast to increase by up to 50% by 2050



“ Doing nothing to address and manage the pressures facing our wastewater system over the next 25 years is not an option. ”

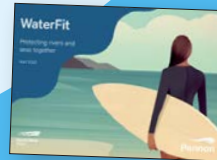
WITHOUT TAKING ACTION AND PLANNING FOR THE FUTURE WE FACE THE FOLLOWING RISKS:



STORM OVERFLOWS

Climate change and growth will increase our reliance on storm overflows in the future. At the same time, we need to deliver a significant reduction in the use of storm overflows in line with new legal obligations set to improve the health of our rivers and seas.

We've already begun this investment to deliver benefits and you can find out more about our work on our WaterFit plan [here](#).



WASTEWATER TREATMENT WORKS COMPLIANCE

We need to maintain compliance with stringent wastewater treatment requirements in order to protect the environment. In the future we will need to continue to maintain and upgrade our treatment works to ensure they are resilient to climate change, population growth and urban creep.



FLOODING RISK

We have reduced sewer flooding by over 80% in the last 30 years, but climate change and population growth increases the risk of this in the future. We estimate that without action, a further 10% of catchments are at risk of sewer flooding in a severe storm by 2050.

DID YOU KNOW?

Our system now handles 25% more wastewater and rainwater than it did 15 years ago.

WHAT HAVE WE HEARD?

Customers and stakeholders have an important role in shaping our plans.

We want to engage all customers to ensure everyone can hear about our plans and share their views. The DWMP consultation gave us a formal way of hearing from a wide range of our customers, stakeholders and our regulators about our plans for drainage and wastewater investment.

We asked consultees what their priorities were for our investment in our drainage and wastewater network and were especially keen to hear their views on how we strike the right balance between nature-based solutions and partnership working and whether we've got the right balance between prioritisation and the pace of change.

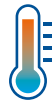
WHAT WE HAVE LEARNED

We're grateful to everyone that took the time to engage with our DWMP consultation and provide us with feedback on our draft plan. The key themes we heard were around:

- Balancing our investment choices
- Ensuring we deliver an affordable plan that delivers steady improvement
- Demonstrating environmental leadership through the pace and types of solutions we deliver
- Helping our customers to understand our plan
- Detailing our approach to adaptive planning including how this approach will support risk management
- Storm overflows – providing a robust and detailed plan for storm overflows including a timeline.

YOUR FEEDBACK

PRIORITY
1



Customers rank tackling the impacts of climate change as the greatest challenge for the network

PRIORITY
2



Customers view coastal bathing waters as the highest priority for investment; this reflects the high use of beaches by our customers and the importance of tourism to our economy

PRIORITY
3



Customers would like the DWMP to be balanced, addressing both storm overflow spills and flooding

PRIORITY
4



Customers like the idea of working with nature to reduce or slow how quickly water enters the drains. They think the best option is to include nature-based and engineering solutions, rather than make the existing system store more water

PRIORITY
5



Over 90% agreed or strongly agreed that a step change in the level of investment is necessary to protect the environment

PRIORITY
6



Customers want us to prioritise the most impactful investment such as those at beaches to deliver environmental improvements affordably

“

“Putting money into prevention rather than just mopping up what has happened, being proactive.”

South West Water customer

“We all want a greener world.”

South West Water customer

“Reducing storm overflows is the biggest issue as we live in South Hams and it's a big issue for us.”

South West Water customer

“

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DID YOU KNOW?

We're working hard to help everyone **understand storm overflows** and how they operate. We understand that the way they operate is **no longer acceptable to customers** and our DWMP sets out a **plan for radical change and environmental improvements**.



HOW THIS HAS SHAPED OUR PLAN

You can find out about how your feedback has shaped our plan in our Statement of Response [here](#).



WHAT DO WE WANT TO ACHIEVE?

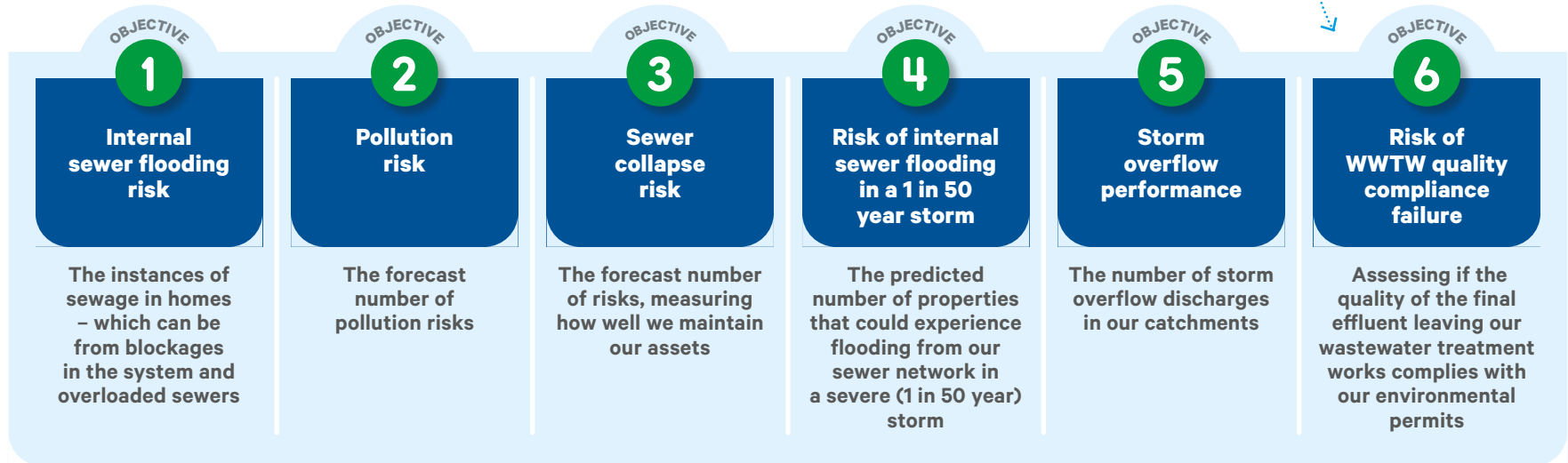
We know that our customers and stakeholders want our future performance to improve our impact on the environment.

WHAT'S A WWTW?

WWTW is the acronym for wastewater treatment works – the facility where we treat sewage

OBJECTIVES FOR 2050

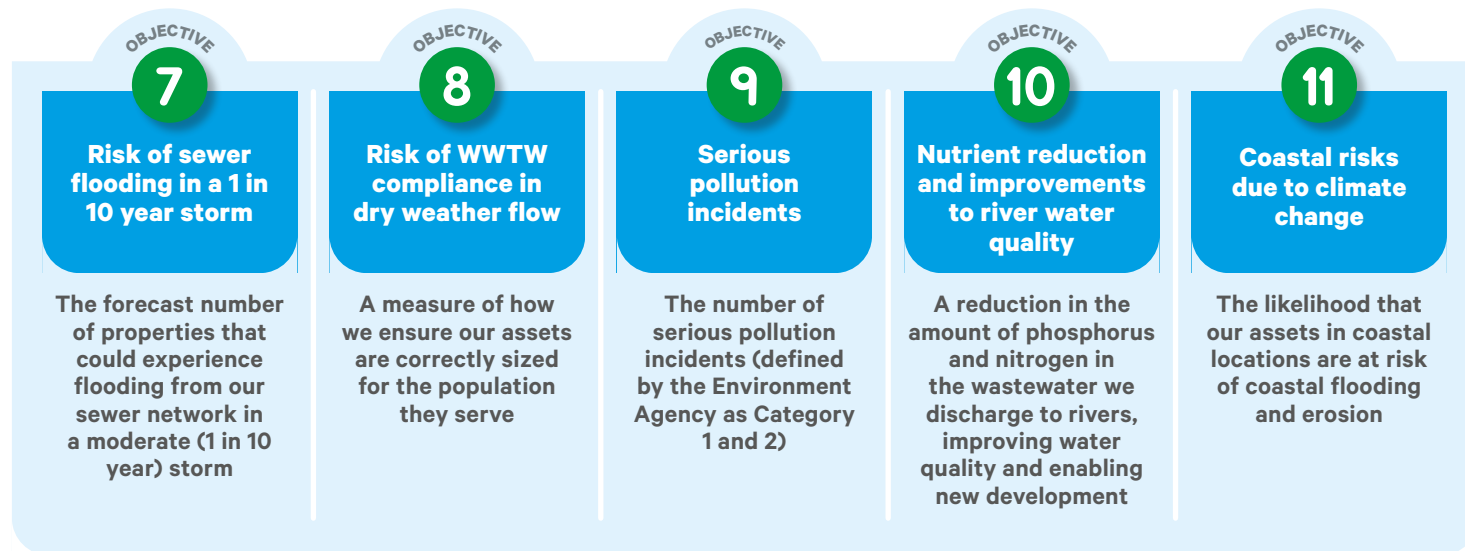
Common objectives set for all water companies



OUR BESPOKE OBJECTIVES

As well as keeping our assets in good health and responding to the six common objectives mentioned above, we are also going further by committing to additional objectives that keep pace with population growth and climate change and deliver multiple benefits for our environment and the region.

We will need to create new approaches to deliver these objectives and work with our partners and customers.



We are adding our own objectives to raise standards and tackle the impacts of climate change

HOW WE'LL DELIVER THESE IMPROVEMENTS

There are a range of activities we can do to manage future risks on our drainage and wastewater network.

Our plan focuses in the next five years on increasing the amount of flow we can store and reducing the amount of rainwater that enters our network. We'll work with others to develop our approaches to working with nature and these types of solutions will take a little longer to deliver benefits.

INVEST IN OUR EXISTING ASSET BASE

Examples of actions we will take include sewer cleansing and clearing to remove and prevent blockages; sewer relining and replacement (to prevent rainwater getting into the sewer); pumping station maintenance and upgrading treating capacity at wastewater treatment works to reduce storm overflows and the levels of nutrients entering rivers.

GREEN FIRST

Our 'Green First' approach will look for the opportunities to work with nature, our stakeholders and communities to reduce the amount of water entering our drainage network by slowing the flow in our catchments. At least 10% of our activities will be nature-based (such as rain gardens) by 2030 and we'll develop our skills, understanding and capacity to deliver more nature-based solutions over this first five-year DWMP.

RETHINK HOW WE DESIGN AND OPERATE OUR SYSTEMS

Our plans include considering new networks and sewers; separating sewers by constructing new surface water networks; rationalising smaller treatment works into larger units; and introducing smarter networks and monitoring.



WORK WITH CUSTOMERS

Customers are a really important part of our plan to help us to deliver environmental improvements. We'll be leading campaigns such as Love your Loo and Think Sink to slow the flow of water into drains and reduce sewer blockages.

We will continue to work with partners to deliver collaborative and cost-effective solutions to ensure that our drainage and wastewater services are robust and resilient.



WHAT WE WILL DELIVER BY 2030

We're making bathing and shellfish waters and areas that are ecologically sensitive our priority for the first five years.

Our DWMP sets out a plan for radical change and environmental improvements. We're increasing the pace of delivery so working with others and looking for innovation will be a real focus for us.

BY 2030 WE WILL HAVE...

- **Invested in improving 275 storm overflows to reduce spills to a minimal level and always less than 10 per year**
- **Invested in half of our storm overflows at designated Bathing Waters and Shellfish Waters to reduce spills to a minimal level and no more than three each season**
- **Removed over 350 hectares worth of land drainage from our sewerage network**
- **Added over 150,000m³ of storage to capture rainwater and reduce overflows, that's the equivalent of building 60 Olympic sized swimming pools**
- **Upgraded 48 of our wastewater treatment works to remove nutrients and reduce our impact on river health – that is more than 20% of treatment works that need upgrading by 2050**
- **Invested in 715km of sewer to prevent water infiltrating and increasing flows – in a line they'd stretch from Lands End to the Scottish border!**

£1.7 
billion
of new investment

ACTING QUICKLY

Reflecting the strong views of customers and stakeholders and the storm overflow targets from the Government, we have put together a plan that rapidly improves overflow performance in key areas in the next five years.

This is our largest ever investment programme and we know that it could have a significant impact on our customers bills.

We know from our research on customer bills that we can deliver the investment set out without our resident customers paying much more than they do today – we look forward to working through these proposals with regulators as we continue through the business planning process.

You can find out more about the potential impact on bills in our [Regional Plan](#).



SPOTLIGHT

STORM OVERFLOWS

Reducing pollution from storm overflows is a priority for our customers and stakeholders. We will invest £900m by 2030, radically improving storm overflow performance across the region.

To reduce spills we can increase treatment capacity at wastewater treatment plants, replace screens, enhance pump stations, create additional storm storage and separate more surface water in a range of ways, including nature-based solutions.



Defra published their Storm Overflow Discharge Reduction Plan setting out targets to reduce discharges from storm overflows.

HOW MANY STORM OVERFLOWS ARE THERE?

Across the region there are 1,342 storm overflows. 56 have already been prioritised for action by 2025 in our Waterfit programme and 786 are prioritised in this plan. The remaining 500 either do not spill or their average spill rate is less than ten times per year and will be addressed over time through our ongoing maintenance programme.

WHERE ARE WE INVESTING?

We've listened to our customers and we're starting by reducing spills at our high priority sites. These are areas where our spills risk causing ecological or recreational impacts. Our programme to 2030 will improve 35% of these, resulting in around 4,500 less spills each year.

At our bathing water sites we will reduce spills to a minimum, with no more than three across each bathing season. By 2035, we'll have made these improvements across all of our bathing waters by 2035, maintaining our 100% bathing water quality standards.

Our Dart and Tavy pilot explores what we would need to do if an inland bathing water was designated. We have installed monitoring to help us identify how we would work with others to achieve bathing water quality standards. We expect to start seeing designated inland bathing waters within our region very soon.

We'll share storm overflow information through our WaterFit Live platform



“ The current Victorian designed wastewater system that relies on combined sewer overflows is clearly no longer acceptable and we're taking action to tackle it.



Reducing spills from storm overflows is a **high priority** for our customers and stakeholders

DID YOU KNOW?

We're increasing our river water quality monitors at every storm overflow site, providing information on when sites are spilling and the impact of the spill in the river

INVESTMENT ACROSS OUR REGION

DART / TAVY

Population served 11,000

Urgent risks The community are proposing a new designated bathing water just to the North of Totnes. We are therefore supporting this process by investigating where and when our assets, and the assets of others, may influence the water quality.

Our plans We are carrying out near real-time river monitoring and spot sampling, combined with water quality monitoring, to provide transparent data for the public. We are reviewing the investment that would be needed at five storm overflows to meet spill standards for inland bathing waters.

FALMOUTH

Population served 39,000

Urgent risks 24 overflows are due to improved by 2030, five of which are already performing ahead of Government targets, but will be fitted with appropriate screens.

Our plans Our preferred DWMP scenario is to focus on reducing overflow spills by reviewing surface water runoff in the catchment and seeking to reduce flows through surface water separation, the use of Sustainable Drainage Systems and where appropriate infiltration reduction. Defra and Ofwat have agreed that we can accelerate significant improvements at nine storm overflows in order to deliver early benefits.

PLYMOUTH

Population served 105,000

Urgent risks The wastewater treatment works was constructed in the 1990s and is nearing the end of its operational life. There are 64 storm overflows in the catchment, 30 of which require improvements: six are scheduled to be completed by 2030 with a further 11 between 2030 and 2035 and then finally 13 further overflows in 2040. The remaining 34 overflows require screening improvements only.

Our plans Our plans involve a 15-year programme to replace the Plymouth Central wastewater treatment works. This will significantly increase treatment capacity and reduce the risk of future spills with climate change and population growth. We will focus on reducing overflow spills through surface water separation, the use of Sustainable Drainage Systems and where appropriate infiltration reduction. We are collaborating with Plymouth City Council to reduce surface water separation and saline infiltration into the sewer network. We are already developing a number of nature-based solutions at the boundary of the city utilising the skills of our Upstream Thinking partners to provide both flood resilience and reductions in storm overflow discharges.

SIDMOUTH

Population served 14,000

Urgent risk We are targeting significant improvements with six storm overflows due to be improved through the acceleration programme recently agreed by Defra and Ofwat. All six overflows are due to be completed by 2028.

Our plans We will focus on reducing overflow spills by reviewing surface water runoff in the catchment and seeking to reduce flows through surface water separation, the use of Sustainable Drainage Systems and where appropriate infiltration reduction.



OUR FUTURE PLAN TO 2050

We're investing more than ever in our wastewater networks across the South West to deliver significant environmental improvements.

BY 2050 OUR PLAN WILL HAVE...

- **Improved storm overflow performance** – with no storm overflow causing any public health or ecological harm to rivers and seas, and minimal spills, if any
- **Managed flooding risk** – diverting flows away from sewers and upgrading sewers to keep the risk of flooding to homes and businesses at historic low levels even with the increased water into the system from increased rainfall and population growth
- **Raised treatment standards** – removing even more contaminants, such as nutrients and chemicals, from treated sewage to further enhance the health of rivers and seas
- **Maintained compliance of our treatment works** – ensuring that extra flows to treatment works are safely treated to protect the environment
- **Built resilience against wider climate change risks** – protecting our assets from sea level rises, coastal erosion, and flash flooding, preparing us for a 2°C or more increase in temperatures.

ADAPTING TO CHANGE

Our DWMP is designed to adapt to a changing future. We use early warning triggers such as river levels, storm overflow monitors and mathematical models to help us invest wisely in the right assets at the right time.

We're also working with the Met Office and the University of Exeter to better understand climate change impacts on our business.

PACING OURSELVES

Reflecting the strong views of customers and stakeholders and the storm overflow targets from the Government, we are accelerating our delivery of the 25 year storm overflow plan, delivering all outputs by 2040.



University of Exeter



Met Office

SUPPORTING OUR CUSTOMERS

We know we need to work hard and look for ways to keep bills affordable and will continue to do so in future.

There are a range of ways we can support customers who are in debt or struggling to pay their bills due to the impact of life changing circumstances.

More information on our support schemes is available on our website

www.southwestwater.co.uk/bills/need-help-paying-bill/

GET INVOLVED...



We are committed to providing greater transparency in our progress, our decision-making and the performance of our system as we implement our plans.

WATERFIT LIVE

You can find real-time information on storm overflows and where we're planning to invest to reduce spills on our WaterFit Live app.

We'll soon show information for all sites where storm overflows can occur, alongside bathing waters. We asked communities to share their views on our plans and that's helped us prioritise where we'll be working.

To share your views visit southwestwater.co.uk/environment/waterfit/waterfitlive/

GET INVOLVED, COLLABORATE AND HOLD US TO ACCOUNT

We'll produce annual reports on our progress and we'll share these on our website as we prepare to implement and engage with partners who are keen to collaborate with us.

If you would like to join a customer focus group, our stakeholder Forum, be part of the WaterShare+ Panel or attend our AGM then please register your interest via the link below.

We know that many other organisations and individuals share our drive to improve environmental outcomes and we recognise that we can't achieve the plan on our own.

If you would like to collaborate with us on a project or initiative then please also get touch. Visit southwestwater.co.uk/dwmp

