



David Black
CEO
Ofwat

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Dear David,

Firstly, further to my recent email, I would like to take the opportunity to formally congratulate you on your recent appointment as Chief Executive.

I am writing in response to your letter dated 1 March 2022 to update you on the work we are doing to improve our performance for our customers and to protect the environment.

We agree with the Government and Ofwat that the issue of wastewater needs immediate focus and that use of storm overflows needs to be reduced. The Environment Act is the first step, and I would like to reiterate our full support for it, as well as our support for Government's expectations set out in the Strategic Policy Statement and Storm Overflow Discharge Reduction Plan.

Our overall strategy to improve our environmental impact includes new initiatives to improve wastewater processing and capacity within our systems, more investment into our infrastructure, improved water quality monitoring and, as you are aware, the establishment of a dedicated team – the Storm Overflow Task Force - to drive forward our ambitions in reducing the use of storm overflows. We have intimated that there is potential to reduce storm overflow use by up to 80% by 2030. This will be validated via our pathfinder projects and I look forward to discussing these with you when we meet in the next few weeks.

It is critical that partnerships are established to deliver on those ambitions, and I believe the work we have been doing has been leading the way in establishing those collaborative frameworks. These will need to be formalised, and new frameworks and approaches established, if we are to meet an ambitious pace of delivery, at the same time deliver innovative solutions which are environmentally sustainable, resilient and do not place the financial burden only on water utility customers.

Surface water separation has been established as a critical factor in this and it is heartening to see this being recognised by many bodies, notably highlighted recently by the National Infrastructure Commission.

Within this letter, I have set out some details of the work we are undertaking. The appendix contains our timeline for the next three years (up to March 2025). We are also updating our website so that customers and the wider public also have access to this information.

Storm Overflow Task Force

We are acting now to reduce the impact operations might have on the environment. The Storm Overflow Task Force, established in November 2021, is a dedicated team responsible for driving our ambitious targets, piloting schemes across the region and unlocking partnerships to ensure we create a sustainable system fit for the future.

Part of the task force's work is delivering our five pathfinder projects over the next two years, establishing strong relationships to ensure their success. The projects, across Deal, Margate, and Swalecliffe in Kent; Pan Parishes in North Hampshire; and Sandown on the Isle of Wight, will help us to develop new and innovative solutions to reduce pressure on the sewer network and therefore the use of storm overflows. In parallel, the

task force will build and deliver a wider regional plan to reduce storm overflows by 2030, using the learnings of the pathfinder projects.

Broadly we believe there are three main interventions:

1. Source control – keeping water out of sewers through surface water management, e.g., with SuDs
2. Optimisation of existing infrastructure – smart control of our networks and enhancing interactions, such as highway drainage
3. Building more infrastructure - larger pipes, tanks, pumps, and treatment sites

Our aim is to exhaust all possible solutions across interventions one and two, before we consider more infrastructure (three). A key focus for the task force will be developing relationships and partnerships across multiple sectors and industries, to implement low build and nature-based solutions. We believe there is a clear role for Southern Water to act as a convener of people and organisations in the region to have a long-term impact. Through our website and social media channels, we will keep the public up to date with our work.

Pathfinder projects

The pathfinder projects are situated in catchments that pose complex challenges, have a higher volume of storm overflow spills, or require an innovative approach to tackle the local wastewater treatment issues.

Each project will be completed in stages to ensure that we are implementing the right solutions and can report on the effectiveness of our interventions throughout the programme. The projects will typically be phased as follows:

1. Initial survey of the catchment area and action any immediate interventions. This could include cleaning screens and pipes to reduce the chance of blockages.
2. Implement 'no regret' interventions and establish pilots of new concepts and approaches. This could include measures such as controlled improvements on existing assets and piloting new schemes and incentives to encourage surface water management within the pathfinder catchment.
3. Implementing larger and more complex interventions to deliver the desired outcome for the project. This will involve working in partnership to deliver at scale. Examples of the types of interventions that could be implemented at this stage include installing soakaways, roadside swales, rain gardens in schools, real time smart control of sewer networks, highway drainage enhancements and development of public green spaces.

Deal, Kent – Residents in this area have experienced chronic internal flooding to their properties over many years. As heavy rainfall events increase due to climate change, we believe that properties will continue to be at risk from flooding unless we tackle the amount of surface water that gets into the combined sewer system. In this area, we will be identifying and trialling different approaches to manage water flows. Southern Water, Deal's Member of Parliament, Kent County Council, Dover & District Council, and public representatives have formed the Deal Water Action Task Force to collaboratively work together in the area.

Margate, Kent – The catchment of Margate has a significant combined sewer system, which gets overwhelmed during heavy rainfall. This results in storm overflow activation to prevent widespread flooding; it can also stress the assets, lead to pumping failures and further discharges of wastewater in more local coastal waters which has resulted in beach closures. This project is still in the early stages but our work in the area will seek to understand the source of all the water in the catchment with a view of removing enough to reduce the stress on pumping stations and storm overflows.

Swalecliffe, Kent – Swalecliffe has a predominately separated sewer system, but there is still significant excess water in the network, resulting in numerous permitted storm overflows within the catchment. We will use a holistic approach to understand the root cause and better manage water flows, identifying options to reduce peak loading onto the treatment works and other parts of the network. We will also be investigating if there are other causes of additional flow into the wastewater sewers for example through intermittent infiltration from groundwater and overland flows entering the sewer system.

Sandown, Isle of Wight – Sandown is the catchment with the largest number of storm overflow releases (as of 2020). It is made up of eight sub-catchments and covers more than 90% of the population of the Isle of Wight. This catchment gives us the opportunity to trial different solutions such as enhanced wastewater

pumping station control, surface water removal and storage solutions. We plan to build a strong coalition and commit to delivering interventions that will significantly reduce storm overflows on the island.

Pan Parishes, Hampshire – There is excess groundwater in the area which finds its way into the sewer system through leaking joints in public and private sewers. When the ground water is high, tankers are deployed which impacts residents and if the level gets too high, there is a need to discharge to the local watercourse. These events are similar to storm overflows. Finding solutions that work in this catchment can inform similarly affected catchments in the future across our region. This project will trial new engineering analysis, techniques, and technologies.

U IMP5 and U IMP6 (increasing wastewater through full treatment process and storm tank capacity)

Outside of the task force and our pathfinder projects, we have multiple projects ongoing across our region to improve services to our customers and minimise adverse impacts on the environment.

Through the U IMP5 programme of work, we are increasing the amount of wastewater being passed through the full treatment process. The aim of this is to prevent any storm spills during a dry day. Further, for some of our sites, flow reduction plans are required in the catchment, in addition to increase process capacity at the water treatment works. This work is being carried out across the region at 67 wastewater treatment works during this funding period.

Through the U IMP6 scheme we are aiming to increase the volume of storm storage capacity at our wastewater treatments to align with the Environment Agency's methodology on calculated capacity. This includes carrying out work at 53 wastewater treatment works during the current AMP period.

One of the treatment works part of both schemes is the Budds Farm Wastewater Treatment Works at Langstone Harbour. We are investing £18 million to improve the works which manage 109 million litres of wastewater every day. At Budds Farm the indicative additional capacity required is 3378m³, which equates to an increase of 44% of the current permitted capacity. The investment will help to upgrade storm tanks, pipework, and infrastructure to tackle pollution, reduce the use of storm overflows and future proof the system.

Storm Overflow Assessment Framework Investigations

As well as the work to reduce spills and increase the capacity of our infrastructure, we are also conducting Storm Overflow Assessment Framework (SOAF) investigations. The aim is to drive further investment on spill reduction and to reduce our impact on the environment. Through these projects, we are investigating [spill frequency](#) and how it can be reduced, [groundwater infiltration](#), as well as Cost Benefit appraisals across 61 sites during this AMP period.

Monitoring and transparency (Bathing Waters)

We've invested more than £32 million on improving bathing waters in the past five years including major programmes in Worthing, Sussex and Shanklin, Isle of Wight. While we're proud that 79 of 83 of the bathing waters in our region are rated good or excellent, we know there's more we need to do to improve the health of our rivers and seas. That is why we're taking a collaborative approach to tackling the many causes of water pollution, through local stakeholder partnerships across the region to put holistic, nature-based approaches at the heart of reducing pollution.

Increased monitoring is essential to improve our wider environmental performance and to achieve a significant reduction in the use of storm overflows. We are therefore continuing to invest in improvements to the timeliness and accuracy of our data.

Event Duration Monitors (EDMs) are an important part of monitoring the quality of our waters and providing accurate information on sewage discharges. We fully support the Government's aim of having EDMs installed at 100% of storm overflow sites and are continuing to make progress with EDMs installed at 98% of our sites. This figure will be 100% by 2025.

Our industry leading notification system, Beachbuoy, which provides near real-time information on releases of stormwater, is part of our continued drive to be as transparent as possible. This system is designed to enable our customers to hold us to account in reducing storm overflows and we are confident they will see a real

improvement as our investment programme begins to take effect. We will be making announcements this summer about further improvements to Beachbuoy and will continue to work with the Environment Agency and Surfers Against Sewage to develop one interoperable system suitable for all.

The Save our Harbours Coalition

As you know from your visits to Chichester Harbour, storm sewer flow and surface water are component elements in receiving water's nutrient and bacterial loads. Our ground-breaking work in setting up the *Save our Harbours* coalition has been instrumental in creating a better understanding, proportionate contributions, and is another important part of our plans to help enhance the natural environment.

Investment

We are aware that further action is required by all water companies to collaborate with sectors across the economy to ensure problems are tackled at their source. To do this, it is vital that we can continue to invest.

For the current investment period we have committed to investing more than £2 billion across our region. £1.5 billion of this is for investment in improving wastewater services, which is being used to upgrade our ability to process greater volumes of sewage and the capacity to store more storm water. This is in addition to the nature-based approach to reduce storm overflows. The £2 billion includes £230 million of investment, over and above the allowance set by the industry regulator Ofwat.

We know that Ofwat has a duty to customers to ensure they are receiving the best value for money – even more so in the current climate. Southern Water will therefore put forward an ambitious and thorough proposal in our PR24 business plan, taking key learnings from our pathfinders and wider initiatives, to demonstrate how efficient but targeted investment, can deliver for all.

I look forward to meeting with you to take you through our plans in more detail, and I am excited about continuing to work together to deliver for our customers and the environment.

Yours sincerely

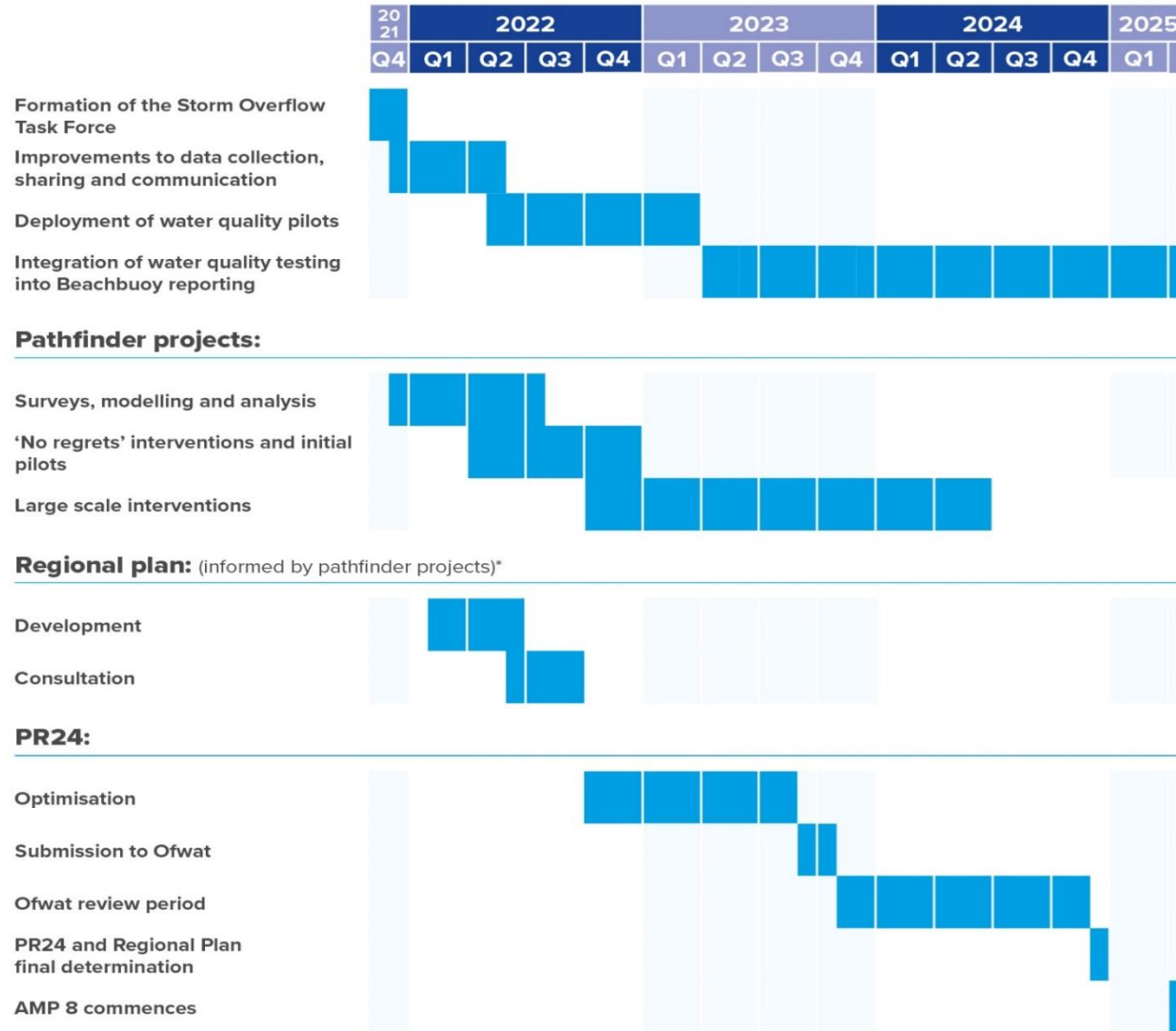


Ian McAulay
Chief Executive Officer

[southernwater.co.uk](https://www.southernwater.co.uk)



Appendix - 1.0 Southern Water timeline of development plans 2021 – 2025



* throughout the period our UMIP 5, UMIP 6 and SOAF work will be ongoing.