

## Policy and Performance Advisory Committee – 3 November 2022

### Advance notice of questions to Southern Water.

#### Sources

[Storm overflows evidence project \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

[Storm overflows explainer - Ofwat](#)

[Storm overflows discharge reduction plan - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

<https://www.southernwater.co.uk/our-performance/flow-and-spill-reporting>

**We see regular incidents of foul water being pumped out to sea and rivers which means that bathers cannot swim from many of the beaches along our coast. Southern Water has claimed that it has invested millions of pounds but in fact the situation appears no better than 30 years ago and is now a serious health hazard.**

- a. Why have discharges increased so much over the last few years?**
- b. Why is there no capacity in water infrastructure to handle sewage without discharging it into rivers and seas?**

Storm overflows are a legacy of sewer design and construction practices until the second half of the twentieth century. They were a pragmatic and affordable means of draining towns and cities. Their use is consistent with practice throughout Europe, which has some 650,000 overflows across the continent

There are 15,000 storm overflows in England and 13,350 discharge to inland rivers. Overflows are designed to operate infrequently and as the result of heavy rainfall and this is the basis of their environmental permits.

However, in practice spills can also be caused by blockages, operational issues and 'infiltration', where pipe joints and cracks in sewers allow groundwater to enter taking up capacity.

The main two reasons that storm overflows are put into operation more frequently due to

- Urban Creep – paving over green spaces with impermeable material

	<ul style="list-style-type: none"> <li>• Climate change and increased rainfall</li> </ul> <p>Many storm overflows therefore operate more frequently than is acceptable to the public and other stakeholders in the community even though they are a relatively small contributor to water quality standard failures overall.</p> <p>Rather than building more storm tanks – which is carbon intensive and a temporary solution – we are committed to working with stakeholders to ‘slow the flow’ at source. Evidence is being gathered via our Pathfinder projects.</p>
<p><b>What is Southern Water doing to create capacity and stop this, and when will it be done? (Cllr Robinson)</b></p>	<p>Government targets are to reduce pollution via storm overflows by 2030, but we want to go faster and have a pollution reduction programme working towards the target of 2025.</p> <p>To achieve this, we’re investing £83 million to reduce risks and significantly increase monitoring of our network.</p>
<p><b>Considering once in 100-year storms are becoming the norm, does Southern Water think its current plans demonstrate successful service planning and who is responsible? (Cllr Robinson and Cllr Ross)</b></p>	<p>We have a dedicated team working with developers and local planning authorities.</p> <p>However, we don’t have a statutory right to oppose developments. We can make suggestions and recommendations, but the development decisions lie with the Local Planning Authority.</p>
<p><b>What are the short/medium/long term plans to eliminate discharges and what is the timescale for these? (Cllr Boorman)</b></p>	<p>Our plans to reduce pollutions via storm overflows are publicly available on our website. We are committed to gathering evidence to support long-</p>

	<p>term solutions, and putting in any sustainable quick fixes identified in the short-term.</p> <p>The new ways of working will be fed into the regional planm which will be published next year, and will contain our plans on how we will meet the targets.</p> <p>We are discussing plans to accelerate pollution reduction with the Secretary of State. We need to have these agreed in the next AMP (Asset management plan) which will then need to be agreed by our regulators.</p>
<p>Given the multiple sources of discharges after rain events in CSOs, drain holes, soakaways etc, what efforts are being taken to ensure that all the relevant bodies concerned are meeting regularly and as a matter of urgency to tackle discharges? e.g Highways Agencies, Farming bodies, Environment Agency etc. How does Southern Water monitor discharges, how is the monitoring calibrated, and how does Southern Water report to the public, regulators and Government on how the targets are met.? (Cllr Bird)</p>	<p>98% of our outfalls have electronic monitoring (EDS) and we publish our annual flow and spill figures annually.</p> <p>Our Pathfinder projects are bringing cross-industry bodies together to solve these issues and collaboration and partnership is the direction that is needed.</p> <p>Discharges are reported to the Environment Agency.</p>
<p>In particular, what, if any monitoring, does Southern Water carry out of water quality on the Ouse itself and tributaries such as the Bevern Stream, and how often are those readings reported? (Cllr Banks)</p>	<p>Water quality is monitored by the Environment Agency, and available to the public in real time.</p> <p>There are monitors for all sources of pollution – which also includes agricultural and highways run-off.</p> <p>Our innovative coastal monitoring system Beachbuoy is currently being trialled for inland water, if successful it will be rolled out, currently we are awaiting results of the experiment.</p>

<p>Ditchling wastewater treatment works discharged raw sewage for 225 hours last year. What plans do Southern Water have to tackle this? (Cllr Banks)</p>	<p>The purpose of our dedicated Pathfinders project is to significantly reduce use of storm overflows. It's a crucial part of our regional plan to tackle the problem at its source and implement sustainable solutions. The primary reasons for discharges are groundwater infiltration and rainwater run-off and we are seeking solutions to these problems at source.</p>
<p>Given the Ofwat fine of £150m for water companies announced on 4<sup>th</sup> October 2020 for not meeting targets for waste water compliance, pollution incidents and internal sewer flooding (with Southern Water one of the two worst performing having to pay £28 million back to customers in 23/24 bills) - how will Southern Water meet this commitment? (Cllr Bird)</p>	<p>Clarity on what commitment Cllr Bird is referring to?</p>
<p>Is there a coordinated national strategy between water suppliers to address wastewater and storm overflow issues? Is Southern Water seeking coordination from the Government? (Cllr Robinson)</p>	<p>Yes. The Government published its Storm Overflows Reduction plan in August 2022 and the water companies are committed to working in partnership to meet the targets set. Our ambition is to meet those targets in 2025, rather than 2030.</p> <p>Our Pathfinders</p>
<p>What actions are being taken to monitor and ensure that the many private and communal septic tanks that discharge into the rivers are technically up to date, upgraded, and monitored for pollution control? (Cllr Bird)</p>	<p>Private septic tanks are monitored by the Environment Agency, and we have no jurisdiction over them at all.</p>
<p>Raw sewage was discharged into the rivers and seas around our area 735 times - the equivalent of 6,060 hours of discharges. On what basis do shareholders continue to receive dividends and bosses continue to receive bonuses when failings occur? How is it right that this record of failure is rewarded? (Cllr Robinson and Cllr Banks)</p>	<p>We haven't paid external dividends to external shareholders for the last six years.</p> <p>CEO pay has been frozen for the last four years, and every detail about bonuses and remuneration is available in our annual report. Lawrence is only a matter of months into his role as CEO and has targets for environmental protection and customer service, amongst other aspects.</p>

<p>What is the estimated cost of the work being done to eliminate discharges? Is it cheaper to pay the fines, than to do the work? (Cllr Ross)</p>	<p>Fines have now been increased one-thousand-fold, and can be up to a quarter of a billion pounds for each incident.</p> <p>Our strategy is not linked in any way to fines or penalties – we are committed to finding sustainable, long-term solutions to problems that are not going to be resolved by inaction. Paying fines will not contribute to resolving this issue and future-proofing the system.</p> <p>The government has estimated the cost of eliminating CSOs as £650 billion nationwide, which doesn't include the knock-on cost of disruption caused by accessing pipes under roads.</p>
<p>If coastal and river towns and villages are financially impacted due to sewage discharge should they seek compensation from Southern Water for loss of tourist revenue and the ecological impact? (Cllr Robinson)</p>	<p>Storm overflows are currently the system we have, that prevents communities from being flooded. Wastewater flows out to sea rather than backing up into homes and businesses. It's an emergency outlet – they are being used more frequently due to urban creep and climate change.</p> <p>If a customer is affected by internal flooding, then there are guaranteed standards of service that may result in compensation.</p>
<p>How will Southern Water commit to informing the public when these events are happening? How will you inform people via your website, social media, and other channels to inform people or to protect people for the hazardous effects? (Cllr Boorman)</p>	<p>We publish real-time data on our website about any spills that are likely to affect bathing water. These are available to the public on our website and users can set up email alerts.</p> <p>Pollution Risk Forecasts from the Environment Agency take into account a number of possible factors including runoff from agriculture, highways and roofs.</p> <p>Outfalls Storm Overflows are only part of the problem, which is why we are acting sooner than the government targets.</p>

<p>Given recent legal rulings regarding the questionable data provided to the Environment Agency from Southern Water, can Southern Water explain how they are providing confidence around the data now provided regarding spillages.</p>	<p>The incidents that led to the fine took place between 2010 and 2015, nearly 15 years ago. There has been a wholesale change in the executive since then and each member of leadership is committed to transparency and improved environmental performance.</p> <p>We have installed monitors on 98% of our coastal outfalls which are connected real-time to the Beachbuoy site.</p>
<p>Will Southern Water set up a meeting with Town/Parish Councils and other stakeholders affected by discharge of sewage into waterways, where it can brief them on the plans for the future? (Cllr Boorman)</p>	<p>Our regional plan will be published on our website and available to the all stakeholders as well as the general public.</p> <p>We invite stakeholders and the public to consultation meetings for any major strategies and we take their views into consideration when devising the plans.</p> <p>We will send a notification to stakeholders when the regional plan is published.</p>
<p>How will Southern Water provide targets and updates to all those affected every few years on progress achieved – following the penalties imposed, and advise if the targets are being met or not? (Cllr Brett)</p>	<p>We keep our website up-to-date and are committed to sharing information publicly where possible.</p>
<p>When was the last time a reservoir was built? What plans are there to build new reservoirs? (Cllr Robinson)</p>	<p>The last reservoir built in the UK was in 1991 at Carsington, near Sheffield.</p> <p>Southern Water and Portsmouth Water are working together on the first new reservoir to be built since 1991 – at Havant Thicket.</p>

	<p>We are working hard to secure our water resources in the Southern region in the face of enormous challenges such as climate change. Havant Thicket will make a contribution, as will water recycling and a desalination plant.</p> <p>Projects like this can take 20-30 years, sometimes more. There are an enormous number of stakeholders, regulators, planning authorities, procurement</p>
<p>How much water does Southern Water deliver a day and how is the leakage of 88m litres of water a day explained? (Cllr Robinson)</p>	<p>Our leakage is lower than the industry average at 17%, and we're fixing over 22,000 leaks per year. We have additional teams and acoustic loggers working on this important issue.  need mains replacement for Victorian network  Leakage comprises three parts</p> <ol style="list-style-type: none"> <li>1. Our own infrastructure – it's an old network, the pipes are cast iron and they are weak.</li> <li>2. Leaks on customer pipes. These are often harder to find because the pipes are a lot smaller.</li> <li>3. Wastage. These are things like leaky loos which accounts for a surprisingly high quantity.</li> </ol>
<p>What has your 'Target 100 programme' achieved to date in terms of improving water usage? What are the next steps?</p>	<p>Headlines on T100</p> <p>We're already industry leaders on per capita consumption (PCC). When the whole industry saw consumption rise, <b>on average by 10.4%, during the pandemic, ours was one of the lowest at 7.4%.</b></p> <p>Second highest household water meter rate in the industry, in fact, with 88% of households already metered by the end of AMP5 and have committed to increase this to 92% by end of AMP7.</p>

We have **completed 8857 home visits in the last 12 months saving an average of 34l/property/day** against current average PCC and we plan to **complete another 6055 by Mar- 2023.**

We have installed 18313 products for our customers

We have installed **water efficiency devices (flow restrictors) in 500 social housing** properties to help customers save on water and energy bills.

**Smart metering:** Our plans for smart meter installation have begun with a trial this with **Clip-on 'smart' meter devices are being installed in 1500 homes**

Water efficiency audits in schools: We have just completed a trial in **Lock Heath school showing preliminary results of 18% reduction** in overall daily consumption.

We have also provided a one-off funding contribution to **Littlehampton Golf course to design a reservoir and save ~7000m3 of potable water** currently drawn from the mains supply.

**You Save, We'll Pay Incentive for NHH:** Apart from TUB, a new incentive was introduced this summer to match reducing in use with water wholesale charges (either 10%, 20% or 25%) for three months from September to November 2022.

We have completed **20 community outreach events** on water efficiency and **commissioning classroom resources from curriculum specialists, planned for Jan '23 school**, on water-saving and living efficiently for KS1 and KS2 students to lay the foundations for a future where a water-efficient culture is the norm.



	<p><b>Behaviour change trials:</b> We have completed ethnography studies on bathroom, garden use to understand the best mechanisms to encourage our customers for progressive change efficient behaviour; and upto 20 trials and experiments planned in the next 12 months.</p> <p><b>Water neutrality in North Sussex:</b> We are supporting the recent water neutrality consultations and working collaboratively with the planning authorities and Natural England; and to support developers we have excluded non household efficiency audits in North Sussex from the T100 plan to allow developers opportunity to offset their water demand as an example and encourage to build water efficient homes.</p> <p>Non-household provides a significant opportunity for consumption reduction and we are starting a <b>trial with Business Stream in Hampshire County Council to drive water consumption reduction through retrofitting and behaviour change led comms.</b></p>
<p>Can you tell us about your project with South East Water for water recycling?</p>	<p>The Peacehaven recycling project is being led by SE Water. We are in the early stages of working with them, the expected completion is 2040.</p> <p>We have two water recycling projects that are underway in Hampshire and Sussex to protect the environment and our custeomrs against drought and climate change.</p>
<p>How confident can you be that even under the smaller growth outlined in the existing Lewes District local plan there is capacity surrounding combined sewer overflows. I ask this in light of heavy rainfall causing capacity of pipes to be exceeded leading to flooding in peoples' homes gardens, roads and open spaces – and raw sewage being expelled from Wastewater Treatment Works? (Cllr Banks)</p>	<p>We don't have any staturory rights when it comes to planning applications and development – we can only make recommendations to the Local Planning Authority.</p> <p>Most of our wastewater treatment works have capacity to process the water from population growth - we monitor development closely and can – and do – invest when it's needed.</p>

	<p>The main issues are around urban creep, groundwater infiltration and rainwater – our Pathfinder projects are examining how these problems can be solved in a sustainable and carbon-friendly way.</p>
<p>What information is available to assess the impact on the number of sewage discharges into local rivers from a development, and how will the information Southern Water has be shared? (Cllr Banks)</p>	<p>Discharge information about specific incidents is available live on Beachbuoy (coastal) and available for inland waterways via the EIR process. However there is no correlation between developments and discharges – the main causes of <i>individual</i> instances are groundwater infiltration, network breaches such as misconnections and incidents due to fat, oil and grease. They are becoming more frequent due to climate change.</p>
<p>How will you meet the request from the Council from the May 2022 – to respond in detail on each major development and which treatment works will be managing the sewage and impact on local rivers and seas of the development? (council motion)</p>	<p>We are currently undertaking a full review of the way we provide responses to planning consultations to provide a report pack with additional information and presented in a more accessible plain language format to eliminate jargon and enable people with less industry specific knowledge to use the information provided.</p> <p>We will be testing the new format over the next couple of months and will then adopt a continuous improvement approach based on feedback received.</p>
<p>In an area like <b>Ringmer</b>, Southern Water has plants already operating close to their maximum permit capacity, and which are also discharging untreated wastewater regularly (in Ringmer averaging at 18 hours a week) rather than purely in storm conditions. There is further major housing development under construction right now in Ringmer which will certainly add to the sewage load, so can you explain firstly why there is nothing in your current investment programme for this treatment works, and secondly whether you have calculated what will be the impact of this new development on levels of untreated wastewater discharge. (Cllr O'Brien)</p>	<p>We are aware of the new development - the Ringmer site is operating at 20% capacity so there is room. Should and work be needed then we will invest.</p>

<p>How do you work with the Environment Agency, Natural England and other Government agencies to ensure that the quality of water is improving? How would you like the regulation of water companies and the water industry to improve going forward? (Cllr O'Brien)</p>	<ul style="list-style-type: none"> <li>• Needs collaboration across the entire regulatory system and wider agencies, it's not just Ofwat</li> <li>• Regulators need to keep pace with customer demands, they've changed significantly</li> <li>• Greater clarity in terms of consistent, measurable outcomes is helpful for all <ul style="list-style-type: none"> <li>o Example - Defra storm overflow reduction plan</li> </ul> </li> <li>• Need to work in partnership with regulators to benefit customers and environment <ul style="list-style-type: none"> <li>o Example - RAPID good example of regulators coming together partners and other companies</li> </ul> </li> <li>• Customer and environmental outcomes very important, but also helps to define key investment outputs</li> <li>• Long terms plans enable clarity for all, challenge and support, particularly with stakeholders <ul style="list-style-type: none"> <li>o Example: WRMP, DWMP, WRSE</li> </ul> </li> <li>• This next price review critical step on that pathway to being able to plan longer term and finance accordingly</li> </ul> <p>We want to be a catalyst for positive change</p>
<p>How will you keep this Committee and Council informed of your performance in the next few months and years?</p>	<p>Our plans and performance reports are available on our website, which we update regularly, and communicate with stakeholders to notify them.</p> <p>We are always open to ideas about new or more effective communication channels so we welcome your ideas.</p>
<p>Are you willing to join a stakeholder group looking at these issues in a constructive and collaborative way?</p>	

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