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# Speech

Given by John Russell, Senior Director of Strategy, Finance, and Infrastructure  
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## How will regulation shape the future of wastewater networks and infrastructure, and how assets will look in 25 years.

It's a real pleasure to be speaking to you all this morning. I'm here to talk about how regulation will shape the future of wastewater networks and infrastructure today – not a small topic by any stretch of the imagination. As a regulator, it's important we take a step back and look at the bigger picture for the industry, and this is a great opportunity for us to explain what that looks like going forward.

At the moment, there's a strong spotlight on how companies manage their assets. We're facing into the ever-evolving nature of climate change, population growth and significant and growing concerns around water quality. We've been listening to voices across the industry – and outside of it – and I've visited a number of sites myself – I've seen first-hand the challenges that are facing the sector and the environment.

Wastewater networks are essential in supporting the day-to-day functions of our society. They protect public health, manage pollution in water courses, protect us against flooding and provide an essential service which customers rely on. But what will be required of our wastewater networks as we look forward? How will we meet these challenges of the future? And what role does Ofwat – and other players in the industry – have in meeting these challenges?

So let me start with a positive view of the future. There is a shared sense of ambition to address the challenges facing our wastewater infrastructure. There is a purpose across the sector to create more resilience, adaptability, and push forward with improving and investing in infrastructure that can meet our country's rising demands. There is also a shared understanding that only when water and wastewater services are environmentally sustainable will the long-term interests of customers be met. Achieving this is a key aim for Ofwat and is part of our strategy.

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But we have been clear: we cannot achieve these aims alone. Leaders in the sector and beyond need to come together and co-create solutions that are sustainable, can be practically delivered and lead to a cleaner environment for everyone.

## **A complex but troubling picture**

So, what is the big picture right now? The reality is that when it comes to water quality and pollution, the situation is complex with many moving parts, players, and contributors. There aren't always simple answers, but we all need to recognise that the current position is not a good one.

There has been growing widespread public anger due to sewage spills in watercourses and horrific pictures of effluent strewn riverbanks and harbours. Citizen science has played a vital role in shining a light on this, and we recognise the impact this has had on data, monitoring, and encouraging transparency on wastewater discharges. This month the Environmental Audit Committee's inquiry into the quality of river water in the UK published its report which painted a bleak picture of England's water quality. with only 14% meeting "good" ecological status. We've seen our waterways described as 'chemical cocktails' and public eyesores. All parts of the sector are facing criticism.

At the core of it all – the current levels of pollution and wastewater discharges are unacceptable, and the water sector must address its role in this thoroughly in both the short and long term. We welcome the new duties on companies within the Environment Act to progressively reduce the harm caused by storm overflows and we will continue to play our part in pushing companies to deliver on these new requirements as well as meeting their existing obligations. This is a priority for us as a water regulator.

But this still isn't the bottom line if we all want to improve the water quality in our environment. Our watercourses also suffer the consequences of pollution as a by-product of other activities such as industrial use and farming. There are also housing developments that lack permeable areas for natural drainage, and the behaviours of the everyday person also impact the wastewater system. On the latter, we see the devastating impacts of fatbergs caused by tipping oil and fat down the drain and putting single use wet wipes down the toilet blocking sewers and damaging the infrastructure that is there to protect public health and the environment.

So, the water sector is not the only cause, but the combined outcome of all these issues is an impact that cannot be left unaddressed. Companies are responsible for maintaining their assets, delivering infrastructure and performance improvements that they are funded for through customer's money, for communicating with their customers, and ensuring that they plan for- and adapt to - the future

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## How Ofwat has contributed to the big picture

So, what is Ofwat's role as a regulator? Our core job is to set the service and delivery package for companies to achieve, allow them funding through customers money to run and invest in their systems, people, and networks and to meet their environmental obligations and to hold them to account for delivering all of this.

Over the past 30 years, there has been huge investment in the sector with an average of £1 billion invested in environmental development and management every single year since privatisation.

In PR19, Ofwat set out stretching targets to significantly reduce leakage and pollution incidents over the 2020-2025 period. We allocated £13 billion out of a total package of £51bn as part of the service package on the environment. We required companies to reduce pollution incidents by 30% by 2025 and to improve 12,000km of rivers. Another £643 million was added to increase the resilience of water and wastewater infrastructure against potential failures.

Separate to the price review, £4.6 billion of investment has been provided to improve the water quality of the River Thames. As the largest specialist infrastructure project since privatisation, the Thames Tideway Tunnel will be able to store and intercept 39 million tonnes of sewage away from the Thames to meet the demands of its rising population. In turn, we'll see a reduction in spills and need to use storm overflows, as well as better outcomes for the environment and future generations.

We also allowed an additional £4.8 billion worth of investment through the WINEP in PR19. This funding goes to directly serve asset improvements, investigations, monitoring and catchment interventions, and covers improvements in sewage treatment and in storm overflows. It is important to note that we funded all WINEP schemes proposed in PR19.

Another £2.7 billion has been given to remove nitrogen and phosphorous from wastewater to improve river water quality. By working with the Environment Agency, Defra, and the Drinking water inspectorate, we have worked to reform the WINEP's processes so that it we can see more outcomes-focused results, deliver more value for money, and allow for more nature-based solutions and collaboration where appropriate.

We also recognise the essential role Drainage and Wastewater Management Plans will play in wastewater management and flood alleviation as it allows us to understand how water companies perform against several common planning objectives. These include objectives based on storm overflow performance and pollution risk. We are also working closely with

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colleagues in the EA on the implementation of the Flood and Coastal Erosion Risk Management Strategy.

Beyond this, our role has stretched further to allow change at a much faster pace.

This led to the acceleration of many promising innovative projects through the green recovery and our innovation funds. This gave our sector the opportunity to kick start planned investment and new ideas – something which we will always look to encourage. Last summer, we were able to award £2.8 billion of funding for the green recovery and to energise projects that will reduce the risk of flooding, protect habitats, cut pollution, and save water.

Similarly, our innovation fund, which focused on boosting innovative collaboration in the sector, has enabled us to award over £36 million across two competitions so far. £9 million has been awarded to projects looking to improve the health of our waterways and an additional £14.2 million for projects looking to resolve the challenges facing vulnerable communities and prevent leakages to reduce bills. At Ofwat, we've been pleased to see so many water companies collaborating with each other as well as new contributors to the sector. As part of this new wave of collaboration we've been pleased to see the sector establish 'spring', its first centre for excellence.

This activity – the investment, the schemes that are creating real improvements, and the innovation we're facilitating – paints a picture of where the industry is headed over the next 25 years. By driving this agenda, the industry should be in a very different place when it approaches 2050.

## **What are we doing now?**

But beyond investment, companies still need to meet their existing legal obligations and look to manage their wastewater assets more effectively and efficiently. We are taking a broad range of urgent action to hold them to account for this.

In September, we collaborated with water companies to gather further insight into the current state of our company assets through our co-created asset management maturity assessment. This focused on understanding their approaches to decision making to encourage improvement and spread good practice. It is clear from this work that there are a number of areas that the sector can improve on across long term planning, data and information strategies, skills needs and inclusion of wider value in asset planning. One of the key areas we identified for improvement was reporting to, and engagement with boards on asset health and operational resilience risks and mitigation.

In addition, last year several companies explained to us that that they might not be treating as much sewage as they should be. This led us to launch a major investigation to understand

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if and how often water companies in England and Wales are breaking the conditions of their environmental permits at wastewater treatment works. Where there are instances of non-compliance, we will be taking action where needed to hold companies to account. The aim is to complete our initial assessment by the end of February 2022, to inform our next steps.

Furthermore, we are active members of the cross-sector storm overflows taskforce which will recommend actions that'll achieve the long-term aim of eliminating harm from storm overflows in England.

Come July, we will also be publishing our draft methodology for PR24. Here, we aim to provide greater regulatory clarity of the review and help companies plan for the long term. We'll look to companies to be clear on how their five-year business plans are their route map in the context of their long-term ambitions. It is expected that these plans will still consider the most efficient way to sequence those investments, ensuring affordability and resilience is addressed thoroughly.

PR24 will enable the sector to do more as we look to face a range of challenges. It is critical that we continue to accelerate transformation whilst keeping the impacts to the environment to a minimum. For example, there is great opportunity for companies to harness the power of renewable energy in wastewater, but this is something we have yet to see more on.

We will also be reviewing the wide-ranging recommendations set by the recent Environmental Audit Committee report in full over the coming months.

But, in the immediate term, companies have the ability and the resources available to make an impact now. They know what their obligations are, what is the right thing to do, and it isn't acceptable to hide behind regulation or say they can't do anything until the next price review. We need water company responses to the legitimate concerns about pollution from their networks to be timely, accessible, and transparent. Too often the response has been silence.

Companies need to urgently look at how they are monitoring and maintaining their wastewater networks and assets targeting the places where failures cause the most harm as well as establishing how they can better use real time data to predict and prevent issues occurring. They also need to implement customer engagement plans that provide education on the impact of non-biodegradable waste on our networks. Implementing nature-based solutions and sustainable urban drainage schemes can be cost effective and are key to keeping water out of the sewer network in the first place.

I think it will also be important to see a change in company culture and commitment. We will all want to see companies give more thought as to how to tackle these issues; whilst improving their transparency and engagement with stakeholders.

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## **What does the future look like?**

Pulling back to the topic of my talk today – it's important to remember where we are going and what we look to achieve moving into the future. We can imagine what great would look like...

Great would-be eliminating pollution from wastewater networks through investment, real time monitoring, better customer education and management of our water networks. Great is delivering more efficient solutions and building long-term resilience born through strong and aligned collaboration across and outside of the sector. Great is seeing a rise in green and blue infrastructure that harnesses the power of nature-based solutions and promotes a healthy and resilient environment that'll thrive for years to come.

Through these actions, I also see a widespread reduction of carbon production across the water sector and proactive steps being taken towards embedded net zero targets.

Companies can and should be working towards these challenges now. By the time we reach PR24 there should already be real improvements visible, and the long term should be in focus with plans for PR29 and beyond continuing to add to efforts to reach our shared purpose.

Thank you.