
PR24

NORTHUMBRIAN
WATER *living water*

ESSEX & SUFFOLK
WATER *living water*

YOUR WATER, YOUR SAY

FRIDAY 12 MAY 2023

WRITTEN RECORD

A large, stylized graphic of water splashing from the top right corner, rendered in white and light green, set against a dark green background. The splash is composed of several curved, parallel lines that create a sense of motion and volume.

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1. MEETING PARTICIPANTS

Independent Chair	Kevin Johnson
CCW	Steve Hobbs , Senior Policy Lead – Regulation
Ofwat	Kay Greenbank , Head of company engagement
Northumbrian Water Group	Andrew Beaver , Regulation and Assurance Director Colin Day , Head of Water Service Planning Heidi Mottram , Chief Executive Peter Vicary-Smith , Independent Non-Executive Director Richard Warneford , Wastewater Director Mark Wilkinson , Head of Customer Billing

A cross section of customers and other stakeholder representatives also attended the session online, as well as representatives from Ofwat and CCW.

2. INTRODUCTION (1)

Kevin Johnson introduced himself as independent chair, appointed by Ofwat and CCW, for the Your water, your say (YW,YS) public online meeting(s).

He welcomed participants and informed them that the session was being recorded, for administrative purposes.

Kevin outlined housekeeping rules.

He went on to give an overview of the periodic price review process (currently PR24) as well as the role of Northumbrian Water Limited – Northumbrian Water in the North East of England and Essex & Suffolk Water in the South East. He also explained the roles of Hartlepool Water, Anglian Water and Thames Water.

Kevin acknowledged the different areas, very different geographic profiles, very different population profiles, and different services.

Kevin outlined his role in the process – “to facilitate a constructive challenge session as part of the price review process.” He explained “This is a challenge session, so I actively encourage a challenging, robust and I'm sure possibly at times passionate exchange of information, experience, questions and answers.”.

He explained that the company would make a 15-minute presentation on their priorities for the future across all its geographic and service areas. Kevin would then facilitate at least an hour for questions and answers in four themed blocks:

- Reliable services
- Improving the environment
- Sustainability and resilience
- Affordable and inclusive services (and anything else that doesn't fit into one of those boxes)

3. PRESENTATION

Heidi Mottram, Chief Executive Officer, made a presentation on behalf of the company.

Thanks very much Kevin, and good afternoon to everyone on the call. I'm really pleased to be here today with my team to tell you about our business plan for 2025 to 2030.

Our vision is to be the national leader in the provision of sustainable water and wastewater services. We are a purpose led organisation and our purpose, shown here, shapes all of our plans and activities.

As you can see, we provide water and wastewater services in the North East of England, as Northumbrian Water, and in the South East we provide water only services, and are known as Essex and Suffolk Water.

Our operating areas are very different.

Firstly the North East of England, where it is generally colder and wetter, with a higher risk of storms and flooding. This has the potential to cause spills from Storm Overflows, which we are working hard to reduce.

At Kielder, we have a lot of water stored in the largest manmade reservoir in the country, with its rich biodiversity, dark skies and impressive outdoor leisure activities.

Along our 100 miles of coastline we have some of the best and cleanest beaches and bathing waters in the UK.

In Essex and Suffolk we have the driest areas in the country, and increasingly we are facing water scarcity. The geography of Essex and Suffolk varies from densely populated London boroughs to green belt, estuaries, and rural farmland. Our main reservoirs in this area are Abberton and Hanningfield, which are both sites of special scientific interest because of their environmental importance.

WHAT IS IMPORTANT TO OUR CUSTOMERS AND STAKEHOLDERS

We make sure our customers are at the heart of every decision we take.

Getting the right balance between investing in our services, environmental improvements and the affordability of customer bills is not easy, and it's really important to us that the views of our customer inform those decisions. So, our plan has changed a lot over the last two years to reflect what our customers have asked us for.

In these discussions, people consistently tell us their top priority is good quality water. They also share their concerns about the environment, particularly water scarcity and drought in Essex and Suffolk, and the need for long-term improvements to river and bathing water quality in the North East.

Customers also tell us that they expect us to work with others in our regions to solve difficult problems – and we do this well. In creating our business plan, we have done this more than ever before, working closely with organisations, like the Rivers Trusts, to understand the best ways to tackle environmental challenges.

We see growing support for these environmental improvements, but customers don't always want to pay for these through their bills - especially when times are already tough. Some customers support the idea of phasing investments over a longer time so that they're more affordable.

With some of the poorest communities in the country on our doorstep, it's not surprising that our customers tell us it's really important to keep our services as affordable as possible, and build in plans to make sure financial support is available for those customers who need it.

We take that responsibility very seriously.

We use the money that we collect from customer's bills to run the company efficiently day to day, maintain and operate our equipment, pay our employees and supply chain partners, and meet the energy costs of running our business. This is known as operational expenditure (or Opex).

We also use customer's money to build new networks, reservoirs and treatment works, and invest in new equipment to improve our water and wastewater services. This investment is known as capital expenditure (or Capex).

Ofwat, our regulator, sets the amount of income we can charge to customers. This is done through a price review every five years. In our last price review in 2019, we were able to reduce customers' bills by 18%, the largest reduction of any water company.

In most years, we spend more on investments than the cash we can collect in bills, and we make this difference up through borrowing or by our shareholders investing more money. By borrowing money we can spread the costs of investments over today's and future customers, rather than being a big cost upfront to our current customers.

To make sure our company runs well, we need to strike a careful balance. So, for the 2025 price review, because of the huge investments that we need to make, we will need to borrow more money, our shareholders will have to put in more money and customers will have to pay more money in bills.

We think this is going to mean an increase of around 24 to 30% on customers' bills. I'll go into more detail on what this money will be spent on and what it will mean for you in the next few slides.

We know that an increase in bills will not be welcome for many customers, and we've worked hard to limit this increase to only what is necessary. We're focused on finding innovative and less expensive ways of tackling the issues that you care about.

OUR PLAN HEADLINES

Our Business Plan for 2025 to 2030 is our most ambitious ever, with unprecedented challenges – and an investment programme of £3 billion to match.

We want to make sure that the plan is affordable and that there is enough support for customers so that no household spends more than 5% of their income on water bills.

And we want to do all of this while continuing to provide reliable, high-quality water and wastewater services and an unrivalled customer experience.

In Essex and Suffolk, with the urgent water supply challenges, we need to invest £350 million in new water supplies and demand reduction activities.

In the North East we will invest £1.7 billion in a huge environmental programme to stop storm overflow spills and improve the environment, focussing on the most important locations first.

We need to invest now to make sure these critical assets can provide reliable services, meet the needs of our environment, and are sustainable and resilient to a changing climate.

RELIABLE SERVICES

In order for us to provide all customers with a reliable service we need to invest in our water supplies.

Firstly in Essex and Suffolk, we need to increase the amount of raw water that is available to us - this means either building a new reservoir or a water reuse plant in Suffolk, and also creating a new borehole in Essex.

Secondly, we're working to reduce the amount of water we use – and the amount of water we lose through leaks. We already have the lowest levels of leakage in Essex and Suffolk, a third lower than the industry average.

We use innovative ways to tackle leakage, such as surveying 8,000km of pipes by satellite, and we will continue to lead the water industry by driving innovations in this area, developing new technology and supporting the National Leakage Test Centre.

From 2025, we will invest more in replacing pipes to drive leakage down even further, by another 40% by 2050.

We will need to introduce compulsory metering in Essex and Suffolk, so that all homes will be fitted with a smart water meter by 2035.

Smart meters can tell you how much water you're using so that we can all get a better understanding of our water consumption, and we can spot leaks more quickly.

Alongside smart meter installations, we will increase our existing water efficiency activities – for example providing free water saving devices and fixing leaky toilets for free.

We will also be working with businesses and local partners, such as farmers and other water companies, on how we all use and share water.

In the North East, largely due to the water storage we have built at Kielder reservoir and higher levels of rainfall, we're not at risk of drought. However, we still have a responsibility to use water wisely and to play our part in protecting the environment.

We'll encourage people in the North East to take smart meters, if they would like them, to help to monitor their water use, and we'll provide the same water efficiency advice and free repairs to leaky loos.

We're also focusing on improving drinking water quality across both regions and we have agreed a five-year plan with the Drinking Water Inspectorate to do that. We've already invested £150 million in improvements between 2020 and 2025, including replacing and upgrading water treatment works, and we will do even more between 2025 and 2030.

CARING FOR THE ESSENTIAL NEEDS OF OUR ENVIRONMENT

In the North East, we have some of the lowest levels of pollution and some of the cleanest rivers and beaches in the country.

32 out of 34 of our coastal bathing waters are classified as Excellent or Good and two of our catchments, Northumbrian Rivers and Solway Tweed, have the highest proportion of water bodies by surface area meeting good ecological status in England and Wales.

But this isn't enough. We know that customers and stakeholders are increasingly concerned about spills from storm overflows into rivers and the sea, and we agree that both Northumbrian Water and the water industry needs to reduce spills from storm overflows.

We are very focused on addressing this issue. We're already investing more than £80 million towards reducing our use of storm overflows between 2020 and 2025. Some of this has been funded by our shareholders to improve our existing systems and monitoring so we can understand the extent of the problem for us.

Between 2025 and 2030, we will invest £1bn into tackling this issue. This is going to mean lots of work across the North East – for example with major projects at Berwick, Marske, and Redcar to take rainwater out of the sewer system and allow it to drain elsewhere. We're exploring and testing new technologies to help us better use the existing capacity of our sewers and we're using nature-based solutions wherever possible.

We've talked to customers about how quickly we should do this, and their priorities.

That isn't the only issue we are tackling, though. We have been working with partners to create plans to reduce phosphorus and nitrogen in our rivers, tackling this directly at our treatment works and also supporting better water quality through catchment partnerships.

We're also working with others to reduce their impact on the environment, including understanding and mitigating the impact of pollution from agriculture and microplastics on our rivers.

SUSTAINABILITY AND RESILIENCE

Getting water to your homes involves a highly complicated network of pipes, treatment works and machinery – for ease let's just call them 'assets' here.

The assets are required to deliver a service to our customers every hour, of every day, every day of the year, and so we need to make sure they are resilient and can recover well from disruption.

The cost to repair and to replace these aging assets is growing. We're very aware that customers pay significant sums to allow us to maintain them, so we will replace assets in the most efficient way possible, by innovating to take advantage of new technology and nature-based solutions, and by prioritising the most critical assets.

But we need to do more than ever before. Before 2030, we will repair and replace the poorest condition assets helping to reduce the risk of pollution incidents or supply interruptions from failing equipment.

Fixing these assets now will be cheaper in the long run than allowing them to fail before replacing them.

We have also looked ahead at the risks from climate change. We need to do some work now to protect assets from flooding and power failures in storms, and prevent further supply interruptions.

AFFORDABLE AND INCLUSIVE SERVICES

Our services should be affordable for all customers, whatever their circumstances.

Our goal is to make sure bills are affordable, and we have zero water poverty in our areas by 2030.

We continue to be committed to supporting customers who are struggling to pay their bills, and this is becoming more challenging as the number of people needing help has grown due to the cost-of-living crisis.

To support those in need, we will offer a social tariff for households that spend more than 5% of their income on their water bill, after housing costs.

Debt and financial advice are vital in supporting customers who are struggling with bills, and we actively promote and encourage customers to access these services, working in partnership with charities and housing associations to make sure we reach as many people as possible.

Correctly understanding customers' needs and diverse circumstances is critical to providing an unrivalled customer service and our 4.5 million customers sometimes need a bit of extra help in other ways too.

We actively promote our priority services to anyone who needs extra support, – this could be due to many factors such as age, mobility, communication needs, or life changes (such as pregnancy). Please do talk to us if you, or anyone you know needs our help and there's a link in the chat box so you can find it easily.

We are pleased that our customers value our services and approach and have rated us as the top water company at providing customer service in Ofwat's independent CMEX survey and as the most trusted water company in CCW's Water Matters report.

We'll continue to work hard to make sure that we are delivering their expectations for the best customer service.

BILLS AND SUMMARY

So what does this mean for you, our customers.

The additional investment we need to address all the challenges I've talked to you about today means that water bills will need to rise significantly by between 24% and 30%.

For Northumbrian customers we expect our combined bills to remain amongst the lowest in the country and well below the sector average – we expect the average bill to be £470 a year by 2030 plus inflation.

In Essex and Suffolk, we need to continue to invest to make sure we have enough water supplies in the future. We recognise bills in Essex and Suffolk are already among the highest because of investments we made in the past, like increasing capacity at Abberton Reservoir, but we now know that more is now needed. We expect that average bills for water services only will be around £303 a year plus inflation by 2030.

OVERVIEW

There is a lot to do, and we will invest wisely and efficiently. We'll continue to use innovation and technology to improve services and make sure you continue to receive good services in the future.

We are already ranked as one of the top companies in the sector at being efficient and we are known nationally and internationally for our innovative culture and results.

So I think we're well placed to continue to deliver the best services possible for you.

Thank you for your time today, I'll now hand back to Kevin.

4. INTRODUCTION (2)

Kevin thanked Heidi.

He reiterated the themes that questions would be taken in and outlined how the question taking would be facilitated.

Kevin introduced Heidi's team from Northumbrian Water:

- Andrew Beaver, Regulation and Assurance Director
- Colin Day, Head of Water Service Planning
- Richard Warneford, Wastewater Director
- Mark Wilkinson, Head of Customer Billing
- Peter Vicary-Smith, Non-Executive Director

5. QUESTIONS ASKED WITHIN THE SESSION

5.1. RELIABLE SERVICES

Question 1: Northumbrian currently average or below average or poor for leakage reduction in the North East, water supply interruptions and sewer flooding targets. They were mentioned in the presentation earlier but I wondered if you could give more information about how the company will improve its performance in the coming years.

Heidi Mottram: We're very transparent about our performance. We put everything both on our own websites and also on the Discover Water website because we know that this stuff is really important to customers. Maybe it probably is easier if I ask Colin to come in on leakage and explain a little bit about where we are on leakage and then Richard on the more waste related questions. But generally, when we look at our performance, we tend to come out as one of the higher performing companies. There's more for us to do, we are never complacent. We're pushing hard and to get further up the league tables as well. But generally, we stand in a pretty good position, but we know our customers expect the very best. So, we'll keep pushing.

To get in the detail, I'll pass to Colin in the first instance to talk about leakage and then to Richard on the wastewater slides.

Colin Day: So if I talk a little bit about leakage. In the North East and we are about the middle of the pack in terms of our leakage performance, and generally we don't have a water shortage up in the North East. There's

plenty of water. We built Kielder a number of years ago, which really helps with that. But we are looking to innovate around that space and try to build on our leakage position.

And actually, in Essex and Suffolk, where we do have some water scarcity across the region, we are industry leading. So, we're using that information and that knowledge that we have performed down in Essex and Suffolk to really push the frontier on our leakage performance. We set ourselves some really challenging targets over this five-year period to reduce our leakage by 17 1/2% in Essex and Suffolk, and we're continuing that journey to get leakage as low as possible across all of our region.

And we're setting ourselves a 50% reduction target by 2050, which will put us really at the forefront of leakage performance in Essex and Suffolk, which is really important to us, particularly in that part of the world where water is scarce, as I mentioned.

And if I just add a couple of things in that we're doing - we're always looking at innovating and particularly about how we go about repairing leaks. So, we're working with lots of different sectors to try and understand different ways that we might repair our leaks. We're implementing new technology and we're scaling that up over this year to repair leaks without having to dig them up, which will be really ground breaking in this space and will really help us move forwards.

We're also implementing satellites and deploying sensors across our network to really understand where leaks are happening, so we can get to them quicker and over the last year we've improved our performance really, really significantly. We're consistently now fixing leaks that have been reported to us within four days, which is an industry leading position and we know that we're going to need to continue to improve on that to get to the ambition that we set ourselves over the next five and 25 years.

Richard, anything to add on the environment?

Richard Warneford: Yeah, a couple of points I think. Firstly, from a quite strategic point, the drainage and wastewater management plan, DWMP will be the biggest thing in our plan from a wastewater perspective and that looks strategically at the whole system. It looks at things like pollution, flooding, and storm overflows, that people will have heard lots about. That plan looks at all of that right out to 2060 and there's a chunk of that activity that happens in the next five-year block from a point of view of flooding, specifically building on improvements we've made already in this five-year period.

So, we've seen internal flooding reduced by two thirds in the last three years and we've seen external flooding go down by about 35%. We're really far more comfortable now about where we're heading and the trajectory and it's going to be about doing more of that. That's being about the Capex, the capital investment, Heidi mentioned being about bringing in additional resources. It's been about campaigns like 'Bin the Wipe' which has been adopted nationally. Lots of that will continue and we expect to get better again in the in the following five-year period. It's a big part of the plan.

Question 2: Yes. So, I'm a customer from Essex & Suffolk water. My main question is in regard to why the water is so hard in Essex area. It has an adverse reaction to our/my family's skin. We've been here a year and you know it's really affecting our health. So, I just wanted to know what can be done about that, what improvements can be done?

Colin Day: Thank you for your question, <name>. I'm really sorry to hear that you're having trouble with the water quality in your area and perhaps afterwards it would be really useful for us to get a more specific location from you around where you are so we can look into it in a little bit more in depth with one of our water quality teams. I think CCW are picking up some of those details that they can pass on.

So, generally across our patch, we don't have a particular issue with hard water. So it's a little bit surprising that you are having that issue. And generally, our sources are relatively soft but there will be local areas where we are supplying from groundwater sources. So lower down in the system, there may be some hard waters in some very localised patches. We monitor very closely for all water quality parameters every single day in our network and look at that impact right at customers' taps.

We do take water quality very, very seriously and look to make sure that we have a really consistent level of service in that space. And like I say it, it's really difficult to answer that in a very localised area and I certainly would be happy to pick up with you. We don't have any specific plans in our next five years to look at hard water as an outcome, but there may be some things that we can do with blending in your local area if it is a particular problem.

Question 3: Why are broken lead pipes on customer's property only mended but not replaced?

Colin Day: Again it's tricky to reply to a very specific case. What I can do is talk about our lead replacement programme. We do have lead pipes. They were used extensively a long time ago. So, we have got a network on the customer supply side and on communication pipes into customers properties. We do have some lead pipes across the system and we are actively replacing those lead pipes and in fact we over this five years, we're investing more than £14 million and over the next five-year period, we'll be investing a further £37 million to really focus in on replacing those lead pipes.

We also take action when we identify lead becoming an issue. When we treat the water and it goes out into the system, there's no lead in the water that we pumps out into the system. The water does pick up some lead if there are local lead pipes. What we do is we dose phosphate to help retain the lead in the pipework so that it doesn't leach into the water and then we test the water at any customers' properties. If we find levels that are above 4 parts per billion, so really, really low levels, we will look to replace those lead pipes.

So, we are actively out in the network looking for and making those replacements. And as I said, investing significant amounts of money to replace those lead pipes. When we do identify them and when we do identify that they are causing any issues, we do replace them.

Again, it would be good to pick up this with you afterwards to know your exact location so that if there are very specific issues that we can pick up and resolve.

Question 4: You said it looks like you're making smart meters compulsory in Essex and Suffolk. If that means that the water down there obviously is being smart metered to make it more efficient, is it going to be rolled out across into the Northumbrian Water region where I live? Would that not make sense to make it compulsory nationally rather than just regionally?

Heidi Mottram: Thanks very much <name>. I think the best way to probably answer this one is to call in Colin to help us understand the process behind why we make decisions about smart monitoring and then we've got Mark, who I think is one of the industry's leading experts on how these can benefit people and what they might get from it if we do introduce, because there will be some smart metering in the North East.

Colin Day: So, thanks, <name>. Yeah, you're absolutely right, in Essex and Suffolk, we will be looking to roll out, significantly across the patch, smart metres so that everywhere is smart metered by the end of 2035. That's a significant investment in terms of understanding where water's going, understanding how it's being used and will really give us good insight into where leaks might be.

The reason we can do that in Essex and Suffolk is because it's a water stressed area - it's formally classified in that way by the Environment Agency. So, that enables us to roll out those smart metres in a big way. What we're trying to do as well is learn that lesson up in the North East. So, we do have a big programme to start rolling out smart metres in the North East and we will be offering that service up to our customers up there over the next 10 years as well. But it will be optional. We won't be out rolling them out in the same scale we are in Essex and Suffolk, and partly the reason for that is because we don't have the same levels of water stress.

We developed Kielder Reservoir a long time ago. That's a really, really good source of water for us and provides really good resilience. So, there's not the same stress and the urgency in terms of rolling those out.

Mark Wilkinson: So, as Colin said, we've got quite a big plan still to roll smart meters in the North, it's actually very similar in absolute numbers as the Essex and Suffolk region for the period. Obviously, there's a few more

properties in the north and it will take us a little bit longer to get round the whole patch. We're trying to do that in an area-based approach. We'll come into an area and we'll talk to customers in that area to try and get full coverage so we can get some of the efficiency benefits out of that.

As well as that, we're going to be talking to customers who we think will save money to make the most of that opportunity. So, if we've got customers, we think would save by having a meter now then we will give them the opportunity to get a smart meter to help them over the next five years. So, it's a bit of a mixture of the two things really - to make a step change and to provide savings opportunities.

5.2. IMPROVING THE ENVIRONMENT

Question 5: I'm the regional chairman of the Angling Trust, I am a fisherman and I represent the angling trust in Water Resources East (WRE) and many other things across the region. I am interested in, not just Essex and Norfolk, Suffolk, but I spent a lot of time working with WRE on the Fenland Reservoir, supplying the deficits across East Anglia. My biggest concern is we've got some deficits and some environmental damage going on today and I'm really concerned about what I'm seeing in the WRMP about where we're going to be in the future because even WRE can't actually give us the full deficits that we're probably going to get to by 2050 because the data isn't available yet to plan it. With so many unknowns, I'm really concerned - you know this next five-year cycle is bad enough, where we are today - but I'm just really concerned the state of our rivers are going to be in five to ten years' time. Because there's a lot of assumptions that you know - efficiency savings and demand is going to be reduced. If the public don't buy into that, then it's more environmental damage on our rivers and groundwater. So, we've got a problem today and Essex is a classic one, really is a classic one. You know where they're going to get the water from to build, we will see you know that's in your hands.

Colin Day: Thanks <name>. If I try and explain a little bit more about what our position is. So, I've mentioned a few times that Essex and Suffolk are water stressed areas. There is a real challenge, not just for our company but for other water companies that are operating down there. So Anglian Water, Cambridge Water and Affinity Water have all got challenges in reducing abstraction over the next period as part of the water resource management plan, which is the WRMP that was mentioned.

We look out over 50 years with various different scenarios planned in there to look at climate change and how different weather patterns might affect us. Within that we also work very closely with the Environment Agency and local organisations to really understand how much impact our abstraction is having on the environment. Some of those things are quite uncertain as we speak at the minute.

We've planned in some big environmental reductions in our plan already, which will require us to develop some new sources of water and we're trying to do that in the most environmental way that we possibly can. So, we're looking at developing a north-south, Suffolk Storage Reservoir, which will help us store winter rainfall and be able to supply that back into the area. We think that that's the most environmentally friendly way that we can provide water so that's the top of the list of our plan.

You also mentioned that actually that there's a whole raft of uncertainty. So, we look to try and balance the reductions in demand. We work very closely with new development developers in the region, so non household customers as well as our household customers, to look at how we can reduce demand. We've also talked about smart meter roll out, which will help us understand where water is being used, but we also look at where we might develop supplies.

And within our water resource management plan, looking over the next 25-50 years, we are also looking at adaptive pathways. So that means that we've got different routes through - so things might change between now and then and we will be building up different options for how we might supply the water over that longer period. We're trying to make sure that the investments that we make now are no regrets and will absolutely support the environment as we go forward and we are also working with the Environment Agency on what those reductions might need to be.

As we go forwards and <name> you also mentioned WRE, which is the Water Resource East group - a combination of a whole raft of organisations that come together to really look at water resources across the

region. We're trying to work as not just as a water company on our own, but as a whole group of water users and water suppliers across a region so that we're making best use and best decisions for the environment in the long term.

Question 6: Hello I'm <name>, I'm a customer. I'm also interested in river bathing waters and I just wondered ... I understand there's only 1 in the North East at Ilkley, and I wondered how many would you get? What criteria you need to get a site on the list?

Heidi Mottram: The very many beaches that we have in the North East are already well understood and well used and if it is OK, this is definitely Richard's area of expertise, so I'll ask him to come in. There's lots going on and he can perhaps say a bit about the wider context if that's helpful to <name>.

Richard Warneford: So, from a bathing water point of view to give context first, bathing water is at the beaches which are the only ones that we do have in our area, I'll come on to Ilkley in a second. We have 32 out of 34 bathing waters at excellent and good status. So, they are really good status. We've invested hundreds of millions of pounds to get them there.

Moving specifically to the point about river bathing waters, we don't actually have any in the Northumbrian area currently. There is the one just South of us in Yorkshire Water's area, at Ilkley.

The process isn't for us to designate river bathing waters. There is a process where people apply and Defra would assess that. There were some applications recently - there was one at Wylam, for example, and they didn't go through to the next stage at the Defra process. So, that's how things work. There is a process beyond us. We don't regulate. We don't actually create those river bathing waters.

We have actually said that in our area we are supportive of trying to create a couple. We're looking at opportunities to work with people where there is an opportunity in our area. But ultimately that's decided through Defra and through a process that they have enabled to assess that based on immediate value for users on lots of different things to do with that water course.

We don't currently have any river bathing waters in our region but out of all of the ones that we have on the coast, 32 out of 34 are at good or excellent status, and the two that aren't, for clarity, aren't to do with our assets.

More information can be found here: [Bathing waters: apply for designation or de-designation - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/bathing-waters-application-process)

Question 7a: Hi there. So, I am a customer who lives in the Deerness Valley (County Durham) which is in the Northumbrian Water area and we've had sightings of otters and trout within the river. So I think although it's very small, these sightings have dropped off. It's getting disappointing and we wonder what is happening in the environment that is causing that. What is Northumbrian Water doing to monitor sewage or farm run-off into rivers? I'm not sure what you're responsible for.

Richard Warneford: Okay, thanks for the question, <name>. So, you're correct in what you said at the end there, that the farm run off actually isn't something we monitor. But it is a big contributory factor. In fact, it's the biggest contributory factor to rivers not achieving good status.

So overall, in the North East, we've got 30% of rivers at the good state. This compared with 14% in the rest of the country. But that's not good enough and we want to see things improve.

We've got some huge plans to do a number of things, including the monitoring that you mentioned in your question. In the next five-year period, we're going to be investing something like a billion pounds. So phenomenal amounts of money to move the highest priority discharges from storm overflows to a much lower level of spills. So those high priority, which are all set out by government in something called the Storm Overflow Discharge Reduction Plan.

This sets out the targets and looks at various things like the status of the river and whether it's a sensitive water. The number of spills and other criteria as well, like for example, if it was a shellfish water. So, all of those things will drive a massive amount of investment, which we will be doing, things like removing surface water from networks to reduce the number of spills - that might be nature-based solutions to actually reduce the number of spills.

In addition to that, moving on to your question about monitoring, we're doing a number of things now already. We made some pledges ahead of the government requirements to do a number of things on monitoring. We're putting monitoring in place now to measure the number of hours of highest priority spills, that's ongoing work in this current five-year period. We're also doing some work to make sure that, by the end of this year, we're publishing whenever there is a spill to let people know when there are spills are occurring.

That will be live on a website by the end of this year and then moving into the next five-year period, from 2025 to 2030, we will be moving towards putting monitoring in place upstream and downstream of all of our discharge points. So that's a huge amount of monitoring, a huge amount of data that will be out there in public domain, very transparent.

So, a real change for the sector and for the transparency of everything that's going on through a lot of monitoring, as well as a lot of physical work to reduce the spills.

Follow up question 7b: I'd be interested to know about your promotion of that with the general public and whether you would be involving volunteer groups in doing that monitoring or keeping you informed about the state of the rivers in sort of feedback to you. I think it can become an unknown thing, you know, we can be concerned about something and not know what's going on to try and improve that and also not always be aware when things are deteriorating. So what's your involvement with the public to do that?

Richard Warneford: It's a brilliant question, <name>, and I think the plan is going to be more and more focused around citizens and that it is something we're running in the Innovation Festival this year - the theme of the festival is citizens. We see this as really important.

We have a scheme already, called Water Rangers, where we have a number of people, volunteers, if you like, from the public who whilst walking their dogs or walking in the area that they live in, they actually help monitor the river. They point out anything they may see with our assets. So, we're already doing that and we're expanding that. We've committed through another pledge to actually expand that so there's a lot of things to do and we're really keen.

I would be very keen to talk to you separately, maybe about the Deerness Valley itself, we could have a conversation about that and about what we do there, what assets we have and what the plans are there. So happy to take that one offline in a bit more specific detail as well.

Question 8: <Name>, British Canoeing. Millions of people enjoy paddling on our waters to stay active for their health, mental wellbeing and to connect and protect nature, removing plastic pollution and invasive non-native species. How are you prioritising reductions of sewage discharges at popular recreational locations? Those near canoe clubs and centres, for example, in inland waters beyond designated bathing waters, which are predominantly coastal, which can impact on public health.

Richard Warneford: I'll not repeat anything I've said answering the last question as there is an overlap there, but the prioritisation criteria is quite strictly set out in the Storm Overflow Discharge Reduction Plan targets. So that's something that is set out by regulators and by government ultimately and that actually picks up some of the things that I said before. Just to list a few again - shellfish waters, sensitive inland waters, rivers not at good status, bathing waters, which I appreciate are on the coast, and where there's a higher level of spills.

These are the things are what we have to focus upon in actually prioritising. So, there isn't, for example, a specific category that says where there's a canoe club or an amenity value or use. That doesn't mean we don't

look at them, of course we would. We want to work with customers and see whatever we can do at any specific areas and have those conversations. But the prioritisation criteria is actually set out. You know, legislation and that's that doesn't include, for example, a canoeing club. I'm just trying to draw out there the difference between what we have to do and what we may wish to do, and how we want to work with our customers and communities because that's our business purpose versus where the prioritisation criteria might drive us.

Heidi Mottram: Kevin do you mind? Just it's slightly off beat. But I just think <name> might be quite interested. One of the things that we're doing that came through our Innovation Festival was a citizen scientist project around putting monitors onto canoes. And we're working with some students from the Royal Academy to do that because we know that people would be really interested in that. It just sounded like something that <name> could be interested in. So, if you are just let us know again through the CCW contacts and we can get in touch with you and let you know what we're doing and you might want to get involved.

Question 9: <Name>, Development manager at the River Waveney Trust. Given the issues with excess levels of nitrates entering the system and causing issues to the point of looking at nitrate stripping, can you tell us what Essex & Suffolk Water proposes to do in terms of working with landowners to reduce levels of nitrate?

Colin Day: Thanks, and that actually it relates to some of the questions that have just been asked as well. So, we're absolutely passionate in our organisation about working with local rivers trusts and in partnership to really improve the whole environment. And, actually we do offer a catchment protection scheme where we work with farmers and local landowners to really look at what improvements we can make across the whole of the catchment.

That presents benefits in lots of ways. It presents us benefits in the water quality that's in the rivers. That means we have to treat it less when it comes to our treatment works before we send it out to our customers, but it also improves the wider environment for the benefit of everyone. We offer a field to tap scheme which offers farmers some grants and some help and understanding on improving how they can discharge, how they can spread fertiliser on land and what types of fertilisers and things that they should be using.

That helps us to improve the overall environment, the times of year that might be really, really good to spread, but it also does local schemes where we might be able to provide framework to harvesting or local improvements to their farm area that would improve that run off into the catchment. So, we are working extensively with local landowners and farmers in the region but, like I say, we're also really keen to promote some of the partnership working that we do.

We're always keen to look at more of those to really help improve the overall catchments that we serve and that we use. And I think the specific question was around nitrate. So, nitrates is a challenge for all of the industry. It's a long-term problem in terms of most of the nitrate is already in the soil and we can work with farmers to improve over time. But also we're looking at it as part of our Water Resource Management Plan. We are looking to put some improved treatment into some of our treatment works so that we can take out that nitrate, but it is coupled with a long-term agenda to try and reduce that problem in the future, which will have some environmental benefits as well.

Heidi Mottram: It's probably also worth mentioning that in Suffolk, of course, in the same way that we do this in the North East will be working in partnership with Anglian Water and because they're responsible for those river water quality elements in the same way that we're responsible for them in the North East. But of course, there's a water provider. The reason we're very interested in this is because that would be the water sources that we're abstracting to clean water from. So I know that's complicated – that was pointed out right at the beginning, but they're a big player in this and we work with them too.

5.3. SUSTAINABILITY AND RESILIENCE

Question 10: Sustainability First. As climate change is resulting in extreme weather or increased extreme weather events, including drought, heat waves and increased water supply interruptions, how

will you proactively help your domestic customers and small high water dependent businesses to prepare to be more resilient to these changes so they're negative impacts are lessened or prevented?

Andrew Beaver: So, really, really good question. What we've done for the business plan is we have some very good long term planning processes that help us to think about what the future might look like. And Colin was talking earlier about the water resource management planning process and Richard talked about the drainage side. Those planning processes help us a lot to think about how the long-term effects of climate change might impact on us. So long term impacts on water availability or rainfall. But they're not so good at.

The dealing with the real extremes of weather, that I think the question was referring to, so investments are coming out of those long-term processes already. In addition to that, what we've done with the planning process this time is we've supplemented that with additional work that tries to look at what types of extreme weather event we are more susceptible to in our areas, and the sorts of extreme weather events those might be and how those might impact on our regions. And then the systems that we work within.

So, for example, as Heidi mentioned storms – there was a very big wind storm that disrupted power lines and communication and it had an impact on our ability to provide services to our customers. So, we've taken that work, we've looked at those locations where we have the biggest risk, we've engaged with power companies and other people that are involved in those systems, and the plan involves targeted investment to try and improve the resilience levels in those locations to make sure that if we have more of those types of storms in the future, we would be able to maintain supplies to customers.

I don't know if Richard or Colin maybe want to say something about things we're doing on the demand side to help small businesses and other customers in those locations.

Colin Day: So, as part of our plan we are always really keen to work with our customers in reducing demand and our household customers, as many of you are, and in fact most of our employees are household customers of ours as well. So, we work very closely internally around what we can do to reduce demand, but we're also setting ourselves a tight target in terms of reducing business demand - working with local businesses to understand how they can be more efficient.

How we can work with the local planning authorities, and we work very closely with the local councils to really understand where we've got pressures, how we can put in additional support, and additional help for those businesses to understand their multi-use and how they can improve on that. We've set ourselves an 8% target to reduce that over the next period and we'll be looking to going to work with those local businesses to help them do that.

Question 11: Regional chairman of the Angling Trust. With my Broads hat on - clearly there's an impact in the Broads with climate change and we're actually hosting an event in the UEA this November. The talk is about the whole impact on the Broads of climate change and stuff, but I'd be particularly interested to hear the views of Essex & Suffolk Water on the challenge that climate change is bringing to your Trinity Broads, which is effectively a reservoir for the catchment of Great Yarmouth and Lowestoft.

I believe, and I know that through the period of hot weather last year, you guys weren't extracting 24 megalitres a day out of there because of the algae blooms. Which meant you were extracting from the Broads rivers themselves? And you know that is not good for the environment, in a drought condition, to take 24 megalitres a day out of the heart of the Broads Rivers. So I just wonder what plans you've got in this planning investment cycle to try and deal with mitigating algae blooms in your reservoirs?

Colin Day: You're so you're right. <Name>, absolutely we have some challenges in terms of production from the Broad in terms of quality over this last summer for both algae and some of the parameters that we were monitoring. We are looking at treatment options for how we can continue to abstract it. I've talked about it earlier a little bit in terms of we're under pressure in terms of the environment in that region as a whole, and so we're looking to try and balance our abstractions and development of new sources effectively over this next five-year period. There will be a significant development of sources in that region that will need to happen and

provide additional water to balance off some of those challenges that we've got what we are doing is the things I've mentioned earlier.

The North Suffolk Reservoir, a winter storage reservoir that will look to try and really take advantage of when we have high flows in rivers. We'll also look to try and develop some environmental benefit as part of that scheme so really looking at the best environment options. We are also looking at water reuse schemes, we're working with Anglian Water to look at how we can use effluent reuse type schemes to make sure that we're minimising abstraction from the environment to make sure that we're leaving as much in the environment as we possibly can.

Now it's absolutely a joint challenge for everyone in the region and we're working really closely with all the partners to reduce water use, and know you've challenged this and we know that it's going to be some challenging targets in terms of how we can reduce demand. But working really closely with the local planning authorities to make sure that water efficient methods for new development are used, and partnering up with those organisations to make sure that we can keep that impact on the environment as low as we possibly can.

5.4. AFFORDABLE AND INCLUSIVE SERVICES (AND ANYTHING ELSE THAT DOESN'T FIT INTO ONE OF THOSE BOXES)

Question 12: Northumbrian Water customer. Considering Northumbrian water have paid out over two billion pounds in dividends since it was purchased by CK Infrastructure Holdings, why is the onus for infrastructure improvements being put onto customers? Why are dividends not being stopped to pay for these improvements - they've been making huge profits from customers for years and there needs to be a degree of balance. You can't keep asking customers to pay more while you still pay out huge dividends.

Peter Vicary-Smith: First of all, dividends are important because in the same way as if a bank lends you money it expects a return, then the level of investment that we've had from our shareholders, but also are expecting in the future, they're going to want to have some form of return on that in order to invest the huge amounts that we've been talking in the plan.

When the level of dividends is decided by the Board, and the Board has a majority of independent directors like me on it, the things we look at are firstly what investment does, what investment is going to be required, and what's a reasonable return on that. What the company is doing in terms of hitting its other targets - in other words, do we need to be spending more to achieve other targets rather than simply give a return to the shareholder. And thirdly what's financially affordable - is the company financially robust enough in terms of its other borrowing and so on to be able to afford to pay a return to its shareholders and all of that.

When looked at in the round, over the last three years Northumbrian Water's paid out, I think, 4.3% as an average dividend over the last three years. That's not a wildly excessive in comparison to what other companies would expect for the level of investment being made here.

Andrew Beaver: To add one point - I just I just wanted to say that in the current-view of this plan we would see our shareholders, having to put in about 800 million pounds of new capital investment. Direct new equity capital investment to support the plan that's in front of us. That will be way more than they take out, more than they're able to take out in the distributions over the same period so I just wanted to make the point that it is absolutely being shared as it should be.

Question 13: Sustainability First. How much financial support, in total, in pounds, do you propose to make available to customers struggling to afford their water bills between 2025 and 2030? How much or what percentage of financial support will be funded from shareholder profits?

Mark Wilkinson: If I have a little back look over the 2020 to 25 period, we're putting in about 40 million pounds of support over this current period. About 10 million comes from the company and about 30 million of that is

actually in social tariffs. And that's helping around 110,000 customers at the moment. It's going up every day and we expect that to be something in the region of 150,000 people by 2025, so we are helping more customers all the time. It's been a difficult two or three years, so we understand that help is really needed. At the moment in terms of what that looks like – it is about 25% company and 75% from social tariffs.

In the in the current plan, and this is still developing, but the current plan for 2025 to 2030 we are thinking on average that should move up to about 35 million pounds a year so a real uplift on where we are now. We think we need to support something like 400,000 households by 2030, so again that's an increasing profile across that period as bills go up.

This depends a little bit on customer attitudes to social tariffs. There's a lot of work being done in the industry on social tariffs, and we're working closely with the other companies and CCW to try and get a bit more of an aligned approach because one of the things that's happened over the last few years is the plans, and the way companies help different customers has become a little bit disperse and that's quite tricky for customers when we have the same household potentially as a water customers for Essex & Suffolk Water in the South who's also an Anglian Water customer for wastewater services. So, we're trying to align those a lot more. We're working really closely with both Anglian Water and Thames Water to make those things aligned as possible.

What I would also highlight is it isn't just about discounted bills. Support is around a whole host of things. It might be around debt advice. We fund debt advice with one of the few companies that fund debt advice – StepChange the national debt line. It's important that those things are funded. Our customers will fall into debt from time to time. And actually that debt advice needs to be independent and needs to be available. It needs to look at all bills, not just water bills.

I guess that moves me on to the fact that water is one part of a customer's overall household budgets. When we look at budgets and support and how we help customers, we need to go beyond water. So, we need to act as a bit of a conduit to make sure people can access energy support, they can access Council tax support, those sorts of things. We're working really hard to make sure we do that sort of single assessment and signpost people where we need to.

We've done a lot of work with National Energy Action. We sponsored a new role at National Energy Action, who are an independent organisation who've actually been looking at energy saving for many years. We recognised the similarities between energy and water and how there's a big overlap in some of those things. An awful lot of energy is used heating water so saving water can actually save energy if we get that right. And so we worked on that organisation to really promote the links between the two and come up with a sort of some cool messages that we're getting out to customers.

Beyond those sort of more traditional financial supports, there are little, short-term things we can do. Sometimes people are experiencing short term problems. So, we offer things like payment breaks, flexible payment plans, short term arrangements to help people get over difficult periods, all of those things fall into the pot and we'll talk to customers on a regular basis about what works for them.

We talked about smart metering earlier as well. One of the real big plans around smart metering is how we can use smart metering to help customers save water, but also save money if they save water and what they use, they obviously get a benefit from that as well. So really trying to tie all of these things together in the plan is how we intend to support customers.

If I pick onto the sort of non-financial vulnerability, you can imagine a lot of customers we speak to have other reasons why they might need help from us. It might be how they access our services; it could be a different language; it could be that if we've got work going on in an area that will disrupt their lives and it made it very difficult for them to get on with their daily business. So, making sure we focus on priority services and our register of customers on priority services has been a real area of focus for us.

We've moved those numbers from what was around half a percent of our customers registered for some additional need at the beginning of this five years. We're now up to almost 9%. So, we've got a lot of additional information from customers around how we can help them and what they need from us and our plans for between 2025 to 2030. We need to keep focusing on that and tailor the service a lot more.

Additional information relating to extra support:

- Northumbrian Water Customers

<https://www.nwl.co.uk/services/extra-support/financial-support/>

<https://www.nwl.co.uk/services/extra-support/priority-services/>

- Essex & Suffolk Water Customers

[Financial support \(eswater.co.uk\)](https://www.eswater.co.uk/financial-support/)

[Priority Services \(eswater.co.uk\)](https://www.eswater.co.uk/priority-services/)

Question 14: Northumbrian Water customer. What are Northumbrian more to doing to completely change the attitude within the water sector concerning the illegality of water pollution, especially from raw sewage discharges based on an acceptable return rate provided to shareholders, which has led to massive underinvestment.

Heidi Mottram: So, thanks for the for the question, <name>, and I think the start point would be that we would want to say that we take our responsibilities about the environment really seriously. I mean we're a company at the end of the day that the operates completely in and surrounded by that in order to provide the services that we provide. We're just as passionate as everybody on this on this call and we've talked throughout this session about all the different things that we're trying to do to make sure that we protect it.

We're good custodians. We're looking for example at new nature-based solutions, etcetera. So maybe not go over that old ground because I think the questions more about how and what we're doing to change things. So, I would say there's definitely been obviously a shift in public opinion and in particular around storm overflows which were built originally, I think we all understand this, as release valves in the system and people thought that that was an OK thing to do. But clearly now this is not where we are and we need to crack on and do something about this.

So, we've talked about the investment that we will make in that area, 80 million already in this five years and a huge amount in the next five years to really get on top of that and move because that's what customers want us to do. And that's why Andrew also mentioned, you know, big sums of money coming in from our investors, around about £800 million, to support that as well. So, you know we recognise that we want to do something about it.

We're proud of the fact that our beaches and our river water quality is pretty much the best in the country, but we want to make it even better. So, we're on with it. I really hope you don't underestimate our commitment to this because we care just as much as our customers do.

Question - Kevin Johnson 15: Two quick follow up questions from me. In sort of picking up sentiment of other questions that we've had that Peter and Andrew touched on. Just give us again in broad terms over that next five-year period, the investment that is planning to come from customers and the amount of investment, which is coming from shareholders, from investors. It's just that those numbers again, Andrew.

Andrew Beaver: The current estimate of capital investment is going to be above £3 billion. That's effectively a doubling from what we're doing in the current AMP.

The environment programme is currently approaching two-thirds of that, with about with about a billion pounds in the Drainage and Wastewater Management Plan, which includes the storm overflow investment.

As I said, in order to maintain our financial resilience, 800 million of that I expect to be financed from new equity investment, with the remainder coming from debt investment that will feed through to an increase in customer bills which in the North East is looking around 30%. There are some choices around that. So, on the slides that we showed earlier, there are things we must do in order to meet the new legal requirements that we have on storm overflows and other things, and there are some choices we have about other things that we could do.

So, you know there is that balance between affordability and investment. I hope that answers the question.

Question - Kevin Johnson 16: Okay. Thank you, Andrew. Heidi, I'm going to throw you a very nice question from me. And this is maybe an unfair question. But I think you may wish to have the opportunity to pick up on it because this session is a sort of mini version of Question Time and I can exclusively reveal that I'm not quite paid quite as much as Fiona Bruce. But as you will have probably seen, all your media monitoring would have picked up from last night, Question Time had panel that included Nick Ferrari, who is an extremely good LBC breakfast presenter.

But he was there in his sort of a commentator capacity last night and he said, and I'm summarising really. But he basically said that Chief Execs of water companies should be thrown into jail. I think he used a phrase pretty similar to that. It may have been a little harsher. Water company Chief Execs should be thrown in jail if they're not delivering in terms of storm overflows and particularly sewage outfalls into the sea, etcetera. I just wonder what your immediate response is to that suggestion.

But also, I think from the sentiment that was probably in that audience on the night where he's a man who knows how to get a round of applause. So, he got a round of applause. But I just wonder what you might think not just of the suggestion, but of the sort of sentiment that is there?

Heidi Mottram: Okay. Well, I didn't hear the programme I was probably tucked up in bed by then.

I think, listen, we understand. We understand this. I hope that customers from the call this afternoon have got how much we have put in – the energy and the effort we've put in to making sure that our environment is protected. Our beaches are cleaner, rivers are clean and we, and you know, the standards that we're performing too are amongst the highest.

I mean one of the ratings, for example, that the Environment Agency gives to companies goes from one star to a four-star, a four-star being excellent. Northumbrian Water has four stars! So, I hope that gives you some indication of where we are and what we're trying to do here. And you know we're pushing on and doing even more going forward.

I guess the sentiment about throwing people in jail, my view about that would be we would always be compliant with the law whatever the law was. So, I don't think I'll be in jail anytime soon because I'm not going to break the law and I never would.

But you know, that's probably just the minimum level. You know we should be doing more. We should be pushing further - our customers want this, we want this, we work in partnership and it was lovely to hear the stuff about Deerness earlier. We work in partnership with some fantastic organisations who care about this as much as ours, and together we do really good stuff. So, I know that sentiment exists but it's not what we're about in Northumbrian Water we care about this.

I absolutely care! You know we will not break any laws and that's the minimum, the very minimum. We're going to be much better than this and we already are.

6. CLOSE OF SESSION

Kevin Johnston closed the session covering the following:

- A reminder that all questions submitted during the YW,YS session or in advance, would be shared with Northumbrian Water, and response provided. CCW will facilitate that process.
- Additional questions could be submitted within 24 working hours of the YW,YS session via CCW. He determined that deadline as 3pm on Monday 15 May.
- Northumbrian Water will publish the presentation on their website soon.
- A written record of the meeting will be available on Northumbrian Water’s website within 21 working days.
- For Essex & Suffolk Water customers – Anglian Water’s YW,YS session has already taken place but CCW can assist customer in putting questions to them in they provide your wastewater service.
- For Essex & Suffolk Water customers – Thames Water’s YW,YS session will be held on Friday 19 May.
- Another YW,YS session for Northumbrian Water will take place in the autumn following its PR24 submission. That session will look at what was discussed by customers and stakeholder representatives in this session and how that shaped the final business plan which was given to Ofwat.
- Thanking colleagues across CCW, Ofwat and, of course, Northumbrian Water Limited for staging this your water, your say session.

7. QUESTIONS POSED WITHIN CHAT BUT NOT ANSWERED IN THE SESSION

7.1. RELIABLE SERVICE

Question 17: What considerations are there for water security?

Answer: Security of supply is already excellent in both our Northumbrian Water (NW) and Essex & Suffolk Water (ESW) regions. For example, we have never needed to impose a Temporary Use Ban (TUB) in the NW region and have not done so since 1998 in the ESW region. Nevertheless, we plan to invest to provide even better security of supply in the future.

	Northumbrian Water	Essex & Suffolk water
Level 1: Appeal for restraint	1 in 20 years	1 in 5 years
Level 2: Phase 1 Temporary Use Ban	1 in 150 years	1 in 10 years
Level 3: Phase 2 Drought Order Ban	1 in 200 years	1 in 50 years
Level 4: Reduced supply at customer tap	1 in 500 years	2025 to 2039: 1 in 200 years 2040 onwards: 1 in 500 years

Security of supply is the principle objective in both our NW and ESW Water Resources Management Plans (WRMPs). In order to have security of supply, the amount of water we are able to abstract, treat and distribute to customer taps must always be more than customer demand and leakage from our network. Where this is not the case, then customer demand and leakage must be reduced and water supplies increased. In order to maintain security of supply during a drought, we may necessarily need to place some restrictions on customers’ use of water as if we didn’t, then we would need to develop even more expensive supply schemes. Our WRMP24s set out our planned levels of service for these restrictions which are as follows:

Importantly, government expects that we will move from providing a 1 in 200-year to 1 in 500-year level of service for Level 4 drought restrictions (reduced supply / pressure) at the customer tap. This means that we must ensure that a Level 4 restriction is not implemented more than once every 500 years on average. We propose offering this level of service from 2025 in our NW region and from 2040 in our ESW region. The

levels of service in our NW and ESW operating regions are different. This is because ESW Levels of Service reflect that the region is a serious water stressed area and in the short to medium term has a small supply surplus due to abstraction licence sustainability reductions, new non-household demand and climate change.

Our NW and ESW WRMP24s take a twin track approach to increasing security of supply and meeting 1 in 500-year supply resilience. They sets out our demand management strategies which will help reduce demand and supply schemes which will increase supplies:

- **Demand Management:** This includes the use of smart meters for both household and non-household properties and water efficiency campaigns. We are also committed to reducing leakage in order to achieve an overall leakage reduction of 50% by 2050. We will reduce ESW leakage by 40% by 2050 and NW leakage by 55% by 2050 giving a group company reduction of 50% by 2050.
- **Supply schemes (ESW Only):** These include a new Linford WTWs and new nitrate removal schemes in Essex and in Suffolk, new strategic treated water pipelines and service reservoirs, a Water Reuse scheme new Lowestoft, a nitrate removal scheme and potentially a new winter storage reservoir (North Suffolk). Depending on the outcomes of further EA investigations regarding the sustainability of our Norfolk Broads abstractions, our abstraction licences may be further reduced which could drive a further Water Reuse plant near Great Yarmouth.

Once demand savings and supply gains are realised from our Best Value Plan in AMP8 and beyond, then we will look to improve our ESW levels of service with a Temporary Use Ban returning to 1 in 20 years on average.

In summary, we are already offering secure supplies of water but plan to invest to provide even better security of supply (1 in 500 level of service for Level 4 restrictions) and can do this from 2025 in the NW region and 2040 in the ESW region (or as soon as our new supply schemes are in supply).

7.2. IMPROVING THE ENVIRONMENT

Question 18: Why are discharges into the sea not measured?

Answer: The start and stop time and duration of all intermittent discharges from storm overflows that affect bathing waters (and those discharges to the wider environment) are recorded and reported to the Environment Agency as part of our annual return. Those affecting bathing waters are reported on our website in near real time via our [Beach Aware system](#) and are also shared with Surfers Against Sewage in near real time. By the end of 2023 the start and stop time of all Storm Overflow discharges will be made public in near real time (within 1 hour of the discharge).

For continuous discharges from our wastewater treatment works affecting bathing waters, we record the volume of flow through our discharge meters at each location. We have 16 treatment works on total which discharge into coastal waters. Only three of these treatment works are unmeasured as they do not meet the regulatory threshold for measurement due to their small size. This information is reported to the Environment Agency as part of our annual return.