

To provide great water for a stronger, greener and healthier Cumbria

Summary of the event



United Utilities is developing its business plan for 2025-30 and we want our customers and stakeholders to have their say on how we shape those plans.

We recently held a 'Your water, your say' online open challenge session on 23 June 2023 and invited household customers, businesses as well as those representing regional and national interest groups to attend.

The session is part of the Price Review process known as PR24. It is designed to enable people in Cumbria to hear about our proposed draft plan, including the challenges we are facing as a sector and the different ways we're working with communities and stakeholders, to deliver more for customers and the environment.

It was an opportunity to put questions directly to the company's Chief Executive and other senior directors, and highlight the issues they want us to focus on in the future.

The event was hosted by independent facilitator Bernice Law, Chair of Your Voice panel, the independent challenge group representing United Utilities' customers and stakeholders across the North West.

Members from our Executive Team included:

- Louise Beardmore, Chief Executive
- James Bullock, Strategy, Policy and Regulation Director
- Jo Harrison, Environment, Planning & Innovation Director
- Mike Gauterin, Customer Service Director
- Sion Platts-Kilburn, United Utilities Wastewater Catchment Manager for Cumbria

This is a summary of the discussion which centred on the three themes of our plan, which is to make the North West **stronger, greener, and healthier**.

When we submit our draft 2025-2030 plan to Ofwat in October 2023, it will have to set out how it is addressing the issues raised. Following a welcome and introduction by the independent chair, Chief Executive Louise Beardmore gave a 15- minute presentation on the company's proposed draft plan for 2025-30 and what it means for customers and stakeholders in Cumbria.

Overview of plan for North West and Cumbria

We serve 7 million customers here in the North West, supporting over 200,000 businesses.

We are also a huge employer in the region, employing over 22,000 skilled jobs, both in terms of delivering our services, but also in terms of improving our infrastructure across the 5 counties, including Greater Manchester, Cheshire, Lancashire, Cumbria and Merseyside.

We want to ensure it delivers a plan for the North West that improves the services for customers and for the environment.

It is time for a step change to deliver an ambitious plan that benefits everyone. We are embarking on the largest infrastructure investment in the company's history to help reduce the use of storm overflows. We have already taken action and have delivered a 39% reduction in spills since 2020 – but we know that's not enough.

Across the North West we plan to:

- Reduce the amount of water leakage – 20% improvement*
- Reduce interruptions to customers' water supply – 40% improvement*
- Reduce the number of pollution incidents - 30% improvement*

- Reduce the number of water quality issues customers experience – 50% improvement*
- Reduce the number of properties affected by sewer flooding inside their property – 30% improvement*
- Reduce the impact of storm overflows – 60% improvement*
- Provide £500m of affordability support for customers struggling with their bills*

*% performance improvement from 2021/22 to 2030

Through our plan for Cumbria we will:

- Work in partnership with environment groups local communities and landowners across the county to minimise the impact which diverse sources of pollution and climate change has on water quality of our rivers, lakes and coastlines
- Offer sector-leading support to customers who face difficulties paying their water bill and give extra support for customers with additional needs
- Invest £36m at Carlisle Wastewater Treatment Works to meet nutrient requirements and unlock development at St Cuthbert Garden Village
- Spend £37m to return Crummock Water, Chapel House reservoir and Overwater to a more natural state

Summary of main topics of discussion during Q&A section

Long-term water supply

Water is a vital but limited natural resource. The pressures of population growth, climate change and environmental considerations mean that it's now more important than ever to plan how we will manage water resources. With careful planning we can continue to deliver a reliable supply of water for customers in the future, while protecting the environment.

With increasing pressure on water resources across the UK, our Water Resources Management Plan (WRMP) defines our strategy to achieve a long-term, best value and sustainable plan for water supplies in the North West.

We produce a WRMP every five years, and this sets out how we intend to achieve a secure supply of water for our customers. When testing the plan, we consider a range of scenarios and options taking account of uncertainties around climate change, water transfers, and the amount of water needed, population growth and environmental changes.

This helps us to understand what the risks are in the short, medium and long-term to our water supplies across the region.

For example, we are spending £42m to maintain supplies from the Haweswater Aqueduct into Cumbrian communities and ensure great quality drinking water.

Reducing Leakage

As part of our plans being put forward for the Price Review, we are looking at how to drive improvements in leakage, how to reduce customer demand so people are using less, and how to develop new sources of water.

We're increasing our efforts to find and fix leaks, using new technology where possible to help us reduce the level of leaks faster.

Water is a precious resource, and we plan to reduce the level of leakage by at least 20% and have set targets to reduce leakage by 50% by 2050.

To reach these targets, we are driving innovation and taking a holistic technology led approach.

We are installing a series of sensors across the North West to understand how our pipe work is performing and where those leaks may be happening, and, more importantly, get out to fix them quicker.

We've developed and deployed artificial intelligence which uses rapid machine-learning to interpret the unique data trail left by leaks, tracking them down to pinpoint their exact location and identifying their size, just by the sound they make.

We work with customers to identify leakages in their homes and businesses too.

We know we have to do more. We continue to innovate and work closely with partners to reduce leakage and strive to deliver a great service to customers across the North West.

Reducing customer demand

Making the best use of our water is a major part of our plan to ensure there is a sufficient supply of water for the decades ahead. To address challenges around future supply we need to lower demand and create new water sources.

We are working closely with customers to help support them to use less water by raising customer awareness about the importance of saving water.

We know customers genuinely care about how much water they are using and would like to understand more.

As part of our plan, we will install 670,000 new smart meters that will give customers information about their water use, giving them confidence to move to a water meter and become more water efficient.

Customers who are on a water meter typically use 21% less than other customers. If customers have visibility and usage information, it can help drive down the reduction in water usage.

New water sources

Most of our water in the North West comes from reservoirs, with over half coming from Cumbria and Wales.

Reservoirs can fill quickly when it rains and empty quickly when it's bright and sunny. Therefore, we need to put in place plans to ensure that we are resilient in the long-term.

Our plan involves developing a number of additional sources of water.

We look at the resilience of all our local networks, our local storage reservoirs and pumping stations. We plan to improve resilience in any areas that are deemed vulnerable by building new pipes, putting new pumps in place so that we can protect customer supplies in the long-term.

In addition, we're part of the Water Resources West regional planning group (along with Severn Trent Water, Welsh Water and South Staffs Water and other stakeholders), and we have developed our WRMP with input from the group, so it is aligned with an overall regional plan.

Together we have considered the needs of other, more water stressed, areas of the country too and the scope to transfer water from the North West to the South. We will develop new groundwater sources to improve the resilience of supplies in the North West and to support any potential transfer in the future.

In considering any potential transfer, we will ensure it does not affect the reliability of the water supply in our region or cause any significant harm to the environment.

Bills and affordability

Customers want us to ensure that the North West is a great place to live and work, and, more importantly, that we have the infrastructure to support that.

Customers want us to spend money wisely and efficiently, so we can make sure that we keep bills affordable.

The average annual bill today is £417. Going forward that bill will increase, before inflation, to £512 by 2030, a £20 increase each year for the 5 years.

Of that £20, approximately £5 to £6 will go towards the new infrastructure that we need to deliver to improve drainage and to reduce storm overflows.

Affordability is also a hugely important issue for many people in the region and lowering bills and helping customers out of water poverty is a priority.

We recognise the social and economic challenges of a region that includes some of the most deprived areas in the country, so it is more important than ever that we are doing what we can to help those customers who are struggling with payments.

We currently offer six different help to pay schemes, dependent on their needs.

In Cumbria, we are helping more people to pay their bills through an 80% increase in support.

Supporting jobs and local economy

As we embark on our largest ever investment programme to deliver environmental improvements, this will stimulate greater employment opportunities directly, and through our supply chain, contributing to local economies across the North West.

We're proud to invest in young people, offering several opportunities including graduate, apprenticeship and intern schemes.

We have the only Ofsted accredited training centre in the sector where we are training people for jobs for the future.

For example, we have recruited Green Apprenticeships to help achieve our plans to go carbon neutral by the end of this decade.

Infrastructure investment

We understand that our customers and stakeholders want us to do much more to protect our natural environment.

In response, we are embarking on the largest investment programme since privatisation to ensure our plan makes the North West stronger, greener, and healthier.

Protecting the environment

As a trusted company, we're committed to improving the environment across the region.

We understand we need to invest in our system, and work closely with customers, stakeholders and partners to protect and enhance the long-term resilience of the environment for future generations.

As part of our Love Windermere partnership, we are working closely with a range of stakeholders including the Lake District Foundation; Lake District National Park Authority; National Farmers Union; National Trust; and South Cumbria Rivers Trust to improve water quality, improve ecology and better understand the Windermere catchment.

In Cumbria, we are also spending £37m to return Crummock Water, Chapel House reservoir and Overwater to a more natural state.

In addition, we are enhancing 21km² of land including peatland restoration and biodiversity improvements.

Combined Sewage Overflows (CSOs)

Storm overflows are an important part of the sewerage network and include combined sewer overflows (CSOs) and storm tank discharges.

They act as a pressure relief valve when there is too much rainfall, allowing rainwater, mixed with sewage, to rise inside the sewer and eventually enter a separate pipe which flows into a river or the sea.

Sewers operate this way to help prevent the flooding of streets, homes and businesses. When we do need to use them, they can sometimes affect river and bathing water quality, albeit temporarily.

We want to remove CSOs from the North West in terms of the way that they operate.

The plan that we are putting forward for the next 5 years is going to see the company reduce storm flow activations by 60% (*compared to the 2020 baseline*).

The challenges won't be fixed overnight, similar to the transition of electric cars from diesel cars, as the infrastructure needs to be put in place first.

That means re-plumbing the North West region and building new infrastructure so that our systems can cope with future population growth and challenges arising from climate change.

In Cumbria, we are investing £1.4 billion to improve water quality by improving 151 storm overflows, protecting 319 km of rivers and enhancing 8 bathing and 4 shellfish waters.

In Windermere we want to do more sooner and have accelerated £19m investment which will see us enhance four of our wastewater assets at:

- Elterwater pumping station
- Ambleside wastewater treatment works
- Hawkshead pumping station
- Near Sawrey wastewater treatment works

These steps will reduce the amount of phosphorus entering the lake.

Executive Pay

Our executive pay continues to be firmly aligned to the performance of the company with respect to delivery for customers.

The senior team is incentivised on the issues that are important to customers including reducing leakage, reducing combined sewer overflows, and pollution events for example.

Full Q&A and our responses

STRONGER

Q. How does United Utilities decide which of the storm overflow situations to prioritise?

The North West has got more combined sewer overflows than anywhere else in the country. They have been a feature of the system for the past 150 years and have been designed to activate when there is excessive rain.

However, that doesn't mean they have to remain a feature.

We are hugely motivated and extremely passionate about making a step change in reducing combined sewer overflows. That's why we are putting forward the biggest infrastructure plan in the country to tackle this challenge.

Twelve months ago, the government did a piece of work asking how much it would cost to improve storm overflows across England and Wales. The cost of that was £56 billion, of which £20 billion fell to the North West.

And that's because of the infrastructure that was laid many years ago combined with the high levels of rainfall in the region and growth in population.

The plan that we are putting forward for the next 5 years is going to see us reduce storm flow activations by 60% (*compared to the 2020 baseline*).

However, similar to the transition of electric cars from diesel cars, the challenges won't be fixed overnight as the infrastructure needs to be put in place first.

That means re-plumbing the North West region and building new infrastructure including additional storage capacity to store the extra rainwater the region gets.

We are investing £3 billion across the North West in the next seven years to drive down the number of storm overflow spills. Much of this investment is skewed towards Cumbria, an area that we recognise relies heavily on the tourism industry, and we want to ensure that we target areas accordingly.

By the end of this year, we will have installed monitors across all storm overflows.

Q. Good to hear that storm overflows and combined pipes are now recognised as products of design choices by the Victorians. But wasn't this recognised in the 33 years since privatisation? And doesn't this deserve immediate investment to remedy?

Combined sewer overflows operate here in the UK, but also in other parts of the world including Europe, Australia, and the U.S.

However, that doesn't make them right. We understand people's concerns and we're putting forward plans to address this. This includes plans to reduce storm overflows by investing £3bn, going further than any other company in the sector.

We have been approved for accelerated investment to start on the plan now because we do not want to wait.

As a sector we have apologised for not acting on this sooner. The plan we are putting forward is the largest and most ambitious environmental investment plan since privatisation

Q. What is the timescale for the accelerated investment?

The infrastructure that we are putting in place falls into three areas.

- We're building huge amounts of new storage tanks, the size of Olympic swimming pools to store the extra rainfall we experience across the region
- We are redesigning and increasing capacity through wastewater treatment works
- We are investing in a series of green and nature-based solutions to capture surface water

In addition, we are working with developers, schools and communities to look at innovative ways to capture surface water to stop it entering the system. For example, in Lancashire we are trialling industrial sized smart water butts.

We have strategic relationships with local authorities, and we are currently exploring ways to capture highway drainage by utilising sustainable drainage technology to treat that surface water safely and return it into the environment.

This is an example of a partnership led approach to tackle challenges across the region by working closely with the local authorities, the Environment Agency and householders.

Under current legislation, we have until 2050 to put plans in place to tackle those challenges. But we want to go quicker. The plan we have put forward for the next 5 years reduces storm overflow activations by 60%. That is a level of aggression, and a level of delivery, that is huge and significant enabling the step change we need to drive forward our plans for a stronger, greener, and healthier North West.

Q. Your 2022 annual report talked about all storm overflows being monitored by 2023. It also talked about real time data on their operations being made publicly available. What is the progress/target for that?

We're on track to install monitors on all storm overflows by the end of 2023. This will allow us to make near real time data available to customers.

As a sector we are creating a national portal. This is likely to be housed by an independent body and will publish data in near real time and will be available to everyone to see if a storm overflow is activating in their local area.

Q. Your Water Resources Management Plan talks about the work that UU is doing to identify the need for water to be transferred from our region to other parts of the UK by 2030. My question is specifically about the £37 million that you're proposing to spend at Crummock Water, Chapelhouse Reservoir and Overwater where you are going to take a perfectly viable reservoir on which you have spent millions in the last 20 years improving - to now completely removing this water storage facility. Given the dire forecasts on water requirements in the future, how does this make sense when at best it can only produce marginal environmental benefits?

Every five years we produce a [Water Resources Management Plan \(WRMP\)](#) which sets out how we intend to achieve a secure supply of water for our customers.

When testing the plan, we consider a range of scenarios and options taking account of uncertainties around climate change, water transfers, and the amount of water needed, population growth and environmental changes.

This helps us to understand what the risks are in the short, medium and long-term to our water supplies across the region.

As part of our plans being put forward for the Price Review, we are looking at how to drive improvements in leakage, how to reduce customer demand so people are using less, and how to develop new sources of water.

However, we must also consider the requirements of our environmental regulators.

The Environment Agency and Natural England identified that abstraction from Crummock Water, Chapelhouse Reservoir and Overwater is causing environmental damage and we have been told to cease abstraction.

This has led to the development of the West Cumbria Scheme to develop new sources elsewhere in the region.

As we go into the next planning period, we'll be spending further investment on identifying new water sources across our region to ensure that not only is the North West resilient, but the wider UK is resilient too.

We have been working with the newly formed regional Water Resources Group to look at what the resource needs are elsewhere in the country, and how we might play our part in that.

Q. Given that your abstraction rights have ceased as far as Chapelhouse is concerned, does that mean that whatever local people now think about your proposals, they are going to happen anyway?

The proposals for these lakes were part of our last investment plan that we signed off in 2019. We are enacting those requirements now, and we're currently thinking about what happens from 2025 onwards.

What we have to be clear about is that we are protecting the environment and that means only taking water from those areas where we aren't causing any damage.

Managing abstractions is a continuous and ongoing process. Our plans are looking at the next five years and subsequent years to ensure that as those abstraction permits change, we're investing and continually looking ahead to ensure we have got sufficient water.

Q. I don't recall there being any consultation on the withdrawal of your abstraction licenses being discussed with people locally.

We held a public consultation 10 years ago centred on ceasing abstraction at Ennerdale.

This went to a public inquiry where we had to provide evidence around what the best alternative solution was. As part of that public inquiry, we also engaged about the ceasing of abstraction around Chapelhouse and Overwater.

GREENER

Q. I am delighted to hear that you are putting in extra investment into our lakes and rivers. I want to know if the investment is coming from the pockets of normal householders like myself?

If a storm overflow is activating because there's a problem that is down to our maintenance, that's our responsibility and customers shouldn't pay for that.

However, we need to build new infrastructure as a result of hydraulic capacity due to changing rainfall patterns and growth in population. That does need to be paid for and that's coming from the £20 per year increase.

Of that £20, around £6 will deliver all of the improvements that we need to make in relation to new water sources, improving water quality, reducing leakage and combined sewer overflows.

We have delivered a 39% reduction in combined sewer overflows in the last 2 years, and that's because shareholders have given us £250 million to deliver that improvement. Shareholders have also supported customers with £140 million worth of affordability support too.

We need shareholders because they lend us the money that allows us to make the investment.

We need additional investment because we want to move fast and make those changes.

There are also licensed obligations that mean we cannot pay out returns to shareholders if we are not delivering on our obligations and our services.

The company will incur financial penalties if the targets, such as improvements on leakages and targets to reduce storm overflows, are not met.

There are also mechanisms to protect customers and to ensure that we deliver on those obligations.

Q. If you look at the Environment Agency's discharge report for 2022, out of the 7 worst performing treatment sites across the North West, 6 of them are in Cumbria. Do you acknowledge that we do have a major problem in Cumbria? I put it to you that there has been too little investment in rural communities in Cumbria, because all 6 sites are in small rural communities.

Secondly, I am from Staveley, South Cumbria. In our experience, the wastewater treatment works overflows so frequently that they're not storm overflows at all, but surface water and we need some attention given to that. Also, would you come to Staveley and talk to us so that you can see what is going on?

We know Staveley well and we have got Staveley Wastewater Treatment Works in our plan. There is a high volume of surface water that's entering the sewers in Staveley, which has a large catchment area with lots of groundwater infiltration

Together, that is putting challenges on the village of Staveley.

As a result, we are currently working on an engineering solution that's currently in design.

We would like to come and share that with the community in Staveley, so that you can see what we are proposing to do to reduce spills.

We have also been working with the Clean River Kent group, which had its application seeking bathing water status refused by Defra (Department for Environment, Food and Rural Affairs).

We want to work in partnership with organisations across communities in Cumbria and engage on issues that matter most to people and businesses.

Q. What is United Utilities doing to remove plastics in its wastewater treatment works?

Microplastics is an area that we are concerned about. There have been lots of studies in recent years about how effective wastewater treatment works are at removing microplastics from wastewater.

A good functioning wastewater treatment works can take out around 95% of those pieces of plastic. But we really want to work with people, organisations, and stakeholders across catchments to prevent plastic getting into the wastewater treatment system in the first instance.

One of the biggest culprits of microplastics are wet wipes.

We work with the supply chain and with communities on messaging around the correct disposal of wet wipes, which should be put into the bin and not flushed down the toilet. Wet wipes cause blockages when they are wrongly disposed of.

We recognise we cannot do this alone, and we need to work more broadly with the supply chain in order to tackle this issue.

Q. In 2020, the number of spills from the wastewater treatment plant in Torver was 109. In 2021 it was 0, and in 2022 it was 0 because the monitoring equipment for the past two years was not working. My question is, are situations like ours stripped out from the data before it is calculated?

As part of our data, we're reporting on the number of monitors that are monitored and what we call operability. We've got the highest operability score in the sector.

These monitors are very susceptible in terms of their reliability, because of the very nature of where they sit in the system.

The 39% year on year improvement shows an improvement of our operability score because the year before, the operability was a lot less.

We can't comment on Tover specifically tonight, but we are willing to come back to you in terms of activities.

Q. In 2021, South Lake District Council sampled the water from the River Kent and the fecal bacteria was off the scale. Tim Farron kindly asked the question of the Executive as to why this was the case. We were told by United Utilities that the Environment Agency consent to discharge license didn't require quotas to meet any standards with regard to bacterial content, and therefore no action was going to be taken. My question is, where the license from the Environment Agency doesn't require fecal bacteria to be controlled, are you going to continue to take no action? Or is this now going to become a reason to invest in infrastructure?

We need to get rid of combined sewage overflows and reduce their activation so we can reduce the likelihood of this ever being an issue in the first place.

We want to deal with the root cause of the problem and that's why we're proposing to make the level of investment not seen before.

In Cumbria we have lots of small treatment works and they have a deemed consent from the Environment Agency. This is a consent that doesn't have specifics in terms of levels of bacteria or suspended solids or nutrients.

We have a challenge from the government to meet a target of 10 spills going forward so regardless of whether it's a big treatment works or a small one, we will need to meet the same standards. We are looking at how we best prioritise that investment over the next 25 years.

If there's something specific you want us to follow up on, we are more than happy to have a look.

Q. My son and I bought a piece of land 5 years ago which we are turning into a market garden. United Utilities used one third of our land to run a pipe through, but also to use as storage for their equipment. We had lorries coming and washing their filth out onto the land and this has rendered the front third of our 2 acres totally unusable. We were told we will be compensated £600 for this, but after 5 years, we haven't been paid, but you are talking about spending millions.

If we have failed you on this occasion, we will contact you to resolve this. More importantly, we are keen to understand what lessons we can learn from this. You have our commitment of that.

Q. I live up in Penrith and I'm a Westmorland and Furness councillor. As we build more houses, I want to know what I can do as an individual householder to reduce the problem that I'm causing by having my rainwater going off into the local sewer. Is there anything we can do as householders or is it something that's going to be done at a community level?

In terms of surface water, lots of homes have had gardens concreted over for driveways, extensions and patios reducing a lot natural drainage. As part of this plan, we have got a big programme of activity to help both communities and customers with sustainable urban drainage such as introducing permeable driveways and water butts.

We're working in partnership with local authorities to look at some of those solutions.

Q. Surely, we should be digging new drains for rainwater to be going off in one direction, possibly straight to the river, and separate drains to the sewers. We need to be doing that separation work as well as all the other things.

We have been working with developers offering them 90% reduction to put in sustainable urban drainage and we are working with local authorities to advocate for that rainwater recycling.

When we look at the challenge that we've got ahead of us, we are going to have to completely renew our drainage systems. There will be areas in the region where we need to look at putting in new surface water sewers alongside the old, combined ones and turning those combined ones into foul only.

It's going to take an integrated approach to drainage exploring area by area, and community by community, to be able to resolve that.

Q. A substantial proportion of the nutrient pollution going into Windermere is from final treated effluent from small UU treatment plants rather than storm overflows. What are you doing to improve the treatment?

In AMP (Asset Management Period) 6, which covered the period 2015 and 2020, we carried out a significant investment programme at Windermere Wastewater Treatment Works. That is now operating at the lowest technical achievable limit of phosphorous removal.

As part of that investment, we took a catchment-based approach. We looked at all wastewater treatment works and what we could do to ensure that we were optimising the phosphorus removal across all of those treatment works.

Though that investment, we halved our phosphorus inputs collectively across Windermere and we are playing our part in making sure that Windermere was achieving the best possible water quality standards.

We are now looking at what we can do to improve spill reduction in the catchment. However, 60% of the phosphorus that's going into Windermere is coming from other sources. We need to look at how we can work with other organisations through the Love Windermere partnership, for example, so that we can play our role to reduce phosphorus from other sources.

Q. The idea was floated of not taking water from the highway drains to wastewater treatment works. To some extent that's pushing the problem elsewhere. That water is going to be contaminated with pollutants including rubber from tyres and break dust being fed directly into the rivers.

This isn't about taking things off the highway. We are working with local authorities to create natural green solutions, whether that be reed beds or swales.

There's a lot of work that's happening right across the world, particularly on highway drainage looking at environmental solutions more broadly in terms of some of that runoff.

What we're not proposing to do is push that problem elsewhere when they are coming into our treatment works and receiving an element of treatment.

We have got some of those green solutions underway. For example, in Cumbria we are working with landowners to deliver nature-based solutions to improve water quality.

We're taking a whole catchment systems-based approach, rather than focusing on over-engineered solutions, which might not be as appropriate for the environment.

Q Since the water stopped being brought to us from Ennerdale, it's not the same. Even though we are now supposed to be receiving borehole water, it feels different on my skin and hair. Do you agree that the water is not of the same softness?

We've worked closely with the community throughout that process. We will get in touch with you about your query and have a look at the concerns around the water.

HEALTHIER

Q. Windermere is the gateway to a very popular tourist destination. Can we look at how other models around the world work such as Lake Annecy, which is considered to be one of the cleanest?

We've been looking closely at Lake Annecy to see what we can learn. The approach at Lake Annecy is different in the way the lake and catchment are managed. Essentially, they discharge into rivers and so there are different environmental impacts as a result of what Lake Annecy does.

In Cumbria, we're targeting the improvements of 4 combined sewer overflows that are discharging into the lake.

If you look at the number of permits that we've got in relation to the discharges specifically, there are 89 different permits that go into Windermere, of which 14 are ours. So, there's a lot going on more broadly.

In Windermere, we are keen to do 2 things:

- Step up and play a leadership role by accelerating that investment to focus on those 4 remaining combined sewer overflows
- Come together collectively to look at what we can do to make further improvements

In addition, we are set to open a shop in Windermere, where customers and communities can come and talk to us openly about the challenges in the area and what we plan to do about them. We all care passionately about Windermere, and we are all committed to seeing improvements in the area.

Another important issue is the level of phosphorus in the lake. There's been significant reductions over the last 10 years, and we are now at the lowest technical permitted level of phosphorus. In other words, there isn't another technology that we can apply to get it lower than it is.

Q. We are pleased to see that you've committed £19 million investment into Windermere. In terms of combined sewer overflows, are you saying there are only problems with 4. What about the others?

We have got 6 combined sewer overflows in Windermere. We have improved 2 of them already and have accelerated £19m investment for the other 4.

There is subsequent investment as part of this plan which includes £41 million in terms of the Windermere catchment for individual schemes and programmes.

Q. We've heard all about these promises and these targets. If you don't achieve them, how will it affect your pay and your staff's pay?

It's important that there is absolute transparency about pay and performance. We've gone out to customers and asked, what are the things that you want our performance to be measured on? They have told us they want to see a reduction in leakage, reduction in storm flow activations, and improvements in water quality for example.

If we don't deliver on those targets, and we don't deliver those improvements in performance, that directly impacts our pay.

Additionally, if we don't deliver and spend the capital investment on specific improvements that we have committed to make, that spend is recovered from us and given back to customers.

Customers do not pay for something that they're not getting in terms of investment, and if we don't deliver the services we promised, then customers will also get a discount on their bill.

In addition, if we're not delivering for customers, if we're not delivering for the environment there is a financial penalty associated with that.

Q. If we're going to be successful joining in partnership going forward, then that sharing of data, which you need to introduce, is important as it will give us an understanding of what is happening as communities may well feel that they are still being left out and not as involved as they might be. We have a really positive part to play if you are willing to open up and include them in the solutions that you're seeking.

We've been investing in technology implementing a series of data sensors into our sewer network to understand what's happening and understand those patterns.

We're only going to tackle these changes if we work together. What's critical, is that we do that in an open and transparent way.

Q. I am concerned about the raw sewage flowing into Hilton Beck. When will this be addressed?

It sounds like if you haven't got a sewage treatment works, the local properties are probably on septic tanks, and we can have a look at this. In situations like this, we are able to work with communities to address what's called a new first time sewerage scheme.

Each individual owner of a septic tank has a responsibility to manage it properly so, there should never be a situation where they are overflowing and polluting a stream.

We all know that it does happen, and we will have a look at this for you.

Q. I'm at the estuary end of the River Kent. We have lot of visitors in this part of the coast that have raised concerns about how safe it is to swim in the estuary. Are you concerned about the safety as I'm interested in enabling safe bathing and making sure that we work in partnership with United Utilities.

Since April, we have appointed a stakeholder manager for each area so we can be out talking to local authorities, parish councils and community groups. We are opening a shop in Windermere to give people an accessible window front to us at all times. We've also appointed River Rangers who are working in the communities too. We are doing river clean ups and have an army of people working alongside those River Rangers.

In terms of the safe to swim aspect, we plan to communicate all this data, so that people can log on to a national portal to see if there has been an activation from a CSO.

That data will be live and will give everybody the information that they need to make informed decisions.

Q. What is happening in Cartmel?

In Cartmel, groundwater infiltration is causing spillage. That's because of the geology in the area. The groundwater is dilute, so it doesn't need to be treated but we are working on temporary and long-term solutions to address the challenges in the area.

This includes working with the Environment Agency to make sure that we have permanent arrangements in place. We have installed some new capability and we are currently lining sections of the sewer in Cartmel.

It's a key area of focus for us and we want to give you reassurance as an executive team that we are looking at our top spillers.

We are also willing to come to Cartmel and talk to the community about some of those interim solutions and give you an update on what we are doing.

Questions not answered during the session

The following section includes our response to questions we received in advance of, during or after, the meeting, but did not have time to answer during the session. Where we have contact details, we are also responding directly to people who raised queries or made comments.

Q. On September 30th, 2017, my bungalow and 300 other houses in Millom were flooded. I believe your pump station failed that morning but obviously it is being denied. I have proof of alarms going off that weren't answered and copies of emails that were sent around your company from different people that work for you saying about different things that were wrong. I lost everything I owned and now can't get insurance as it was the third time this happened. My question is - why can't your company just admit that this happened. I would accept the truth, but I will never accept the lies.

We appreciate the anxiety incidents of flooding can have on individuals and communities. We have worked with the Lead Local Flood Authority (previously Cumbria County Council), to input into their investigation which showed that the flooding was due to the extreme amount of rainfall and that our assets operated as designed. We have held a number of meetings at King Street pumping station, shared information on the operational performance of the pumping station and met with customers and stakeholders to discuss the flooding in this area.

In Millom and Haverigg, flood risk problems are complex. The area is susceptible to multiple mechanisms of flooding which include surface water, tidal, fluvial and from the artificial drainage systems which serve both conurbations. These are all interlinked but under the responsibility of different agencies.

The Lead Local Flood Authority are currently finalising their investment package to resolve a number of issues and we are preparing to contribute financially to support the separation of drainage in Millom as part of this.

Q. Please tell us exactly when you will stop dumping sewage in natural bodies of water, how you will achieve this and what funds you will allocate the meeting your targets?

The government has set a deadline of 2050 for all storm overflow spills from public wastewater infrastructure to be reduced to an average of 10 spills per year. However, we realise that for our customers this is too far into the future, so we will be investing significantly more in reducing storm overflows to achieve this target as fast as possible.

For AMP8 (2025-30), Ofwat has approved acceleration of investment projects which will allow us to go further and faster to achieve our ambition, starting now. It will see us spending a further £200m in the next two years in relation to projects with a value of over £900m in relation to storm overflows. This is an acceleration of our AMP8 investment plans where our draft Water Industry National Environment Programme anticipates around £3 billion of investment in relation to storm overflows. This will help make a significant 60% reduction in storm overflow activations against our 2020 baseline by 2030.

Q. Does United Utilities have any policy for water shortage at Thirlmere to which we have recently changed our water supply? It still supplies North West England along with Haweswater and Windermere but it seems likely that the current situation; where we have had more than a month with very little rain, is going to become more common in future years and lake levels will be very low. Pressure to divert some supplies e.g. Lake Vyrnwy to the south, would only make this policy more important. Borehole water, which was used to supplement Ennerdale, did not receive universal acceptance due to the different hardness and, no doubt, the same criticism would be made if this was adopted in the future.

Prior to the West Cumbria pipeline scheme being approved for construction, significant investigations were undertaken to ensure that there would be no detriment to the supply of water across the region. The work involved closing the three-treatment works serving the West Cumbria area and establishing Williamsgate water treatment works.

Our abstraction limit from Thirlmere has not changed with the introduction of Williamsgate water treatment works, we are supplying West Cumbria with its daily needs, whilst reducing the abstraction of water from the south of the reservoir to go down to Manchester. Alternative sources elsewhere in the region have been utilised to ensure that there is no adverse impact on our water resources position.

Our long-term [Drinking Water Safety Plan](#), shows how we will ensure that we are able to supply all of our customers over the long-term. Amongst other things it considers climate change, population forecasts and a number of other factors that are built into our long-term plans.

Q. When are United Utilities going to fully renew the infrastructure for the whole Lyth valley to avoid the current frequent leaks and water pressure issues, we get due to the Victorian system? The answer will be helpful as currently we frequently have very low pressure at the top of the valley, and if the pressure is high enough to reach us adequately, it is too high for the lower areas and bursts the pipes, then none of us have any water! We often have UU water tankers serving the area at huge cost to UU and the lanes that get congested with tankers.

The system in the Lyth Valley was installed in 1963. Since its installation we have also invested significantly over the last 15 years to upgrade parts of the network. This has involved over 6km of mains renewals and the installation of a pressure management valve to stop mains bursts in Brigsteer village.

Q. I would like to ask what specific measures UU has in place to address 'nutrient neutrality' – the Eden catchment area is one Natural England has identified. The planning system has had to implement the policy with immediate effect, while the cause of the issue – water treatment and land use – are lagging behind. Residential development is held up while mitigation measures are defined and sourced. The size of many water treatment plants in our area are too small for you to be required to upgrade them. Please will you do this, even though the regulations don't enforce it?

Nutrient Neutrality is about sustainable development in our important habitats, all sectors need to work together to improve and maintain these.

We are proposing to deliver improvements to the technically achievable limit of 0.25mg/l of phosphorus at seven wastewater treatment works; with six of these proposed to be accelerated to begin this business plan cycle (before 2025).

At the moment, we are unable to start any work on the accelerated programme as we wait for the Levelling Up and Regeneration Bill to be enacted. All investment in our infrastructure must be driven by legislative requirements; if these pieces of legislation are not enacted then we have no legislative requirement to deliver the improvements.

As highlighted, at present, the legislative requirement is focussed on sites which serve a population above 2,000. The Secretary of State has set this and unless this changes then we do not have the legislative requirement, and so funding, to deliver these improvements to smaller wastewater treatment works.

However, we are delivering our largest ever programme of work to improve water quality. Specifically in Cumbria we are investing £1.4million to improve 151 storm overflows which will protect 319km of rivers and enhance eight bathing and four shellfish waters.

Q. Many remote dwellings are not connected to mains water. Their private water supplies are dwindling, and this is only going to get worse with climate change. Some of 'their' water may be being taken for the mains supplies. Water may be short across the system. What plans does UU have to help all residents – especially those who historically have not been customers – to continue to have adequate water supplies?

With increasing pressure on water resources across the UK, our Water Resources Management Plan (WRMP) defines our strategy to achieve a long-term, best value and sustainable plan for water supplies in the North West. Customers and stakeholders can now read our latest plan, Revised Draft WRMP24 [here](#).

We have a duty to provide water for domestic purposes and customers can request new connections to mains water [via our website](#). The process is outlined there, and our Developer Services team are happy to answer any questions about specific issues.

Q. More than 81,000 sewage spills in English rivers in 2021 - have these figures improved in 2022?

Over the last three years, since the beginning of the current business planning period, we have reduced reported spills by 39% and reduced the duration of these spills by 41%.

Q. Given the substantial evidence of pollution into our lakes and rivers, it is clear that United Utilities has not invested sufficiently in its infrastructure. How can UU justify that it paid its previous Chief Executive over £12M in five years and recently paid out £300M to shareholders?

We invest twice as much as we make in profit (around £800 million per year). Shareholders invest money in the company which we rely on to help fund our investment programme. We pay a dividend to those shareholders for their investment; we have to compete with other companies on the stock market and if we did not give a fair rate of return then investors would take their money elsewhere. We would not then be able to attract the level of funding we need for the upgrades required. Shareholders will be making a huge down payment on the investment we are planning to carry out.

Furthermore, any future bonus will be linked directly to improving river health and achieving other stretching environmental targets.

Q. Plans for improvement sound fine but does not this indicate a very inadequate service in the past?

Since privatisation we have invested £20 billion in making improvements to our wastewater and water network. We must invest on a cyclical basis as it is not possible to make changes all at once. As well as this, we must also abide by regulatory requirements which have changed over the last 30 years.

When we are required to make upgrades because of tightened regulation, it more often than not requires expensive large scale capital investment which again needs to be staggered. The improvements and changes we are proposing for our 2025-2030 business plan is just the next part of the cycle to improve the service we deliver to our customers.

Q. What does the 'pollution' mean? Are we talking just overflows or also treated effluent? Or does pollution include carbon emissions, litter, etc. too?

When we refer to pollution in this context, we are talking about any untreated releases from our wastewater assets to the environment.

Q. Can you spell out what you are going to do about carbon reduction in particular?

Greenhouse gas emissions management and reduction is a priority for us and our stakeholders because the affordability and resilience of our operations and services fundamentally rely on a stable climate and a healthy natural environment.

We have reduced our operational emissions by more than 70% over the last 10 years, measured with the market-based reporting methodology that recognises the benefit of green electricity tariffs. In 2020, we committed to the 'science-based' approach and made six bold carbon pledges to further advance our progress towards the national legal requirement for net zero in scopes 1, 2 and 3 by 2050 (as defined in the 'Global Best Practice Greenhouse Gas' protocol).

We are highly experienced in following global best practice and adhering to national and regulatory requirements to measure, disclose and reduce greenhouse gas emissions. We openly report our emissions annually across all relevant areas of scopes 1, 2 and 3.

In designing our plan to 2030, we have pushed the boundaries to focus on alternative solutions that help reduce emissions in every part of our business plan. However, our ability to innovate is limited by legal and regulatory constraints. We are pursuing a range of opportunities to reduce emissions, pursuing offsetting only as a last resort. Greenhouse gas emissions have been valued throughout our decision-making at PR24 to develop a comprehensive and stretching business plan that strives for the most sustainable long-term approaches towards the priorities agreed with customers and stakeholders.

Q. When you say "installing screens to reduce litter entering the watercourse" of the 62 sites how many of these already had a permit requirement to have them installed before you install them?

Where we have a permit requirement to prevent screenings from entering the environment through our discharges, provisions are in place to do so.

We know that litter in watercourses is something that impacts both customers and the environment so to continue to reduce litter we are looking at a range of additional things we can do.

That might be upgrading screens where appropriate but will also include extra litter picking and site inspections by roles like our River Rangers, as well as continuing to engage our customers on our 'stop the block' messaging.

Q. When you say you are going to improve 151 storm overflows, how do you decide which ones get done?

Our storm overflow discharges have been categorised in line with the Government's 'Storm Overflow Discharge Reduction' plan. This sets out timeframes for delivery of improvements for overflows dependent on the sensitivity of their location.

We will deliver the Storm Overflow Improvement programme from now until 2030 where we will deliver improvements to significantly more overflows than the government require us to deliver by 2030.

We are prioritising this as we understand how important it is for customers and stakeholders that we reduce the dependency on storm overflows to protect customers from flooding. Specifically, our plan has been designed to:

- Achieve a 60% reduction in storm overflow performance by 2030
- Prioritise overflows in close proximity to designated bathing waters
- Address ecological impacts where we have been able to identify the best value solution to do so
- Improve 28% of all storm overflows.

Q. If the output from combined sewers from existing households is so high, presumably adding a lot of water into the sewers thus increasing storm overflows, how are you going to work with those households to reduce the amount of rainwater going into the sewers?

One way in which we plan to work with homeowners is through a project around looking at how best to help customers to stop paving over driveways with impermeable surfaces.

This 'urban creep' makes rainwater drain to sewers even quicker than it did before contributing to spills and flooding. We plan on working with partners such as councils, and the Royal Horticultural Society to educate and provide tools and guidance to support installing more permeable and nature friendly alternatives.

Within schools we are also educating on how things like rainwater planters and rainwater gardens can be installed. We have delivered one of these projects in Whitehaven already, and plan to deliver two more in Workington this summer. These show and educate children and communities on how features like this are installed, maintained and what benefits they provide biodiversity within homes and gardens.

We have a partnership at RHS Bridgewater where we have our climate resilient garden to demonstrate components such as permeable paving, green roofs and water butts in a way which look amazing and can be installed in gardens. Supporting this is the COP24 garden which sets the context as to how you can adapt your gardens for climate change. We run parallel education campaigns with them around the importance of water to stimulate education through trying to place water as a key resource to recycle, just as you would do with heating and waste.

We know we need to more, so we are looking at how we provide these tools to customers through incentives such as water butt installation and we have tried a couple of different ways to doing this in Forton and in Carlisle using different types of technologies to tackle different drivers.

The scale of our storm overflow programme is large, so more will need to be done and we will work with Westmorland and Furness Council and Cumberland Council as the Lead Local Flood Authorities to identify opportunities to do this in partnership. We have a rainwater management strategy which will guide us on how best to work with our customers to encourage uptake of rainwater management practices.

Q. Can you reassure us that BEFORE you increase our bills, you reduce the stakeholders pay back?

Shareholders invest money into the company which we rely on to help fund our investment programme; we pay a dividend to those shareholders for their investment. We have to compete with other companies on the stock market and if we did not give a fair rate of return then investors would take their money elsewhere. We would simply not be able to attract the level of funding we need for the upgrades required. Shareholders will be making a huge down payment on the investment we are planning to carry out, the cost will be repaid by customers in small amounts over the lifetime of the new infrastructure, which could be 50 years or more.

Q. Tim Farron has put out information that Cumbria has been named England's sewage hotspot. How true is this and if this is the case how can UU also be in the top 4 companies for the work they do? With regard to increasing capacity, is UU taking into consideration all the new builds being built and why, when we are such a wet county, are the reservoirs not being increased to accommodate these increases?

There are many rural villages and small towns in Cumbria which means that the majority of our 569 wastewater treatment works are in Cumbria. We are investing £1.4 billion to improve water quality by improving 151 storm overflows, protecting 319km of rivers and enhancing eight bathing and four shellfish waters. Ofwat has also approved the acceleration of £800 million of investment regionally so we can start some of these improvements in Cumbria now.

Whenever we design improvements to our assets, we take into account climate change, population growth and tourism by applying uplifts, designing to future design horizons. This allows capacity for any increases in flow we expect to see.

Q. With over 2000 CSOs with monitors, you state a reduction of 33% in reported incidents (spills) can you confirm the total numbers of monitors of that total that the company returned data on? i.e. if they are not available for 95% of the time the company can choose to wipe all data and not return data to the Environment Agency?

Please use this link to access our [Event Duration Monitoring data](#). Since 2020 we have reduced spills by 39%. In 2022 we had 2004 EDMs and reported data for 1971 of them.

We only remove data where we have investigated and recorded it as erroneous in line with Environment Agency guidance when producing the return. Operability is not linked to data provision as we will still include data against a poor operability if we believe the data to be reliable. In line with EA guidance, we are obliged to provide supporting reasons for all high spills, blanks and low operability (<90%) which is all included in the return.

Q. Will the investment include remodelling roads through towns to incorporate more soakaways, permeable parking and street trees?

We have looked at where removal of impermeable area upstream of CSOs provides a significant reduction in spills. Where that has provided a best value option against a conventional grey storage tank then we will apply our rainwater management strategy to deliver improvements to drainage within roads and the public realm to deliver soakaways, permeable parking and street trees. Westmorland and Furness Council share this vision with us, and we will look to work together to deliver these types of works where required.

Q. Will the works be in the smaller rivers too?

The size of the watercourse has not influenced where projects should be implemented. However, the status of that watercourse, if it is a shellfish or bathing water as an example, does influence where work should be prioritised. The decision has largely been based on the scale of the problem at that site.

Q. In Arnside we are the estuary of the River Kent. Is it safe to swim in the river here?

There is a storm overflow in Arnside, the spill information for 2021 and 2022 is [available on our website](#). We do not advise whether water bodies are safe to swim in, this comes from the Environment Agency, which regulates water

quality. Wastewater is just one factor that influences water quality; the EA's catchment explorer states that nationally storm overflows account for 4% of the reason why a watercourse would not achieve good ecological status. So, there are also many other things to consider such as highway and agricultural run-off. The EA takes all these factors into account and displays this information on their website.

Q. Only Windermere WwtW is at best achievable scientific level though right for TP, not the other 15 UU assets in the catchment?

There are nine wastewater treatment works, six storm overflows and three emergency overflows in the Windermere catchment. Our consents are directed by the EA who set these conditions through our permits to discharge. They set these conditions based on the status and quality of the receiving watercourse and the catchment conditions. The EA hold all UU permit information on their permit database.

Q. Could you please advise what proposals there may be for Grasmere where there is a combined system and floods during heavy rainfall?

Occasionally during heavy rain, the sewers in Grasmere cannot cope with the additional stress and do surcharge. We also see a lot of groundwater infiltration into the sewer in Grasmere. We have installed several dynamic network monitors around the network in Grasmere to help us get ahead of issues before they become a problem for customers; these monitors send alerts when they spot any deviations from the norm in the sewers. The hydraulic issue is logged in our prioritisation database, but currently there are no plans for investment.

Q. New mains water network replacement and sewer replacement projects in progress and budgeted in the Westmorland and Furness Area.

We regularly monitor large parts of our sewer network to check its structural integrity and to keep them free flowing. To make best use of customer's money, we must ensure we get the most out of our water and wastewater networks whilst ensuring we deliver the best service possible. That means that pipe replacement is not always an indication of asset quality.

On an annual basis, we clean nearly 48,000 metres of sewer across the Westmorland and Furness area. This is a proactive programme where we CCTV and where required, clean, to ensure we stay on top of the known risk areas as best we can.

This business planning period we have over 20 clean water pipe replacement or upgrade projects across the Westmorland and Furness area.

Once we have our 2025-2030 business plan approved, we will be able to share what the investment plan looks like for the area in relation to asset replacement.

Q. Confirmation of main sewer replacement in Burneside, Kendal, projected in 2018 and associated storage at Wastewater Treatment site.

I can confirm that we will be starting work in Burneside in October 2023, with the main construction taking place from February 2024 (subject to planning approvals). This work will involve replacing 820m of sewer with larger diameter pipes, increasing the size of existing manholes, reconnecting properties to the new network and installing a new pumping station with storage capacity. This will stop the flooding currently experienced at Steeles Row.

Q. Removal of grey water from Sewage network Staveley – Progress report.

There has been a lot of progress made over the last few months in identifying surface water connections into the combined network. This work has been completed in partnership with Westmorland and Furness Council who have completed a desktop study identifying where these connections could be. There have been large areas of catchment land found to be connected as well as recent developments, these connections could be removed and diverted into the watercourses flowing through the village. This work is still on-going as we continue to work with the council to investigate other potential connections.

The LLFA have submitted an application to DEFRA for funding to contribute towards the solution linked with removing these connections.

Q. Grant to aid the supply of Water Butts to Communities in Westmorland and Furness Area ----Residents to Reuse and conserve water.

We offer all our customers discounted water butts and promote their use and benefits. We have also trialled the use of smart water butts in Skelwith and are due to start a project in Staveley again trialling the use of water butts.

We have a communications plan to engage with customers on water efficiency which is used all year around, this is expanded during the summer months to focus on the benefits of saving water in the garden.

Q. Working with Business and Hospitality to conserve and reuse water. Run Workshops for best practice.

As a wholesaler, our direct contact with non-household customers is limited in the open water market, but we do promote a number of schemes to retailers who can engage with the end customer(s) to see if any of the incentives can be employed. The various incentive schemes covered are:

- Rainwater harvesting
- Water efficiency incentive
- Sustainable drainage systems
-

More details on these schemes can be [found here](#)

In addition to the schemes above, we have teams in the business working on various projects to help identify non-household customers in our region that would benefit from targeted interventions, whether that relates to water efficiency or sustainable drainage. This activity will be increasing significantly in the next few years and is being built into our business plan submissions to our regulator later this year in order to help UU achieve the targets we are setting to reduce overall water consumption, leakage and to address surface water drainage issues.

Q. Progress on Improved water catchment and storage in Cumbria consistent with Climate Change and increasingly less rainfall in summer months. Drought and biodiversity Loss.

We will be investing £1.4 billion to improve water quality across our region by improving 151 storm overflows, protecting 319km of rivers and enhancing eight bathing and four shellfish waters; 91 of these schemes will involve natural solutions. A significant proportion of these overflows are in Cumbria.

£41 million has been dedicated to the Windermere catchment to reduce spills from four overflows, with £19 million of this accelerated to be spent in the next two years. Solutions are still being developed, however there will be a mixture of traditional grey options such as storage tanks and increasing pipe sizes and green options which will improve biodiversity and ecology.

We will be spending £37 million to return Crummock Water, Chapel House reservoir and Overwater to a more natural state and enhancing 21km² of land through peatland restoration and biodiversity improvements.

Q. Collection of Data to monitor constant bursts and closed Rural Roads causing heavy traffic use on unsuitable weight restricted routes and further damage.

Locations where we have experienced a burst water main are documented on the company system MyRisk. Frequency and risk will be reviewed and then funding secured if mains replacement is needed.

Q. More collaboration with Westmorland and Furness Council to conserve and reuse water and prevent pollution of Rivers and Lakes.

We continue to work with Westmorland and Furness Council as the LLFA through regular making space for water meetings. We will also be engaging on our Better Rivers Better North West programme to identify areas where we can maximise opportunities through joint working.

Q. 30% reduction in pollution. Why not 100%?

We have one of the lowest overall levels of pollution incidents across the country and one of the lowest levels of pollution. Our biggest target across the sector is a 60% reduction in storm overflows by 2030. We are delivering an accelerated programme so we can get the biggest benefits as quickly as we can by 2030.

Q. What is your business model, are you a fix it when it's broken model because that's cheapest or a new infrastructure company?

We understand that our customers and stakeholders want us to do much more to protect our natural environment. In response, we are embarking on the largest investment programme since privatisation to ensure our plan makes the North West stronger, greener, and healthier.

Q. Why are customers having to pay for this and not shareholders seeing their dividends reduced? Have you considered renationalising?

Shareholders will be making a huge down payment on the investment we are planning to carry out. They will pay for the investment in the first instance, the cost will then be repaid by customers in small amounts over the lifetime of the new infrastructure, which could be 50 years or more. The cost of new infrastructure is always borne by the public, if there is a failure of an asset, then that is our responsibility, and the cost is not paid by customers.

We pay a dividend to our shareholders for their investment, and we have to compete with other companies on the stock market to give a fair rate of return, otherwise we would not attract the investment we need for the upgrades. The current rate of return for shareholders is currently around 3.8% which is not excessive, it is comparable with a fixed rate savings account.

Renationalisation is not the route to take when there is so much investment needed to achieve the environmental ambition which we all want. If the water industry was nationalised, then we would be competing for funding from the public purse alongside the other public sectors. As a private industry, water companies in England and Wales have invested more in drinking and wastewater infrastructure, per inhabitant, than any country in the EU.

Q. Are UU directors taking a reduction in their salaries to invest into the infrastructure too?

Our pay is directly linked and correlated to what customers have told us is important to them. That's related to areas including leakage reductions and reducing CSO activations. If we don't deliver reductions in CSOs, for example, that directly links to our pay. People are only getting rewarded and paid for the performance and improvements that everybody expects to see.

In addition, if we have promised capital investment on treatment works or particular processes, and then we don't deliver on that, the investment is taken away from the company and is refunded through customer bills.

If we do not meet the targets we have committed, including targets to reduce leakage, reduce the number of water quality issues and reduce the amount of sewer flooding, then there is a financial penalty. That financial penalty is applied to the company by means of reducing customer bills.

We will work hard to meet and beat the targets that we have set because we want to deliver the best possible service.

Q. Are Thames Water saying that they won't be paying dividends until problems re sewage discharges are resolved? If so, is UU considering the same?

In terms of dividend payments to shareholders, the benefit of shareholders is they give us money that we can invest now. That's an additional £13 billion to make changes that are going to last hundreds of years.

If we wait until we've got £13 billion worth of investment, it could take years and we wouldn't be able to make the improvements that we want to make.

In addition, United Utilities is in a robust position thanks to our prudent and resilient approach to financial management.

We have the lowest level of gearing in the sector at just 58%. In addition, following a further cash injection of £350m recently, we have sufficient liquidity to cover our cash flow out to at least 2026.

Our shareholders recognise our financial structure is prudent and they are supportive of the significant investment programme we are planning over the coming years.

By funding this programme with a combination of debt and equity we can protect customers from what would otherwise be very large increases in bills in the short term, while delivering the environmental improvements we all want to see.