Wessex Water 'Your water, your say' – Written record of questions answered on the day and after the event

Tuesday 14 November 2023

Business plan 2025-2030

Wessex Water
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Introduction

This document is a written record of the ‘Your water, your say’ meeting held by Wessex Water on 14 November 2023. This meeting gave customers and stakeholders an opportunity to find out more about our PR24 business plan, which we submitted to our regulator (Ofwat) in October 2023.

The meeting was chaired by Kevin Johnson, and facilitated by Ofwat and the Consumer Council for Water (CCW).

The Wessex Water panel comprised:

- Colin Skellett – Group chief executive
- Ruth Barden – Director of environmental solutions
- Matt Greenfield – Director of strategy & regulation
- Sue Lindsay – Director of customer policy & engagement

Group Chief Executive Colin Skellett began the meeting by presenting a summary of the business plan we have submitted. The slides used and a video of the presentation are both available on our website.

Kevin Johnson then invited questions on our plan from attendees.

This document lists all questions received during the meeting, as well as further questions that were received prior to or within 24 hours after the event, alongside our responses to these questions.

In each section, questions are grouped into the following four themes:

1. **Safe and reliable water supply** – including water quality, water hardness, supply interruptions, leakage, lead replacement, water efficiency, rainwater management, smart meters, new reservoir sources, asset/network resilience.

2. **Effective sewerage system** – including surface water separation / storm overflows / spill frequency, household flooding, and pollution / nutrient reduction.

3. **Enhancing the environment** – including river and coastal quality, monitoring, abstraction reduction, net zero, biodiversity, housing and population growth.

4. **Affordable bills and excellent customer experience** – including affordability, standing charges, water poverty / financial support, tailored assistance programme (TAP), Priority Services Register, community engagement and partnerships, investment, dividends, pay, trust / transparency.

Questions answered on the day

Theme 1: Safe and reliable water supply

Question: You talk a lot about being driven by or being informed by statutory requirements about what your regulators say you must or must not do. What would you do differently? What would you do more / less of if you didn't have all those requirements? [Kevin Johnson]

I think the biggest difference is the sheer scale of the nutrient requirement which has come out of [the Environment Agency and] Natural England at quite short notice. That is driving a big chunk of this investment programme – £0.9 billion. If that were spread over a slightly longer time period, you would do more on existing infrastructure.

Because statutory requirements on nutrient reduction are so significant, it is distorting the rest of the programme.

This is the biggest programme we have ever delivered, and deliverability is a key concern. We're in the process of taking on several hundred more people. We've got 400 apprenticeships now going in the business. We are ramping up to deliver what will be a really big programme.

I would have spread the nutrient reduction over a longer time period and done more on other things like storm overflows, etc. in the short term. But we are where we are.

Question: You've tracked back a little from the plans you shared in April at the previous ‘Your water, your say’ session. You're taking just short of £1 billion off the investment plan. But still only 62% find it acceptable, with 46% of people said it would be difficult to pay on those draft plans. Do you really think that this slightly revised plan, obviously subject to Ofwat approval, is really going to be affordable? And are the measures you're putting in place to support vulnerable customers going to be enough, when I think 29% of people tell you that they're struggling to pay their basic bills, and we are still in the midst of a cost-of-living crisis. Have you still got work to do on this plan? [Kevin Johnson]

To clarify, the 62% acceptability figure was on the original £4.5 billion programme with a 45% bill increase. We would expect to have a greater acceptability than 62% for the business plan we submitted, since the programme is smaller and the bill increase is smaller.

But the key is making sure that everybody can afford those basic services. So we will do whatever we need to do, by using social tariffs and various other support, to make sure that nobody is in ‘water poverty’. That is the key to me because the services we provide are so fundamental and essential.

We were the first company to introduce social tariffs, and we expect a significant increase in these tariffs. That’s the key to making sure that everybody can afford bills. And to reiterate, the actual size of the bill in real terms is just about the same as it was 15 years ago.

It’s disappointing that because of the way the system works, we've had bills decrease and now they’ll increase. It would have been better to have had them stay stable over the period.

Question: The social tariffs and other forms of support rely on your wider customer base, so there is a degree of cross-subsidy involved in the bills people pay. They are in turn helping the other people who can't afford it to the same degree. Should the company be doing more? Should the company be finding more of its own money, spending less on other things, in order to support those customers who find it difficult to pay their water bill? [Kevin Johnson]

There is a degree of cross-subsidy. We have to get support from customers to do this; we have to ask customers what they think. And broadly, customers are happy to pay a small cross-subsidy. We also do things directly; we

have the Wessex Water Foundation that last year gave away about £750,000 of support for a range of things. But this industry has always had cross-subsidy. There’s cross-subsidy between metered customers and unmetered customers, for example. And as long as we get customer support, I think it's a reasonable thing to do.

Question: I live in Stroud and notice that water type seems to change occasionally. We've had a long spell of soft water, but this changed recently and it's hard again now. Why is this?

Stroud is outside of our water supply area [it is served by Severn Trent]. But I think it's fair to say that there are some instances where customers do get water from different sources and certainly water that's through a chalk system and taken from ground water is typically harder than water that's been in reservoirs, for example. It's really important that we balance the system to make sure that our customers stay in good water supply – sometimes customers will notice that change. But most of the time it stays pretty consistent.

Question: I'm a chemist and I’m based in Glastonbury. I'm a member of the Royal Society of Chemistry and part of the Water Science Group. The Royal Society of Chemistry started a campaign to ask the UK government to lower the PFAS levels in tap water because UK levels are far too high in comparison to Europe and the US. How much of these PFAS are we drinking at the moment? I think I need a reverse osmosis system to purify drinking water further because these are so-called forever chemicals, so they have long term health impacts.

You are absolutely right to identify PFAS as a potential problem for the future. For drinking water quality, we've not got such an impact in Wessex because 80% of our water is groundwater, and groundwater tends to be much less affected. The PFAS tends to come down through the sewerage network. The trials we've done show that only about 30% of PFAS is taken out through the conventional sewage treatment systems. So it finishes up in the river system.

This is something that we don't know enough about. At the moment we have to meet the standards set by the Drinking Water Inspectorate (DWI). The DWI is now looking at PFAS and trying to determine what the new standard should be. But there is no doubt that we're going to have to do more on treatment – both at sewage treatment works to stop it getting in river systems, and then additional treatment for those companies taking water for supply from surface water from rivers.

Question: Why do you not have a water softener treatment plant so we don't have to descale our kettles and irons and showers so often? With the amount of money you have, it would pay to have one installed and the water would taste better.

It wouldn't necessarily taste better – hard water generally tastes better than soft water. But I understand the problem. Generally our water is naturally hard because a lot of it comes from the chalk. 80% of it is hard water. The good news is that hard water areas have lower incidence of heart disease, so it's actually good for you! The bad news is it does fur everything up.

There are limits to the amount of softening we could do. It's not something that’s encouraged on a general basis by the Drinking Water Inspectorate. But of course individuals can put softeners in on their home as long as they do not drink the softened water – they should have a separate tap for the hard water, because it's much better for drinking and it really does taste better.

Question: My interest is very much the environmental impacts of Wessex Water. I see a lot of social media from Welsh Water, who do a lot educating their customers – only the three Ps, only rain down the drain, use of water butts, stuff like that, much more than I see from Wessex Water. Surely social media campaigns would be really cheap – we're not talking about printing anything, getting advertising. Surely you could do more.

We do a lot and I'm surprised you don't see it. We put a lot of information out and the three Ps message is really key. For those that don’t know what the three Ps are, it’s that the only things you should put down the loo are pee, poo, and paper. We've just done a whole series of ‘Around the bend’ tours where people can visit our treatment

works. Visitors come away saying ‘Well, I'm never going to flush wet wipes again.’ But I take the point that if you're not seeing it and getting the message across, we must do better.

Question: I live in Gillingham, a town of some 11,000 people. Talking to my neighbours and other people in the town, we've noticed over the last few years that the water pressure has gone down. Obviously, decisions that we made on things like installing water softeners were based on the water pressure we used to have. It’s definitely cut down. Is this a policy, or might we see water pressure come back up in the future?

There are minimum pressure standards, and you should not be getting anything below that – nowhere in the region does. We have generally reduced excess pressures because leakage is linked to the pressure in the pipe. So across the whole network, over time we've been putting in pressure control systems that make sure the pressure is balanced throughout the network and you don't get very high pressure that some people used to get, that can cause leakage.

We asked the customer to send in their contact details to arrange a pressure check at affected properties.

Comment: We have had people come out and check the pressure a couple of times and they’ve said that it’s within acceptable limits – they just don't say acceptable to who.

There are legal levels that we have to meet.

We repeated our offer to arrange a pressure check, to see whether there is anything we can do.

Question: What research are you supporting or sponsoring to develop smart water meters like smart electricity meters that are far cheaper to operate than the current methods for reading water meters? It's no good if they're more expensive than present.

We are planning on rolling out smart meters. We're looking at the most cost-effective way to do that, and the technology involved. We're planning to roll out meters to around 40% of our region, which will give customers much more ability to manage their water use.

But certainly we've not nailed the technology yet. We're looking at all the technology out there to see what's best for customers and what will give them the best experience. We’re happy to learn and if there's anything you've got in mind from your own experience, then do let us know.

Question: We're part of your Community Connectors project. You have a big target to reduce water usage per person per day. What would happen if people didn't do that – what would the impact be?

We are looking at lots of different options to reduce demand. Our business plan features an increase in investment around water efficiency. We really do want customers to be able to save water and we need to give them the tools to do that. So smart metering is one way to help people manage their water use, and it also helps us find leaks, which helps customers save money and also helps us control our network.

We’re also doing things like going into homes, doing water efficiency audits. We're looking at a massive ramp up of our Home Check programme, to identify leaky loos for example. A leaky loo can use as much water as two extra people in a home.

It's imperative that we make water efficiency and smart metering work. Otherwise we would then have to look at other [supply] solutions. But our preference would be smart metering and water efficiency and helping customers to achieve those savings.

Question: I’ve actually just had a Home Check, which was excellent. But what would happen if as a population we don't generally reduce our water usage? What would then happen within the Wessex Water region? Would it cause problems with groundwater levels etc?

You've been doing all the right things. We're trying to encourage everybody to do the same – because climate change is making a big impact on water, on rainfall. We get longer dry periods, which impacts on drought, and shorter, more intense rainfall, which impacts on sewerage.

On the water side of it, we have to further reduce the amount of water we take from the environment. It's a lot less than it was 30 years ago, but we need to go a lot further to reduce the impact on river flows and on river quality. One way of doing that is through people storing their surface water. Rainfall getting into the sewers from one average roof in a storm is equivalent to the volume of sewage from 100 houses. We're encouraging people in the Connectors areas to install water butts. They then have a butt full of water for when it's dry, and it prevents the surface water from entering the sewer and making storm overflows worse.

Comment: We have been involved in getting water butts out to Bridport's allotment holders – so I can see how they can make all the difference.

Question: What are the 10 water treatment centres that are being updated?

I don't know them all off the top of my head. There are certainly some where we're looking at particular issues, e.g. removing nitrates (which get into groundwater). Between now and 2025, we need to make sure we really understand the risks of some of those sites in particular and maintain an adaptive approach.

Kevin Johnson asked for a fuller answer to be included in the written record – see below:

We are considering a number of schemes including the following, and will continue to adapt this list ahead of and/or during AMP8 as our understanding of risk develops or new risks arise:

- *Black Lane WTC*
- *Chitterne WTC*
- *Codford WTC*
- *Compton WTC*
- *Corfe Mullen WTC*
- *Holt WTC*
- *Milbourne St. Andrew WTC*
- *Milbourne WTC*
- *Rodbourne WTC*
- *Sturminster Marshall WTC*
- *Stubhampton WTC*
- *Tucking Mill WTC*
- *Upton Scudamore WTC*

Theme 2: Effective sewerage system

Question: I was very pleased to read Wessex Water’s Striking the Balance report [our business plan]. I'm interested in knowing what was spent in the past so that we can make a valid comparison when you have completed the plan by 2030. How much has been invested in storm overflow improvements in the last five years, so we can compare like with like?

We're currently spending £3 million per month dealing with storm overflows. The plan would increase that to almost £7 million per month.

But I should add that there are different ways of dealing with storm overflows.

The traditional approach is to build a very big tank for storm sewage, then when the storm passes you pump it back into the sewer system. That is a very expensive approach. So to solve all the storm overflows in England by that method, the estimated cost would be about £500 - £600 billion.

We are increasingly looking at nature-based solutions, where particularly for rural areas we can use nature to treat the overflow, rather than pouring a lot of concrete or doing a lot of pumping.

Then the third way is keeping surface water out of sewers in the first place. Surface water ought to go straight into rivers, not combined sewers. We need to do much more to separate it.

The money we're spending is a combination of three approaches. In the five-year period from 2020-2025, we will spend £180 million in storm overflow improvements, and we are proposing to spend £400 million in the next five years.

Question: Can you share a list of the storm overflows you are proposing to improve?

On our website there is a storm overflow improvement dashboard – you can have a look at maps and you can search for storm overflow improvements by both local authority area and also Westminster (i.e. Parliamentary) constituency. It shows what we're doing in this five-year period, what we're doing in the next five-year period, and those which are already compliant with the requirements.

Between 2025 and 2030, we're delivering 38 nature-based solutions. They’re typically in the areas where there's higher levels of groundwater infiltration.

There are quite a lot within the Dorset Frome Poole Harbour catchment. We're delivering a nature-based solution at Bulbury Lane, near Lytchett Matravers, we've just got planning permission for that. So that's reducing storm overflows from about 70 spills per year down to about 10 per year, using over a hectare of wetland area, including a wet woodland too. So we'll provide significant improvements to the River Sherford there as well.

One of the traditional approaches we are going to do is at Bournemouth. We are just about to start work, putting in a very large tank to deal with the overflow there.

I'd urge you to go to our website to have a look in more detail.

Question:

We've been working a lot with Wessex Water and the Environment Agency to look at all sorts of issues, e.g. storm overflows, persistent chemicals. Our biggest issue is surface water. I completely agree with using water butts, but once your water butt is full, which happens in the first rainfall, it becomes an irrelevance. It's just bypassed with the next rainfall. We're in an elderly community, where they may not be physically able to just pop outside and empty their water butt.

It would be fantastic if you put a bit more into small village infrastructure, e.g. directly installing water butts for people, giving advice on how to manage water butts and perhaps installing some sort of template rain gardens, maybe in schools or community areas to show what a rain garden is. We're seriously lacking in the sort of infrastructure to support people installing and using water butts. Also, we are a slippage zone, so we don't want to encourage people to put too much water into the ground in certain areas. Is there a programme to really explain how water capture works in an efficient way? **[Lower Char community project]**

We have been working very closely with many of the communities around the River Char and the rivers in West Dorset. We are looking at doing more sustainable drainage options in schools as well. There's a SuDS [sustainable drainage systems] in schools programme – we've just completed our first project, which is in Bath, but we are looking at other locations across the region too. As you say, that's quite a good example then for the local community to understand what that looks like.

In terms of water butts, there are various different mechanisms e.g. smart water butts or water butts which drain themselves over a period of time so you don't have to physically empty them yourself. That's something which we are looking at as part of our Community Connectors projects in Bridport, just a bit further east from you.

We've been working with the Litter Free Dorset Project around installing water butts there as well. So we are looking at other opportunities to work with local communities and community groups to make that a bit more accessible.

Question: A number of spills have been on several rain-free days. I'm sure you will blame this on high levels of groundwater, but other beaches have not been impacted by this. Please explain why it's happening. **[Local of Avon Beach / Friars Cliff]**

I will need to look into that in more detail with one of my colleagues to understand exactly what's going on. I know we have been doing a bit of work with the local community there as well, and collecting some water quality samples from the bathing water throughout the year.

There are two things in relation to Friars Cliff and Avon Beach. Firstly, the actual overflows are a long way away. We put out information about where the flows operate, on a precautionary basis. That gets picked up by Surfers Against Sewage and others, but the actual impact is minimal.

Secondly, with the amounts of rain we’ve had recently, water has been sitting in the catchment for a long time, and it takes quite a long time for the catchment to drain down, and for the overflow to stop. It's even worse where you've got high groundwater levels and you've got large lengths of private sewer where you get infiltration.

But that's not a Friars Cliff problem. That is just the time it's taking for the catchment to drain down.

But the actual impact is absolutely minimal. In fact, we took some samples recently when the overflow was operating and it showed no impact whatsoever on the water quality. But clearly people are concerned about it because they see that the overflow has been operating.

The long-term answer lies in real time monitoring of public health parameters, which is something we have been developing. The difficulty with public health parameters is that to measure things like enterococci and coliforms, you have to take a sample, take it to the lab, put it in a Petri dish, incubate it for 36 hours and then measure what's grown. But at Warleigh Weir and a number of other sites, we have started measuring other parameters, and then using artificial intelligence (AI) to correlate between those measurements and the public health parameters. We've now got 96% correlation at Warleigh Weir, so over time we'll be able to tell people the quality of the water they’re using in real time.

Question: I'm representing Batheaston and the River Avon. We're looking at how to improve the water quality there. How do you plan to roll out the technology at Warleigh Weir into other locations? We're downstream in the Avon, we have our own storm sewage overflows within Batheaston, one of which goes into Catherine's Brook, which runs past the school, where the children play. So in the interim until the long-term problem is solved, how will you roll out that real-time monitoring technology, so that people can educate themselves on whether to enter the water or not?

We currently have real time information at Warleigh Weir that shows water quality, river flow (which actually is one of the biggest issues there) and also water temperature. So people can do their own personal risk assessment and decide whether or not to swim.

We're also progressing a similar scheme with Bristol City Council in the Floating Harbour at Baltic Wharf. The next sites which we've got plans for are Bathampton Meadows, and also upstream in Farleigh Hungerford, with the swimming club there.

We're using information from the Rivers Trust and opinion from local authorities to understand the locations that are currently popular bathing or amenity sites, and where they lend themselves to encourage / enable people to safely

swim and use the sites recreationally. We have a long list of sites that we're looking at and are currently in consultation with. In our business plan, we're planning to roll out that technology at 20 locations.

The Warleigh Weir monitoring is showing some really interesting results. It shows that from instantaneous measurements, around 25% of the time the water quality there would achieve excellent bathing water status, 50% of the time it would either be good or sufficient, and only 25% of the time would it be poor i.e. would not satisfy the bathing water standards. That doesn't always relate to storm overflow operation because it's a huge catchment and there are many, many issues which impact water quality there.

Our monitoring provides people with useful information, in real time, so that they can make a sensible decision as to whether or not they want to use that water recreationally.

Comment: Thank you. It would be good to see some of the money put into educating people across the across the whole region in other areas as well.

Question: I would like to understand more about storm overflow discharge hours into our rivers. How many actual hours does Wessex Water discharge for? And what is the plan for getting this to a residual level, i.e. where it's impossible to reduce this further?

We publish information on our storm overflows on our website – you can see the data over previous years for individual sites and also the total. We have data particularly for the last three calendar years (2020, 2021 and 2022). In 2022, our overflows operated for a total of 129,000 hours. That's not just rivers, that's to the coast as well, and that's throughout the calendar year. That's a 45% reduction on 2020 figures.

Our Storm Overflows Improvement Plan sets out how we're going to reduce that further. Some of that is through surface water separation, stopping the problem at source. Some of it is around attenuation, constructing big tanks, being able to pump the storm water forward for treatment. And some of that is around nature-based solutions.

The longest storm overflows in terms of duration are those which are due to groundwater infiltration, which is when the water table is higher than the sewerage system. Groundwater can ingress into both the public system which we operate, and the private system which homeowners own and are responsible for. In these locations we're looking to install nature-based solutions to ensure that we're providing treatment from those storm overflows, such that there isn't any environmental impact as a result.

All of that is laid out both in our Storm Overflows Improvement Plan, and on our website.

Question: It looks like not much land is owned by Wessex Water – I think it was 4000 hectares[1], and less than 200 planning to be developed. What are the nature-based ways to separate sewage from groundwater?

One of our key challenges is around the land area that nature-based solutions require. So while we are trying to deliver nature-based solutions on our own land holdings, we're also working with other organisations such as the Wildlife Trusts, to identify locations adjacent to storm overflows, where we can work with third parties to develop nature-based solutions there.

That gives the opportunity of providing reed beds, wetlands, and wet habitats adjacent to a river, and also potentially to do some re-naturalisation as well, so a greater benefit than if we were to do this only on our own landholding.

Similarly, we are working with the lead local flood authorities to identify opportunities for SuDS [sustainable drainage systems] and other drainage schemes, to reduce the incidence of surface water flooding.

[1] Wessex Water’s total estate amounts to fewer than 3,000 hectares.

So it's a real mix of solutions on our own land, and working with third parties and partners to deliver the best solutions for each location.

Question: I'm on the boundary between Southern Water and Wessex Water, near Salisbury. I sometimes wonder whether Wessex actually just provide the bill rather than the water. Are all the projects actually going to reach targets in 2030, or is it possible that a lot could be achieved sooner? Targets always bother me from a project management perspective. Targets are the last thing you want when people, particularly managers, then start focusing on targets rather than actually getting on and doing what needs doing.

I do wish that all the different regulators wouldn’t set us so many targets, because often they are conflicting targets.

We're already ramping up for this programme. We have allocated £50 million of spend prior to 2025 to start ramping up, to start placing supply chain orders. To deliver this step change, we have to start before we get into 2025; there will be some ramping up as you go through the period inevitably. We're trying to minimise that, so we get a relatively smooth programme.

Some of the things can be delivered earlier, for example some of the nature-based solutions because they're relatively easy to deliver. But for most of these things, e.g. nutrient reduction, you need to purchase large amounts of chemicals, equipment etc. and install it. So we won't start delivering before the next period. But we are confident in delivering. We have never, ever missed a target for our capital investment programme and we don't intend to do it going forward. So the 41% of the storm overflow targets will be met before we get into the 2025-2030 period.

Question: I think the road drains should be cleaned out. It used to be done regularly. Now they are usually full of earth and have plants growing out of them. When it does rain very heavily, there is nowhere for the water to drain away and it causes flooding.

Unfortunately road drainage isn't our responsibility, so it's down to the local authorities and local councils. It's their responsibility to clear and maintain them. But yes, if they're not maintained properly, it can cause flooding, which is a real inconvenience for everyone and also can have an impact on us.

Question: I'm a consultant paediatrician. I run cold water swim groups for people with vulnerabilities. We're just about to partner with Macmillan on a big project around this. Colin made a point about there being no problem with storm overflows at Avon Beach, and that you’ve done a few samples. When you look at the whole network, it looks like Avon Beach has got particular vulnerabilities with the way the river systems flow, particularly from Holdenhurst. Can you really say with significant confidence that you are comfortable during these autumnal months when we get intense rainfall, low pressure systems, that there is not a problem. We actually know lots of people who get ill who've been in, particularly after heavy overflow. Can you quantify the volume of spill and the quality of the spill to allow us to make some sense of that? And how many samples have you taken? I appreciate the AI system may help if it works in saltwater – does it?

The five or six overflows that impact on Avon Beach are all several kilometres away, because they're mainly on the river system, so Holdenhurst itself, for example, where we're just putting a lot of additional storm storage.

All the evidence is from samples, and only a limited number of samples have been taken. During the recent really heavy rain, with lots of storm overflows operating, the samples taken do not show that there are any significant public health concerns due to bacteria. But it does need more research and it's one of the reasons why we put out the information when the overflows operate as a precautionary basis. And it's why the real time monitoring is key to this. We've just put real time monitoring off the end of Bournemouth Pier and at Boscombe, and we're in the process of running the calibration at the moment. There's no evidence that it doesn't work in saltwater, but it does need a period of calibration. The problem we've actually had at Bournemouth and Boscombe is that the water quality has been so good that we need some poor water quality in order to be able to complete the calibration.

In short, it is prudent not to go in if there's been a major storm, because that's always the advice. Secondly, if you're bathing anywhere, then don't ingest the water. But getting real-time monitoring will give you much better information and you'll be able to make your own judgment as to whether to go in, be that at Avon Beach or anywhere else.

Question: How does your confidence about this not being a major issue tally with the earlier comment that 25% of the time the water was poor quality? Surely a reading of 'poor' on the AI system a quarter of the time is not acceptable?

That was on the River Avon, at Warleigh Weir, where you've got a whole raft of stuff coming in; septic tank waste, agriculture etc. That is not the case on the coastal sites. On Environment Agency (EA) monitoring of the South Coast sites[2], they are all, with one exception, excellent or good. But the EA sampling is not continuous, it's only spot samples taken. So clearly, if there's been a heavy storm, be prudent. When we get the real time monitoring in, you'll have much better information.

Question: And is that likely to happen to Avon soon because it's a popular place?

It's one of the sites we've identified in the plan. Also, as part of our Poole Harbour work, we're looking at the correlation between E.coli and norovirus as well, because the current faecal indicator organisms are E.coli and Intestinal enterococci, so bacteria not viruses. We're trying to understand the linkage between them. We'll be rolling out any learning we get from that. It's an evolutionary programme so that we can provide better data to use.

But in relation to the point about monitoring at Avon beach, we need to talk to Bournemouth, Christchurch and Poole Council (BCP) about their priorities, to make sure we're aligned with them.

Kevin Johnson suggested that this person provides contact details for further discussion with Wessex Water.

Kevin Johnson asked for a fuller answer to be included in the written record – see below:

This location is on our list of priority sites for real time water quality monitoring, however before we can commit to progressing this we need to have more detailed conversations with Bournemouth, Christchurch and Poole Council (BCP). Similarly, we need to undertake detailed feasibility studies to identify the best sensors to be deployed, locations for these and the supporting water quality monitoring and analysis programme.

A number of further questions and responses relating to Avon Beach / Friars Cliff can be found in the 'Questions answered after the session' section – see page 21.

Theme 3: Enhancing the environment

Question: With climate change and an increasing population, can Wessex Water reassure their customers that plans are in place to deal with increased demand for water amid longer drought periods? Is any consideration being given to building new reservoirs to deal with the demand?

In our water resource management planning, we do a very detailed analysis, looking at all sorts of different potential future scenarios around climate change, population growth and customer demand.

Alongside everything we discussed earlier in terms of reducing demand, e.g. smart metering, water butts and Home Check visits, we're also looking at supply side measures too.

[2] The 2023 Bathing Water Profile for Christchurch Avon Beach is available here: https://environment.data.gov.uk/bwq/profiles/profile.html?_search=christchurch&site=ukk2201-18800

We're looking at a couple of new reservoir options alongside our neighbouring companies and how we supply that around the whole network to provide resilience everywhere. In particular, one of the options we're considering in detail is whether we can use some existing quarries. When the quarries reach the end of their useful life, they will be turned into reservoirs anyway as part of the planning condition for the quarry – we’re looking at whether it’s an option to bring them into supply for us.

Question: Are there any legal planning regulations for housing developments that make housing developers contribute money to water and waste utilities for the upgrade of sewerage plants to cater for the extra waste? Where is the extra water to come from? My local river, the Allen[3], has dropped about a meter in depth for average flow since 1977 as the population in Wimborne has and is exploding.

Firstly, yes there are charges for developers to pay to connect to the network. However, these typically cover just the immediate connection and the downstream infrastructure, but not as far as sewage treatment works. This is something that we've been talking to government about, to make sure that that the right people are paying for the right upgrades and that we can maintain that infrastructure over the longer term.

The other thing that we're looking at is how we could encourage developers to use more innovative solutions, so things like greywater recycling and rainwater harvesting. This could be both through the planning process, so that there's an obligation for the developers to take those approaches, but also through us providing incentives for developers. For example, we could reduce their charges to reflect cost savings we would make from not needing to upgrade the system.

Question: According to your Striking the Balance leaflet, it costs £900 million to reduce nutrients from entering rivers and seas, but only 1400 tonnes of chemicals would be prevented from entering. Does it cost nearly £500,000 a tonne to prevent this?

The figures there are a total cost for both phosphorus removal and nitrogen removal – it’s a total cost of £900 million to remove 1,600 tonnes of nitrogen and phosphorus by 2030[4].

Different technologies are required for those. Nitrogen removal is a very chemically intensive process. It uses methanol which gets shipped across from Eastern Europe and then is transported by tanker from Hull to the sewage treatment works. It requires quite a lot of extra construction and oxygen injection into the process as well. So that's a capital cost over many different years. So we do have typical costs per tonne of either phosphorus or nitrogen to be removed, but it’s an aggregate at the moment.

Question: Why are you removing nitrates and phosphates rather than preventing them getting there in the first place?

Nitrogen or phosphorus is down to us [as humans]. Nitrogen and phosphorus come from the food we eat, but our bodies only take what we need. So we excrete the excess into the sewerage system. About 50% is from urine and 25% from faeces.

The ideal solution would be a much more circular economy approach whereby we're reusing that nitrogen and phosphorus by way of fertilisers. Essentially this is what happens with the sludge being returned to land. If we can have no net imports of phosphorus into the catchment, then it's becoming a lot more sustainable in terms of nutrient use within that locality.

[3] The River Allen in Dorset is within Bournemouth Water's supply area and so is impacted by their abstractions.
[4] Our latest estimates indicate the programme will remove around 2,000 tonnes per year of phosphorus and nitrogen combined. This is a total cost including capital expenditure and will therefore allow us to continue removing higher nutrient levels beyond 2030.

Question: What is the cost of a reed bed – we would like to put in two? [Lower Char community project]

It depends on the location, the size, what you're looking to do, how naturalised that is. There are so many different variables that it really is location-specific.

Ruth offered to follow this up separately in a discussion.

Question: What is Wessex Water doing to get the more industrial and bigger customers on board with what you've outlined in the strategic plan [i.e. in terms of reducing water usage]?

It's really important we focus on businesses as well. We've been doing quite a large programme focusing on schools at the moment – it’s delivered some real benefits, because schools tend to have many leaking urinals etc. We work with retailers to facilitate that. We're also going to expand that programme over the next period to find other ways we can work with businesses. Smart metering will help, as it will allow businesses to better monitor their use. But we’re certainly collaborating with retailers to find more ways for business to save water, as it’s a really important area.

Question: What about the industry sectors that use water as part of their processes? Besides schools, do you have big industrial users of water in your client base?

Yes, and we can work closely with them to alert them to help find leaks on their sites, help them to save water in other ways, and give them more and more data to be able to manage their water use and spot trends. Some of that we do with retailers, because in the business market, the retailer is responsible for billing these customers and we are the wholesaler. So we work very closely with those retailers to help the end customers. We are doing as much as we can to tackle that sector.

Theme 4: Affordable bills and excellent customer experience

Question: You've made the decision during a cost-of-living crisis to make changes and improvements. Please guarantee that the shareholders will fund the cost and you are not increasing the general household bill to cover the cost.

During the cost-of-living crisis, we made a number of changes. The principle one was to get people through the system faster, and that will continue. The costs are shared. As I said, we go out to customers to see what level of subsidy customers think is appropriate. So customers bear part of it, shareholders bear part of it, and that will continue going forward.

Question: We will make sure bills are affordable for all, but how and what is your definition or calculation of affordable?

It's paramount that everyone can afford an essential service. We define affordability as based on paying no more than 5% of your disposable income (income less your housing costs).

We know that for a lot of people, water is affordable, but for a lot of lower income customers, it isn't. We can offer reduced tariffs to those customers to lower their water bills. To give you an idea, customers with the biggest discounts pay around £1 per week on our main social tariff. We work with many partners, and we ask customers to seek advice and we can put them onto the correct tariff.

Anyone that needs help from us should get in touch with us. We do lots of work to reach out and find customers. Where we have data, we are automatically applying social tariffs. We are predicting that we may need to have around 140,000 customers on such schemes by 2030, but it's absolutely our aim to eradicate any water poverty in our region by 2030 and hopefully sooner.

Comment: I won't pay a penny more for water services. You've had vast amounts of public and customers money and used it to raise debt and pay shareholders and bosses vast amounts of money. If you want the money, then the government are going to have to nationalise you and all of the other thieves of the water companies. Seriously you can forget any money from customers if you are a private rip off company, as now can't pay won't pay.

Question: To what degree does that resonate in your research with what others told you about their view of the company or about the proposed bill levels? [Kevin Johnson]

First of all, since 1989, when water and sewerage was privatised, we have not had a penny of public money. The money comes from two sorts of investors:

- equity investors – Their return at the moment is about 5.25%, the sort of return you get in a good high street bank. So it's not massive.
- debt investors – The industry was set up such that debt over time arises, it’s a question of who pays – today's customers or tomorrow's customers? So it was set up so that as you invested in things that Ofwat approved, you could borrow against that.

There is a mixture of debt and equity investors, and then money coming from customers. We spend a lot more money on operations and capital investment every year than we take in from customers. That's why the debt level rises.

In some places there have been shareholders who’ve stripped out dividends. Thames is the classic example – RWE stripped cash, then Macquarie, and the absolute tragedy is the regulator allowed it to happen.

This has not happened in Wessex Water. We have had a consistent owner YTL for the last 22 years and our gearing (our relationship between debt and the value of the business) has been consistent throughout. Last year we paid out £71 million in dividends. Our investment was four times that. The actual returns to shareholders are set by the regulator. The only way shareholders get more than that is if you can do things more efficiently. And then that efficiency is shared between the shareholder and the customer.

I don't accept that shareholders in Wessex Water have benefited disproportionately. What has gone wrong is that we've allowed bills to be the priority rather than investment. If at the last price review bills had been kept constant, we could have invested another £340 million in the current five-year period. But we are where we are – the bills have to increase because they decreased last time around.

But this does have impact on the trust of the sector. Trust is important for a number of reasons. We need customers to work with us to help reduce demand; we need to have customers’ trust when it comes to dealing with and managing the environment. The great erosion of trust over the last two years is of grave concern to us.

Kevin Johnson noted that Thames Water is not here to comment on this point, and that Ofwat is here observing, but not to engage in the meeting.

Question: To what degree do you think your fellow water companies have let you and Wessex Water down? And what can you do to make sure that trust increases, not only in Wessex Water but in the water industry as a whole? [Kevin Johnson]

The whole industry has got to do better. We have to do better. We've got some high standards now, but we need to do much better.

The issue of storm overflows came almost out of nowhere. People had previously accepted that storm overflows exist. But the recent publicity has been really good, because for the first time we are getting investment programmes that are at the right sort of level to deal with storm overflows, as well as nutrients and long-term infrastructure security.

From that point of view, we are where we should have been a long time ago. We as companies should have done much more to shout about the need for this investment. We need to do better and we will do better.

Question: Will a dividend be payable to shareholders in future years? If so, why? Considering they have been handsomely rewarded with dividends, whilst investment in Wessex Water has been neglected?

If the business plan is approved as it stands, bills for customers will go up, and investors and shareholders are going to have to put equity in and take much lower dividends. That's a fact – that's what the balance will be. So the burden of paying for the extra investment will be shared between investors and customers.

Question: Throughout the strategic plan you've clearly identified the need for the social plan and it's very useful for the people that we see. One of the presenters mentioned the support given and I can vouch for the fact that of all the utilities, some of the smoothest support is given by Wessex Water. Is the social fund linked to the return to investors? Will the social fund go up or down over the period of the strategic plan, or what's the proportions? **[Representative of debt advice service]**

We started off with a social fund of half a million pounds. Last year we gave away three quarters of a million pounds. And that fund is continuing to grow.

We're paying for it out of savings that we're making in other places. So that social fund will not be linked to the return that shareholders get, that social fund will grow to meet the needs that it funds.

Question: What's the relationship between Wessex Water and Pennon, which owns, I believe, Bristol Water. Bournemouth Water and South West Water. And how does the relationship work between YTL and the two companies?

Bristol and Bournemouth Water were water-only companies that have been in the private sector for almost 200 years.

Pennon was created out of the privatisation of when South West Water was created, at the same time that Wessex Water was created. Wessex Water has tried to buy Bristol and Bournemouth Water several times, but they didn't want to belong to us. Pennon now owns them.

We have a really good working relationship with Bristol Water – we have a shared billing service, so we send a single bill to customers so they don’t receive one each from us and Bristol Water. We have a similar, good working relationship with Bournemouth. We are cooperating on water resources among other things.

Question: Can we get monthly billing, or at least quarterly. Six-monthly billing makes it difficult to manage the household budget.

Although that's how we currently bill, for anyone finding it difficult to manage their money, we can set up more regular payment arrangements. Plus there are various payment options. When we move more towards smart metering, we'll have much more information from our meters. So we will be able to increase the frequency of billing e.g. to quarterly or monthly. Customers would have much more control over their bills and how they pay. In many cases, that will be through digital apps or portals. But certainly, for customers struggling with budgeting and six-monthly bills, there are ways around it. Just get in touch with us.

Question: The shareholders had £70 million paid out to them last year, when a loss of £11 million was made by Wessex Water. The previous year the dividends were £63.5 million and there was a loss of £44.4 million. Why should shareholders get any payout when a loss is being made? You only get the payout when you make a profit.

If that was real money, you'd be right, but it's accounting, not cash. Essentially, it's due to deferred tax. So the actual cash the business made was no different from the previous years, but the accounting treatment led to a loss appearing as an accounting loss. It wasn't a cash loss.

Comment: I still think the shareholders should be prepared to take less.

The shareholders have taken less, and the dividends have come down significantly over the years. Our income is linked to inflation and when we had deflation, the shareholders didn't take money out of the business, they left money in because there wasn't money to take out, but that's on a cash basis rather than an accounting basis.

We need to recognise that this sector needs investment. It won’t get that investment from the public sector. So we do need investors to make the investment so we can carry out the capital programmes we've described. So shareholders are really important.

What is also important is they only get their fair share. We've always had a simple philosophy in Wessex Water that we are about customers, the environment and the people in the business – and shareholders get what's left, and the returns they are getting are modest. It's a safe return, which is why it's a modest return. They’ve been good shareholders for the long-term.

Question: The plan is a much-needed increase in investment. How will you ensure that the greatly increased plan is delivered? What are the consequences for Wessex Water if the plan is not delivered effectively – and when would these be felt? I'm concerned that Wessex Water and its suppliers may fail, but we will continue to pay upfront through our bills.

We are quite unique in how we deliver our investment programmes because we make very little use of main contractors. Mostly we have in-house project management and in-house design, and we use a lot of local subcontractors. So if you look at all the different subcontractors across the Wessex region, it's probably about 10,000 people being employed.

We like using local subcontractors because that puts money back into the local economy. We're already having good discussions with our contractor and supplier base to ensure we can deliver. We're doing a lot of standardisation. We've got our own offsite manufacturing capability. So a lot of equipment that we'll use for things like nitrate and phosphate reduction etc. will be produced ourselves and will be standardised across the region.

So we are very confident we can deliver. It is going to be a challenge. This is going to be a significant step up in the amount of work we do, and it's why we're likely to create several hundred new jobs in Wessex Water, and several thousand new jobs across the region as we deliver this investment programme. But we will deliver it. We've never failed in the past and we will not fail for the next five years.

Question: You've got a much more ambitious plan for all the reasons that we addressed right at the beginning of this session. What kind of assurances can you give and what happens if you don't deliver on the plans that you've set out today? Because Wessex Water is not delivering on every single one of its performance commitments. There are still issues as you've identified. How can people have trust in the company and that it can deliver this higher level of ambition across all kinds of areas, not least in terms of environmental impact? **[Kevin Johnson]**

I think that trust has to be earned, on the basis partly with what we've done in the past and the confidence that we can deliver this in the future. We do well on most of the metrics that we're judged against. On pollutions, we do not do well enough. This year should be better, but we are totally focused on driving down pollutions, driving down any adverse impact on the environment.

But the proof will be in the pudding. We have to deliver this – if we don't, there are severe penalties from the regulator. The business and the investors in the business would suffer significantly.

But I am confident in the team we have – we've got really good people in this business. Amid all the headlines, it's sometimes difficult to remember that we have 3,500 people across the whole of the group who are absolutely dedicated to making sure that all of this works and we do everything we have to do, in all weathers, all conditions. On the whole we get it right, but not always, and we have to do better.

Questions answered after the event

Theme 1: Safe and reliable water supply

Question: What does high quality water mean?

By this, we mean wholesome drinking water, compliant with the Water Supply (Water Quality) Regulations.

We are consistently a top performer for drinking water quality in the UK, with 99.99% of the 180,500 samples we take meeting the regulatory standard in 2022.

Question: Briefly, what is PFAS?

PFAS (per-and poly fluoroalkyl substances) are from a chemical family consisting of at least 5,000 individual substances. They are sometimes referred to as ‘forever chemicals’ because of their persistence in the environment.

In manufacturing, PFAS are favoured for their durability and useful properties such as non-stick, water repellence and anti-grease. PFAS are used in the manufacture of many domestic products, including:

- skin creams and cosmetics
- car and floor polish
- rinse aid for dishwashers
- textile and fabric treatments
- food packaging and microwave popcorn bags
- baking equipment
- frying pans
- outdoor clothing and shoes.

They also have many widespread uses in industry, including in firefighting foam.

Question: What are the PFAS levels and 1,4 dioxane levels in the water you supply, and what checks and methodology do you use to monitor the water quality?

Concentrations of PFAS identified in our water supply vary from source to source. All results from our treated waters have shown concentrations below the guideline value of 0.1 µg/L (0.1 parts per billion). You can read more about PFAS on our website.

1,4 Dioxane is not a parameter that is commonly tested for and there is no legal requirement to do so in the UK at the moment.

With regard to monitoring of water supplies, we use a Drinking Water Safety plan approach as advocated by The World Health Organisation, and our monitoring is designed around this. There are also statutory duties for water companies which describe what sampling and monitoring we should undertake. Our monitoring programmes are independently monitored by The Drinking Water Inspectorate (DWI). The DWI has some of its own information on pharmaceuticals and drinking water on its website.

Question: We moved into our property a year ago, twice in the last fortnight our drains have had to be cleared. This is because of hard water and the amount of limescale. Why should we be paying to clear drains and descale kettles because of such hard water? Is anything being done about the ridiculously hard/limescale water in this area?

There is a large amount of information and advice about water hardness and limescale on our website, including a tool to check water hardness in your area.

In general, groundwater is more likely to be hard than water from surface reservoirs, as the water picks up minerals as it percolates through the rocks. As 20% of our water comes from reservoirs (all in Somerset) and 80% from springs and boreholes (across the region), it ranges from Soft to Very Hard. We do not artificially soften any of the water we supply, as there would be no benefit for the vast majority of water used and it is an expensive and resource intensive process with a significant carbon footprint. However, we do blend very hard water with softer water in some areas, in order to minimise the hardness received by customers.

Customers can also choose to soften the water they use in their homes, but should always maintain an unsoftened supply for drinking, as the minerals contained in the water are generally accepted as having a health benefit, and the softening process replaces the calcium and magnesium with sodium, which can have a detrimental health impact.

Question: What would happen if customers don't reduce their average daily water usage? Would it mean water scarcity or other environmental impacts?

As explained during our YWYS event (see page 10 above), we have planned for a variety of future scenarios. We refresh our business plan every 5 years and will be monitoring average water use and the impact on household consumption of our plans for smart metering and water efficiency support. If we identify that customer usage isn't reducing at the rate we have planned against, we can adapt our plans at the next 5-yearly cycle to ensure that we continue to meet our commitments to ensure a resilient water supply and maintain environmental protection. To do this, alongside delivery of demand reductions in the next 5 years, we are continuing work developing a range of new supply schemes, including new reservoir options.

Question: Why is Wessex Water not putting more money into directly helping communities by, for example, installing rain gardens (for example in schools as community project templates) and installing free water "smart" butts, helping elderly communities with water butt pumps etc?

We have a developing rainwater management programme with communities across our area. In 2023 we ran a trial with over 200 households in Chippenham to install water butts and soaker hoses to capture rainwater and keep it out of sewers. We also have a 'SuDs in schools' programme which involves working with schools to separate their rainwater from sewers and provide biodiversity benefit through installing rainwater gardens in their premises.

Additionally, we have run water butt promotions for customers across our region and have distributed over 6,000 water butts since April 2023, as well as increasing the communication of why better rainfall management is a useful element of our strategy to reduce the operation of storm overflows. We're collating evidence on what approaches and strategies for working with customers is most effective, and we will use this evidence to inform our work in the 2025-30 period.

Question: There are many outlet pipes taking fresh water from the local hills out to the sea. I’ve noticed the large conduit pipe that leads out on Dunster Beach allows gallons of fresh water to be ‘lost’ into the sea every day. Will Wessex Water consider conserving rainwater in this area more efficiently?

Our future water resources plans consider a wide range of options for efficient use of water. We will be undertaking further work as part of our regional group to identify options for local water storage, which when scaled up and used to store water over the winter can benefit water supplies as well as downstream river flows during the summer period. We note that we do not own any pipes taking freshwater into the sea at Dunster, so this pipe may be a land drain taking rainfall that has fallen onto fields.

We are in a strong position regarding water resources, largely due to water available in chalk aquifers across parts of our region. We have not had a hosepipe ban in our region since 1976. That said, we are always seeking efficiencies, and as populations increase, we will need to plan for this. At a local level, we are carrying out trials to assess the practicalities and effectiveness of installing water butts at homes. These can reduce water use significantly and ease pressure on the sewerage system.

Question: I don't understand the following: "Working with the Environment Agency, we will explore the use of treated effluent to replace drinking water, for example to water golf courses or nourish potato and energy

crops." It may be the way the sentence is structured... Did you mean - "Working with the Environment Agency, we will explore the use of treated effluent to replace THE USE OF drinking water, for example INSERT COMMA to water golf courses or nourish potato and energy crops”.

Question: There is a similarly oddly structured sentence regarding treated effluent from your Poole centre to enhance flows in the River Stour.

By this, we mean that we will explore whether treated effluent could be used instead of drinking water for certain purposes, such as for watering golf courses or crops. We are also working on a water supply scheme to move recycled water from Poole wastewater treatment works to the River Stour, after advanced treatment, to offset a proposed reduction in abstraction from the groundwater sources in the River Stour catchment.

Theme 2: Effective sewerage system

General questions on storm overflows

Question: What are you doing to combat the issue of sewage being released into our waterways?

Question: What are the planned investments to end sewage pollution in Wessex Water's area?

Question: In your business plan how have you committed to stopping raw sewage discharge into the watercourses and sea of the South West? If you have not committed to stop them, how do you justify being ethically and environmentally focused?

Question: What about the sewage being cast into our oceans, waterways and all? This has been in the recent news. Raw sewage pollutes waterways and oceans.

Question: Can you reassure me that you are taking the issue of inappropriately discharging sewage into the sea [seriously], especially when there is not excessive rainfall?

Since 2000, we have upgraded more than 582 storm overflows across our region. For the current five-year period (2020 to 2025), we are spending around £3 million per month to reduce their impact on the environment – focusing on those which discharge most frequently and those that have the biggest environmental impact. The specific activities that we are carrying out to achieve this are set out in our Storm Overflow Improvement Plan. This includes completing 13 improvement projects in Bath, Bristol, Dorset, Somerset, South Gloucestershire and Wiltshire; and making sewage treatment upgrades at 42 water recycling centres to increase capacity, introducing more nature-based and low-carbon methods. We estimate that these investments will reduce the number of hours storm overflows operate for by approximately 25% by 2025.

For the next five-year period (2025-2030), we are planning to more than double our investment in storm overflows to more than £6 million per month, or £400 million over the whole period. This will deliver improvements at a further 128 overflow sites. This constitutes one of the biggest single investment programmes in our plan, reflecting the importance of this issue for us and for our customers. Our specific plans are set out in our business plan (see Section 5 of our document Wastewater networks plus strategy and investment).

Our long-term commitment, which is set out in our Strategic Direction Statement, is to eliminate the discharge of untreated sewage from storm overflows.

Availability of data on discharges

Question: How many cubic meters has been discharged in the ocean, rivers, lakes in 2022?

There were 328,000 megalitres of treated discharges in 2022. We do not measure volumes from storm overflows. Volume alone will not provide useful information as load is a combination of volume and concentration. By the end of 2023, we will however have installed event duration monitoring equipment on all storm overflows – this records the length of time that a storm overflow operates, although not spill volume.

Question: Are you planning on submitting live spill data?

Yes – live discharge data has been available for bathing water sites for over 10 years. All other live discharge date from storm overflows will be made available at the beginning of 2024 (once event duration monitoring equipment is present on all storm overflows).

Question: I am a Wessex Water resident and receive your asset spill alerts. If I receive one, how long after it is it safe for me to swim in the sea without the risk of any infection due to these authorised spills?

There will always be some level of risk from open water swimming, as water in the environment is not disinfected (unlike water out of your tap). Just because a storm overflow is not operating does not mean that there won't be harmful bacteria from treated sewage or cattle, sheep, pigs, ducks, swans, seagulls, otters, rats etc. Indeed, even when water is known to be "Excellent" standard, there is still a probability of illness if ingested. The World Health Organisation, which sets bathing water standards, has estimated a 10% probability of illness arising from ingestion of water rated as Excellent quality. Consequently, we advise that everyone swimming in open waters should follow the Government’s public health guidance.

If Wessex Water are confident that spills are not affecting the quality of the bathing quality waters, why are you not sampling bathing water quality post-spills and then publishing the results?

Our Coast and Rivers Watch alerts provide notifications to interested parties in real time when overflows operate. We have worked with the EA, SAS and local councils to identify which overflows have the potential to impact water quality at designated bathing waters and some known amenity sites. In many cases, these overflows are located in coastal locations where the discharge point is up to 1km offshore. At these locations it is unlikely that these spills will impact bathing water quality due to the location of the discharge, the dilution provided by the sea and the tidal patterns during storm events.

It is the responsibility of the Environment Agency to undertake the water quality monitoring at designated bathing locations during May to September. These data do capture storm events and occasions when overflows operate. These results are publicised by the Environment Agency, once analysed at their laboratory, on the Swimfo website.

We are separately rolling out a programme of real-time water quality monitoring at both river and coastal locations. To date, real-time monitoring is available at Warleigh Weir, Baltic Wharf (Bristol Floating Harbour), Bournemouth Pier and Boscombe Pier. At these sites, water quality is recorded and updated on a half-hourly basis throughout the year, capturing storm overflow operation in addition to runoff, private discharges and other sources which may impact water quality. We are rolling out this programme over the next few years to around 20 river and five coastal sites.

Question: As you roll the AI-backed real-time analysis out to other sites, will you re-train at each site? Moreover, will details of the calibration schedule, training/validation datasets of the real-time water quality prediction technology be A) peer reviewed and B) made publicly available?

Yes, we will retrain the AI at each site as we obtain more data from the water quality sensors deployed, laboratory analysed water quality samples and other data such as weather, river flow and asset data. Typically, it takes 6-12 months to obtain sufficient data to accurately learn the signals to provide real time inferred water quality data using sensor information. We are currently working with an independent, academically based, big data and statistical consultancy to peer review the data and AI work undertaken at Warleigh Weir. Once the sensors have been installed and the water quality relationship is being developed (after 6-12 months), this will become publicly available.

Work in the Hampshire Avon catchment

Question: With regards groundwater infiltration, it has been stated that this is largely due to privately owned sections of the sewage network. In reality private landowners are not going to invest to fix this, what is the solution to this? Can Wessex Water find a way of funding improvements in key areas? Can you

please confirm investment plans for surveying and sealing your own pipe network within the Hampshire Avon catchment?

We recognise there is a high proportion of groundwater infiltration which arises from private pipes which connect to our sewerage network. It can be difficult for homeowners to identify this problem and then to reline their private pipework to address this. In these locations, we will reline as much of our (public) network as is appropriate, and, where possible, install nature-based solutions to treat these overflows before discharging to watercourses. Our data shows that the provision of nature-based solutions provides further treatment such that the discharges have no impact on the downstream watercourse and are the most sustainable solution. Where this is not possible, the alternative is to provide greater attenuation and pumping to move flows on to the nearest water recycling centre for treatment. However, this is very energy intensive.

Our plans to survey and reline our sewerage network are set out in more detail in our Infiltration Reduction Plans which are available on our website.

Within the Hampshire Avon catchment specifically, we have a number of nature-based solutions either underway or planned to treat groundwater-influenced storm overflows. This is in addition to the current solutions at Shrewton and Hanging Langford. We are currently progressing nature-based solutions at: Barford St Martin, Fovant, Hurdcott and Wishford as well as undertaking further sewer survey and sealing work. We are also working with Wiltshire Wildlife Trust to design and deliver a nature-based solution at Coate Spaniel Bridge and have a number of other schemes, such as in Warminster, where we are providing storm water attenuation. There is more information available on our Storm Overflow Improvement Dashboard.

Question: I welcome the work that Wessex Water has been carrying out on treatment wetlands, both for tertiary treatment of final effluent and for mitigating stormwater discharge. Can you confirm where these are planned in the Hampshire Avon catchment, including what sites have had (or are planned to have) a feasibility assessment for nature-based solutions in AMP7 and planned for AMP8. Your own evidence shows how effective and cost-effective these can be, would you agree there should be a plan to implement on all feasible sites – especially on designated rivers?

There are a number of sites where we are already progressing nature-based solutions for storm overflows in the Hampshire Avon catchment by 2025. This includes reedbeds at Hurdcott, Coate, Fovant and Wishford which are already in design or construction, with completion expected by March 2025.

In total, across our region, 160 storm overflows upstream of SSSIs have been identified for improvement by 2050. It is our preference to install nature-based solutions, where appropriate to do so and subject to land availability. More information on the locations of these solutions can be found on our Storm Overflow Improvements Dashboard.

Work in the Bristol area

Question: Are there enough storm drainage and sewage treatment plants in the Greater Bristol Area, with all the planned extra homes and development in the East Fringe and North Fringe of Bristol? Does Bristol need a new sewerage network to meet the housing target of the Bristol, South Gloucestershire, North Somerset and BANES local plans?

We have just completed our North Bristol Sewerage Strategy, designed to accommodate recent and future development in Bristol. The first phase, the Frome Valley bypass sewer, allows flow from North East Bristol (e.g. Yate) to be diverted away from the city centre, to free up capacity for development. The first phase was built 7 years ago and cost £15 million. Phase 2 of the strategy, the Trym sewer, has just been completed. Phase 2 was constructed mostly by tunnelling machine and cost over £50 million. We have published more details of these projects on our website.

Question: I live close to the River Frome (Hambrook, South Gloucestershire) which smells strongly of human urine after rainfall. There is very little life in the river. I assume this is down to the storm drain system? What is being done to clean up this river and also thus improve biodiversity?

We are currently improving three storm overflows which discharge to the Bristol Frome upstream of Hambrook. These schemes are located in Frampton Cotterell and Winterbourne (as detailed on our Storm Overflow Improvement Dashboard) and will be completed by March 2025. They will deliver increased storm storage and will reduce the frequency of spills, respectively, as follows: 1) 70 times per year to 13 times per year; 2) 61 times per year to 12 times per year and 3) 93 times to 20 times per year.

Additionally, on the River Frome, we are disconnecting rainwater that is connected to the foul sewer as part of the River Frome Reconnected project, working alongside South Gloucestershire and Bristol City Councils. This will manage flood risk on the river, as well as improving biodiversity.

Work in the Avon Beach / Friars Cliff Beach area

We received several questions about Avon Beach and Friars Cliff Beach, in Dorset. Some of these questions were answered during the ‘Your water, your say’ session. Responses to other questions are set out below.

Question: As a beach heavily impacted by these spills, can you assure us that we will be next in line for a water quality meter?

This location is on our list of priority sites for real time water quality monitoring. However, before we can commit to progressing this, we need to have more detailed conversations with Bournemouth, Christchurch and Poole Council (BCP). Similarly, we need to undertake detailed feasibility studies to identify the best sensors to be deployed, locations for these and the supporting water quality monitoring and analysis.

Question: What immediate steps can be taken to save our beach from constant pollution?

Avon Beach is consistently classified as Excellent by the Environment Agency for bathing water quality as per the Bathing Water Regulations. The most frequent discharges (over a calendar year) are from the storm storage tanks at Holdenhurst, Kinson and Christchurch water recycling centres (WRCs). We are currently constructing an additional 9,000m^3 of storm storage at Holdenhurst WRC, which will reduce spills to 2 per bathing season (May to September).

Question: How can you be so sure significant spills have no impact at Avon based on a few samples? We have multiple examples of people falling ill having swum / windsurfed there. Do you know the volume of each spill and the quality of sewage spilled?

The current spot sample data taken by the EA shows that water quality meets the "Excellent" standard. However, even at "Excellent" standard there is a probability that people who ingest water may get ill. The standards, derived by the WHO, estimate that there is still a 10% chance of illness due to ingestion of waters meeting "Excellent" standards.

The only quality of water safe to drink is drinking water which is disinfected, so that there are no bacteria present. Measuring volume alone would not answer this question, as environmental load is affected by a combination of volume and concentration, and measuring the concentration of bacteria is a lab-based process which takes significant time. However, we are planning to bring near real-time water quality monitoring using the same approach that we have successfully developed for Warleigh Weir. Avon beach is on our list of priority sites, so we will be looking to bring this better information of water quality to users soon.

Question: Can you clarify why Avon and Friars Cliff has more spills than other surrounding beaches?

The most frequent spills occur from the storm storage tanks at Holdenhurst, Kinson and Christchurch WRCs. These sites are some way upstream of Avon Beach. It is not straightforward to estimate the effect of such discharges on water quality at a location several kilometres away. And spot samples that are taken by the Environment Agency show little impact on water quality (the beaches are rated as "Excellent").

Nevertheless, there may be some link between these sites and water quality at Avon Beach. The Christchurch catchment also responds to groundwater ingress, so discharges can occur when the groundwater table is elevated which can be for long periods of time.

Our desire to utilise new AI approaches to infer bacteria levels from spills is well underway, and we are aiming to bring this to Avon Beach too. This will improve our understanding of the local factors affecting water quality at this site.

Other questions

Question: In relation to the WildFish High Court Injunction can you confirm whether Wessex Water has been in legal compliance with the Urban Waste Water Treatment Regulations 1994 on stormwater discharges? It is my understanding that the regulations allow untreated sewage to be spilled during exceptional weather events. Within the Hampshire Avon catchment (according to your own data) CSOs operated (where monitored) for 7,776 hours in 2022, largely due to groundwater infiltration. Is this classed as an exceptional event? Or do you have special dispensation from the regulator to allow the release of untreated (albeit diluted) effluent on such a regular basis?

If Wessex Water has been in breach on the Urban Waste Water Treatment Regulations 1994 would you agree that costs to bring infrastructure up to standard should not be incurred by bill payers, as they have effectively already paid for this? Wessex Water seems confident that CSOs in their region have minimal impact on water quality, what are the plans to share the data and analysis that underpins this confidence? The Shrewton case study is interesting, but is it indicative of large WWTW?

Wildfish’s recent legal action in the High Court was a judicial challenge of the Government’s Storm Overflows Discharge Reduction Plan (SODRP), which sets out long-term targets for improvements to storm overflows, and specifically whether SODRP was compliant with the Urban Wastewater Treatment Regulations (UWWTR). It did not consider the circumstances of individual sewerage companies or treatment sites.

Regarding the question on compliance, the UWWTR set out the standards that sewerage undertakers such as Wessex Water must meet in respect of the treatment and collection and treatment of urban wastewater, including the duty to provide and maintain collecting systems and treatment plants. The UWWTR do not directly place specific limits on stormwater discharges. The Environment Agency (EA) takes the provisions of UWWTR into account, including the general duty described above, when granting the environmental permits under which our collection and treatment sites operate, including when setting appropriate conditions in those permits (e.g. in respect of allowable discharges). The EA has responsibility for regulating compliance with these permits.

Wildfish’s challenge to the SODRP was ultimately dismissed by the court. Our storm overflow improvement plan demonstrates the activities which we will undertake over successive business planning periods to reduce the frequency of storm overflow operation, in line with Government targets included in the SODRP. As part of this, we are working with Defra and the Environment Agency to demonstrate the effectiveness of nature-based solutions to treat groundwater influenced storm overflows, such that there is no ecological impact.

The impact on water quality from storm overflows is already publicly available and comes from Environment Agency data on their Catchment Data Explorer. This shows there are 1,074 reasons for rivers not achieving good ecological status in rivers in the Wessex Water area and 9 of these reasons (i.e. less than 1%) are associated with storm overflow discharges.

In relation to the Shrewton wastewater treatment works (WWTW) case study, analysis of the storm overflow discharge reveals that it is of a higher standard than the treated sewage is required to be (as set by the water discharge permit). Our large WWTWs do not have the same degree of groundwater-inundated sewerage catchments.

Further information regarding our storm overflow plans, current data and evidence base is available on our website.

Question: Are planning regulations being changed to ensure with new builds that surface water passes to surface water drains rather than the sewage network?

Building regulations changed in the mid-1960s to require this. However, developers have a right to connect surface water to combined sewers. Now that storm overflows are monitored and there is greater knowledge about the

frequency of operation, we strongly oppose all connections of surface water to sewers carrying sewage. Our policy on this issue is set out on our website.

Question: We are aware that there are still significant problems with the Downton Batchelor Way development sewage system, that was built by Persimmon 5 years ago. Not only are there frequent pipe blockages, but your Wessex Water colleagues have shared with us the plan of all the locations where surface/ground water is entering the sewage system. In respect of the faulty manholes (where the surface/ground water is entering), can you let us know who are you dealing with at Persimmon, and do you know when these faults are expected to be corrected?

Question: At present, a number of individual houses on the development are suffering from frequent blockages in their sewage pipes leading to the main development carrier sewers. Persimmon just arrange for Dyno Rod to come and clear them. The Dyno Rod technicians advise every time that the manholes have very sharp bends and inadequate fall, causing a build-up. The downstream pipe also has a large dip in it on some, also causing sewage build up, and subsequent blockage. They recommend a new larger manhole, and relaying of the downstream pipe to remove the hollow. We are getting nowhere with Persimmon. Do you have a high-level contact at Persimmon we could chase to get a satisfactory solution, as this has now been going on for several years and is very disruptive for residents, as they cannot use their toilets for several days, and have to be present when the Dyno Rod technician comes to clear the problem.

We can appreciate the frustration residents will feel with Persimmon Homes not yet completing the works to resolve the defects necessary to bring their sewerage system to the standard required to be adopted by Wessex Water. These sewerage systems remain privately owned, and it is the responsibility of the developer to operate and maintain them until such time it can be demonstrated the required construction and performance standards have been met to enable adoption. While we are unable to share individual contact details, we have made Persimmon Homes aware of these queries and we are continuing to engage with them to understand how they intend to resolve these issues.

Question: I’m glad you are investing many millions in storm overflows. Presumably the costs for this investment will fall on the fixed surface water drainage charge part of my sewerage bill? How much will this fixed charge go up (from currently about £25/yr I think) and how will you be assisting people like me disconnect our roofs from sewers so that they can save on a service they no longer use and which (if everyone did it) would help stop storm overflow discharges?

We currently offer a rebate on standing charges for customers who disconnect their property’s drainage from public sewers. We have also recently trialled various schemes to support customers in the uptake of water butts.

In future, as we invest more to manage rainwater, we do expect standing charges to increase. We will be reviewing how we charge properties for rainwater management over 2025-2030 to ensure that customers are only paying for the services they receive, as well as providing better incentives for customers to manage their rainwater effectively. Our plans in the area are currently under development, we will be looking at trialling new ways to charge for this from 2025-26 onwards.

Theme 3: Enhancing the environment

Question: I am sorry that it is going to take you so long to stop all overflow effluent reaching rivers and sea. However I accept your plan. But, in the meantime, before you eradicate the problem altogether, is there any way you can filter out solids (i.e. plastics etc.) before they tip out of the overflows?

Screening overflows is an important element of any overflow structure. When debris escapes it is usually where something has gone wrong with screens and flow has bypassed them. This can be due to a blockage causing stormwater to get so high that it bypasses a screen, or by the river getting so high that it prevents the overflow from operating. Additionally, not all overflows currently have full screens - some have scumboards, which just prevent surface floating debris from escaping.

We intend to replace these will full screens as part of our 2025-2030 investment programme, which should help to address this problem. However, this does require an extensive amount of work; as screens can affect water flow, sometimes the length of the weir needs to be increased to ensure the screen does not itself cause flooding. Consequently, screen installation can often require extensive civil engineering works to make the storm overflows chamber bigger to accommodate the screen. As a result, it will take some time to make this change at affected overflows.

Question: Why are the edges of the sea of Minehead up to Weston-Super-Mare showing brown froth? This is likely to be linked to the ‘no star’ or only ‘one star’ award from the Blue Flag clean beaches. Please could Wessex Water explain why our local sea is not recommended for swimming and what they are going to do to clean up the water?

The brown foam which is commonly seen along the coastline in summer and autumn is sea foam which is natural filamentous algae and not due to pollution. More information on the difference between pollution and algae is available here.

The bathing water at Minehead has consistently over the last four years been classified (by the Environment Agency) as Good, meaning that it is suitable for swimming. Bathing water at Weston-Super-Mare has been classified as Poor for the last two years, and the Environment Agency is currently investigating the reasons for this. Our Weston-Super-Mare water recycling centre has UV disinfection, operating all year round, which performs well and well within its permit limits. There are also two storm overflows impacting Weston-Super-Mare and Uphill. However, these operate very infrequently; the overflow at Knightstone Road did not operate in the 2020 or 2022 calendar years and only once (for less than an hour) in 2021, while the storm overflow at Black Rock (near Uphill Beach) has operated 8 times during 2022 (calendar year) for a total of 39 hours. The EA's ongoing investigations have demonstrated that there is a strong correlation between high bacterial readings and seagull faeces, indicating that this is the most likely cause of failure.

Question: In 2022 bathing water quality at Minehead was rated as good. The Wessex Water sign at the beach states that there were 2 pollution risk warnings in 2022. Data from Surfers Against Sewage and the Environment Agency states that there were 18 pollution risk alerts in the same period. Why the discrepancy? And isn’t it time that new signage was installed where beach users can use a QR code to get “real-time” water quality information?

It is the Environment Agency who issues the Pollution Risk Forecasts based on their modelling data, typically relating to predictions for the tide, rainfall and wind direction. These are pollution risk forecasts only, and so take account of a number of different bacteria sources that could lead to a pollution event, including urban and rural runoff as well as influences from the sea, and they may not be related to storm overflows. The Swimfo website highlights two pollution risk warnings issued in 2022.

We provide a data feed to Surfers Against Sewage so that they can show storm overflow discharges that may affect Minehead. This data is also available on our own web map. We only issued two alerts to Surfers Against Sewage for summer 2022 (15th May to 30th September) at Minehead. We also make an annual return to EA for each summer’s performance and the data submitted for the three storm overflows that can affect Minehead only included these two discharges on 5 June (for 54 minutes) and 16 August (for 35 minutes).

The sign at the beach is provided by the Local Authority. We agree that new signage is needed, and we are making good progress on this, working with the LA, EA and the Severn Estuary Partnership. We are progressing final agreement and manufacturer and hope to have new signage in place as soon as we can.

Question: Can Wessex Water confirm their commitment to support inland bathing water designation during AMP8?

Yes, we have recently recruited a River Recreation Liaison to work with Local Authorities and communities to provide useful data on water quality at 20 popular recreational sites. The list of sites is currently being prioritised as we work with Local Authorities and groups to identify the most appropriate locations.

Question: When the headworks at Wyke Regis, Weymouth, were being designed, what was the estimated number of households it would be servicing?

Question: How many households are currently connected to the Wyke Regis Headworks?

Weymouth WRC's preliminary treatment or headworks building was commissioned in 1982 and discharged screened and degritted sewage via the sea outfall (into West Bay). Secondary treatment and sludge treatment works was commissioned in 2000. The 2000 scheme had a 40-year design horizon to accommodate a growing population, with a design population predicted for 2040 of 97,577 (c.40,000 households). The current served population is around 88,000 (c.36,000 households). The site performs well within its quality discharge limits.

Question: As well as representing the Woodland Trust, I am a customer from Wellington in Somerset. I realise that Wessex Water is short of land, for biodiversity improvements, but trees are obviously an important nature-based solution for improving water quality and slowing the flow. This also includes reducing water temperature through shade which is important to river biodiversity, and an increased impact from climate change. Does Wessex Water work with any landowners in the catchment to provide off-site water quality improvements for nature including tree planting?

We are delivering phosphorus reductions across the Tone and Parrett catchments in Somerset over the current 5-year period (2020-25) working with farmers, landowners and other land managers. This programme includes a wide suite of measures from cover crops and watercourse fencing to tree planting. Further details of this programme are available on our website.

Question: Are you encouraging farmers to put their fertiliser sludge through anaerobic digestion before spreading on the land? This would assist in recovering NPK. Or should Wessex Water do the anaerobic digestion themselves first?

Over 80% of our sludge is treated through an anaerobic digestion (AD) process, with the remainder treated through lime stabilisation. All our biosolids (treated sludge) are sold as organic fertiliser for use by farmers, with no further treatment required. Any application onto fields is required to be compliant with Defra’s Farming rules for water, which includes application rates matching Nitrogen / Phosphorus / Potassium (NPK) crop / grass uptake with leaching / runoff.

At present we do not recover NPK through the treatment process, although we continue to explore recovery technologies. Should farmers generate their own sludge, there are several private AD industries around the region that already offer this level of treatment. Our current AD plants do not have sufficient spare capacity to treat additional agricultural sludge.

Question: The April 2023 ‘Your water, your say’ Wessex Water presentation contained a slide entitled ‘Nutrients in Rivers’. This slide included a map of the region, on which a number of areas are shaded, and one of the bullet points says, “no house building in shaded areas.” Can you provide a larger version of the plan? And what action will Wessex Water take to ensure that no significant large housing developments take place in these areas?

A version of this map can be found in our business plan document setting out our Wastewater networks plus strategy and investment (see Figure 44 on page 92). This shows the nutrient designations within our region, as well as other designations. More detailed maps for each catchment can be found in sections 6.2.3 to 6.2.13 of this document.

Wessex Water is not directly responsible for housing development rules and regulations – these are decided at Government level, by Defra, with local authorities applying them. However, we will make planning condition recommendations mandating that adequate sewerage capacity is designed into development proposals, in order to negate any impact on the environment.

Question: Why is so little awareness being encouraged about the overconsumption of water and how it can damage wildlife? Over-draining of aquifers and the potential for salt water inland incursions are just not talked about. Are water companies scared to reduce water consumption as it will reduce profits?

None of our groundwater abstractions are 'draining aquifers'. There are some catchments where reducing abstraction will offer better protection to wildlife and ecology, and our business plan sets out how we will achieve this while balancing the need to provide secure water supplies for homes and businesses.

A core part of our future strategy is to reduce water consumption. We are aiming to reduce current levels of demand (145 litres per person per day) to 135 litres per person per day by 2030, and to 110 litres per day by 2050. We will achieve this through our demand reduction strategy, which will see us invest over £100 million in the 2025-2030 period to roll out smart meeting to homes and businesses, offer enhanced water efficiency support and reduce leakage. This will help us meet a 20% reduction in the volume of water we take from the environment to supply to customers by 2037-38.

Question: In the renewable energy schemes are any using Archimedes screws? I understand they are very useful in low head situations.

Currently, we operate medium to small-scale hydro-turbines at three of our sites; we continuously assess opportunities for renewable energy where viable.

The Archimedes screw turbine, while innovative in its design, faces challenges that limit its viability as a mainstream renewable energy solution within the water industry. These include: its relatively low efficiency compared to other renewable wind and solar technologies; the slower conversion rate; and the system's large scale / physical footprint, which can create challenges with installation in our constrained sites. Maintenance can also be complex and costly due to the general wear and tear on the screws.

Archimedes screws themselves are usually proposed for rivers and side channels, which are outside our jurisdiction as a water company.

Theme 4: Affordable bills and excellent customer experience

Question: The price increase to be implemented in April 2024 is expected to be between £5 and £7 per month. Based on my circumstances, this means an increase of between 14.1% and 19.7%. Whilst accepting the increase may be an “average”, on what basis do you consider such a huge increase to be anywhere near justified?

Question: Today, [average bills are] £40 per month, 1.4% of average household disposal income. In 2030, [they will be] £57 per month, 1.9% of average household disposable income. Surely you should be aiming to automate, work more efficiently etc. in order to keep this percentage the same? Also you should not be using average but median.

The increase in bills next April forms part of the current regulatory settlement for the 2020-2025 period, which was agreed in 2020. Average bills initially fell for the first two years of this period, but are now rising again.

Our latest business plan sets out what we intend to deliver over the next five-year period from 2025-2030, and the funding we need to achieve this. We have put innovation at the heart of our business plan, to ensure we are delivering as efficiently as possible. This touches on several areas, such as harnessing advances in technology, making better use of design and data insight, and new ways of working. For example:

- Expanding our use of StormHarvester, an innovative solution uses machine learning and hyperlocal rainfall forecasts to predict sewer levels/flows, detect early blockage formations and optimise network performance. This will allow us to identify pollution or flooding incidents more quickly and efficiently.
- Our Rainsavers trial with 200 households, to reduce the operation of storm overflows by separating rainfall from sewers, by working in partnership with customers and local communities.

- Pursuing innovative nature-based 'green' solutions to improve river quality (e.g. creating wetlands to treat discharges from groundwater-induced overflows), rather than relying on ‘grey’ infrastructure solutions built of concrete and steel, which are carbon-heavy and often more expensive.

But although we will be working more efficiently across all areas of our business, we will be required to deliver a significant increase in the volume of work during this period, which inevitably comes at a cost. This step change in the scale of our investment programme is why average bills need to increase further in this period.

Despite this increase, bills will still be lower in real terms than they were in 2010. One of the reasons why bills regrettably need to increase over the 2025-2030 period is because they have been falling in recent years, and this has led to underinvestment in maintaining and improving the water networks.

The regulator, Ofwat, is now scrutinising our proposals and the level of efficiency that we believe we can deliver over this period (i.e. how much more cheaply we can deliver a certain amount of work). They will set out their view next year on this, which will ultimately determine the overall change in customer bills.

The increase in customer bills will vary by household, as it will depend on customer usage. However, we have been clear that we will protect those who can’t afford to pay the full cost of their water services. We pledge to eradicate water poverty by 2030, based on the principle that a customer’s water bill should be no more than 5% of their disposable household income after housing costs. So for those who need support, bill increases will be much lower than the average (and in some cases customers won’t see any increase at all).

Question: Does Wessex Water use Earned Value techniques to ensure the strategic plan delivers value throughout?

We use a range of analysis and techniques to monitor progress against our plans and ensure that we are delivering value. In developing our business plan every five years, we use data-driven tools to ensure we are using best-value solutions that maximise benefits, subject to a given set of constraints. This includes our Service Measure Framework (SMF), a risk and value decision-support approach which enables objective comparisons of investment options across business areas. We do this at various levels, from scheme to programme to overall business-plan level, with multiple iterations over time as our investment plans are created, reviewed, and assessed.

When it comes to delivering our plans, we have robust project management procedures in place to ensure our projects are carried out on time and to budget. We have a very strong track record of delivering on our strategic plans. Value is obtained from the competitive procurement process that we follow across our supply chain including contractors, subcontractors, labour, plant, materials.

We have set out further detail on our decision-making frameworks as part of our business plan in the following document: WSX37 – Resilience, risk management and decision frameworks.

Question: You state in your business plan that "Shareholders will have to provide more investment...". I'd like to know how that would happen. Are you asking them to pay more for the shares they already have? Are you asking them to buy more shares? Are you going to sell more shares to new investors? Will you reduce or pause dividends? The statement that "customers will have to pay higher bills" is clear and frankly customers will have no choice in the matter.

Question: What is not clear is what you mean by "Shareholders will have to provide more investment", especially as they don't actually "have to", do they?

Question: How much will the dividend payable to shareholders be reduced in respect of previous years?

Question: How does the size of the social fund compare to anticipated reward offered to shareholders throughout the strategic plan?

The dividend payment last year was £71 million, and £62 million in the previous year. Dividend payments have fallen in recent years. In our proposed business plan, due to the significant level of investment required, we forecast that shareholders will be reinvesting the totality of all profits into more investment over the five years.

Our social fund (the Wessex Water foundation) was launched in 2020 with a response to the Covid-19 crisis. This fund has continued to grow and last year awarded grants of three quarters of a million pounds. This included £225,000 in direct support to debt advice partners, and £165,000 in cost-of-living grants to these partners. This funding comes from outperformance in other parts of the business and is not linked to shareholder returns.

Question: Can you please explain why all the water companies seem to be saying that improvements to the water supply/sewage network will have to be paid for by customers, when vast profits over the last couple of decades have been paid to executives and shareholders? Why have most of these profits not been put back into the company to improve the water supply and sewage pipework, thus preventing water wastage from leaks, and the disgusting spectacle of raw sewage polluting our rivers and seas, killing both plant and animal wildlife? It seems completely unfair to me that we have been lining the pockets of executives and shareholders while the existing network has proved inadequate in meeting the demands placed on it, and that we are now being asked to shell out even more money because of a lack of investment in the existing system.

Question: When will you be honest and state “Our investors are at the heart of everything we do and we want to maximise profit and their dividend, and increase customers’ bills to pay for upgrading the infrastructure.”

Question: Wessex Water has charged consumers for sewage proper removal over the years and now their “Turnaround Plan” involves charging them again for something that they have already paid for. Wessex Water shareholders have taken huge dividend payments and have forgotten about the long-term sustainability of their own company. They have also forgotten their customer. Given the fact that water consumers in the UK have no “contract” with their water company, only a statutory duty to pay, it appears that Wessex Water shareholders have taken absolute advantage of this arrangement. Can the Board of Wessex Water please explain how they think that any of the above is acceptable? It stinks of mismanagement and fraud. I would also argue that rotten behaviour like this has damaged the public’s confidence in Wessex Water, the water companies and public investment in public-private infrastructure.

Question: Why is my bill increasing by £5-£7 per month? We already pay some of the highest, if not the highest, water bills in the country. Maybe invest some of your own money rather than paying big dividends and bonuses.

Comment: This 'essential' work should have been executed ever since privatisation (in the 1980s?). It was meant to be part of the deal. I appreciate you are not the only one. Every privatisation has been complicit in some way in the downgrading of our public service sector. It is a hole that is getting deeper. The arrogance and presumption of the email received today with no apologies for corporate and political neglect, bad or mis-directed management and/or funds for which WE WILL HAVE TO PAY.

Comment: Have a look at the standing charges of water and energy companies and ask why or how can so much be collected by so few yet not used for the purposes intended? Ofwat or Ofgem? They must take their share of the blame too.

Improvements in water and sewerage are funded partly by customers’ bills and partly by investors. We have invested significant amounts of money over the years to make infrastructure improvements. For instance, last year alone we invested £292 million, which was more than four times the dividend payment (£71 million). Dividends have fallen in recent years. Furthermore, in our proposed business plan for 2025-2030, we forecast that shareholders will be reinvesting the totality of all profits into more investment over the five years. In addition, debt investors (akin to mortgage providers) will be contributing around £2 billion of additional investment.

The overall allowed return to investors – which is set by the regulator, Ofwat – is currently just under 5%. This is the lowest level since privatisation. Without the ability to earn some return, shareholders would invest elsewhere at a time when the water industry needs more investment in critical infrastructure improvements.

Question: Can you explain how you calculate and justify your dividend payouts given the amount which is needed for investment?

Dividend payments are reviewed and approved on a quarterly basis by the Board after considering both current and projected business performance. In particular, the Board takes account of:

- our current and projected performance in delivering the level of service customers expect from an efficient water and sewerage company and that where that level of service has not been delivered, that customers have been adequately compensated
- that we are delivering the required quality and environmental outputs and making sufficient investment in our infrastructure to maintain and, where necessary, increase resilience
- that the correct amount of tax has been paid
- that we have met any unexpected additional expenditure needs that may have arisen during the year to date, as new operational risks emerge
- the level of regulatory gearing and its comparison with Ofwat’s expectations pertaining at the time
- the sufficiency of distributable reserves.

Overall, the level of dividends is closely linked to our business performance. And when we outperform targets, the benefits are shared with customers by way of better service levels or cost savings generated through higher-than-expected efficiency.

Question: I would like it to be made public, the amounts of salaries and bonuses paid to the top 10 Wessex Water / YTL / Wessex Water Services Limited earners over the last 20 years and, amount paid in dividends and / or shares to the same. I would also like to know the owner and main beneficiary of Wessex Water profits and the nationality or country(ies) of receipt and whether full UK taxes are paid on all earnings thereof (and of above).

Full salary information for board members is published in our Annual Reports every year.

Wessex Water is owned by YTL, a Malaysian based firm with interests across Asia and Europe. Full UK taxes are paid – in addition to corporation tax, the company also pays around £50 million per year of additional taxes such as national insurance and business rates.

Question: What was Wessex Water’s revenue from its water & sewage customers for the past two years?

Question: What was Wessex Water’s expenditure for the past two years on providing water and sewage services for its customers – including money spent on infrastructure development but excluding any monies spent on shareholder payments and debt servicing?

Question: What are the predicted figures for the next 2 years?

Revenues from both households and businesses were £520.6 million in 2022/23 and £506.5 million in 2021/22. Combined investment and operating expenditure (excluding financing costs) in 2022/23 was £550.6 million and in 2021/22 was £495.6 million. Comparable estimated revenues over the next two years (2023/24 and 2024/25) total c.£1,160 million, with combined investment and operating expenditure totalling c.£1,380 million.

Comment: Ever since water utilities were privatised in the UK, investment in my opinion has been woefully small. Whilst reading through your Winter 2023 Wessex Water magazine, it is heartening to read of your aspirations to finally sort out many water issues, especially sewage overflow into our rivers and surrounding sea, most years too late. As a reflection of your sincerity in future plans, I would like to see the board of Wessex Water making a commitment that no member of the board, or company, receives a bonus for failing to meet expected standards, until you can truthfully say “our rivers and coastal waters are now the cleanest in the world”. If this were to happen, I’m sure the public would [begin] to have confidence in your ‘fine words’.

The company bonus scheme covers performance across several areas, including customer service, drinking water quality and environmental performance. No director received a bonus relating to environmental performance last year.

Theme: General

Question: I am struggling to work out what action is planned in a specific geographical area – in this case the Chew Valley. Is there an area in the business case where this information can be found?

Information on current planned works can be found on our website. Our current programme of major investment schemes is also available here.

For the 2025-2030 period, in the Chew Valley area, we are proposing an integrated constructed wetland located at East Harptree Water Recycling Centre. This will deliver phosphorus and nitrogen reductions to improve the water quality in the receiving stream and into Chew Valley Lake. We also have a Chew Valley Partnership Project which aims to further improve water quality alongside wider environmental outcomes over a ten-year period. This project has been developed and designed in discussion with partner organisations including Bristol Avon Rivers Trust, Bristol Avon Catchment Partnership, Bristol Water, Environment Agency, Natural England, Bath and North East Somerset Council and the University of Bristol. These plans are detailed in our business plan document Wastewater networks plus strategy and investment (see Section 8.1).

We will update the information on our website to reflect our planned investment programme over 2025-2030 late next year, when our business plan has been finalised and approved by the regulator.

Question: You have given information on proposed expenditure for 2025-2030. Would you please advise us, for comparative purposes, what has been spent/carried out in 2015-2020 for the following:

- **No. of water treatment centres upgraded.**
- **Reduction in leakage.**
- **Amount invested in storm overflow improvements.**
- **Amount spent in reducing nutrients from entering rivers and seas.**
- **Tonnage of phosphorus and nitrogen prevented from entering rivers and seas per year.**

We have provided comparable information where available as follows:

- Nine major water treatment centre upgrade schemes were completed between 2015 and 2020.
- We spent approximately £11 million on leakage reduction between 2015 and 2020.
- We have spent around £30 million on storm overflow improvements between 2015 and 2020.
- Our first phosphorus permit was in 2000. Between 2000 and 2020 we spent c.£150 million on upgrades to meet nutrient permits. Our latest estimates indicate that by 2025 we will be removing approximately 550 tonnes per year of phosphorus, and 1,050 tonnes per year of nitrogen.

Question: It does seem that you fell short of achieving your business plan objectives for 2020-2025. Much is repeated for the 2025-2030 business plan, particularly storm overflows and reduction of leaks. Please confirm if my observations are correct.

Question: Nowhere do your plans state that YTL will recover these extra costs by increasing customer bills. I suspect this is what will happen. This is of concern to customers, because whilst most other industries advance plan expenditure to rectify problems by a short-term reduction of forecasted profits, this has not been so in your case. You have certainly failed in the overflows and leaks objectives in the recent past, and the undeclared circumstance seems to be that you will increase charges to customers to rectify your problems and financial shortfalls that should have been funded from previous declared profits. This is a clear indicator of company under-investment in your own infrastructure. This is in keeping with the behaviour of a monopoly company, which is a position you enjoy for the region within which you operate. By how much percentage do you forecast customer bills to increase during the business planning period 2025-2030?

The size of our expenditure programme, the returns to shareholders, and level of customer bills are all set by the industry regulator (Ofwat). Ofwat also monitors our performance against a range of targets that we must meet, in

return for our allowed revenues and expenditure. For the currently regulatory period (2020-2025), we are meeting our performance commitment in respect of leakage; leakage levels were at their lowest level ever in 2021-22, and we have achieved a 9.3% reduction in leakage so far in this period against the baseline[5]. For storm overflows, there are no specific performance commitments for the current period, but we are on track to deliver the schemes to reduce frequently spilling overflows that are in our current business plan. However, we agree that we need to do more in these areas. That is why we have proposed a further reduction in leakage levels of 7.5% between 2025 and 2030. We are also doubling our investment in tackling storm overflows, from around £3 million per month to more than £6 million per month over 2025-2030 – to improve a further 128 overflows. The investment that we are seeking for this period is required to meet these ambitions, not to achieve our objectives for the current period.

We state in our plan that customer bills would need to increase as a result of the proposed level of investment that is required. We expect average bills to increase by £150 in real terms over the next five years, after a decade of rises being held below inflation. This equates to an average increase of £13 per month by 2030. Even then, bills will still be below 2009-10 levels in real terms.

Question: Over the last 2 weeks I have received 3 letters from Wessex Water informing me of works that might affect my water supply/quality. I assume all households would have received the same, amounting to quite a lot of paper and postage. Surely email etc could be used for many, and save a significant amount?

It is a regulatory requirement that we use a written form of contact to notify customers that may be impacted by planned improvement works. Where possible, we do use email to contact customers. However, we do not currently hold email addresses for every customer, and therefore we need to continue using letters to ensure that everyone affected receives important information about planned works. We are looking to make greater use of email, though, and we intend for this to be the primary contact method for the majority of our customers in the near future.

[5] Average leakage between 2017-18 and 2019-20.