



Environmental Audit Committee

Oral evidence: Water quality and water infrastructure: follow-up, HC 721

Wednesday 15 May 2024

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[Watch the meeting](#)

Members present: Philip Dunne (Chair); Duncan Baker; Sir Christopher Chope; Barry Gardiner; Ian Levy; Clive Lewis; Caroline Lucas; Cherilyn Mackrory; Jerome Mayhew; Dr Matthew Offord; Cat Smith; Claudia Webbe.

Selaine Saxby, member of the Environment, Food and Rural Affairs Committee was in attendance.

Questions 1 - 119

Witnesses

I: Alastair Chisholm, Director of Policy, Chartered Institution of Water and Environmental Management; and Stuart Colville, Deputy Chief Executive Officer, Water UK.

II: Dr Rob Collins, Head of Policy and Science, The Rivers Trust; Professor Peter Hammond, Windrush Against Sewage Pollution (WASP); and Charles Watson, Chairman and Founder, River Action UK.

III: David Black, Chief Executive, Ofwat; and Paul Hickey, Managing Director (RAPID - Regulators Alliance Progressing Infrastructure Development), Ofwat.

IV: Robbie Moore MP, Parliamentary Under-Secretary of State (Minister for Water and Rural Growth), Department for Environment, Food and Rural Affairs; and David Hallam, Director, Floods and Water, Department for Environment, Food and Rural Affairs.

Written evidence from witnesses:

[Chartered Institution of Water and Environmental Management](#)

[Water UK](#)

[The Rivers Trust](#)

[River Action UK](#)



Examination of witnesses

Witnesses: Alastair Chisholm and Stuart Colville.

Q1 Chair: Welcome to the Environmental Audit Committee for our one-off hearing today on the subject of water and water quality, an issue that this Committee has paid a lot of attention to during this Parliament. It has become a matter of considerable public awareness and anxiety, frankly. We are very pleased to have several panels of senior people from within the industry and the regulatory bodies, including the Minister, today.

We will start the first panel by welcoming Stuart Colville, who is the Deputy Chief Executive of Water UK, the trade association. Thank you for joining us, Stuart. We welcome back Alastair Chisholm, from the Chartered Institution of Water and Environmental Management, who has appeared before the Committee on a number of occasions.

I will go straight in. We woke up this morning to reports of a significant unpermitted, seemingly unnoticed spillage of potentially untreated sewage into Lake Windermere. I would be grateful, Stuart, if you could address the question that the public is asking: what are the water companies doing? Why do we keep waking up to news of such incidents, given the amount of time and commitment that is being given to addressing the issue?

Stuart Colville: Good afternoon, everyone. Like you, Chair, I woke up and found out about the incident, probably at the same time as you. I cannot comment in any detail on that specific incident. It would have to be for United Utilities, the company concerned, to give any details on it. I can say that every water company takes any serious pollution incident, which that seems to have been, incredibly seriously. It is at the top of every chief executive's list. It is something that we are very focused on.

Looking at the big picture, you have seen the number of serious pollution incidents in England fall to its joint lowest ever level last year, but there were still 44 and that is far too high. It needs to get down to zero as fast as possible. Every company—

Q2 Chair: Can you remind the Committee what a serious incident means?

Stuart Colville: Yes, of course. A serious pollution incident is a breach of compliance in a way that produces harm. The Environment Agency categorises breaches of compliance with a rating from one to four. Categories 1 and 2 are the most serious and that typically results in noticeable harm to the environment or humans. The number of these has been coming down quite steeply but it needs to trend to zero as quickly as possible and every company has a plan to achieve that.

Q3 Chair: The companies have published plans for, I think, £96 billion of capital expenditure in aggregate, currently being reviewed by Ofwat with determinations due next month. Could you characterise the £96 billion for



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us? What proportion or amount of that is going towards increased capital expenditure on treatment?

Stuart Colville: Yes, of course. Since the Committee's report two years ago, there has been a huge amount of activity from Government regulators and industry. Probably the most important development on the industry side is the submission of plans for £96 billion of expenditure. They were submitted in October. We expect Ofwat to produce a draft view on them in the middle of June, before coming to a final determination in December.

The plan, I should say, was accompanied by an apology last year from the water industry for not dealing with the issue of sewage spills fast enough and with sufficient determination. We held our hands up and said we should have acted far sooner on this. Hence this transformational amount of investment that we have now put forward—£96 billion, as you say.

I should just clarify one thing. In October, the figure stood at £96 billion. In the subsequent months, it has now increased very slightly to £100 billion as a result of further discussions with DEFRA on some of the environmental policy details. It now stands at £100 billion.

Q4 **Chair:** To be spent over what period?

Stuart Colville: That is 2025 to 2030. It is a significant increase on what we currently spend. It is the largest volume of investment in Europe for any water industry.

In terms of the breakdown of that expenditure, I will come on to sewage in a second but I want to alight first on the fact that about £10 billion of it is for water resources. This is important not just to secure supplies against drought in the future; also has a direct environmental benefit because it allows us to reduce abstraction. Within that plan, within the now roughly £100 billion, there is a proposal for 10 new reservoirs, the first of which is already under construction; five desalination plants, the first of which is under development in the south-west; and, five recycling schemes; as well as transfer schemes to move water around the country. I do not want us to lose complete sight of this important environmental component as well.

On the sewage side, there are a number of components to that spend. Nearly £4 billion is going into upgrading sewage works specifically to remove phosphorus. This is where new technology is applied to strip out some of the nutrient loading into rivers. This is important because phosphorus is the single biggest cause from the water industry of rivers failing to achieve good ecological status. That is an important bit of spend.

There is £10.7 billion specifically for storm overflows, which will cut spills from storm overflows by about 40% by the end of this decade. We are prioritising that in bathing areas and what we call high priority areas—



chalk streams, shellfish areas and so on. That will make an enormous amount of difference as well.

Q5 Chair: Does the industry have the capacity to make that scale of investment over a very limited period? What are the likely barriers? Does it require planning consents? Does it require scaling up the supply chain? A huge amount of construction will be required if remedies are to be mechanical systems rather than nature based. Is there a breakdown between those two approaches?

Stuart Colville: Compared with what we are spending now, it is about triple what we are spending on sewage works and a tripling again on storm overflows. It is a big step up and that does mean that the supply chain and the companies themselves are going to have to step up as well in order to deliver.

We have looked at this carefully, collectively with the supply chain, engaging with them on what is the maximum that they can deliver in any given year. We have looked at issues such as how many roads you can dig up in order to upgrade sewage pipes. We have looked as well at the balance between nature-based solutions and traditional concrete-based solutions, because sometimes by rebalancing between those two things you can maximise the amount of progress you can make.

We think it is demanding. It is about as fast as we can go, but we think we can get there, yes.

Q6 Chair: Alastair, could I bring you in? Have you had a chance to consider these plans? Do you think they are credible? Will they make a difference?

Alastair Chisholm: I think they will make a difference in terms of the concerns of our membership. The biggest concern relates to the deliverability of the plans.

Water UK has said that an additional 30,000 people will be needed to deliver a scheme of this size. Our sector as a whole, our profession, is facing a drain of expertise and skills. There is quite a wave of retirements imminent over the next five to 10 years. The sector is struggling to attract enough new talent. A recent survey by a water sector recruiter found that 70% of people who are skilled in this area are considering moving to other utilities areas. The biggest area of need is in those highly experienced engineers. Deliverability is a real concern here.

Chair: Of course, the tideway tunnel is just coming to an end. I do not know how many people that employed or employs currently, but at its peak it was several thousand, I think, wasn't it?

Alastair Chisholm: Yes.

Stuart Colville: Yes.

Q7 Ian Levy: I do not believe it is a condition of the Committee, but for



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clarity I would like to declare that tomorrow, I have a meeting with Northumbrian Water exactly about this. That is why I wanted to ask this question.

Thank you for attending today. What have been the main causes of pollution incidents in recent years? What steps are companies taking to deal with these incidents? Can you also comment, if you would not mind, on whether they have been storm overflows or sewage discharges? I would like to dig into that and get a little bit of clarity on the low rates of self-reporting of incidents by companies. Alastair, do you want to go first?

Alastair Chisholm: Yes. The primary causes of serious pollution incidents are normally mechanical and electrical failures in things such as pumping stations, treatment works and so on. That often comes about when companies and service teams do not respond quickly enough to alarms. We are concerned that there has been a long-term trend of inadequate maintenance and a bit of asset sweating, which may have led to suboptimal maintenance that means that these events have been happening more now than in the past. There is increased focus on those things now and companies are working hard to turn that around.

The foul sewer network is a major cause as well. There, the main causes are blockages that come about through the use of fats, oils and greases and things like wet wipes causing blockages.

Again, that is something that water companies are alive to and a lot of them have proactive cleansing programmes in place. Companies are putting a lot more into network monitoring. There are about 15,000 storm overflow monitors in place and about 15 times that amount in terms of in-sewer monitoring going on so that companies can proactively identify, using things like machine learning, where blockages are likely to take place and direct the maintenance. It is a picture that should be improving, but maybe one that has been a bit neglected in the past.

Q8 Ian Levy: I think it is fair to say that the public does understand that things go wrong sometimes and that we do have breakdowns—that things can happen, but Stuart, could you expand a little bit on the low rates of reporting of incidents? That is one of the main things. If people know there is an incident, if people know something has happened at the time when it is happening, they will know not to go swimming in the sea. My constituency is Blyth Valley. We are right on the coast and people do use the sea quite a lot. Could you expand a little bit on that?

Stuart Colville: Yes, of course. Alastair is right. When we look at the data—we have been doing a lot of work on this recently; as I mentioned, it is a big priority—the three big things we see are blockages, asset failure and power failure, and we are taking action on those three things.

On self-reporting, which is when the water company says to the regulator, "Something has gone wrong here, something is not working right," according to the Environment Agency figures, the percentage of self-reported incidents now stands at 83%, which is the highest it has



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ever been. It has not been higher than that previously. That still means that something like one in five incidents are not being reported by the water company but instead are discovered most frequently by members of the public, who might be walking past a manhole or something and see something go wrong. That tends to be at the outer edges of the sewer network rather than around the waste water treatment works or pumping stations where there tends to be more water company presence. I think that will change over time. As Alastair mentioned, we see far more sensor deployment and far more data now than ever before, so I think that percentage of reporting will go up further. However, as I say, it is now at the highest it has ever been.

Q9 Ian Levy: Finally, what are the consequence for the one in five that are not reported or are very late in being reported?

Stuart Colville: The Environment Agency would investigate, as it would with a reported incident, and would try to determine the cause and the role of the water company in that. The agency has a framework to have a look at incidents and determine the penalties that should apply.

Q10 Ian Levy: Should the public keep reporting stuff as they see it?

Stuart Colville: Yes, absolutely. It is important that if something is going wrong, the regulator is aware of it and the water company has an opportunity to fix it as soon as possible. One of the big things that will turn an ordinary pollution incident into something very serious is a delay in getting there.

The industry has been investing a lot of time in creating things such as rapid response teams, rebuilding control rooms to get alerts faster, triaging those alerts, and getting people out there as quickly as possible. That is an important element of this.

Chair: Barry Gardiner has a quick supplementary question.

Q11 Barry Gardiner: Mr Colville, when you were talking about the Windermere incident with the Chair, you helpfully outlined the criteria for it being a harmful incident for a major sewage spill. In the Windermere incident, the EA was not able to visit for 13 hours, by which time the outflow had been stopped. When the testing that could have established harm took place—it is very difficult to establish harm after the event—the testing was done at the bank side of Lake Windermere, not in the centre where the outflow from the pipes had come. Surely your members should pay much more attention to getting a swift response and a swift notification to the EA while an incident is still happening so that the testing can happen properly. Then we could establish whether it really was a harmful spill or not—a major incident or not.

Stuart Colville: I will say two things in response to that. First, sampling at the site of an incident is not the only means by which you can identify harm. There are other techniques you can use, such as counts of fish populations and so on, to try to analyse what is going on. Perhaps most



importantly of all, though, there are far more sensors going in around water company assets now. Upstream and downstream of every sewage asset operated by a water company there will be water quality monitors looking at five or six different parameters—ammonia, pH, temperature and so on. What that should allow us to do is if something does go wrong, not only will the water company see that, it will be revealed in real time to the world. Anyone can go on to these maps and see that there is an ammonia spike or there is something happening.

We are trying to recognise the very legitimate concern that we are hearing that lies behind this question and to say, "Let's just be transparent about this. Let's push these maps out. Let's show the world what is happening." We are installing the sensors to enable that to happen.

Q12 Chair: I will just interject for a second. You mentioned transparency there. I think that if the water industry started to introduce transparency in the way that it responds to public concerns about the consequences of spillages, that would be a sea change and very welcome. One of the reasons why there are over 2,000 investigations into water company permit breaches is because of faulty EDMs, inadequate data responses to FOI requests, and so on. How do you respond to that?

Stuart Colville: One of the reasons why the water industry apologised last year was because we had not confronted the very legitimate public anger about this issue. The only way we are going to restore trust is to lean heavily into this transparency agenda. As we were hearing earlier, occasionally things may go wrong but we have to be open and honest about that. That is one of the reasons why every company is currently in the process of publishing a map that allows you to see exactly what is happening with all its overflows. Water UK as the trade body has said that it will pull that together in a way that will be of help to national stakeholders as well. I think you will see far more of that. We have also published an open data route map to say, "We have loads of data here. Let's start publishing that for the world to see."

I think that will leave us as one of the most transparent water industries in the world at the end of this process. No other country is doing this, but I think it is essential for restoring trust among the public.

Chair: Is that a pledge that we can hold you to?

Stuart Colville: Yes.

Chair: Perhaps a subsequent Committee will hold you to it; I do not think that this Committee will be around by the time you fulfil it. It is welcome, none the less.

Q13 Caroline Lucas: I want to follow up on that. Mr Colville, you say that no other country is doing this. No other country has the madness of a privatised water system such as we have in this country, which simply is



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not working. In the case that we have just been hearing about in Windermere, we are hearing that the Environment Agency could not get there for 13 hours because it did not know about it. In terms of transparency, that is giving out a pretty negative story, isn't it?

Stuart Colville: I represent not just private companies but public companies and a mutual company as well, so I can look across all these and see that many of the challenges are identical for all those industries in all those countries. I speak to my colleagues in France or Germany. Germany has 66,000 overflows, which are broadly unmonitored. When I speak to my French colleagues, they cannot tell me how many overflows they have. I do not want us to think this is a uniquely English problem because it just isn't. I take the point that it is an unusual ownership model. Most countries do not have the system that we have. However, I think that is a separate issue from the question of environmental performance.

Q14 **Caroline Lucas:** The Chair will not let me pursue this any further, I am quite sure, but I do have a diagram here that shows the correlation between the type of ownership and the quality of water. It does not substantiate the position that you have just outlined.

Could I ask you one other quick question? *The Guardian* reported in April that some treatment works are manipulating waste water systems to divert raw sewage away from the works and into rivers and seas to reduce the cost of pumping and treatment and to give the appearance of compliance. One whistleblower was quoted in *The Guardian* alleging that, "environmental regulators know about" these activities, "(although perhaps not the scale) and have turned a blind eye due to resourcing constraints." Could I ask you whether you have heard any evidence of those kinds of activities?

Stuart Colville: No, I have not. Engineers have told me that some of the alleged practices are not physically possible within some of the networks that were described. Nevertheless, I think it is right to take any allegation seriously and I would encourage whoever is behind that allegation to pass on the evidence to the Environment Agency.

Q15 **Caroline Lucas:** I am sure they will.

Mr Chisholm, what contribution does poor urban drainage and highway run-off make to the current state of water quality in England? Given the public's concern about sewage discharges, is that particular issue getting enough attention? What needs to be done to reduce the environmental damage from highway run-off?

Alastair Chisholm: Highway run-off, or urban diffuse pollution as it is categorised under the Water Framework Directive, is approximately 17% to 18% of the reason for not achieving good status. Proportionately, it is smaller than agriculture and water but, nevertheless, quite significant.

There are around 15,000 overflows on the National Highways network. Those kinds of network have generally the most dense levels of traffic, so



some of the overflows from that network are among the most polluting. The situation between the Environment Agency and National Highways is that they have a memorandum of understanding that highway outfalls on the national network, on the strategic network, will not be permitted. They do not need permitting. Instead, they use a predictive model to identify where those outfalls are at high risk of impact or not.

Q16 **Caroline Lucas:** Is that right, do you think? Should they be permitted?

Alastair Chisholm: We did some research recently that looked at a small number of outfalls. One of the outfalls that we looked at was defined as a low-risk outfall using this model. We found that polycyclic aromatic hydrocarbon discharges, which are a priority hazardous substance under the Water Framework Directive and potentially carcinogenic, were more than 700 times the maximum allowable concentration.

Q17 **Caroline Lucas:** Would you want to see the model changed in that case because it does not sound like it is working?

Alastair Chisholm: We think that the model needs to be looked at. It dates back a little while now. We are also suggesting that the Environment Agency takes a look at whether certain outfalls do need to be permitted so that would give an extra impetus to cleaning them up.

National Highways is operating a scheme of improvement under the road investment scheme but at the moment it is very small. We think it is important that the Department for Transport gives a far more significant settlement under the next investment round for roads.

Local highways are really not monitored at all. The treatment structures within local highways are gully pots within the drains that you see at the end of your road.

Given the state of local authority finances, the maintenance schedules on those treatment devices are very infrequent and they very quickly get blocked up and need gully pumping. If they are full, they simply do not work. You will find that you get a first flush of pollutants after a dry spell. You get the pollutants building up on the road surface and they flow directly into local watercourses.

There is one other important point on this. This pollution is often characterised as diffuse pollution but it is not diffuse. It is point source pollution. These outfalls are often into small streams and they can have considerable impacts on the ecology of the receiving waters. It needs a lot more attention.

Q18 **Caroline Lucas:** Thank you. Could you tell me whether the current guidance and cross-departmental collaboration, for example, between the Department for Transport, DEFRA and DLUHC is effective in minimising problems and implementing nature-based solutions in particular?



Alastair Chisholm: Sustainable drainage systems in particular are good on the one hand because they tackle a wide range of potential Government policy activities—everything from flood risk management to water quality to urban heat island effect mitigation. That is great. That is their strength. However, the challenge is that those benefits fall across a range of different Departments and those Departments have different statutory duties. They are driving different policy priorities. Therefore, we have seen from experience that there is no effective co-ordination to bring these devices forward at the scale that they need to be delivered.

I can give you a very quick example. I visited some schemes in the London Borough of Enfield recently. It is quite a proactive borough in retrofitting sustainable drainage schemes into its highways. They have installed about 250 in the last decade. They reckon that they need to deliver 500 per year between now and 2050 to manage their flood risk.

The irony in all this is that the borough is not actually a combined sewer area. The cost for an average rain garden there is about £15,000 per rain garden. About 160,000 holes are dug in roads in London each year. If you could retrofit even 10% of those holes with SuDS schemes, you could cut that unit cost in half because a lot of the cost is associated with the excavation. If you could factor water company investment into that equation, you could reduce the unit cost even further. While what we have to deliver sounds like a big number, we could bring the unit cost down through better co-ordination.

Q19 **Caroline Lucas:** It sounds as if better co-ordination will be key, but is it enough to be relying simply on incentives for water companies and developers to implement nature-based solutions? Are there other measures that would go further than simply incentivisation, which does not, frankly, sound like it is going fast enough and far enough?

Alastair Chisholm: One of the things that we are keen to encourage Government and regulators to look at is the idea of outcomes-focused regulation rather than output-focused regulation. At the moment, regulation is very much characterised by meeting certain parameters associated with treating effluent discharges or installing certain numbers of monitors and so on. We need to understand what is going on at a granular level in each of our river catchments. That more granular picture of what is going on could direct both incentives and regulations to target the biggest sources of harm in a catchment.

Q20 **Caroline Lucas:** Do you think the balance is right between incentives on the one hand and regulation on the other?

Alastair Chisholm: It is not working to incentivise nature-based solutions at the moment. The main vehicle for water company investment is the water industry national environment programme, which is about £21 billion, I think, of the PR24 round. In the guidance, the regulators encourage the use of nature-based solutions, so maybe up to 25% of the WINEP is greenish or a combination of the two. Is that driving the level of



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nature-based solutions delivery that we would like to see? I don't think so at the moment, but that probably requires a balance of incentives and regulation. It is very difficult to say exactly which needs to come more.

The challenge from a regulator point of view, just very quickly, is that regulators are, quite understandably, going down quite a hard-line regulation route at the moment. They have come in for some criticism and they are wanting to be seen as strong.

Caroline Lucas: They have work to do.

Alastair Chisholm: I couldn't possibly comment.

Regulators are therefore focusing on water companies and other polluters getting their houses in order. I do not think that regulation is targeting the most multifunctional and most beneficial solutions for the wider environment and environmental river health.

Q21 **Jerome Mayhew:** I am going to be asking questions of Ofwat about the financial sustainability and investability of water companies in a few minutes, but before I kick off on question 4, the ownership structure of water companies was raised a moment ago and it is in the ether, isn't it? Stuart, you will probably have the facts on this. Can you remind me: since privatisation, have leaks reduced by a fifth or a third?

Stuart Colville: Leakage has reduced by over a third since privatisation.

Q22 **Jerome Mayhew:** What about investment levels in infrastructure since privatisation? Have they doubled or quadrupled?

Stuart Colville: Investment roughly doubled after privatisation. It has been maintained at a reasonably similar level since then and it is about to almost double again.

Q23 **Jerome Mayhew:** The percentage of sewage outflows that were monitored before privatisation; what was that?

Stuart Colville: About 0%.

Q24 **Jerome Mayhew:** What is it now?

Stuart Colville: It is 100%.

Q25 **Jerome Mayhew:** Finally, on Welsh Water, which is a not for profit, how has its environmental performance fared compared with English for-profit water companies?

Stuart Colville: It is comparable.

Q26 **Jerome Mayhew:** Thank you. That is very helpful.

Turning now to water security and water resource management, we have heard that water recycling is going to be a very significant issue—an increasing issue—between now and 2050. What do we need to see from water companies? There are two ways to recycle water. There is the



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micro and the macro. The micro is how we use water as consumers and as businesses. The macro is how water companies recycle water. Let's start with water companies. What is the plan and are we going far enough and fast enough?

Stuart Colville: As I mentioned at the start, £10 billion of proposed expenditure is for securing water supplies for the future; an important issue. Within that, there are 10 reservoirs and five desalination plants, but there are also five water recycling proposals that will be taken forward. This is a well-established technology around the world, in places like Australia, Texas, in the Gulf, and so on. In some cases internationally these projects hyper-purify waste water and then put it straight into the drinking water system. That is not what is proposed within the UK. Most of the projects are to—

Q27 **Jerome Mayhew:** I will just cut in there. Is that operated in other countries, straightforward hyper-filtration and then straight back into the water system?

Stuart Colville: Yes, it is.

Q28 **Jerome Mayhew:** Which countries is that used in?

Stuart Colville: I believe it is used in Australia and I believe there is another proposal coming forward in Texas to do the same thing.

Jerome Mayhew: Thank you. Carry on.

Stuart Colville: The proposal in the UK or in the English context is to treat water and then place it either directly into the river or a reservoir. The reason we want to do that is because it is a way of reducing abstraction. Abstraction from rivers has a profound effect on the ability of species to thrive. It concentrates pollutants if you take too much water out, and it clearly reduces oxygen levels and the availability of water for species in that river. There is a profound environmental argument to find the 4 billion litres of additional water that the National Infrastructure Commission says we need by the middle of this century. Currently, the way that we intend to achieve that 4 billion is that a third of it will come from water resource schemes, and these recycling schemes are an important part of that, both to prevent drought and to reduce the environmental impact of abstraction.

Q29 **Jerome Mayhew:** It is not just 4 billion litres of additional water. Geography plays a part in it here. I am a Norfolk MP, the most water-stressed region in the country. Anglian Water is already building a 400 km water main from the Humber down to Cambridge and beyond. Can you talk a little bit about the investment required and anticipated that gets the right amount of water into the right geography?

Stuart Colville: Yes. There is a huge programme of work still to be done. Part of that will be about intraregional and interregional transfers in the way that you mentioned. For example, some of the projects are



looking at using the old Grand Union canal to bring water from the north of England down to the south. There will be a huge amount of capital spend there. There is also a lot of money going into leakage. That will be a way of reducing demand for the water resources that do exist. We have brought leakage down by about 7% since the beginning of this decade. We are on track to reduce it by about a billion litres per day by the end of this decade. We are an average performer across Europe on leakage at the moment. We want to be a top five performer by the end of this decade, so part of the capital investment will be for that as well.

Q30 Jerome Mayhew: It is also true to say that water companies do not have a uniform report card when it comes to leakage. In fact, Anglian—I know it because it is in my neck of the woods—has, I think, the best results in water leakage anywhere in the country. If the other water companies just got to the level of Anglian, what impact would that have?

Stuart Colville: It would make an enormous impact. I do not know the exact figure, but I do know that it is an important part of the way that we get to the 4 billion. Roughly two thirds of that 4 billion is a combination of demand reduction and leakage. Anglian, as you say, has always been an extremely strong performer on leakage and it is helping others to achieve the same standard.

Q31 Jerome Mayhew: Demand reduction: no politician ever wants to hear that because that is about voters having to change their behaviour. What do you have in mind and how are we going to make this as painless as possible?

Stuart Colville: It is a combination of different things. One is installing new equipment in homes to reduce waste. For example, there are particular showerheads. There are installations that you can put into the water supply going into the home to maintain pressure and maintain the experience of the user while reducing the amount of water used.

It is also about smart meters. Currently, about 13% of households in England are smart-metered. That will go up very significantly by the middle of the century. Various millions of them are going in over the coming years. That will put people in control of the water they use. They will be able to see exactly what their usage is in front of them and it will also give them control of their bill.

Q32 Jerome Mayhew: The evidence on water meters has not been uniform. My understanding is that for a rich household—I am sure that is not the right term, but a well-off household—when they install a smart meter, water usage actually goes up because they realise that water does not cost that much. It is only poorer households that are having to change their behaviour as a result of water meters. Is that the right way for us to approach it?

Stuart Colville: You are right that comparatively speaking the charges for water are relatively low in the sense that they have come down 20% or so over the last decade. Bills have been held below inflation for over a



decade. However, there is evidence from the Anglian region, I believe, that shows that there is a behavioural response when people see how much they are using and when they are using it, and when they are given opportunities to make savings by revealing that information to them.

Q33 Jerome Mayhew: We know we have to get 4 billion litres of water a day. How far do you think the current water company business plans and water resource management plans get? Are you confident that the current plans will get to the 4 billion or are we going to need a bit of luck or an acceleration or a change in direction? Where do you see it at the moment?

Alastair Chisholm: We have had a fairly well-established water resources planning process for quite a long time. It has been very well regarded worldwide. The position now is that it needs to evolve. It needs to be looked at and changed. There was a degree of comfort up until summer 2022 and the rapid onset drought. I think that did shake the sector a little bit in terms of how confident it was with its planning.

As to where we can get to, I have spoken to the Environment Agency quite recently in relation to the water resources management plans. It does not foresee a situation like there is in Cambridge extending right across the country any time soon, provided that the measures that are in the water resources management plans are delivered. That comes back to that deliverability of AMP8 and being able to put those measures in place.

Jerome Mayhew: Being able to build reservoirs—

Alastair Chisholm: Being able to build reservoirs: it is important to recognise that within that planning framework, at the point at which a decision is taken to build a reservoir, it takes a decade to 15 years to get it in place, which is why there is such an emphasis on demand management in the short term.

Q34 Jerome Mayhew: You have mentioned Cambridge. Cambridge is very stressed for water at the moment and there are plans for it to significantly expand further without the water being available. Yet the earliest that either of the two reservoirs designed to help alleviate that and other water stress can come on stream is 2036, from memory. Why does it take so long and how can we speed it up?

Alastair Chisholm: They are major pieces of infrastructure. They are very intensive pieces of engineering. There is also a shortage of dam engineers. A lot of these reservoirs are impoundment reservoirs, so they are not in valleys; they have walls built up. We have not built a new reservoir since 1989 and, again, that explains the experience base. I spoke earlier about people leaving our sector. That experience base has gone and has dwindled.

There is also planning. There is the regulators' alliance—I forget the rest of the acronym—for driving forward investment. That is looking to fast-



track these major infrastructure schemes. Nevertheless, there are an awful lot of ground investigations and technical works to go through and it takes a long time. From my perspective—

Chair: Can you make this quite quick, Alastair? I am afraid we are running out of time.

Alastair Chisholm: Sure. The two things need to go side by side. We have had a twin-track approach for a long time, but I think there has been a failure on delivering water efficiency. We had a code for sustainable homes in place more than a decade ago. It was canned in 2015. The top tier of that was looking to achieve the levels of efficiency that we are now scrambling around trying to achieve in Cambridge. It has been a real failure. SuDS and schedule 3—those kinds of measures have been in place but then been canned, and now we are recognising that we need to put those kinds of things back in place.

Jerome Mayhew: That comes in under the future homes standard in 2025, I hope. Thank you very much.

Chair: That concludes our first panel. I would like to thank Alastair Chisholm and Stuart Colville for their concise and helpful answers. Thank you very much. We will suspend while we move to the next panel.

Examination of witnesses

Witnesses: Dr Rob Collins, Professor Peter Hammond and Charles Watson.

Q35 **Chair:** Welcome to our second panel and to our panellists: Dr Rob Collins from The Rivers Trust, which has been a big supporter of the work we have been doing here; Professor Peter Hammond, who has given evidence to us before and hosted our visit to the Windrush during our inquiry in 2021; and Charles Watson, who set up River Action around the time of our original inquiry. I do not think you have appeared before us before, Charles, so welcome to you.

I would like to start by asking Rob Collins from The Rivers Trust to give us a sense of the current state of the condition of the rivers in the UK. Could you try to separate the media concern from what is actually happening to our rivers? There have been some improvements and then some deterioration. Could you try to paint the picture as it is today?

Dr Collins: We find that only about 16% of English surface waters are at good status. Not a single English river is at good chemical status. Seemingly, the situation is better in Wales and Scotland, with 44% and around 56% good status respectively, but that is not really telling the full picture because neither country has undertaken a rigorous analysis of chemical status. It would appear that we have somewhat flatlined here. The next major target is 2027 under the Water Framework Directive that we still loosely follow. It would seem that the best we can do is limp along to around 21% good overall status in England.



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The Environment Agency undertakes classification for nearly 4,000 water bodies, I believe, or surface water bodies. In the last round of classification, around 150 improved. Between that classification period and the previous one, just 150 had improved and slightly more—153—had deteriorated, so we really are flatlining. The Water Framework Directive sets out very clearly that we should not have any water bodies deteriorating at all.

In broad terms, agriculture contributes something like 62% to those failures, the water industry something like 55%, and road run-off 18% to 20%. Those figures add up to more than 100% because, of course, any one water body can fail for more than one reason. The urban element—urban run-off and urban pollution—is very likely an underestimate, I would suggest.

It feels like we are in a pretty dire situation and that reflects years of under-investment. The Environment Agency aspires to reach around 77% good status by 2027, but that is dependent on around £50 billion being invested. Despite the fact that the agency has shown that with that investment, the monetised benefits exceed those costs, we have seen just a fraction of that amount being invested over the last decade or two.

Q36 Chair: At the last five-year period pricing review that we are in at the moment, the water industry was setting out plans to invest £51 billion. That is the figure that you have just mentioned; that is where that comes from. Do you have a sense of how much of that has been invested thus far? I am not sure if that is the right question for you or for anyone on the panel; I should have asked the Water UK people before.

Dr Collins: I get the sense that the £50 billion is not just for the water industry; it is tackling road run-off and agriculture as well. I don't know the figure of the water industry's input to that, but I think it has predominantly formed the bulk of the investment thus far.

Q37 Chair: Peter, could I ask you a similar question? In the work that you have been doing in monitoring not just the Windrush, where you focus most of your efforts, but a number of other river systems around the country, are you seeing any signs of improvement since we last spoke, in the last two or three years?

Professor Hammond: No. In fact, since I last gave evidence, I have been giving advice to something like 30 or 40 campaign groups around the country and they are all very concerned about their local rivers. I have been helping them to identify how to get data, how to analyse it and then how to do something about it. So, I would say no.

Q38 Chair: Is the data that you are analysing showing a deterioration or is it somewhat stable as Rob was suggesting?

Professor Hammond: I need to separate out the monitoring of the rivers from the monitoring of the sewage works and the pumping stations—in other words, the performance of the water companies and



the regulator. My focus is more on how stuff gets into the rivers, not what it does in the rivers. It tends to be the local campaigners—the citizen scientists and the like—who do much of that work.

Q39 Chair: Charles, you are looking at this from a national perspective, coordinating campaign groups around the country. What is your sense of the current state of our rivers?

Charles Watson: The short answer is that it is very bad. The long answer is that is the case everywhere you look—the fact is we are learning more all the time, mainly because citizen scientists are mobilising around the country to provide the data. If we take a critical area for, say, agriculture pollution, the south-west, the number of EA monitoring sites in the south-west region, which is Devon, Cornwall and Somerset, has been cut by a third over the last decade. It is ordinary people who are getting in the rivers and telling us what is going on. Take a river like the Wye: the phosphate levels as we speak today are at an all-time high.

Q40 Chair: We are going to come on to the River Wye Action Plan during the course of this session, but maybe not with you. It is coming up shortly.

Two of you have mentioned citizen science. How is the Environment Agency—and indeed, water companies for that matter—taking data that citizen scientists are coming up with? Are they receptive to information being provided by people on the ground? How is it changing behaviour or policy within the water company or the regulator?

Professor Hammond: In my experience, the Environment Agency does not want to take on board data from citizen scientists unless it is done in a very organised and more scientific fashion; for instance, like on the River Wharfe where a fellow of the Royal Society is managing all the citizen scientists and making them do regular testing at the same places right throughout the year. If you are just doing spot testing occasionally in your river, then the agency is not going to take much notice.

Q41 Chair: We are going to come on to some other questions about monitoring in a second. I do not want to steal other colleagues' thunder, but do you welcome the announcement this week about additional bathing waters—it is the first time, I think, that we have 12 river systems being tested for bathing water status? The Government are going to be consulting on year-round testing rather than just during the so-called summer swimming season. It is obviously a very modest start with 12. Do you think that could be a precursor to a much more rigorous system?

Charles Watson: As you say, it is a very modest start. I think that France has 575 bathing sites on rivers. What we know about most of those bathing sites is that the water is poor quality. What we must remember is that there is no guidance published by the Environment Agency regarding public safety in bathing other than that tiny, single-digit number of bathing sites.



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We have just completed a big citizen science exercise, which by the way the Environment Agency was not remotely interested in, on the Thames in the run-up to the Oxford and Cambridge boat race. Basically, we uncovered levels of E. coli that were off the Richter scale in terms of what is safe for the public. As temperatures are warming up and it is half-term in three weeks' time, tens of thousands of families are going to be in the rivers, on our beaches and going to lakes, none of which have bathing status protections.

I am not exaggerating: somebody is going to die because of the pathogen levels we have in the rivers. Nobody seems to be interested in it. The water companies will not give any public health guidance on it. The EA will not give any public health guidance on it if it is not a bathing site. Of course, we welcome a few more bathing sites, but there is nothing like the national coverage we need to provide the safety net to protect the public from what is going into our rivers.

Dr Collins: Could I just add to that? At the moment, we have no direct monitoring of any pathogens. We have monitoring of E. coli, but that is just an indicator. We do not know what that means should you swallow a mouthful of norovirus or campylobacter or cryptosporidium. We have so little information on that, other than a few academic studies. The Environment Agency does not monitor those pathogens. That is a critical gap in our knowledge.

We obviously welcome further designation but the hard work begins now. We are incredulous that currently these sites can be de-designated after five years if they do not reach a standard. That is a ridiculously short period of time for all the investment that will be needed or the engagement with farmers to tackle septic tanks and all the rest of it. That really has to be addressed.

Chair: We will be asking the Minister about that shortly when he arrives. I believe that one of the things they are consulting on since the announcement on Monday is to change that time limit, as you have just indicated.

Q42 **Cat Smith:** The Office for Environmental Protection recently reported that the Government are not on track to meet the 2027 deadlines within the Water Framework Directive. Could I start with you, Mr Watson? What actions do you think that the Government should be taking to try to achieve those objectives by the 2027 deadline?

Charles Watson: I think the OEP's report was very comprehensive, but I would take you to recommendation 1 of the dozen or so recommendations that it put into that report, which says there have to be "additional measures". There just are not enough measures, particularly on a catchment basis and there is no timeline attached to those measures. However, the most important of all those recommendations is related to funding. There simply is not the funding in place for our regulatory bodies tasked with protecting the environment and protecting



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our rivers to do their job. Until law enforcement is properly funded and polluters are held to account and made to suffer real penalties, there will be no incentive to not pollute.

Q43 Cat Smith: Dr Collins, do you agree or do you think there are other things that the Government could be doing to try to make progress towards or achieve the 2027 deadlines?

Dr Collins: I support those comments. If we do not have the regulation and the enforcement, the whole thing falls apart. We have to have that. We have seen funding for the Environment Agency really drop off for those resources.

We have had a lot of focus on storm overflows, rightly, over the last few years, but what seems to be missed a little bit is still a focus on waste water treatment. Across most of northern Europe—Scandinavia, Austria, Germany, Switzerland—all those countries have 100% tertiary treatment, which is a high level of treatment. We do not have that here. We know that because of that—we have provided written evidence—we have adverse impacts upon the aquatic environment.

It is not just about storm overflows. We need to see much greater investment into tackling agricultural pollution, support, advice and guidance to farmers. ELMS is a start but it needs a great deal more. Some nice piecemeal examples are appearing around private investment and blended finance into rural land management, so we need to maximise those. We need to tackle the whole thing at a catchment scale. This is the thing. We need to be holistic in the way we manage land and water. We have myriad plans and policies and they need to come together at a river catchment scale. We need to identify the benefits and synergies that can come from that.

One final critical thing: not a single English river is at good chemical status. We have to have a robust, strong chemical strategy from the Government that tackles chemicals at source; has a precautionary principle underlying it; enhances the monitoring of chemicals in the environment, not only the aquatic environment; and ensures no further divergence between the UK regulation of chemicals compared with the EU. There are already plenty of examples of that. Chemicals is a huge issue and it has been the elephant in the room for almost the last decade.

Q44 Cat Smith: Can I take you back a little bit to the catchment-based approach? The Rivers Trust, alongside many other NGOs and campaign groups, has been a driving force for improvements at a catchment scale. Could you tell the Committee how effective catchment-based approach partnerships have been in harnessing demand for improvements and driving real change?

Dr Collins: There are 106 partnerships encompassing the whole of England. At their best, they have been very successful. I guess there are two things, really. One is the delivery of things like nature-based



solutions on the ground, but particularly the convening power they have to bring stakeholders together. Where they operate best, at the river catchment scale, they cut across so many different pieces of policy and legislation: ELMS, WINEP, drainage waste water management plans, local nature recovery strategies. That is where they can play a key role, I think.

They have been poorly resourced so some have struggled. Others have driven that movement towards a more holistic approach looking for a targeted approach to find the best solutions in the best location. However, they need to be backed with greater resources and given greater legitimacy because they have been proven. They have shown some ability to bring in funding from a diverse range of sources. We heard about Enfield earlier. There are also some wonderful examples of both rural and urban wetland systems being funded through multiple sources through blended finance, and that is what the catchment partnerships can help to drive.

Q45 Cat Smith: What measures would you like to see from Government or local authorities to support the effectiveness of these catchment-based approaches, maybe defining their roles and functions? You have touched already on the funding, but feel free to stress that again if you think you ought to.

Dr Collins: Yes, funding. There is also their legitimacy in this new world of genuinely moving towards a holistic approach and tackling things at a catchment scale. We have these very high-level EIP targets for nutrients and they are an issue in themselves. They are somewhat regressive, in my view. However, if we can set targets at a river catchment scale, we can bring all stakeholders together and begin to think about innovative solutions. What do we need to do for this particular catchment to reduce phosphorus so it is no longer harming the aquatic environment—ditto nitrogen and so on? We need to have that at a much more local level. That is where the OEP report is right. The partnerships need to have their role carved out, but they need to be backed with funding and the Government can help with their legitimacy as well.

Q46 Barry Gardiner: Professor Hammond, I think it was you—if not, it was one of your colleagues—who spoke about the lack of monitoring of pathogens in the river. Coupling that with what Dr Collins just said about chemicals, what data ought we to be gathering? How could this Committee make a recommendation that says, “This is the data that we ought to be gathering on pathogens and chemicals and this is how we should go about doing it”?

Professor Hammond: I won’t answer the broad question on that for the moment because I want to get one of my pet concerns in.

Barry Gardiner: Do you want to ask me a question?



Professor Hammond: I want to talk about antimicrobial resistance, which I do not think is receiving enough attention. One of the vectors for antimicrobial resistance is microplastics and we are not doing very much on microplastics. If you treat sewage properly, 95% of microplastics are taken out. They go into sewage sludge, which then goes on to farmland, and they get into the environment that way. However, if you do not treat sewage properly, 95% go into river silt, which gets washed into the oceans, so then they get into animals.

Microplastics break down into nanoplastics. Nanoplastics are small enough to cross the placenta. There are things happening to unborn children that we do not yet know about. Even the first poo of a new-born baby, called meconium, has shown the presence of nanoplastics. As well as the chemicals that we should be looking for, there are issues like these tiny bits of plastic, which are a vehicle or a vector for taking what are called xenobiotics—

Q47 **Barry Gardiner:** You have made that point very forcefully and I am conscious that the Chair wants me to keep rigorously to time because my colleague Selaine is going to be twin-tracking with me on this. Can I pin you down on data? What demands should the Environment Agency be placing on the companies in terms of the data that they need to ensure that water quality is where it should be and is reported properly?

Professor Hammond: I am not a chemicals expert so I cannot tell you about precise things like persistent chemicals that come from treatments, fire retardants and the like; I cannot really talk about that, to be honest. My speciality is the access to data, the analysis of the data and the quality of the data, and then the regulation that builds on top of that.

Q48 **Barry Gardiner:** What I am asking you is how that data should be reported. What requirement should we be putting on companies? What should the EA be demanding in order to be assuring the public that it is doing its job properly?

Professor Hammond: At the moment, there are plans, for instance—as someone has already mentioned—for this upstream/downstream monitoring of outfalls, especially sewage treatment works. My recent experience of the devices that will be used for that is that they are not very well—

Barry Gardiner: Calibrated?

Professor Hammond: They need regular calibration but they are not even cleaned properly.

Water companies are using them now. Wessex has been using them for 10 years in the treated sewage that comes out of sewage works. I monitored 2 million samples of such measurements. These are the spot samples that at the moment are just done monthly. Did you know that less than 50% of all treated sewage is ever monitored? They only monitor between 7 am and 3 pm.



Q49 **Barry Gardiner:** With respect, Professor Hammond, you are giving me a deeper analysis of the problem but you are not helping me and the Committee arrive at the sorts of recommendations that would give us a solution. Let me turn to Dr Collins, and then I will come to you, Mr Watson.

Dr Collins, one of your colleagues at The Rivers Trust, Tim Harris—although he does not speak for The Rivers Trust in this capacity; he has 18 or 19 years' experience as an adviser to United Utilities—recently told LBC that water companies have significantly underestimated the number of sewage pipes in operation. That is to say, even if we were putting monitors on the pipes that the companies have identified, which is about 22,000, there could be up to 10,000 unmonitored pipes. The companies simply do not know where they are, because of poor record-keeping over a long period of time. Does that chime with your understanding?

Dr Collins: I understand that point and I think that it is valid. I cannot comment on the quantification of it, but for sure there is an element of that.

Barry Gardiner: In fairness, he said a range between 20% and 50%, so it could be up to 10,000.

Dr Collins: I understand that that is the case. I cannot comment on the particular numbers.

Q50 **Barry Gardiner:** What data do we need from the 20,000-odd pipes that we do know the whereabouts of?

Dr Collins: The question is broader than that. Take the chemicals: the evolution is that we follow the Water Framework Directive and have around 45 priority substances—the nastiest chemicals. It is a Catch-22 because there are only 45 or so of them and they come with a standard, which is a concentration that has to be met in the water but is not. Because of that, we do not monitor all the other hundreds—literally hundreds—very well. There could be pesticides, personal care products, pharmaceuticals, heavy metals, hydrocarbons, industrial chemicals, all of that. We do not measure that collectively—the Environment Agency, water industry—very well.

Q51 **Barry Gardiner:** Who does? Are there good examples that we can follow?

Dr Collins: In Europe, the problem is that it is all driven by the 45, which come with the regulations. With everything else, there is a Catch-22, so we keep a watching brief on some of the other things. What the Environment Agency do with the other hundreds is to collect a water sample and run it through a machine, and the machine tells them presence or absence. That is something, but it does not tell us what the concentration is or whether the concentration is harmful.

Barry Gardiner: We are not getting a comprehensive view of the water.



Dr Collins: No, we are not.

Barry Gardiner: Mr Watson, I know that you wanted to come in.

Charles Watson: Yes. You wanted a simple suggestion: monitor E. coli. If there is E. coli in the water, you know that there will be a load of other stuff with it. It is coming into the rivers. All the progress that has been made in monitoring has been about sticking devices on to outflows, because previously there was dishonest reporting and self-monitoring by the water companies. Now we have wonderful things like live sewage discharge maps, so we know when these things are discharging but nobody is telling us what lies beneath the water.

Take the River Thames, where there is not a bathing site, but thousands of people use that amenity—members of the public, children, families, rowers, swimmers. Nowhere along that river is anyone officially monitoring. We are but we should not be doing this. The mere fact that we have to do it is an outrage. The fact that we had to put out public health warnings at the time of the boat race and give the participants guidance on what to do is outrageous, but nobody else was doing it.

Test for E. coli and issue regular public notices along the river, irrespective of whether it is designated as one of our seven or eight bathing sites, to keep the public safe, because the public is not safe.

Chair: Thank you. I will bring in Matthew Offord briefly on the back of that, because I think he is a Thames swimmer.

Charles Watson: Good luck.

Q52 **Dr Matthew Offord:** You raised the point that someone was going to die. I was swimming in Shillingford on Sunday and there was turbidity in the water. I am aware of the bathing water directives and what they test for, but I am aware that there are viruses, parasites, fertilisers, pesticides, pharmaceutical products, nitrates, phosphates, plastics, faecal matter and even radioactive substances. What do you say is the main threat to human health in regard to those? You have already said, "Good luck with that."

Charles Watson: You are very brave to swim in the Thames. The answer is that people like us should not have to be doing this. We are the only people doing this. Nobody else is doing this; nobody else is monitoring this terrible situation. This should be done by the people empowered—the Environment Agency—to protect the public. Two weekends ago, there was a range of documented evidence of piles of human excrement washing up in the lower Thames, along with all the other horrible things that come out of the pipes. It was all over social media. All that Thames Water did in response was to say, "We've been and visited. We don't think it's us. We think it might be agricultural waste." There are no herds of cows in Putney or Hammersmith. The EA did not turn up. There were no dead fish. The EA will only come if there



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are dead fish. Most of the fish have already been killed, so there is little chance of the EA coming to see the dead fish. That is the situation. Nobody is providing us with the protection.

Chair: I need to move us on, and I welcome Selaine Saxby, who has joined us from the EFRA Committee.

Q53 **Selaine Saxby:** Can I clarify the point on E. coli? You have just differentiated that it is not always human. Might you agree that in the data that we look at, we ought to be able to differentiate so that we get a clear idea of where some of this waste has come from?

Charles Watson: A very interesting report is about to come out from Cardiff University looking at the origin of algal blooms on the River Wye. With things like eDNA testing, you can trace a lump of excrement back to the species that produced it. All the technology is there. There are wonders of technology available, it is just that they are not being availed of.

Q54 **Selaine Saxby:** Do you think that there is a risk that because we are only testing at bathing water sites, there is a presumption that it is the same quality as a swimming pool? There are two different things going on here. One is about the ecological quality of the water and the other is whether it is safe to swim in. They are not always exactly the same thing. I come from a very rural area where we have a lot of cows, so we have a lot more issues with run-off from farms than other areas. Is there a concern about the data almost having mixed messages due to the way in which we are reporting it now?

Charles Watson: It requires scientists, funded scientists, to answer that question. Perhaps we should talk about the anecdotal evidence. Since we have been publishing this, every day we get dozens of incoming emails from people reporting how they got ill—they swam, they went rowing, their kids went rowing, they had a cut, people are getting sepsis. All we know is that there is a terrible problem. As volunteer organisations, all that we can do is highlight this problem in the hope that somebody somewhere will sort it out.

Q55 **Selaine Saxby:** Professor Hammond, can I come to you as a fellow mathematician? If you had the opportunity to design a test data system—you might need to write to us afterwards with the detail on this—what data would you be looking for and providing? Would it just be around EDMs or would you be looking for more?

Professor Hammond: Unfortunately, the most recent work that I am doing shows that EDMs are not very good. We are putting a lot of emphasis on them—too much emphasis, in my opinion. For example, I am doing an intensive study of Severn Trent Water. That is 200 sewage works; it is the biggest thing that I have ever done. This is information on the treatment of sewage and when sewage spills occur. This data was not given to me by Severn Trent Water, which refused to give it. This data was given to me by the Environment Agency. I found that the sewage



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treatment data, which can measure volume, for instance, which this Committee wanted the Government to adopt, are very reliable. For the EDMs, however, 55% of the data series that I have analysed so far—I am halfway through—are inconsistent with the treatment data. Therefore, they are unreliable.

If you include the unreliable data in your analysis, for instance, of compliance with permits, you get that Severn Trent has breached its permits thousands of times. If you exclude that unreliable data, you get hundreds. That means that the classification of Severn Trent as a four-star outstanding company is based on very shaky data. I am very concerned that we are putting so much emphasis on the future on EDM monitoring and that we are using the wrong technology. We should be using volume and we would get a much better idea of what is happening. If this is repeated across the other two water companies that the agency has given me a lot of data for, it would be a scandal if the unreliability was at a rate of 50%.

Q56 Chair: Can I follow that up? This Committee called for monitoring in the receiving waters upstream and downstream of outlets, as we have just been talking about. The Government have been consulting on, and have agreed, the four parameters that will be tested. Peter, do you have a view on the reliability of that? It does not include biology, which is what Charles was calling for with E. coli. You have mentioned some concerns about the quality of the samples that will be used, although they have not yet assessed exactly what will be used and they are still consulting on that as well. However, will the parameters themselves give us a greater indication of the impact on the quality of the water in the receiving bodies?

Professor Hammond: If they work, yes, they will. However, I believe that they will not work very well unless the water companies put a great deal of effort into managing them and keeping them clean, because you get detritus in rivers that generally starts to clog up the devices. You also have to calibrate them regularly. I worry about the accuracy of the data.

Q57 Chair: Are you suggesting that the way in which they have looked after the EDM monitors, which are within their facilities, has not been good enough, so that the unreliability is—

Professor Hammond: I think that it is scandalous and it needs a public inquiry.

Q58 Chair: That is an interesting comment to make and something that we can consider when we write to the Minister. Thank you. We must move on to Cherilyn Mackrory for the last questions for this panel.

Cherilyn Mackrory: I will ask some questions particularly on the agricultural run-off. Mr Watson, could you explain what changes you would like to see, particularly in intensive livestock? We will go into the River Wye a bit later, but you may want to use that as a case study. How can we ensure that intensive livestock units are well regulated and well



operated? What changes need to be made?

Charles Watson: As we know, it is a huge problem. We have just published a report on the dairy industry. The majority of dairy farms in England—67%—and 80% in Wales were in breach of regulations. However, we are not blaming dairy farmers; there has been an intensification of the industry driven by the fact that they have no choice about who they sell their milk to. The supermarkets now control the entire procurement process, so a dairy farm today has to put twice as many cows on the same hectare as it would have 30 years ago in order to break even. That is double the amount of excrement. It is worse than that: it is not double the amount of excrement, because a single dairy cow also, due to the pressure to intensify, now yields twice as much milk as it did 50 years ago. That is primarily because of the soy and the feeds—the intensive stuff—that get shoved into them to produce more milk.

It is very similar to the sewage problem. There is an infrastructure that has not been invested in and is old and antiquated that is taking far more demand and far more volume due to intensification. With factors such as more extreme weather, it has collapsed. That is the problem and these farms have to be helped. If we are going to keep them, if they are going to remain viable, they have to be helped.

Q59 Cherilyn Mackrory: Sticking with dairy, have you seen good practice on dairy farms that we should be aiming for, for the rest?

Charles Watson: Dairy farms that are farmed extensively are by definition good practice, because they do not have that concentration of manure.

Cherilyn Mackrory: What about changes in facilities, then? I am looking for solutions.

Charles Watson: The facilities have to be upgraded and your average dairy farmer cannot afford it. There are 7,500 dairy farms in the country: half of them are smallholders and half of them are tenants. Take, for example, the new slurry management grants that the Government have introduced, which are a very good idea. The problem is that they have to match-fund them 50%. If you are tenant farmer you cannot afford the 50%. There is no means testing on those grants. However, the amount of money available barely touches the sides.

Q60 Cherilyn Mackrory: What about capital investment? Are we seeing any of the infrastructure costs covered in the new farming grants that come with different capital investments? They introduce different things from time to time.

Charles Watson: Not enough. For example, one of the biggest polluters on a dairy farm is silage. This is getting very technical, but silage is not covered—repairing silage clamps is not covered in any of these grants. The grants scheme has to be made more inclusive of other forms of



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infrastructure. It has to be bigger and it has to be more affordable for the smaller farmers if we want to keep small, tenanted farms.

However, the biggest answer to your question is regulation. Regulation of agriculture is done on an advisory basis. When we started River Action, a farm would only be inspected every 275 years, based on the number of inspectors. We welcome hugely the fact that the EA has now recruited a load more inspectors and a farm can probably be inspected every 30 or 40 years. It is still crazy but it is better than it was before. More farm inspections are taking place but the basis of inspection is advisory.

We are currently in a judicial review against the Environment Agency, where we have called out the fact that the most critical regulation within the farming rules for water says that you must never overload soils with more nutrients than what soils or crops can naturally absorb. That is deliberately and consciously not being enforced, due to guidance issued by DEFRA. Not enforcing that regulation is why the soils of a catchment like the River Wye, where you have a huge concentration of intensive poultry, now carry several times the phosphorus loading that the crop or nature that naturally exists there can ever take.

I am afraid, Chair, it is moving to your constituency now. The number of intensive poultry farms in Shropshire is higher than in Herefordshire—the largest concentration of any county in the country. No consideration is being given to the impact of the concentration of all this poultry in one single area.

Q61 **Cherilyn Mackrory:** We will come on to the River Wye, so I will not steal other people's questions.

Dr Collins, the environmental impact plan's target is to reduce nitrogen, phosphorus and sediment pollution in agriculture by 40% by 2038 using a 2018 baseline, but there seems to be some confusion on what that 2018 baseline looks like. Can you provide any information on what farmers are using for their baseline in order to be able to show what success looks like?

Dr Collins: I do not think that farmers know what the baseline is.

Cherilyn Mackrory: How will we ever measure?

Dr Collins: Exactly, that is something that we said in our written evidence. I am not entirely sure what the baseline is. It comes with some modelling and predictive tools but exactly what it is I am not entirely sure. The requirement to reduce will vary by catchment depending on the nature of land use, land management and a load of physical characteristics. One of the challenges of that particular target is that it is not clear. Sediment in particular is really hard to quantify so we need to fully understand. There is modelling behind it and that may be fine, but understanding the uncertainty around that and conveying that to farmers is a huge challenge.



Q62 **Cherilyn Mackrory:** Could we turn to some of the practical and environmental solutions that are coming through now from DEFRA? I have regular roundtables with my farmers and it seems as if the schemes are becoming more streamlined now and a bit easier to access. How engaged have farmers and landowners been with your local trusts? They see that they sit on a catchment that needs to be helped. How engaged are you finding farmers?

Dr Collins: Our trusts are well engaged with farmers, and increasingly in cluster groups as well, which are groups of farmers across the catchment—the landscape. That is good news, and we welcome ELMS and the slurry management grants and so on. All of that is good news but, first, it is not nearly enough money; that is probably the frank answer. Secondly, we are concerned about how it is all targeted. Over here your problem might be soil erosion and in particular phosphorus; over here it is soluble nitrogen. Are we sure from these voluntary schemes that we can target the right solutions in the right place? That is one issue.

Q63 **Cherilyn Mackrory:** On targeting, the onus is on the farmer to decide what is best for his business, based on what he still needs to do to make a profit. As we have heard, it is very difficult for farmers to make a profit at the moment. How much engagement is there? What does the conversation look like when farmers' end games might be slightly different from yours? How do you manage that?

Dr Collins: I do not think that they are necessarily different. There are lots of win-wins to be had. For example, Charles mentioned earlier the level of phosphorus that we have in some of our cultivated soils. It is at or close to saturation. Where that happens, we can advise—not just The Rivers Trust but other people who also engage with farmers—and say, “Actually, there’s a win-win here. There’s no point in you putting on any more phosphorus in whatever form because it will simply get washed off. Therefore, you save on the farm business and the environment is saved and we don’t nutrify the local watercourse.” Where that advice is given, that is all well and good. However, it is very piecemeal out there and that is the problem. Often farmers do not have access to advice or they have to pay through the nose for it, and they are obviously in a very challenging position economically. Our challenge is that we need to see a much more harmonised approach to this advice and target it in the right place.

Q64 **Cherilyn Mackrory:** So that is targeting and better targeted advice as well. What other barriers do we need to overcome? What recommendations could we make to DEFRA to improve the schemes to ensure that we will get to the right end?

Dr Collins: I think that you could target schemes better. Take buffer strips, for example: geographically they could be targeted much better. That would make a lot of sense. There are some overarching things that encompass so much of cultivated land, such as there being too much phosphorus already so our soils are saturated. Therefore, soil nutrient



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testing should almost be universal. It is in Northern Ireland, more or less, as I understand things. I do not quite understand why it is not elsewhere. Those are two clear pieces of advice.

Another one is that steadily, piecemeal examples of blended finance are coming in for farmers for things like nature-based solutions. They are an incentive for farmers and finance is involved. However, we will not see a step change if some of those potential investors are concerned about where the regulatory baseline lies. If they do not fully understand that, they will not want to fund measures that farmers should be taking anyway. This is over and above.

Q65 Cherilyn Mackrory: Do you provide feedback to farmers? Do you regularly test the river catchment their farm sits above? If they have been in the scheme for three or four years now, are you feeding back and seeing improvements? Can you give that motivation?

Dr Collins: Yes, and that is exactly the benefit of working at that local scale. You know what the problems are, as they manifest in the river, and you work back up, engage with farmers and help them to find solutions and find funding to address the issue. That is the key to it; it is at that local level.

Chair: Thank you very much, that concludes our panel. I would like to thank our panellists, Dr Rob Collins, Professor Peter Hammond and Charles Watson very much for joining us. We will suspend briefly.

Examination of witnesses

Witnesses: David Black and Paul Hickey.

Q66 Chair: Welcome back to the Environmental Audit Committee for our third panel of our session on water quality today. We are very pleased to welcome David Black and Paul Hickey from Ofwat.

David, I am not sure if you were listening to the earlier sessions. One of the things that came up was the fact that you are currently reviewing the business plans for water companies for the next five-year pricing period. The figure of £100 billion was mentioned by the Water UK representative. Questions were raised about whether the water companies, with this significant additional investment, will have the capacity in terms of financial resource and physical capacity through contractors to be able to do the work. Are you trying to form an assessment of that? There is a limit to what you can tell us, I appreciate that, but can you characterise your view of the scale of the ambition?

David Black: Thank you; it is an excellent question. Thank you for the opportunity to join today.

The business plans that water companies have set out have proposed around £100 billion of spending over the period from 2025 to 30. That is a significant step up from the level of investment at any previous price



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review and is largely driven by ambitious plans to invest to improve environmental outcomes. It raises a number of questions for us, and you are right that it raises questions about the ability of the sector to deliver on the scale of investment, the ability to finance it, and the ability of customers to afford the consequent impact on bills of the increased investment.

We are examining that and we will issue our draft decisions for consultation on 12 June. We will set out our determinations for each company and the level of costs. We are very interested in whether companies are putting forward efficient, well-backed plans. We are also looking to see their evidence that they can deliver on those plans. As part of providing their business plans, we asked their boards to sign off and to ensure that their plans are backed and credible to deliver, as well that they had the financing in place to deliver.

We are looking at these plans. We will put protection for customers in place. If companies do not deliver, the funding will be clawed back and companies will be penalised, but equally we are looking to see if there is anything that we can do to help the sector to gear up to deliver. We have already taken steps. For example, we have allowed accelerated investments. We have given early approval so that companies can start on some of the environmental spend well ahead of 2025.

Q67 Chair: In our report in 2022, we recommended to the Government that as part of their strategic guidance to Ofwat, you should be encouraged to encourage the water companies to use nature-based solutions as an increasing measure and tool for improving waste water treatment. What focus is there on that in these plans? Can you give us any insights into the extent to which you are trying to follow that mandate?

David Black: We have taken direct steps ourselves and worked with the sector to try to promote nature and catchment-based decisions. We do not see enough of them and we would like to see more. We have made sure that our regulatory framework provides a level playing field so that companies can choose between conventional and nature-based solutions. A nature-based solution will not be appropriate in every case and there is a question for the Environment Agency and Natural Resources Wales in Wales as to whether the nature-based solution or catchment-based solution will meet their requirements. That tends to be the driver of a company's decisions of whether to go with nature-based approaches or not. We are also introducing new measures in the price control. We are measuring the impacts on biodiversity and trying to ensure that companies can capture in their business plans the broader benefits that these solutions bring. That is an area of priority for us. Our concern is that the sector still has some way to go in this space, but we are very clear as a regulator that we would like to see more of this and we are doing everything in our power to encourage those solutions.

Q68 Clive Lewis: Mr Black, after 30 years of privatised water, we find ourselves not only swimming in our own excrement but, with the



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cryptosporidium outbreak down in Devon this week, drinking it as well. Are you confident that the model of privatised water, given that it cannot even ensure our safety in our rivers and bathing waters or our drinking water, and given the existential threat that the climate crisis represents to this country, is the correct model and vehicle to be able to deliver water security?

David Black: The question about the model, public or private, is a question for the Government rather than the regulator. We regulate companies financed in a number of different ways, from the not-for-dividend model in Wales to listed companies and private equity-owned companies in England. We can also look across the border at Scotland and Northern Ireland and their experience of publicly owned companies. From looking at the evidence in Scotland, we see that Scottish Water's leakage performance is worse than that of any company in England, as I understand it. On sewage discharges, Scotland does not measure most of their storm overflows, but the ones that they do show at least four times the level in England. It is not clear to me, in terms of the evidence base, that looking elsewhere is the answer.

On the ownership model, you are absolutely right that the sector faces key challenges in adapting to climate change and improving the environmental outcomes. It is very clear from the state of rivers that where we are now is not good enough. That requires major investment. The sector has financed £200 billion of investment since privatisation, so it can do that. What we need is good data, which you have just been hearing about, and ambitious goals to improve performance. We are confident that whatever model we have, provided that we have ambitious goals, that we have accountability and that we are clear about what we are trying to deliver, the sector can step up and deliver. However, there is no question that it will be extremely challenging.

Q69 **Clive Lewis:** Let's look at the investment that has been talked about. It sounds very good, on the surface, and I think that it is £96 billion of extra investment. However, if we look at the figures for the last 30 years, we find that the cumulative total of dividends extracted since privatisation is £77.6 billion, and over the period until now, there has been £191 billion of investment. That sounds quite reasonable on the surface, until you begin to realise that, like the new investment of £96 billion, it is us—the billpayers—who are paying every single penny of that investment.

In fact since 1990, over 33 years, the owners of the water and sewage companies in this country who own our privatised water system—the shareholders of those companies—have invested less than nothing. That comes from David Hall, visiting professor at the University of Greenwich, who has done a study on this. They are not very impressive investment levels. I am looking at this £96 billion. We are paying for that. None of those companies that have sucked out £77 billion is paying a single penny towards improving our very poor water system, are they?



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David Black: As to the facts, about £200 billion has been invested since privatisation, you are right. The level of dividend payments is around £52 billion, based on Ofwat data. We do not recognise those higher numbers.

That said, since privatisation, the way that the model has worked is that investors pay for the investment up front and then that is recovered from customers over time. So you are absolutely right that over time, customers will pay. On average £4 of capital investment is paid for by customers over about 30 years, like any other investment proposition. The benefit from the customer perspective is that they would have to pay much more up front. If you had to pay the capital investment up front, the bills would be higher now than they will be if it is recovered over time. That is the way the model works.

There has been a significant level of investment in the sector. The level of assets at the time of privatisation of companies was around £9 billion. It stands close to £100 billion today. About £65 billion of that has been raised from debt and about £35 billion from shareholder funding.

Q70 **Clive Lewis:** My final question is about the challenges of the climate crisis. I live part-time in London because I work here, and Thames Water provides my water. As far as models go, Thames Water does not seem to be a poster boy or girl for the industry, yet we find that Thames Water, which inherited a debt-free company, now owns £14.3 billion of debt. As models go—I know you talked about Scotland and Wales—if you can see this, this is the multiplicity of holding companies that constitute Thames Water. I count eight. That is all I can count; there are probably more on there. They have taken out £14.3 billion of money in debt. They have been servicing their dividends from borrowing against the assets. Is this a model that is working to provide clean, drinkable water in this country and that is fit for purpose, given the climate crisis that is coming our way? Is this fit for purpose to provide our water and our water security in the future? Do you really think that as the regulator?

David Black: In terms of the facts, it is true that Thames started at privatisation with no debt. It had assets of £1 billion. It has assets of £19 billion today. That is the key ingredient in the different level of debt: they were debt-free at privatisation and had assets of £1 billion; they have assets of £19 billion today and debts of less than £15 billion.

We are absolutely clear that Thames is not performing in the way that it ought to be performing. We are clear that its finances are not in the state that they ought to be and we have been clear about that for some time. It is very clear that the company needs to improve its operational performance, it needs to improve its impact on the environment, it needs to improve its customer service and it needs to raise fresh equity finance. So it is very clear that Thames needs to improve its performance, but the privately funded model has meant that there has been a growth in assets in London of £18 billion over that 30-year period.

Chair: Thank you very much, Clive. I am conscious that we have the



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Minister arriving at 4 pm. We have three sets of questions and 18 minutes, so that is six minutes each.

Q71 **Barry Gardiner:** In response to Mr Lewis, Mr Black, you would have to acknowledge, would you not, that the level of gearing in Thames Water is 80%—that is debt to the value of the company—whereas your own recommendation is that the gearing of a company should be about 60%? Why have you allowed that to happen?

David Black: Absolutely, we think that the debt level of Thames is too high and we think that Thames's performance reflects those stretched finances. Our model works on a level of gearing; we have suggested around 60% would be better.

Barry Gardiner: You are repeating the question. My question is: why have you allowed it to happen?

David Black: The choice between debt and equity finances has been the decision of investors in the company within a framework set by Ofwat. We have required it to have a minimum level of investment credit rating. But I would agree that Ofwat should have—

Barry Gardiner: Its credit rating was downgraded, I think, twice in the last year.

David Black: Sure, and that will lead to the consequences of Thames being prevented from paying further dividends out of the company.

Q72 **Barry Gardiner:** Yes, but you know how it got around that very well. It got around that by making a repayment of the debt through their holding companies—exactly the Byzantine structure that Mr Lewis just showed us. Therefore, that is not really an answer to the question, because the way in which you are able to constrain the company is not able to pierce that corporate veil into Kemble Water and all the other holdings above.

David Black: Sure. The control over dividend payments, however, does address its ability to take customer money out of the company, so that is ultimately what—

Barry Gardiner: Out of Thames—

David Black: You are absolutely right that we are concerned about the financial resilience of the sector and we will look at further measures if required to ensure that companies do operate prudently. Ultimately, the question is about how the consequences of the financial structures are visited upon investors. That is what we see at this present point in time: Thames has struggled to raise its finances. It is about Ofwat holding the company to account and those consequences falling back on investors and not on customers.

Q73 **Barry Gardiner:** I want to ask you about the level of trust between Ofwat, as the economic regulator, and the businesses themselves—not



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specifically Thames Water but all the businesses. We have had a submission from Stuart Colville, the deputy CEO of Water UK, which is, if I paraphrase, somewhat critical of the demands that you are placing on them in terms of the upcoming price review. I am sure you have seen that so I will not adumbrate it.

David Black: I certainly will not apologise if water companies are criticising us for challenging them too hard. That is part of our job. We are here to protect customers' interests and it is absolutely right that we challenge companies to do better. It is very clear that they have lost the trust of the public and that they need to turn around their performance and improve it. That said, we regulate all of those companies and we engage with them. We have free and frank conversations with them and we work with them in a variety of modes.

Barry Gardiner: It is a robust and professional exchange.

David Black: Indeed.

Q74 **Barry Gardiner:** That is what I wanted to hear, thank you. When can we expect the outcome of your investigation into the sewage treatment works? I believe that you said that was due at the end of March, wasn't it—the end of the first quarter?

David Black: We do not operate to a fixed timescale on these investigations. We have enforcement action under way on six companies. We issued what we called a "minded to" decision to three of those companies. That was late last year. They have the opportunity to—

Q75 **Barry Gardiner:** Yes, but the proposed decisions were expected to be published for public consultation at the end of March. Do not tell me the things that I do not need to know about, just answer the questions that I do, because the Chair is really pushing us for time today.

David Black: I am very keen that we publish the outcomes of these decisions as soon as we can.

Q76 **Barry Gardiner:** When will that happen?

David Black: We are aiming for summer.

Barry Gardiner: No, "summer" is as bad as telling us that it will be the end of the first quarter, and here we are at the end of April. We need more specifics, don't we?

David Black: We are striving to do this as soon as we can, but we are equally very clear that we have to produce a legally robust decision. We may well be challenged by companies and we want to be in a position where we can hold companies to account. We have an obligation to do that as a regulator. You will understand that.

Barry Gardiner: I will leave it there, Chair.



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Q77 **Claudia Webbe:** To follow on from that, it would be fair to say that the investigation that you are referring to is a criminal investigation. Is that right?

David Black: No. Ofwat does not have criminal investigation powers on environmental matters. The Environment Agency has a parallel investigation and is undertaking criminal investigations. Our investigations are civil investigations.

Claudia Webbe: The Environment Agency is undertaking the criminal investigation.

David Black: That is right, yes.

Q78 **Claudia Webbe:** How are you working with the Environment Agency on the price review 24 package?

David Black: We work closely with the Environment Agency. We have a range of engagements with them. My colleague here, Paul Hickey, leads our RAPID group, which is effectively a vehicle for Ofwat, the Environment Agency and the Drinking Water Inspectorate to work collaboratively with water resources. The way that the price review works is that the Environment Agency sets the environmental requirements on companies. They produce business plans with, in this case, the 17,000 environmental schemes. They present those business plans to Ofwat. We engage with the Environment Agency about the extent to which companies have met or not met the Environment Agency's environmental requirements and then we act as the economic regulator to check and challenge the efficiency of the companies' business plans and to protect customers from paying twice or paying excessive amounts for the environmental improvements.

Q79 **Claudia Webbe:** Are there any potential conflicts of interest?

David Black: No, I do not think so. We have complementary but separate roles. The Environment Agency—it is included in the title—is there to protect the environment. It is our role to protect customers' interests, but customers have interests in environmental outcomes as well, so the Government's strategic policy statement to us requires us to take account or give effect to the environmental requirements set by the Environment Agency. When you see, for example, the outcomes of the price review, you will see a very large investment programme that is in large part being driven by the Environment Agency's statutory requirements.

Q80 **Claudia Webbe:** On the proposed customer bill increases, I declare that I am the Member of Parliament for the constituency of Leicester East, which is covered by Severn Trent Water. In my constituency, income levels are £10,000 less than the national average. Severn Trent Water is proposing an increase of 37.16% in prices—in bills. To your knowledge, what are companies doing to persuade their customers that the proposed increase in bills is justified and do you think that those bills are justified?



David Black: We will issue our draft decision on that on 12 June. That will set out our view as to whether the companies have justified their bill increase. We will be looking at their costs: whether they are cost efficient, whether they are well justified, whether it stacks up. We will be looking at the returns that they are asking for. We will also be looking at the affordability support that they supply for their customers. You are absolutely right that many customers are hard-pressed and the idea that they can afford another £20 a year on their water bill is going to be very difficult for many customers.

The sector does at the moment provide support for customers via a social tariff but we need to see that step up and we need to see support made available to the consumers who cannot afford to pay their water bill. There is an element of both check and challenge on the package, making sure that every penny of the bill increase is justified, and making sure that companies are stepping up to provide support for the customers who are most in need.

Q81 **Claudia Webbe:** Mr Lewis posed a question about Devon. I assume that Devon is covered by South West Water. Southern Water is proposing an increase of 65%. Thames Water and Southern Water have admitted that they have not mapped their entire sewage networks. What confidence can billpayers have that companies' proposed investment plans for their sewage networks are properly targeted and will deliver good value for money? I cannot understand a level of increase of 65.98% for Southern Water and 39.64% for Thames Water, yet they have not even mapped their entire sewage networks. How is this justified?

David Black: That is the very question that we are looking at now. We will publish our answer shortly. You make a very good point that we would expect companies to understand their networks, we would expect them to understand what is driving their costs, and we would expect them to be able to demonstrate to customers that their plans are efficient and robust.

As part of our price control, we will also rate each company's business plan as to the level of quality and ambition. When you see us publish our views on companies' business plans, we will set out our confidence in terms of the quality of that company's business plan as well. We will be very clear about what we are expecting the companies to do to address any issues—that is, where they need to provide further evidence to us to demonstrate that their proposals are good value from a customer's perspective.

Claudia Webbe: Chair, I know that we are pushed for time. I am sure that the public would have expected us to ask more questions of Ofwat but I know that we are pushed for time. Thank you.

Chair: Thank you very much. We have the Minister arriving after we hear from Jerome Mayhew.



Q82 Jerome Mayhew: You said in one of your earlier responses that the water companies have lost the public's trust. This is one of the most heavily regulated sectors in our economy. It is regulated by you—they have lost the public's trust while being regulated by you. Are you concerned that the public should rightly have lost trust in your organisation as well?

David Black: That is a very fair question. We think that the sector needs to do much better and it is very clear that the—

Jerome Mayhew: I am not asking about the sector; I am asking about Ofwat.

David Black: Yes, sure. We have looked very hard at the way that we regulate. It is very clear that the level of environmental performance of companies needs to improve and so we will look very hard at the way that we work with the Environment Agency to make sure that the sector will deliver on the right environmental outcomes. You will have heard from the Environment Agency recently on the steps that it is taking to improve its performance. We think that as a regulator we need to focus on making sure that there is a greater focus on the strategic direction of the sector. We do not think that the sector has been sufficiently focused on the long term. One of the challenges that we face in the sector is that these issues are very real today but they do take investment and they do take a long-term plan to fix.

A second point is about driving performance of the companies. Looking across the sector, for example, in 2022 three waste water companies had zero serious pollution incidents. That is exactly as it ought to be; we would not expect a company to have a single serious pollution incident. Yet another two companies in the sector—the poorer performers—accounted for over half of the 44 incidents in the sector. We would like to drive up the performance of the poor companies to match the best and then encourage the better companies to perform. We want to introduce changes such as the innovation fund to try to get the sector to innovate more. We are very clear about the need to deliver stretching performance improvements and we will set challenging performance improvement targets at the next price review.

A further challenge alluded to by the Chair at the start of the discussion was about the ability of the sector to step up and deliver this enormous level of capital investment in the next price review period. We are very focused on what we can do as a regulator to hold companies to account. As for what we need to do differently, we need to be closer to companies to understand what is going on in their businesses and have the ability to step in early when we see signs of poor performance occurring.

Q83 Jerome Mayhew: I will come on to financial resilience in a moment, but that was a long list of all the good stuff that you think you ought to have done. That is the future. It does not bear comparison with the actions of Ofwat over the last decade. Are there reasonable grounds—I am not



asking for a mea culpa; it would be nice but I am not going to ask for that—for Ofwat to pause to reflect on its regulatory performance over the last decade?

David Black: We certainly look to learn lessons from all of our experience. We do that regularly. On the issues around storm overflows, it is very clear that not having accurate data on what was going on was vital. That is one key lesson to learn—that getting accurate data on company performance is important as well as getting a stronger and better view of what is going on inside the companies. We have been a relatively small organisation and we have relied on price controls. The steer from the Government over time has been to be very mindful of the compliance costs that we impose on firms.

Q84 **Jerome Mayhew:** The cost to the consumer has been paramount—perhaps too much so.

David Black: The final point that I would make is about the system of planning in the sector. A lot of work goes into plans and I am not diminishing the efforts of many in the sector to do with that. The question is if the level of environmental investment in this price review is four times that of the previous price review and the price review before that and the price review before that, how did the planning system work? How did we miss the level of investment that is required? How does the planning system work? The question is not about the focus on bills; it is about how the planning system works. Are we anticipating the challenges of the future—we have talked about climate change—and how do we make sure that the sector is investing today to benefit the future?

Q85 **Jerome Mayhew:** We have a quadrupling of the investment requirement for these companies. That and other issues has led to a degree of concern about financial resilience. What are you doing to protect the consumer and to assess the resilience of companies?

David Black: There are clearly some real questions about the financial resilience of particular companies. The first thing that we do is make sure that there is a good and transparent understanding of the financial issues going on in companies. We monitor what is going on and we engage with them. We are pushing them to secure new investment into their businesses and since 2020, there has been £4.6 billion of new equity raised by water companies. Accessing equity markets is important. We need to make sure that our regulatory framework, while being tough and challenging on companies, is also one that is going to be sufficiently attractive to attract new investment.

Jerome Mayhew: There is a balance, isn't there? We are requiring a huge amount of investment and that is private money not public money. There needs to be a regular and predictable rate of return, not overly generous but sufficient to attract that investment, while at the same time not burdening these companies overly with debt and financial engineering, which is what happened in the noughties. It still seems that,



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despite the increased powers that you have, dividend policy is not as clear as it perhaps could be. What are you doing where you are not confident that dividends are based on financial performance and environmental performance?

David Black: We have introduced a new licence condition. It came into effect last year. It will require companies to demonstrate that when they pay dividends, that is linked to performance for customers and the environment. Prior to that there was no legal requirement on companies to do that. We are reminding companies of their responsibilities and companies will, hopefully, be more aware of those responsibilities when they make decisions. More importantly, if they do not make decisions that demonstrate that dividends are linked to performance for customers and the environment, we will take enforcement action to ensure that that stops.

Q86 **Jerome Mayhew:** Given the very bad press that this sector has had and the increased oversight that they are receiving from you, are you confident that the sector remains financially attractive and will receive the inward investment that we all expect?

David Black: That is a challenge. You have spoken about getting that balance right and that is one of the questions that we think very seriously about as the regulator during the price review period. We have a number of mechanisms for testing and challenging that. We think that from an investor perspective, the sector's reputation is important as well and that has clearly been a negative factor. We have seen companies struggle to meet their performance commitments in the current period, and again that has been a detriment on their returns. Therefore, from an investor perspective they have not done very well in the last three to four years. You might say that the sector has not done very well and it is absolutely right that investors should see their returns affected by poor performance. When we set the price review for PR24, we will be setting out that balance of risk and return to make sure that the sector will drive better outcomes for customers and that returns are linked to performance, but also to make sure that the sector remains an investable proposition.

Q87 **Barry Gardiner:** On that question of trust that Mr Mayhew challenged you on, Mr Black, do you think, looking at the revolving door that for a long period of time saw senior directors of Ofwat then becoming senior directors of the water companies themselves, that was something that undermined the public's trust in the regulator being impartial, objective and fair minded?

David Black: We are very clear that all employees of Ofwat are subject to business appointment rules. When they leave, if they are a senior employee, they need to declare where they are going and to get approval for it.



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In the case that is often referred to of Cathryn Ross, a former chief executive, who left Ofwat to work for BT, it was three years before she came back into the sector. We are very clear about making sure that there are no conflicts of interest.

Q88 Barry Gardiner: She is not the only one. There have been many others who occupied senior roles.

David Black: Maybe one or two a year over the last 30 years in a 300-person organisation. It is absolutely right that it is important that Ofwat staff are above and beyond reproach and we have strict rules about that. They continue to be applied. We certainly follow through on that.

Chair: Thank you very much. That concludes our panel. I would like to thank David Black and Paul Hickey for joining us today. We will have a quick break while we await the arrival of the Secretary of State.

Examination of witnesses

Witnesses: Robbie Moore MP and David Hallam.

Q89 Chair: Welcome back to the Environmental Audit Committee for our fourth and final panel of the day on the issue of water quality. We are pleased to welcome Robbie Moore, Member of Parliament and relatively recently appointed Minister for the environment covering water. He is joined by David Hallam, director of floods and water in DEFRA.

Minister, you will have heard on the radio this morning, as we did, the unwelcome news of the very significant spillage of sewage into Lake Windermere, seemingly undetected by the water company or by the Environment Agency for a number of hours. How do you react to such news reports, given your present role, and what are you trying to do to get on top of this issue?

Robbie Moore: First, this is a completely unsatisfactory situation. I would expect a full investigation to be carried out, as will be the case. I have spoken with my Environment Agency colleagues today specifically since hearing the news on this and also had a call with the chief executive of United Utilities as well, to get her undertaking about this matter. An investigation is happening as we speak, so it would be inappropriate for me to comment any further specifically while that investigation is happening.

I would absolutely expect that once that investigation is concluded—if there is, as may come to light, wrongdoing in this case—the Environment Agency as the regulator and the enforcer to carry out their obligations as regulator and enforcer and carry out the appropriate penalties, fines or whatever they may be on the back of what has happened.

Q90 Chair: There are currently over 2,000 instances of alleged permit abuse by six water companies and we have heard from the regulator today that they have issued an interim advice note to three of them. Can you give



any sense of whether we can expect a lot more coming down the track? Are other water companies that have not been investigated likely to be for other similar permit breaches? You have just mentioned that this may be a permit breach; we do not know yet. How are you trying to get on top of that in your departmental role?

Robbie Moore: With regards to Windermere, there is an ongoing investigation so it is fair to let that investigation happen. I can absolutely reassure you and the Committee that I meet with the chief executives of all the water companies on a rolling basis in my office and we go through the performance-related metrics. We look at things like pollution instances. We look at service interruptions and financial standing and I question water companies and hold them to account. That builds on not only the work that I am doing with my officials within DEFRA but the expectations that I would anticipate the regulators to be undertaking—the Environment Agency and also Ofwat—in their respective regulatory roles.

Q91 **Chair:** We have heard from Water UK that the industry is looking to commit up to £100 billion through the five-year business plans currently being considered by Ofwat. That is close to double the previous five-year period of investment, and much of it is going into water treatment but also covering their other responsibilities. To what extent do you attribute that increase in investment to public pressure, Government pressure and regulatory pressure to stop the spillages from happening?

Robbie Moore: Our expectation on water companies is absolutely to enhance their asset base where they have ageing assets, and also to deal with, quite rightly, the challenges associated with storm overflows and pollution instances. This builds into not only the legislation that we brought out with the Environment Act but our plan for water, which is all about more investment within the sector, stronger regulation and tougher enforcement. As part of that more investment, we have seen approximately £100 billion being allocated by water companies in plans through price review 24, which is currently being scrutinised by Ofwat. That process is taking place as we speak, as you will have heard from Ofwat, I am sure. There is an expectation that that specifically addresses some of the pollution instances that are taking place. My understanding is that of the £100 billion that is being put forward collectively by water companies, approximately £10 billion will specifically relate to storm overflow improvements.

Q92 **Chair:** We heard from The Rivers Trust that currently 16% of rivers achieve good ecological status. The target under the Water Framework Directive, which has been taken through into the Environment Act, is to achieve 77% by 2027, which is only three years away. We are not going to make it, are we?

Robbie Moore: It is our ambition to make sure that we are reaching that 75% target. It is worth noting that the datasets that the OEP looked at were from 2019 and that we have made significant improvements in the



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speed with which we are wanting to roll out our plan for water, to ensure that as a Government we are putting ourselves in the best position possible to meet that requirement.

It is right to say, from those 2019 figures, that 16% of rivers were at good ecological status. Looking at how those measurables work, 21 tests are associated with good ecological status, which looks at everything from specific pollutants—arsenic, copper, manganese, zinc—right the way through to fish and how river systems work. Of course, if one element of those 21 tests does not necessarily meet “good”, all the tests effectively sit at the measurable below, which in this case would be “moderate”, and if one of those tests is not met, all of them effectively fail.

We know that in 20% of those rated “moderate” at the moment, just one test is holding that 20% back from reaching “good” status. Nevertheless, we are aware of that and we are dealing with it, which is why through our plan for water” we have rolled out a strategy focusing on more investment, stronger regulation and tougher enforcement.

If I may, Chair, I want to reiterate some of the key measurables that we have put in place since 2019. We have announced an action plan specifically for the River Wye, for which £35 million has been allocated. We have specifically said that all fines and penalties collected from water companies are now ringfenced through the Water Restoration Fund, which allows that money to be specifically put back into improving water quality measures. We have announced £11.5 billion through 180 catchment-based projects and we are also dealing with some of the agricultural challenges, such as phosphorus or nitrate, by allocating £75 million to improve slurry infrastructure.

We will not hold back in holding those who pollute to account, which is why we have removed the cap on penalties. It has gone from £250,000 to an unlimited amount. The money that is collected now gets reinvested through the Water Restoration Fund. We have quadrupled Environment Agency inspections, we have given the Environment Agency more money, and we are allocating 200 staff to specifically carry out inspections and have more of a relationship with water companies, holding them to account and making sure that they are meeting their requirements. We have announced a whistleblowing portal. We have also increased the amount of monitoring that we are doing from 7% of storm overflows in 2010 to 100% now, which gives us an ability as a Government to understand where we allocate resource.

We have specifically said to water company bosses that if there is a serious criminal breach, they will not be able to receive bonuses, and we have also stipulated to Ofwat that dividends must be related to environmental performance. As you may know, Chair, £150 million has been collected in fines and penalties from water companies since 2015.

Chair: Thank you. We have heard in previous evidence that some of the event duration monitor data is extremely unreliable. We do not have the



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facts and figures about that yet but hopefully that will be forthcoming. We will want to draw that to your or your officials' attention because although we accept that 100% of EDMs are now in place, if they are not working, it is difficult to claim that we have 100% coverage.

I am going to move on. You touched on agriculture and Chris Chope has some comments on agriculture.

Q93 Sir Christopher Chope: Thank you, Chair. Minister, DEFRA announced in January that it was designating catchment areas where waste water works must be updated. In the policy paper accompanying that announcement, there was a commitment to complete a limited exemption process by 1 April this year. That did not happen; it has not happened. I raised it at a meeting with you. You recently wrote to me, I think on 9 May, saying that an announcement was imminent. Why has the announcement still not been made?

Robbie Moore: I will bring in David, my official, but I want to reassure you, as I hope I have done at previous meetings, that we are working at speed to try to make sure that those announcements can be made at the earliest opportunity.

David Hallam: We are moving as fast as we can to finalise that list. We have designated all the sites and now it is a question of finalising the list, given that some companies did ask for exemptions. That will be in a few weeks.

Chair, could I just pick up on your point about the event duration monitors? I do not know what you have been told because I was not in the room.

Chair: You can read the transcript.

David Hallam: I look forward to it. There are some alternative facts put out around the reliability of the monitors, but the fact is that 86.5% of monitors operated for more than 90% of the time last year. The vast majority of monitors are operating properly all the time.

Chair: There was a specific allegation about analysis of information provided by one of the water companies, which suggested that over the period that was being considered, only 55%—I think that was the figure—were operable. I think you will need to look at that before you seek to contradict it.

Q94 Sir Christopher Chope: Mr Hallam's answer to my question is most unsatisfactory because the Minister has just written to me saying that the announcement is imminent. Mr Hallam referred to several more weeks before the announcement. The commitment was originally for 1 April. I was told then by officials that the reason it could not be announced before 2 May was because of purdah around the local elections. The local elections are behind us, and now we are being told that there is yet more delay coming down. Do you not realise the impact that this delay is



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having upon all those people who are concerned about investment in waste water treatment plants?

Robbie Moore: Sir Christopher, I want to reassure you and the rest of the Committee that there were challenges, as unfortunately is the case when local elections and mayoral elections are taking place and the purdah period kicks in. I want to reassure you and the rest of the Committee that there will be work being done at speed to make sure that announcement is imminent. I will make sure, in my ministerial role working with my officials, that is absolutely the case.

Q95 **Sir Christopher Chope:** Will it be before the Whitsun recess?

Robbie Moore: Well, as I say—

Q96 **Sir Christopher Chope:** Surely anything after the Whitsun recess is not going to be “imminent”.

Robbie Moore: No.

Q97 **Sir Christopher Chope:** It would not have been imminent on 9 May either, would it?

Robbie Moore: No. Again, just to come back, I want to reassure you and the rest of the Committee that we are working at speed to make sure that announcement can be made imminently.

Q98 **Sir Christopher Chope:** Will it be before—

Robbie Moore: I would absolutely hope that that is the case.

Q99 **Sir Christopher Chope:** You are in charge. Are you not in charge?

Robbie Moore: I absolutely can assure you that that announcement will be made imminently. Whitsun recess is waiting far too long. “Imminently” is the answer.

Q100 **Sir Christopher Chope:** Can I ask you specifically about the River Avon? One of the consequences of the attempt to mitigate phosphates in the river is that you can buy phosphate credits, but phosphate credits vary in price significantly depending upon the location in that particular river catchment. For technical reasons, people who want to buy phosphate credits in my constituency, in Christchurch, have to pay eight times as much for those phosphate credits as if they were up the river at, say, Fordingbridge, further up the road. Why is that, how is that tolerable and how does it fit in with the Government’s policy?

Robbie Moore: We are absolutely keen to explore where there are challenges within different river catchments, and within the same river catchment where those challenges are being presented and the price of the units is changing within that specific area. We want to make sure that there is consistency across the approach and in the way that policy is rolled out and being applied to the market.

Q101 **Sir Christopher Chope:** Why are some phosphate credits more



expensive than others? Surely we are talking about the need to reduce phosphorus. Why should some phosphorus be more expensive than other bits?

Robbie Moore: Again, I will let David come in if he wants to comment, but there will be external market conditions that relate to the environmental benefit that is attached and associated with certain credits that are encompassed within the catchment environment. Certainly, from a policy point of view, we want to make sure that there is consistency in what is rolled out within each catchment area where this applies.

Q102 **Sir Christopher Chope:** Would you like to say a bit more about this?

David Hallam: I am going to offer to write to you with an explanation because I do not have the details of that scheme.

Q103 **Sir Christopher Chope:** Okay—another cop-out. Can I just ask you this: why was the River Avon not chosen for an action plan and why was the River Wye chosen instead?

Robbie Moore: There are particularly challenging circumstances with regards to the River Wye, which I can go into. We announced that £35 million has been allocated to the River Wye Action Plan. We are, as a Department, looking at additional catchments where we can roll out similar types of schemes, based on the challenges that exist within other catchments. Each catchment, as you will appreciate, is different in terms of the phosphorus or nitrate challenges. Further announcements will be forthcoming in due course about additional catchments that we will be specifically looking at.

Q104 **Sir Christopher Chope:** A quick final question: you talk about the environmental benefits of all these policies. Do you see it as an environmental benefit that there are houses in my constituency that are ready to be occupied, but where applications for bin store approval have been made to the local authority and the local authority says it cannot approve the bin stores until £40,000 for phosphate credits in respect of each unit is paid? Is it environmentally sensible to keep houses empty in these circumstances?

Robbie Moore: I know that we have had a specific conversation about this matter in your constituency. Again, I am more than happy to meet you to talk about the specific challenges that you are facing in your constituency and provide further explanation. This is something that needs to be considered alongside DEFRA and DLUHC colleagues, who we are working closely with to make sure that we get the strategy right so that we can unlock houses that are either forthcoming for development or sitting empty at the moment.

Q105 **Sir Christopher Chope:** Can that be imminent, please?

Robbie Moore: Absolutely.

Chair: Thank you very much, Sir Christopher.



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Before we move off agriculture completely, in relation to the River Wye Action Plan I think you have just indicated that this is perhaps an initial plan and that other river catchments are likely to demand similar plans. Your response suggesting that that is something the Department is willing to consider is very welcome.

One of the elements of the River Wye Action Plan in relation to the new money is, I think, primarily tied into either poultry litter or slurry arrangements. I would urge you to consider having a pool of money available to whoever is responsible for delivering the action plan and allow them to determine what is the best use of that money, rather than the Department predetermining the best use of that money prior to completing the plan.

One thing that is very welcome within that plan—I speak as a farmer but not a riparian owner—is that the buffer strips around the waterways are being doubled and, in some cases I think, quadrupled, and that farmers are getting significantly increased support for creating buffer strips. That is probably the single most effective way to minimise livestock pollution and run-off from phosphates that have been spread on fields. I very much welcome that and want to get that on the record for you.

The other piece of evidence that we heard earlier today was about a problem with spreading human sewage sludge that contains microplastics and nanoparticles of plastic that have not been removed through the sewage treatment works, although we heard that 95% do get removed. However, spreading such material on the land allows those particles to get washed away into the river systems, and thereby into the ocean and into the food chain. I would urge the Department to consider what needs to be done to encourage water companies to remove residual plastics before consenting to material being spread on the land. I do not expect you to comment on that. I just wanted to get that across.

I am very pleased that we are joined by Selaine Saxby from the EFRA Committee, who has some questions for you now.

Q106 Selaine Saxby: Thank you and good afternoon. I was very pleased to hear your announcement earlier this week about the new bathing water sites and consultation on testing. As you know, I have a particular issue with the frequency of bathing water testing in coastal locations. Do you have any plans within the consultation to review the frequency of testing and also the differentiation between fresh and coastal water? Overflows in a river environment are going to be tested upstream and downstream, but at the present time there is no testing whatsoever when we have an overflow event in a coastal location.

Robbie Moore: Thank you, Selaine. As you will be well aware, we have announced another 27 new bathing water sites this week, which takes the total number up to 451 in England across beaches, lakes and rivers. I was personally pleased that an additional 12 rivers have been included within the bathing water sites.



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That was obviously part of the announcement. However, sitting behind the announcement of new, additional bathing sites are some of the reforms that we are now looking at making to the regulations on bathing waters. I will run through those because I want to reassure the Committee that from the experience that I have had as a Member representing Ilkley, which has the River Wharfe in it—the first river to be designated as a bathing water site—and having dealt and interacted with other stakeholders, we want to make sure that the regulations are absolutely fit for purpose from a practical perspective.

We do unfortunately have river sites and beach sites that are classified as poor. Currently, if those sites are classed as poor consistently, for five years running, they are automatically de-designated. We want to look at changing that so that automatic de-designation does not take place, so that we can ensure that we are holding those polluters to account or making sure that resource goes into ensuring that the quality is significantly improved, which will take longer than five years.

We are also looking at reviewing the period in which bathing water reports apply. At the moment, it is from 15 May to 30 September. We want to look at widening that, potentially, beyond that, to better suit the usage at those bathing sites. I know that you are a keen surfer and I suspect that you surf beyond those bathing periods.

We are also looking at the number of monitoring sites that we have at each designated site. At the moment, it is just one in a specific location, and we want to look at whether it is reasonable to have more than one monitoring point at each bathing water site.

Another thing that we want to do, maybe picking up on your point, is to look at taking into account water quality before a bathing water site is designated. At the moment it is simply based on usage. It would be far more reasonable and far more practical if we had a better understanding of the water quality before a designation is implemented so that we can get as good a plan as possible in place to make sure that the water quality is improved, whether from poor to sufficient or even from good to excellent, as part of that process.

Q107 Selaine Saxby: The point I was making was with regard to frequency of testing. While I am delighted that we might be able to extend the Victorian bathing water season to the actual swimming season, the actual issue is around the frequency of testing. At the moment it is tested once a week and the data is released a week after that. However, if you have an overflow event at the weekend, we have a situation whereby the Environment Agency then say that the water is safe to go into after one tidal rotation, yet Surfers Against Sewage say that it should be 48 hours.

There is inconsistency of data and we have had evidence this afternoon that the risk is that somebody is going to die in one of our rivers. I feel there is a real need. I recognise that there is now confusion between DEFRA and DCMS because it is for the usage of the water as opposed to



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the quality, but they rely on your data. What are we going to do to start testing frequently enough so that people can know it is safe to go in the water?

Robbie Moore: We want to ensure that data is being collected from these specific, designated sites, and that the Environment Agency is getting that information out there to the users as much as possible through Swimfo and having real-time information put out there, as it is specifically in relation to bathing water sites at the moment.

I know that you put a ten-minute rule Bill forward earlier this week and one point you raised specifically was about the different challenges of different types of pollution. Again, as I have committed already to you, I am more than happy to have that further discussion with you.

David, I do not know if you want to comment further on the types of pollution instances that Selaine is referring to.

David Hallam: I do, Minister, if I might. I am a keen outdoor swimmer myself and I recognise the concerns.

The Chair of the Environment Agency and the chief executive gave evidence to this Committee and were asked the same question, in fact, and they pointed to their modelling. They feel that it is good and that it provides a real-time forecast of what the pollution is likely to be. They do not necessarily agree with the Surfers Against Sewage approach, which is to say a blanket, "It will be for the next 48 hours." However, they said as well that they are very committed to continuing to improve the monitoring and the modelling so that it is as good as it can possibly be, to give bathers and other recreational users the best possible information.

Selaine Saxby: In a user-friendly format, I hope, when we get there, because that is the challenge. The data is very embedded in the Environment Agency website. While it is very detailed and thorough, it is not there in a real-time app format. As you know if you swim regularly, it would be nice to know before you went that it was safe to go. Thank you, Chair.

Chair: Thank you very much indeed, Selaine. Matthew Offord, do you have something you want to add?

Q108 **Dr Matthew Offord:** I do. I have to correct you, Minister. You say that there is real-time publication of swimming locations. That is simply not correct.

Robbie Moore: I was meaning, actually—sorry about that—in relation to the forecasting that the Environment Agency is putting out there.

Q109 **Dr Matthew Offord:** The system as it currently stands means that the Environment Agency has no legal requirement to advertise what the condition of the bathing is. It is a requirement for the local authority,



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which decides that it is not going to get involved in that political argument. There was the outbreak in Harlyn Bay last year, which Minister Pow is certainly aware of because the two of us were in that. We know how the system works on the ground.

You said that you have plans to change the testing. Some of us have been frustrated for many years. We have heard Minister after Minister tell us that bathing water quality is getting better in this country but the system that you use to test the water is, in many ways, redundant. You did say that today is the first day of the bathing water season—happy bathing water season. That means that for the last 226 days there has been no monitoring at any location across the United Kingdom, and the bathing water season is only 139 days long.

Now, you quite rightly say that the water is analysed and it is measured against the previous four years, and that means that you can then designate a bathing water location. However—and this is where Selaine Saxby was incorrect as well—the Environment Agency is required to take up to 20 samples. It does not always do that. In some locations it only does it five times a year. That means that over a four-year period it may have tested the water just 30 times. If you bathe all year round, that is probably 2% testing of when you swim.

When will you make changes? Now that we have left the European Union—I am intimately aware of the EEC 76/160 Bathing Water Directive—when are we going to make changes to that directive so that it is fit for purpose?

Robbie Moore: As part of the announcement that was made this week, we are looking at those reforms, specifically, as I was saying in response to Selaine Saxby, in regard to the dates. At the moment, you are quite right that the bathing water period is from 15 May to 30 September. As part of this week's announcements, we want to look at reviewing that and making it better suited to usage. We know that people are using bathing water sites sometimes throughout the year and sometimes beyond those dates. Therefore, in my view, the bathing period in which the monitoring takes place needs to better reflect that. That is why we have announced that as part of this week's announcement.

The quality of our bathing water sites has improved since 2010. In 2010, 76% of those sites were rated good or excellent. Last year, that had increased to 90%. That is despite the regulations getting tighter and more stringent in 2015. We still managed to make sure that the percentage of bathing water sites that were classified as good or excellent improved to 90%. As at 2023, 96% of all bathing water sites were classified as being sufficient. The water quality overall has improved.

As part of the reforms that we have announced this week, we want to look at providing more flexibility to the dates associated with them. We are also—which I did not mention in response to Selaine Saxby—looking at the definition of "bathers". At the moment the regulations relate to



swimming, but we know that people are paddleboarding, kayaking, canoeing and surfing. However, because the regulations at the moment are based on usage, effectively, which drives monitoring and investment, we want to make sure that the usage criteria are absolutely fit for purpose so we can ensure that that investment and monitoring is sufficiently put in place.

The final point that you mentioned was about the number of times that the Environment Agency is monitoring these sites. I can confirm to everybody that whether their bathing water site is classified as excellent, good, poor or sufficient, the Environment Agency is absolutely meeting its statutory requirements under the Bathing Water Regulations in terms of the amount of monitoring that it is carrying out. In fact, at the moment it is averaging three times more than what it is statutorily obligated to do, in terms of the number of assessments that it is carrying out of bathing water sites. That data enables us as a Government to allocate funding and hold those who pollute to account.

I will give you an example of a river system that I know very well in my own constituency, the River Wharfe in Ilkley, which has a designation of poor. Because it has been designated, we have been able to push Yorkshire Water to put a significant amount of investment—£15 million—into Ilkley, which it has spent recently on upgrading the capacity within the sewage treatment process. I believe it is allocating an additional £38,000 to the sewage treatment work. Having this data enables us to not only carry out the monitoring but ensure that the investment is there to demonstrate that the improvement in water quality can also be followed through.

Q110 Dr Matthew Offord: Congratulations. You have just repeated everything I have heard in my 14 years of being a Member of Parliament about bathing water quality. You fill me with no confidence.

Robbie Moore: Well, hopefully—

Dr Matthew Offord: It is just incredible that you have come along to say that—there are simple ways of getting around the Bathing Water Directive, as I know and as I am sure you probably know as well. The first is that you determine when you take that sample. You can take it at locations and at times when you know that there is no overflow and there is no running water through rain, for example, at times of storms. You can ensure that the tidal stream is in the correct position so that you do not get a reading that you do not like. Secondly, you can reject a reading if you do not like it.

You say that the agency has been undertaking the number of samples that it is required to. Yes, it is, but the number of samples it is required to take is so low it is simply useless to take those kinds of readings.

Robbie Moore: The regulations work on the basis of usage and that is how it has been identified. That is why I do not feel that they are fit for



purpose going forward. That is why we have made this week's announcement, and we are making sure that we are going to review those five points that I have gone through, to make sure that the Bathing Water Regulations are enhanced to better meet the usage and the different types of environments where they are being applied. We have only just seen them starting to apply to rivers within the last few years and we have had 12 additional river systems approved this year. It is right that we get the regulations to practically work on the ground.

Q111 Dr Matthew Offord: Moving on to rivers, at the moment, under the Bathing Water Directive, there are just two areas that are tested: E. coli and intestinal enterococci. It does not test for other pollutants. We have heard that there are viruses, parasites, fertilisers, pesticides, pharmaceutical products, nitrates, phosphates, plastics, faecal matter and even radioactive substances. The tests that the Environment Agency undertakes, both under the Bathing Water Directive and indeed on the rivers, do not address any of those conditions. How can you start addressing the risks of chemical pollutants and antimicrobial resistance when you do not know what the baseline is?

Robbie Moore: The Bathing Water Regulations, as you quite rightly say, specifically mandate the Environment Agency to carry out those two tests, as it does, meeting its statutory requirements.

Under the Water Framework Directive, there are 21 tests associated with good ecological status. Those 21 tests, in my understanding, cover all of the points—in terms of the measurables—that you have mentioned there, plus others in addition: fish, invertebrates and even how the river channel has been altered through mechanical means. Those assessments are done in relation to good ecological status under the Water Framework Directive, and good chemical status is also referenced under different tests.

There are the Bathing Water Regulations that relate to one set of tests, which have specific monitoring points where bathing water designations take place, but in addition to that, all rivers will be looked at under the Water Framework Directive, where there are up to 21 tests that look at good ecological status.

Q112 Dr Matthew Offord: Finally, some of these new bathing sites on rivers are going to be downstream of sewage outlets. We were discussing earlier swimming in the Thames, which I did on Sunday, and it is possible to see sewage outlets. Many of them are illegal but they are still there. How are you going to mitigate some of these sewage outlets to ensure that the Thames, I hope, meets bathing water standards?

Robbie Moore: We have already made sure that all storm overflows are now monitored. It was 7% back in 2010 and we are now at 100% monitoring of storm overflows from last year.



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Having that data available to us enables the Environment Agency to do its job as the regulator and the enforcer where permitting requirements are not being met by a water company. It also enables us to make assessments of where the level of resource and investment needs to go in through our plan for water. As I said, that is all about making sure that more investment is going in where the pollution instances take place, and that there is tougher enforcement and stronger regulation being brought out. That is what our plan for water is all about.

In regard to bathing water sites that are downstream of storm overflow outlets, as you have referenced, if those 12 new river systems that have been announced this week are designated as poor after the monitoring takes place, that will enable more investment to be specifically put in. That will make sure that those sewerage outlets or storm overflow outlets are meeting the expectations that we would expect those water companies to meet, so that we can put in plans, better investment and better levels of resource to deal with the problem to ensure that the quality of those designated bathing sites is improved.

Q113 Dr Matthew Offord: Are you proud that we have designated 12?

Robbie Moore: Yes.

Q114 Dr Matthew Offord: The Netherlands has 33, Germany 38, Italy 73 and France 573, and you think 12 is a proud achievement.

Robbie Moore: Of course, we can deal only with applications that come into the Department. I am proud, given that it was only a couple of years ago that we had the first river designated—the River Wharfe in my constituency—that we have now had 12 rivers designated this week. I would encourage many more to come forward, if we receive those applications, based on the new reforms that we are bringing out through our regulations.

There is a huge appetite out there. We had a consultation period that fed into the 27 bathing water sites that we announced this year. As a Department, we had about 10,000 responses to that consultation, which clearly demonstrates, quite rightly, that people care about the quality of water. That is why we have been so robust in accelerating the measurables, the resource and the investment through our plan for water, which is all about and has at its heart improving water quality.

Q115 Dr Matthew Offord: Finally, have you ever swum in the river in Ilkley?

Robbie Moore: I have not swum in the river in Ilkley, no.

Chair: Thank you, Matthew. I would just like to place on record to the Minister that I am proud that three of the 12 river systems that have secured bathing water status this week are in Shropshire: two on the River Severn—one in Shrewsbury and the other in Ironbridge, which is on the edge of my constituency—and one on the River Teme in Ludlow. I would like to pay tribute to Alison Biddulph, who led the campaign for all



three sites. I set down a challenge to other members of the Committee to encourage campaigners in your constituencies, where you have natural bathing water sites, to get them engaged, because the Ministry has responded very well and I thank you for that.

I would also like to say that the River Teme application went in after Severn Trent decided in January of last year that it should be part of the Get River Positive scheme. In the case of the River Teme, it is investing £7.5 million in improving its water treatment assets, including the only—or at least the first—tertiary waste water treatment plant that will be operational in this country.

One of the reasons why those of us in Parliament get engaged in campaigns to improve the quality of lives of our constituents is to make a difference. I think this Committee has made a difference, in particular, I am pleased to say, on this issue and in my constituency in Shropshire.

Having got that off my chest, the last question is from Caroline Lucas.

Q116 **Caroline Lucas:** Thank you very much, Chair. I do not think there is any doubt, Minister, that the public has a real appetite to improve the quality of our water. I do not think that is in doubt. What is in doubt is whether or not this is a Government that can provide that and is providing that. Notwithstanding the reassurances that you have tried to give the Committee over the past half an hour or so, just last week the Office for Environmental Protection reported that effective evaluation programmes for both the Water Framework Directive regulations and the 2023 environmental improvement plan are simply not in place, making it almost impossible to effectively scrutinise progress in improving water quality. How do the Government plan to improve progress monitoring to ensure that water quality targets are met?

Robbie Moore: I can say that one of my first meetings as a new Minister coming into the Department in November last year was with Dame Glenys in her role as Chair of the OEP. Working very closely with the OEP is incredibly important and we need to make sure that that relationship is established well. We are responding to all reports that are put out by the OEP and we will absolutely respond, within the three-month period that we are obligated to, to the OEP's report. It is also worth noting that since the OEP report was done in 2019 we have, as I said, made huge strides in wanting to accelerate what we are doing in terms of improving water quality.

Q117 **Caroline Lucas:** I am not talking about that OEP report; I am talking about a report that was published just last week. What it said in 2019 is not about the data that is in question at the moment.

I want to know what you are doing in terms of both the report from last week but also a report that was published in January 2024, which covered the period April 2022 to March 2023, where the OEP said, "The scale and pace of delivery of actions is not aligned with the objective to achieve good ecological status or potential by 2027. The River Basin



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Management Plans indicate low confidence in achieving this.” The period in question there was between 2022 and March 2023.

Robbie Moore: Thank you for that clarification but my understanding is that even the report that you are referring to—I am happy to write to you and the Committee with further information—is related to data that was given to the OEP that relates to 2019.

It is important to note that not only have things changed through the plan for water that we have brought out, but it did not take into account the £100 billion that has been put forward by water companies over the next price review period in the next five years, £10 billion of which specifically relates to upgrades that are anticipated over that period of time for storm overflows.

Neither does it take into account all of the work that has been done through the environmental land management schemes—whether landowners have entered into sustainable farming incentives, countryside stewardship schemes or landscape recovery schemes. Many of those schemes have options available to those landowners and agreement holders to improve water quality. One of the big changes that has taken place since that report came out is the landscape recovery scheme, which is a huge shift in terms of trying to get landowners to work collaboratively together with the sole remit of improving water quality.

Previously, under any agri-environmental stewardship scheme, a landowner would have a direct contractual relationship with Natural England, for example, which was based on certain management options that they put in place. However, if other landowners were not involved in the scheme, it would not necessarily help to benefit the water quality being improved within the wider catchment as much as one would want to see. Landscape recovery schemes encourage landowners within the catchment area to work together collaboratively, as part of an agreement and a partnership approach to improve water quality.

The OEP’s report does not take into account quite yet those measurables in terms of improving water quality.

Q118 **Caroline Lucas:** It seems to me that it is problematic either way, is it not? If it is the case that a report published by the OEP in January 2024 is based on data from 2019, if you are right—I would be very grateful if you would clarify that in writing afterwards—then to be dealing with data that is five years out of date would suggest there is something wrong with the regulatory system that is being used, surely. We are talking about changes that are needing to be made pretty urgently and if we are basing that on data that is five years old, then how does that work?

Robbie Moore: The OEP will, of course, be carrying out another report based on 2025 data, which will obviously be as up to date as it can be at that time. That will take into account the significant improvements that we have rolled out as a Government through the plan for water and



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through the environmental land management schemes. As I say, we have a good working relationship with the OEP. We will respond to the report within the statutory timeframe that we are obligated to as a Department—within that three-month period.

Q119 Caroline Lucas: I am very glad you have a good relationship with the OEP; I am sure you have. Glenys Stacey is a very good person and I am sure that relationship is very good. However, it does not take away from the fact that the data that we have in front of us points to the fact that the Government's action is largely off-track. I am very glad to hear you have done some work since then, but everything we have heard in the Committee this afternoon suggests that there are big flaws in the way that the regulatory system is working. We have heard, for example, that untreated sewage has been pumped into English waterways for over 3.6 million hours last year. We had the example of the Windermere—

Chair: Lake.

Caroline Lucas: Lake, yes. I was thinking about the effluent that went into it—the pollution, the sewage that went into Windermere—for 13 hours before the Environment Agency got there.

We are one of the richest countries in the world and we cannot swim in our water, and increasingly we cannot even drink it without getting sick. We have today heard warnings that people in Devon are having to boil their drinking water after 22 cases of diarrhoea there. I put it to you: can you put your hand on your heart and say that the current legislative and regulatory framework in place in England is the best available to deliver improved water quality?

Robbie Moore: I absolutely can say that if you turn the clock back, we did not have the Environment Act. That was a huge piece of legislation that was brought in with hugely positive mechanisms contained within it to enhance the regulatory format through which the Government are held to account in terms of the measurables that we are bringing in, our levels of investment and the objectives that we as a Government want to achieve.

There is also our plan for water, which I have referred to. I have gone through the levels of investment, the stronger regulation and the tougher enforcement that we are bringing out, all of which has come into place under this Administration. We are going forward at speed and bringing out further measures, through the likes of the changes this week to the bathing water designations, which will help us improve and hold those who pollute to account. We are going at speed, whether it is quadrupling our Environment Agency inspections or responding to the challenges that were quite rightly put to us that involved United Utilities through the "Panorama" programme. We are rolling out a whistleblower platform and banning wet wipes.



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We have improved our monitoring programme, which gives us the data to be able to allocate resource. Not only will the regulator, Ofwat, be scrutinising the £100 billion that has been allocated by water companies over the next review period, but we are taking a catchment-wide approach through the £35 million that we are allocating to the River Wye Action Plan. We are wanting to go further in taking that catchment-wide approach when it comes to improving water quality.

Caroline Lucas: I would simply say that if we look at the outcomes rather than the measures that you are talking about, they are still a very long way from the ones that we need. I would suggest that there are questions about that regulatory framework that still need to be addressed in order to be able to produce the water that people in this country need and deserve.

Chair: That concludes our session. This is a subject that has been focused on by the Committee a great deal. We have heard a lot of things today that may lead us to wish to write to you, Minister, with one or two points, not so much clarification of what you have said but suggestions and recommendations for how progress can continue to be made in the remainder of this Parliament and beyond. Thank you for joining us today, Robbie Moore and David Hallam.