



Environment and Climate Change Committee

Corrected oral evidence: Drought preparedness

Wednesday 4 February 2026

10 am

Watch the meeting

Members present: Baroness Sheehan (The Chair); Lord Ashcombe; Lord Jay of Ewelme; Lord Krebs; Earl of Leicester; Lord Lennie; Lord Mancroft; Baroness McIntosh of Pickering; Lord Rooker; Earl Russell; Lord Trees.

Evidence Session No. 10

Heard in Public

Questions 152 – 173

Witnesses

[I](#): Helen Wakeham, Director of Water, Environment Agency; Paul Hickey, Managing Director of RAPID, Ofwat.

Examination of witnesses

Helen Wakeham and Paul Hickey.

Q152 **The Chair:** Good morning, and welcome to the Lords Committee on the Environment and Climate Change. Today, we will be continuing with our inquiry on drought preparedness and hearing from both the Environment Agency and Ofwat. Before we start, I remind everyone that this session is broadcast live on parliamentlive.tv and that a transcript will be taken and made public. Witnesses will have an opportunity to review the transcript and to make very minor amendments. Members are reminded that they should declare any relevant interests the first time they speak. I will take the opportunity here to declare that I am a director of Peers for the Planet and that I have a bore-hole on our property in Oxfordshire.

Before starting, may I warmly welcome our two guests and thank them for taking the time to be with us? Before we begin our questions, may I ask each of our witnesses briefly to introduce themselves and their organisations?

Helen Wakeham: Good morning, everyone. I am the Environment Agency's director of water. In the context of this inquiry, the Environment Agency is the environmental regulator and planner for water. I should also say that I am the current chair of the National Drought Group.

Paul Hickey: Good morning. I am a senior director at Ofwat. My responsibility is to lead a programme called RAPID, which is a joint alliance with the Environment Agency, the Drinking Water Inspectorate and Ofwat to oversee a programme of major water supply infrastructure schemes.

Q153 **The Chair:** I would very much like to hear more about RAPID and its provenance. It is not an acronym that I was familiar with before we started this inquiry, so it would be very helpful to know where you sit in the regulatory framework.

We have heard that the nature of drought risk in the UK is changing. What trends have you identified in this area, and how confident are you that your current evidence base and monitoring accurately reflects England's experience of drought?

Helen Wakeham: You will have already heard, and it is well understood, that climate change is driving the likelihood of more frequent and severe droughts. Last year, 2025, was notable in that we had the driest spring and the hottest summer on record; that follows dominoes of records for heat and dry weather over the last decade.

There are different patterns of temperature and rainfall: we are seeing wetter winters and drier summers. I should say that it is very rare for me to be talking about drought on a dry day—I seem to have done quite a lot of media work in the pouring rain on drought—but we are certainly seeing, and have seen, wetter winters and drier summers. Larger seasonal contrasts mean that different geographies are affected

differently, as we certainly saw in 2025. Areas with hard geographies in the north-west and much of the north-east are affected really quickly by a lack of rain. Areas that are more groundwater-fed in the south and the east tend to be more resilient to a lack of rainfall, but, over time, they lose that resilience and take longer to recover.

Our evidence base for what is happening in the environment is good. We have rain gauges at more than 2,500 sites; that is a citizen science network, where members of the public help us with our rain gauges. We measure flow at 1,300 sites and do groundwater monitoring at 5,000 sites. We also have an ecological surveillance network and we have information from water companies.

Then, in the context of managing a drought within year, the National Drought Group is chaired by myself for the Environment Agency, and has representatives from the Met Office, water companies, NGOs and industry groups, the NFU, the Horticultural Trades Association and the Canal & River Trust. We come together monthly throughout the year; we are meeting in two weeks' time, regardless of the rain. That National Drought Group has sub-groups on public water supply, agriculture, environment and land management.

The purpose of the National Drought Group is to review the drought situation, understand the risks and co-ordinate response to drought across all those organisations. That means that our understanding of a current drought is good and our flexibility and ability to respond to drought is good. Where I would say we do not have what we need is an early warning system for drought. While we take signals from the Met Office and others, there really is a case for some research to understand what an early warning system would look like.

The Chair: Before we move on, you mentioned that the National Drought Group meet monthly. Do you increase that frequency of meetings when there is a drought?

Helen Wakeham: Monthly usually works for us. We might meet as sub-groups more frequently, and of course we are managing drought live in our area operations, so we will have daily contact with the water industry, for example, to enable us to manage that drought.

What I should have said but did not is that Minister Hardy has attended every National Drought Group except for one in the past 12 months. That really helps us because that gives us a very strong steer from government to keep everybody on it and to ensure that the actions we take are well supported.

The Chair: Who has the final say on drought measures when there is an emergency?

Helen Wakeham: There are four stages of drought: a normal situation, prolonged dry weather, drought and severe drought. Decisions on drought are taken by the Environment Agency up to the point where

there is a severe drought, then that responsibility passes to the Secretary of State.

The Chair: The early warning system is something you mentioned as needing more work. Has any work been done on an effective early warning system?

Helen Wakeham: There is quite a lot of work, through Defra's and the Environment Agency's chief scientists, on how we would set up an early warning system. Some preliminary work has been done but we would like to do more and look at how we would operationalise that system in future.

Paul Hickey: I just want to add one contextual point around how the water industry plans for long-term water resilience. We have a statutory framework called water resource management plans. They have a 25 year-plus outlook in terms of looking at long-term need and the interventions, be that on the demand side or new sources of supply, to manage those risks. I say that because it is a theme that we will probably return to throughout the course of this, but that planning system looks at a whole variety of futures. So it is not looking at one scenario on, say, growth or climate change; it looks at a whole range of scenarios then tracks an adaptive pathway through those, given change and uncertainty.

The second thing I wanted to make you aware of is that we know that the future is different from the past, so, in looking at futures, we very much take what is called a stochastic view, which models futures that are recognising that future droughts are likely to be more severe and different from those we have experienced. So looking at future uncertainty and change is very much baked into the planning framework.

Q154 **Lord Ashcombe:** You mentioned that there has not been a lot of work done about advanced warning of drought, but we have heard from the water companies that they have quite a good grip on that. Is there a bit of the right hand not talking to the left hand here, or are the water companies being pushed down? We have heard from them that they know when it is coming, to a great degree, so I am rather surprised at what you said.

Helen Wakeham: I do not think the two points are incompatible. Paul has mentioned water resource management planning; we also have the national framework for water resources that sets out the supply and demand deficit over the next 30 years and, as Paul described, sets out alternative futures and gives us some flexibility to plan for the future.

We work with the water companies all the time. It is probably worth touching on the difference between the 2022 drought and the 2025 drought, and what we learned by working with the water industry and with NGOs. In 2025, in preparation and understanding that future forecast, there was a lot of earlier engagement between us, actively working with multiple sectors to prepare for drought. We saw much less fish mortality in 2025 than we did in 2022, for example; that is because

we were actively working with angling groups. I cannot praise highly enough the work of the Angling Trust and others in working with us to do earlier fish rescues ahead of emergency situations. We issued more drought permits and had fewer environmental incidents because we were ready.

That work with the water companies was really felt by them. We had a workshop with them only this week. They felt that our joint approach had been more proactive and our communications had been better, and they were appreciative of us working better across sectors. There are lessons to learn. In particular, to your point on whether we are ready early enough, what the water companies say is that the Environment Agency's declaration of prolonged dry weather and drought is the thing that enables them to engage with customers to prepare earlier.

Lord Ashcombe: The national framework has modelled a supply deficit of 5 billion litres a day by 2055, but the assessment does not take into account the new emerging demands, such as data centres and hydrogen production, and, indeed, the unknown unknowns—they are always going to be a part of the puzzle—on top of population growth. How confident are you that you are planning for a realistic worst-case scenario?

Helen Wakeham: I will make a start; Paul will have something to say here as well. The last national framework for water resources was published in June 2025, and the first one was published in 2020. What we have asked companies to do this time is increase their resilience to drought in particular from a 1 in 200 event, which is where most of them are now.

Lord Ashcombe: Is this water companies?

Helen Wakeham: This is water companies. So, reduce from a 1 in 200 event to a 1 in 500 years event. We have also taken a high estimate of population growth. There is a plan to meet the environmental standards that are in the environmental improvement plan, and we have asked them to plan for climate change, too. The approach to that requires them to make up 60% of that deficit through demand management and around 40% through new infrastructure.

I am really confident in the planning for the sectors that currently abstract water. The basis of the plan is where we are having conversations with sectors that already abstract. The scenarios take into account new use of water. We use local authority growth plans and evidence from MOSL and others to support that planning, but it is incomplete. We are working hard with other sectors to gain a better understanding of their future water needs.

Lord Ashcombe: So things like data centres and hydrogen production, which are massive users of water, are not really in the plan at the moment?

Helen Wakeham: There are some in the plan, but it needs to be expanded, particularly in relation to those two sectors. We are doing quite a lot of work with the energy sector, some of which is on the barriers to collaboration on energy. The challenges we have around understanding future water needs include commercial confidentiality, for example, which makes it hard to plan ahead. So we have been working with them and we have published guidance for them on abstraction licensing for energy, which will help them get ahead of the curve and talk to us about their future water needs.

We are also working with them on non-potable sources of water; for example, where they may use a non-public water supply for their water. We are doing some work on the Humber cluster on that. We are also working with the Government's Water Delivery Taskforce to raise awareness of water needs in infrastructure planning more broadly, and with Data UK on data centres, and with MOSL and the Department for Science, Innovation and Technology, to build a more detailed picture of their water needs.

What I would say about the national framework and water resources planning is that it has created an environment in which sectors actually understand the need for water and understand the need for water as critical to national infrastructure. That is enabling the conversation that will enable us to refine our approach going forward. Paul, it would be really useful for you to talk about what infrastructure is in the planning.

Paul Hickey: Yes. To complement that, we obviously work very closely with the Environment Agency on long-term planning, recognising the deep uncertainty that you mentioned and the need to be agile. As I have already said, the water resource management plans have an adaptive approach to course correct if things change, but, to support that and ensure that infrastructure is in place to meet those new demands, Ofwat has introduced a re-opener to enable new funding to come in period, should that be needed—not waiting for the usual five-year period but being able to revisit plans to make sure that companies are able to respond to new needs that come. As you say, some of these things are inherently uncertain.

Lord Ashcombe: How are you engaging with other structures, such as industrial businesses and agriculture, to prepare for drought? Agriculture is slightly separate because we all have to eat. The water companies have their plans; do you talk to companies about them reducing their water use in the event of drought to a greater or lesser extent? Their use would need to come down—it cannot just be all on farmers or individuals?

Paul Hickey: This goes to the wider piece. We have seen quite a transformation over the last few years in the way we look at water resource planning. Historically, we had what were described as water resource management plans but they were very public water supply focused and looked at individual companies' geographies and the interventions needed within those geographies. There has been a more regional planning approach in the south-east for some time, given the

more fragmented nature of the industry in that part of our country, but, over the last five years or so, we have seen regional planning cover the whole of England and cross-border catchments. We now have five regional planning groups.

I mention that because we have seen much more collaboration between companies looking at shared infrastructure and how that can be most efficiently delivered. That is something to celebrate, but that planning is also multi-sector. To support the national framework that Helen mentioned, we now have five regional plans that are taking that forward and looking at local needs, be that from farming or from other industrial needs, and what the right interventions are to meet those.

Lord Ashcombe: I am not talking so much about the interventions. How do you work with big water users in the event of drought conditions so that they possibly scale back as well and can keep their businesses running?

Paul Hickey: I will say one thing we are putting in place, then Helen may wish to respond on the instant response structure. Looking forward, managing demand for water is a really important part of resilience. We need to make sure that we use water wisely and connect our use of water with the environment, both in homes and businesses. One of the things we have been working on over the last few years, together with industries and wider stakeholders, is a Water Efficiency Fund. That is going to do two things: first, it will have a national campaign to incentivise more efficient use, both in the home and in businesses, as I say; and, secondly, it will be looking at innovation and what we can learn from other jurisdictions in terms of making more water-efficient behaviours. So that is one thing that has changed. The innovation fund is live as we speak, and the national campaign will go live in May. I do not know if you wish to pick that up in terms of instant response, Helen?

Helen Wakeham: Yes, there are a few things.

The Chair: We need to move on, so please be brief.

Helen Wakeham: I will be brief. We work with direct abstractors of water. Much of the water use from these other sectors is via the water industry, and the work that we do in the National Drought Group helps the water industry then to have conversations with their non-domestic customers; that really helps. There is more to do in future around how that water is paid for and supplied, so we are doing some strategic work with different industrial sectors around where their water will come from in future.

The national framework for water resources is published by the Environment Agency, but it has a senior committee for content that is drawn from different sectors. Particularly with regard to data centres, we are actively looking to recruit data and energy reps on to that senior steering group so that we have a good way of planning ahead.

Lord Ashcombe: Do you talk to other countries that are further ahead in heating up faster than we are, to learn from them what they are up to?

Helen Wakeham: Yes. We talk quite expansively with other countries. There is great experience to be drawn from South Africa, the USA and Australia in particular. The drinking water quality in England is exceptional, and we should remember that when we are thinking about planning ahead, but we certainly have a lot to learn from other countries that are somewhat ahead of us in terms of water resource planning.

Q155 **Lord Krebs:** On future water demand, we were told by Anglian Water, "To justify treatment, we have to demonstrate that to Ofwat, which has been reluctant to take a more speculative view on potential growth; we have never really been able to increase the capacity". How do you respond to that comment saying that you are too conservative on allowing water companies to plan for future growth?

Paul Hickey: I have two things to say on that. First, as I mentioned, the planning process looks at a whole range of different futures, and within that it looks at growth above forecasts. What I would say about the water resource management plans is that Ofwat is obliged to fund investment that is supported in such plans. Secondly, the other thing that has changed—recognising some of the concerns you heard from Anglian—is this new regulatory mechanism to allow and fund change in period. That is something we have worked quite closely on; in fact, I was speaking to Anglian yesterday about a particular case where we will be able to support it on a particular issue it is facing. So, as I said, the future is different from the past, and the regulatory regime needs to be agile in response to that.

The Chair: Just very quickly, because we have heard this from a number of witnesses and notwithstanding what you mentioned about the Water Efficiency Fund, would it help to have statutory drought planning from sectors other than the water companies?

Helen Wakeham: It would certainly help to have a better level of drought planning from other sectors, and there is a case for statutory drought planning for some. It needs a little development to understand what that would mean; for example, I do not think we would want to apply statutory drought planning to farming in the same way as we do for the water industry because that might affect 100,000 farm businesses.

The Chair: It might affect households, too.

Helen Wakeham: Yes. So there is a very strong case for more strategic drought planning, but exactly what that looks like for different sectors requires a bit more thought.

The Chair: We will deal with agriculture separately later in this session.

Q156 **Lord Jay of Ewelme:** How confident are you that the planned water resource projects announced by Ofwat in its latest price review in December 2024 will deliver enough water to meet future demand? You

approved £48 billion—that sounds like an awful lot of money—of projects. Can you say a little about over what period you expect that to be invested and spent? Also, how do you, or how did you, decide which projects to fund? No doubt cost was a factor, but what other factors did you take into account when deciding what to approve? There are a lot of questions there.

Paul Hickey: I heard three questions; shall I try to take them in turn and then you can probe?

Lord Jay of Ewelme: Yes.

Paul Hickey: In terms of the pipeline of major projects, RAPID, which you asked about, was an alliance that was set up some five years ago between Ofwat, the Environment Agency and the Drinking Water Inspectorate, with the specific aim of supporting a programme of then 17 major new infrastructure projects. Those 17 include new reservoirs, one desalination plant, water-recycling plants and long-distance transfers. The objectives were twofold. One was to bring forward development funding in advance of the needs case being proven through the water resource management plan so that schemes would be delivered quicker; we may touch on this when we talk about the cost of schemes. The second thing, which is really important, is recognising that these are very difficult, large and complex projects with complicated regulatory commercial issues associated with them. To get them over the line—if they are needed and proven to be needed—regulators needed to lean in and help where that is warranted. The genesis of RAPID was very much to help move these projects forward.

To answer your question about the new programme, there are now 28 major new infrastructure schemes, so we have seen quite a growth in that programme. That has been worked up collaboratively with the sector and includes all the projects that are within current plans and some alternative options, should some projects prove unviable. The second thing in that programme is that we are looking at a longer-term pipeline of new projects, particularly working with other sectors such as the Canal & River Trust and the Mining Remediation Authority, so that we have a pipeline.

You asked about timescales. Looking over the 10, 15 or 20-year horizon—because the future is uncertain, as I said—we want to make sure that we have a pipeline of projects that does not just meet needs today but is adaptive for change in future. I will pause there on the first question, which was about confidence in the scale of the programme and needs. To give some context in terms of scale, that programme is representing the needs of some additional 10 million people.

Lord Jay of Ewelme: How confident can you be that these various projects you have planned ahead will actually come to fruition? I am trying to get some idea of how you expect this to change over the next few years because, as you say, an awful lot must be uncertain. How do you keep the momentum going when there are these regulatory and

other issues?

Paul Hickey: That was very much behind the setting up of RAPID: doing things in parallel and not in sequence. What I mean by that is that, rather than looking at whether the need for a scheme is demonstrated then starting a detailed appraisal—some of these projects are very large and complicated, and the appraisal work involved is years in the making—we have done a lot of that work already, working in partnership with the companies.

Some of the projects come up against things that are very difficult. For example, one of the early projects we had was a desalination plant near Fawley in Hampshire; that was a preferred option in Southern Water's 2019 plan. We fast-tracked the appraisal of that work, and what was found was that the environmental impact of the brine discharge from that plant was environmentally unacceptable. That is exactly the situation we are trying to avoid by making sure that, when the projects come through the plan and are shown that they are needed, we are there, if you like, ready to go into planning because we have done all the technical work to make sure that they are, as far as we can see, permissible. That is why there is a lot of money being spent: they are large infrastructure projects.

Helen Wakeham: RAPID is the regulators' alliance, comprising Ofwat, Natural England, the Drinking Water Inspectorate and the Environment Agency. I sit on the RAPID board for the Environment Agency. That enables us to pre-empt some of the issues that might arise—not only pre-empt them, but pre-empt them for all the forthcoming schemes. As Paul says, we are doing this in parallel, not in sequence, so, as we go, we are chomping through sometimes difficult regulatory issues, which then makes the development of future schemes easier.

Lord Jay of Ewelme: Do you feel that RAPID has made a difference?

Paul Hickey: We get very good feedback from the companies in that they have found the relationships very helpful. Obviously, by the fact that we have done the work five years earlier than it would have been done, we have moved the schemes forward. It has been positively recognised in things like the Cunliffe review, which is probably looking at seeing how we can extend. It is an interesting model of the sort of joint regulatory working that will be part of the future in a new regulator. That being said, there is a humility with this. You can always learn, and we do evaluation work about how we can do things better and quicker—very much with the new regulator in mind because that functionality will move into the new regulator in due course.

Q157 **Baroness McIntosh of Pickering:** I joined this inquiry half way through, so I would like to declare my interests. I am an officer of the water APPG and the flooding APPG. I am a vice-president of ADA. I have a very small shareholding in both Pennant and United Utilities. I last worked with Helen on the CIWEM-sponsored bio resources report, and I am currently chairing a study on water use and efficiency with the

Westminster Sustainable Business Forum.

I have a quick question, following on from Lord Jay's. Paul, how long does it take to build a reservoir, from inception to completion?

Paul Hickey: It is very site-specific and depends on the size of the reservoir. We have a reservoir under construction at the moment by Portsmouth Water to serve the customers of Southern Water. It is called Havant Thicket, and is quite a small reservoir. By contrast, there is a reservoir planned for the south-east to serve Affinity Water, Thames Water and Southern Water.

Baroness McIntosh of Pickering: Is 10 years a conservative estimate?

Paul Hickey: It is in that order; obviously, it is dependent on things such as planning and if there are objections or legal challenge, but the physical construction is linked to the size of the reservoir. In Havant Thicket's case, it is a couple of years. For the south-east scheme I mentioned, which is now the White Horse Reservoir, the embankment is 10 kilometres long, so that will obviously take longer to build.

Baroness McIntosh of Pickering: Helen, obviously, water reuse is going to be increasingly important, particularly for industry, energy and data centres, as we have heard. I am particularly vexed by some of the projects that are ongoing in North Yorkshire. They are taking 10% of farmland out of production, but they are also highly combustible and flammable. Is this a source of concern of increasing water use as we go forward: that we have the water resources to put out a fire in one of these battery storage plants, or BESS, as they are known?

Helen Wakeham: It is not an issue I am familiar with; I will have to take that away, I am afraid.

Baroness McIntosh of Pickering: I will be interested if you can write; it would be very helpful to know, given the fact that we had the moorland fires in North Yorkshire, which took a huge amount of water resources.

Helen is familiar with my pet subject of SUDS and ending the automatic right to connect. If you have a major housing development being built in an area of water stress, if we had natural water resource and water reuse such as SUDS and ending the automatic right to connect, would those things help relieve drought in future?

Helen Wakeham: The short answer is yes, because those natural systems certainly help. In planning for drought and water resources, it is very hard to generate the evidence that would say, "We can rely on those systems rather than the infrastructure and demand management that we are working on", but it would certainly help. There is something in the water White Paper. The expectation of simplifying our planning regimes for the water environment into water supply and water environment will help us to do that, because it is implicit in that that there will be a systems approach to understanding the water environment.

Baroness McIntosh of Pickering: How are you supporting the development of water reuse approaches?

Helen Wakeham: Paul may want to come in as well, but the Environment Agency has a position statement on water recycling for public water supply. That requires advanced treatment to meet drinking water standards; that is the responsibility of the Drinking Water Inspectorate, of course, but we want to see water companies investigating the potential.

Paul mentioned the reservoir at Havant Thicket. Part of the supply for the water for that reservoir will be treated wastewater, so those schemes are already coming online. There are also opportunities around water reuse outside of public water supply. We are developing a regulatory position statement, which sounds very dry, for reuse of treated effluent for other purposes. The reason for the regulatory position statement is that the current regulation around reuse of water is really complex; it involves the urban wastewater treatment directive, the water framework directive, the habitats directive and waste legislation because, once the treated effluent leaves the works, it is no longer the urban wastewater treatment directive but waste. I mention that only to illustrate the complexities of water reuse, but, as regulators, it is something that we are chomping through.

For farmers, we are looking at local resource options and supporting water abstraction groups to screen local resource options. One of those options has some funding at the moment to use wetland treatment for final effluent, which will then go into irrigation for farming.

Paul Hickey: I have one quick addition to what Helen said. On scale, we have 12 water-recycling projects as part of the major infrastructure programme. The one that Helen mentioned is at quite an advanced stage. Being able to recycle water and look at sources that are not dependent on rainfall is a very important part of our future toolkit.

The two things that are really important in that is, first, as Helen mentioned, there is a robust regulatory regime that gives confidence that public health and the environment are protected. Secondly, we have been very active in learning from the experiences of other countries, not just in terms of technologies and regulatory regimes. We were asked before about international learning: a critical part of this is taking people with you, and public trust and confidence. This practice is widespread in other parts of the world—Australia, America and so forth—and is very much part of how we have been supporting that programme.

Q158 **Lord Trees:** We have had mention in some notes about new large-scale water transfer schemes. Can you elaborate quickly on the mechanism of those?

Paul Hickey: Certainly. In terms of context, Helen mentioned the national framework for water resources. In the first one of those, published five years ago, we drew on evidence from working with

Professor Jim Hall—whom you heard from earlier—and his unit at the University of Oxford. That very much pointed at the need to be able to increase the ability to move water from areas of water outside of drought to areas of water stress.

There are a number of schemes that we are looking at to do that. A really lovely scheme that is moving forward—in fact, we published information to advance it yesterday—is moving recycled water from Minworth Sewage Treatment Works, which serve Birmingham in the Midlands, down through the Grand Union Canal to be taken through advanced treatment then to be used by Affinity Water. I use that as an example because that is repurposing existing infrastructure, which is a great thing to do.

Another example is the Severn-Thames Transfer, which moves water from the north-west of England down through the River Severn then pipes it across to the Thames so that it can move into South East Water. Wherever possible, we want to use natural systems, but they will obviously need augmentation with pipeworks and what have you. One of the things I have already touched on is new option development. I am really keen to work with the Canal & River Trust, and organisations such as the internal drainage boards, on how we can do more schemes repurposing our existing network of canals.

Q159 The Chair: When you look at the water demand versus supply equation, a huge amount of water is necessary for the well-being of the environment and making sure we do not destroy vital ecosystems unnecessarily. The Felixstowe Hydrocycle is an example we heard about; that makes a huge amount of sense. I hear what you are saying, Paul, from Ofwat's point of view. I just wonder whether you are getting enough support from the Environment Agency and, therefore, the Government in making sure that there are nature-based solutions, which not only reduce or ameliorate the impact of drought but help with the other side of water management, which is too much water in flooding scenarios. Do you think that enough emphasis is being placed on those types of solution?

Paul Hickey: I have a couple of points on that. First, when we talk about the need for new supply infrastructure to complement the ambition on demand management and leakage reduction, over half of the driver for that is to protect and improve the environment so that we leave the environment in a better state than how we found it. I talked about some schemes in the south-east to restore our damaged chalk streams, chalk catchments and other iconic habitats. In terms of how—

The Chair: We need to move on, so could you be quick?

Paul Hickey: There is sometimes a polarised discussion between blue and grey infrastructure. For example, a new reservoir is grey infrastructure but can provide enormous benefit to communities, habitats and biodiversity. It is about how we get the best value for nature out of all the infrastructure we provide. To get to the nub of your question, we work very closely with the Environment Agency to ensure that nature-based solutions are implemented where they are appropriate.

The Chair: Do you get enough support from Ofwat, Helen?

Helen Wakeham: Absolutely. This is an area, as with most, where we are entirely aligned. I would not say that Paul and I agree 100% on everything all the time, but we certainly do on that.

Q160 **Lord Lennie:** We have heard from water companies that Ofwat's approach to mains renewal has limited their investment into leakage. They seem to think that operating at about 20% loss is normal. That may be buck-passing and shifting the blame—I do not know. How would you respond to that criticism? To what extent will the new White Paper change investment into leakage report?

Paul Hickey: Leakage is different for different companies. In the last review, 2020-25, we saw a reduction of leakage by 16%; in this current round, we have plans to reduce that by a further 17%. There is some £700 million of enhancement expenditure, which, as I said, is baked into water resource management plans.

We have an obligation and a will to fund what is in water resource management plans. It was Anglian that raised previously the challenge on the level of funding. Part of Ofwat's role is to make sure that costs are efficient, and that is subject to a live review through the CMA process, which will conclude in March. It is more about whether the costs presented are efficient, rather than whether we should have a high ambition for leakage. We think that bearing down on leakage is really important, not just because it is an efficient use of water but because—I touched on behaviour change—we know that we will not shift the dial on people's attitude to saving water if they see water being wasted from the distribution system. It is really important for both those reasons.

Helen Wakeham: Paul picked up one of my points but, with my National Drought Group chair hat on, during the 2025 drought, companies were vigorous in responding quickly to public reports of leakages and mains bursts. That helped them in their conversations with customers about managing water wisely, but that alacrity in responding to reports of leakages and mains bursts is something that they need to bring into business as usual. It was visible during drought; they need to keep it up.

Lord Ashcombe: Are you suggesting that they were not doing it at this time of year?

Helen Wakeham: Water companies work on leakages and mains bursts all year round, but the processes they put in place in the drought year in 2025 to respond quickly were different, and that is what we need to see.

Lord Ashcombe: Is that now the level they are working at going forward?

Helen Wakeham: I cannot tell you that it is.

Lord Ashcombe: Is it not for you, Ofwat or somebody to tell them to do it? What percentage of leakage would you aim at for all companies?

Paul Hickey: There was a concept in the past of what is called the economic level of leakage. Again, this is a personal view: that perhaps introduced perverse incentives about not addressing things. We know that other parts of the world achieve much lower levels of leakage, so this is really about how we encourage innovation. We have an innovation fund on this and we are trying to encourage more ambition on leakage. Indeed, the sector itself has set a high level of ambition to achieve leakage reduction in future, so it is really important that this is something we all work collaboratively on, because, as I say, it is so important in terms of customer confidence and changing customer behaviour.

Helen Wakeham: The Environment Act set a target for leakage reduction of 50% by 2050. In the environment improvement plan, there are milestones along that journey, so that is what we expect to see.

Q161 **Earl of Leicester:** I declare my interests: I am a farmer and landowner in Norfolk. We have four reservoirs. We do winter abstraction from two rivers a mile from where they pour out to the sea. We have a number of bore-holes. Is there pressure from government on Ofwat to keep water prices low? We heard from Anglian Water that it struggled to convince Ofwat that investing in large-scale mains renewal is the way to go.

The Chair: I am sorry to interrupt. Can we park that question, because we are coming to that specifically later?

Earl of Leicester: Okay. It is a pricing issue. We also heard that Portsmouth Water renews only 1% of its mains network each year, which would not necessarily tie in with the 2050 target you talked about.

Q162 **Lord Jay of Ewelme:** I want to follow up on one thing that Paul said about leakages and the experience of other countries. The figure of 20%, which Lord Lennie mentioned, seems incredibly high. I think you said that other countries are bearing down, but do you have any sense of what percentage of leakages roughly similar northern European countries experience, and how they compare with us?

Paul Hickey: The performance across England is variable depending on different companies for historic reasons of how they have addressed leakage, but also issues around the geography they serve.

To answer your question, we probably should have taken action to follow up with more detailed information on the performance of other countries. My understanding—I caveat this with the follow-up information that our current performance is in line with many other countries—is that we obviously want to aspire to lead and learn from others. As part of that, we have an innovation fund to try to stimulate new thinking. That is very much a collaborative venture with companies and others in the supply chain, and there is a whole raft of things that we can explore there. Yes, it is about asset renewal and asset health—asset health is a topic we can come back to—but part of this is surveillance and having much more accurate information on where leaks happen.

The Chair: Do we not have that surveillance in place?

Paul Hickey: I was going to come on to that. Another thing that is going to happen over the next five years is the installation of over 10 million smart meters. That is a quadrupling of the installation of such meters in the past and will provide rich intelligence about where water is being used.

The Chair: We are focusing mostly on leakages in the public domain, not in private households.

Lord Jay of Ewelme: It would be very helpful if you could write, as you mentioned, with information on how other countries are doing so that we can get some sense of comparison.

The Chair: That would be really helpful.

Q163 **Earl Russell:** I declare my interest as a non-exec director and board member of the Water Retail Company.

In relation to leakages, 19% of potable water is lost through leakage. You have a 50% target for reduction. How confident are you of meeting that target? Do you feel that you have the regulatory tools you need to get there? If not, is there a need for more legislation, and is that planned?

Paul Hickey: My personal view is that it is not about potential regulatory tools; it is about supporting the companies on the ambition to achieve leakage reduction by spreading good practice and supporting innovation. It is a high level of ambition, but there is confidence that we will achieve it. I would be very interested to know if you have heard a contrary view; as I say, I have not personally come across a regulatory barrier to that.

Q164 **Lord Krebs:** Should the price of water, both for abstraction and in the public water supply, be reviewed to incentivise water efficiency? Just to give some context, MOSL said, "When we look at water efficiency and demand management, we often talk about the fact that there is not a price signal". Water Resources South East said, "The price of abstracted water does not reflect its scarcity". Similarly, Anglian Water said, "Because potable water is cheap, it is assumed to be the main source of water supply for new developments, even though alternative non-potable sources may be more appropriate for energy and industrial developments". So we have heard a lot of information that says water is simply too cheap, both out of the tap and abstracted. Would you like to comment on that?

Paul Hickey: We are very mindful that water bills have gone up considerably to fund the step change in enhancement expenditure that is being delivered. As a link to that, we are working with companies to extend support to those who need it. I am not sure that charging people more for water is the right way. It is much more about information. I mentioned the Water Efficiency Campaign to raise awareness both in the home and in business to encourage water-efficient behaviours. Historically, there has been quite a focus on domestic use. Something that we work quite closely with MOSL on is targeting particularly large users. When you look at industrial users, there is quite a small number of

very large users that we could be much more effective at targeting. So there is a way of encouraging efficient behaviours.

The other thing I would say is that there are some tariffs that disincentivise. Some large users have falling block tariffs; essentially, the more you use, the less you pay. Because of efficiencies of scale, it may make certain economic sense, but, clearly, that is not the right thing in terms of encouraging water-efficient behaviours.

Lord Krebs: Did I understand that—it is cheaper the more you use?

Paul Hickey: There are only a relatively small number of those, but that is just an example of something that needs to be worked out of the system; they will cease over the next few years. The headline is that we should be much more encouraging of water-efficient behaviours; equally, there is a role for tariffs, particularly in the industrial context, to encourage efficient behaviours.

Lord Krebs: I will come to you in a moment, Helen. More generally, you do not agree with the witnesses who said that we need stronger pricing.

Paul Hickey: I go back to the point that we face a cost of living crisis; bills have gone up to finance very high levels of investment, and we are very sensitive to that. There are more sophisticated ways to encourage water-efficient behaviours in that context.

Lord Mancroft: Like what?

Paul Hickey: Exactly what I described: raising awareness and connecting personal use of water to environmental impact. We have seen the great campaign that Southern Water did on connecting people's use to iconic chalk stream habitats; that really sparked a debate. It is not about telling people they cannot have showers or do things; it is about encouraging people to be mindful of how the water we extract impacts the environment.

Helen Wakeham: Just to build on that point, again, with my National Drought Group hat on, there are very strong signals that people connect the water in the tap to the water in the environment. Yorkshire Water's temporary use ban—more commonly referred to as a hose-pipe ban—resulted in a 10% reduction in water demand from Yorkshire Water customers. That is unprecedented. It is about making that connection.

On abstracting water directly for the environment not via the water companies, we also need to be mindful of the cost to some water users, particularly farmers. The basis of the charge is the regulatory service; the Environment Agency's regulatory charges are not based on the value of the water but on the regulatory effort to regulate it, if you like. We think that there is an opportunity to review the charging structure to incentivise efficient use. That may not be penalising people for using more water but perhaps incentivising people to take water when there is plenty of supply, for example. The basis of our water resources legislation is the Water Resources Act 1991, which is worded almost exactly the

same as the Water Resources Act 1963—it is 60 years old. There are opportunities to update our legislation, which would incentivise the more efficient use of water.

Lord Krebs: Paul, not now but in writing, could you send us some information about the comparative cost of water per cubic metre, both abstracted and from the public water supply, between the UK and other northern European countries?

Paul Hickey: Yes.

Q165 **Earl of Leicester:** Paul, you mentioned the cost of living crisis. Do you perceive pressure from government to keep water prices low? Does that constrain you in giving water companies larger amounts of money to fix their infrastructure?

Paul Hickey: Much of what we have been talking about in terms of water resource resilience comes through statutory planning processes. Ofwat is obliged to fund investment that is identified—be that on the supply or demand side—through price limits. The role Ofwat has is to challenge that those are efficient and the customer's interests are protected; both in terms of that the costs are reasonable and that there are mechanisms in place to return those costs to customers should they not be spent. That is a long way of saying it is not about a bill issue; it is about how we make sure that the investment that is identified is delivered efficiently.

Earl of Leicester: Do you both perceive that there is not enough work being done on the water companies' infrastructure, or do you think it is about right? It sounds like it is a little too little.

Paul Hickey: I can make two comments on that, and I am sure Helen will come in. Absolutely—over the next five years, we will be seeing a step change in enhancement expenditure, over £100 billion-worth of investment to improve both wastewater and water assets. Clearly, that shows that more needs to be done.

There was a question on asset health. That is something on which we have been working with the sector to do more, looking at how we better understand asset health and how we have forward-looking metrics to ensure that we pre-empt failures. Again, that is something we need to do more of collectively. It is signalled in the White Paper, which talks about MOT-type checks in ensuring that assets are fit for service. We have a re-opener in the current five-year period; where more investment is identified to improve asset health, that will be supported again.

Earl of Leicester: Can I follow up on that?

The Chair: Very quickly.

Earl of Leicester: It is great news that RAPID has been formed and you have 28 infrastructure projects on the go. They might take 10 or 15 years to build. What went wrong 20 or 25 years ago? Was it a lack of leadership from government? Surely there must have been people in your

organisations saying to government, “We’re going to have a water problem in half a century’s time. We need to get on and build infrastructure”. Why was no infrastructure built in the last 20 or 30 years?

Paul Hickey: Looking back, there was a lot of emphasis on smaller interventions such as improving or addressing leaks from smaller-scale interconnectors, so the deficit was met through lower cost interventions. Looking forward, we have seen two things: while we need to keep the ambition high on those sorts of interventions, new infrastructure is needed and a lot of that need is to meet the requirements of the future. We can see that the future, in restoring and protecting the environment in the face of a changing climate, will need us to reduce a lot of abstractions. That has been the driver for a lot of the big infrastructure programmes I talked about, as well as future needs both in the home and in business.

Helen Wakeham: I will be brief. On planning for investment, Natural England, the Environment Agency and the Drinking Water Inspectorate use the legislation they are responsible for to advise companies on what they are required to deliver through the price review process, and then we talk to Ofwat about how that is delivered. That is how we make the case for future investment. There is a question about asset health, as Paul has described. As the Environment Agency has stepped up its inspection of water industry assets over the last two years, in 2024-25, of 4,000 inspections, a quarter of those sites showed non-compliance, which indicates poor asset health. That is what we are on to now in terms of more inspection, compliance and understanding of what needs to be done.

Earl of Leicester: But why was nothing built 30 years ago?

Helen Wakeham: In terms of big infrastructure, it is 30 years since the 1976 drought. The thing that has changed, which is less visible than the big schemes, is, 30 years ago, there were lots of very small sources of supply and very little resilience because those supplies were not connected. Fewer larger sources and the interconnectivity has done what it needed to do until now, and it was the water resource management planning in 2024 that made the case for the investment we see coming forward now.

Baroness McIntosh of Pickering: When you say asset health, is it the age of the pipes that are over 100 years old?

Helen Wakeham: It is asset health across the water industry’s assets, in water treatment, pumps, pipes and wastewater treatment works.

Baroness McIntosh of Pickering: But they are over 100 years old?

Helen Wakeham: It is not necessarily the age but the quality of the maintenance.

Q166 **Earl Russell:** I want to ask you a question about your ongoing review of

abstraction and licensing. In particular, how do you balance the environmental impacts of abstraction with the need for water resource flexibility, and how are different water users being prioritised within that process of review?

Helen Wakeham: That is one for me because that is water in the environment. I have already said the abstraction licensing regime is from the Water Resources Act 1991. It requires us to ensure that any new or changed abstraction does not impinge on others; we need to take into account the needs of public water supply, agriculture, industry and the environment. The way the regime works is it requires us to look at four things. If somebody applies for abstraction, is the need justified? Is the water available? Are there any impacts on other users—in which case we cannot do it? Is any environmental impact acceptable?

That is the way the regime works and it has done its job but it is not particularly flexible. What we are expecting—it is in the White Paper—is that the regime will move into the environmental permitting regulations. That will mean that licences do not automatically expire, we can exempt lower-risk activities, and it gives us a lot more flexibility to review licences. I should also say that in that understanding of what water is available, since 2017 we have reviewed and revoked licences equivalent to 1.9 trillion litres of water; that is twice the water needs of London. That licence review enables us to understand when water is not being used and remove it from the licence, and that gives more certainty for what water availability is like in the future and reduces the risk that suddenly somebody will use a licence they have not used for many years.

Earl Russell: You talk about that need for greater flexibility; could you just talk a little more to that and to the ideas of more dynamic abstraction management? Then, perhaps if you are moving to that kind of process, what are the new concerns and ways that you would manage that, and maybe some advantages and disadvantages?

Helen Wakeham: There are quite a lot of questions in there. That is fine; it is really helpful. We are consulting at the moment on reserving water rights, and the way the system works at the moment is that when you want some water you apply for a permit and you can get it or you cannot.¹ That is not really good enough if we are looking ahead to the RAPID schemes: 28 big schemes, nine reservoirs. How do we ensure that the water is there for the future? We are consulting on how we would do that.

If you look at if the need is justified, the water resource management plan says that we need this for public water supply and a strategic water supply plan for other sectors; that water needs to be accounted for in critical national infrastructure planning. So we are confident that the water will be needed. Then we create a system that says this water may not be needed until 2035 and therefore in the interim we can allocate it to others. So it is quite a dynamic system.

¹ Note by witness: ‘...or cannot depending on current availability.’

Then in terms of abstraction rights for farmers, for example, how do we create a system that enables farmers to take account of things such as high water flows without an expansive permitting system? To do that, the environmental permitting regulations will work for us—they are ready to go, so that is not a big issue—but then we need the right technology to enable people to take account of that. So, “I want to take some water. Can I take some water today?” requires smart metering for a farm business, but it also requires telemetry in the environment so that we have a live understanding of what water is there. We can do it and we are on the cusp of something really exciting.

Earl Russell: What is actually, fundamentally, a simple question is actually fiendishly complicated in reality and it is an interaction of weather, floods, individuals, monitoring abstraction and monitoring groundwater resources. It is actually an interplay of lots of complex systems.

Helen Wakeham: You are exactly right: it is easy to say, difficult to do. But the opportunities around new technology—and we are investing in new tech—will enable us to do it.

Earl Russell: But the direction of travel is very much towards that more of a dynamic—

Helen Wakeham: Very much flexibility. In the same way as it is for potential abstraction charges; the intent here is to take water when it is cheap and available, which reduces the need to take it in times of water stress.

Earl Russell: That could have a role in flood management as well, I guess.

Helen Wakeham: Indeed.

The Chair: Thank you. Earl of Leicester, did you have anything left to ask?

Q167 **Earl of Leicester:** I think my question has been answered by Helen; it is very encouraging to hear that you are excited about telemetry, and that farmers and the EA and anybody else will have to have it. Certainly our experience is that it takes weeks—it is paperwork, and it is tedious—and all the time flood water, or water, is going out to sea.

Could I just ask about these adaptive plans? If I understand it, a water company wants to reserve water rights for, let us say, a new town that is planned in 15 years’ time. How is that going to work? Is the water company saying, “Fine, you can have that water in 15 years’ time, but you can’t have it in the next 15 years”? Water companies might naturally overegg the omelette a bit and say, “We’re going to need rather more than we do”. What happens to the water that is not used?

Helen Wakeham: The answer to that lies in the consultation that we are running at the moment, which runs until 16 February. What is the

evidence that you will need this water? It needs to be in your water resource management plan for public water supply. As we have described, the water resource management plans are very well evidenced, lots of options appraisal has been done, and then that scheme will be built into RAPID. So we have confidence. We do not see it as an issue of the water industry trying to take more water; we see it as an issue of making sure that the water is available when they get there.² Of course, in the meantime, there is a lot of work to do and a lot of things will change around demand and other users of water.

Earl of Leicester: Those water companies are going to want confidence themselves so they are going to ask for a little more water. We talked about pricing and we had evidence that the price of water abstracted by, let us say, a farmer is about 10 times less than that supplied by a public water supplier. But if water prices for abstraction go up then that will lead to a higher cost of root vegetables, et cetera; that is just an observation.

Q168 **Lord Rooker:** Good morning; thanks for being here. I want to ask you about the drought permit regime: how is it working, and do you think it minimises the potential damage to the natural environment? If you think it does, what can we do to reduce the delays in approvals?

I will put my supplementaries in now too: we have been told delays to approvals can be weeks or months because inquiries need to be made; we have been told the variation to an existing permit can take 12 to 18 months to approve; and, astonishingly, we were told by someone from Yorkshire Water that they physically have to deliver letters or bundles to the Post Office when they want to make changes. Bundles to the Post Office? Surely there must be better means of communication. What we have been told in terms of the delays is just impossible to get your head around. Could you explain why these occur and what is being done to get rid of them, please?

Helen Wakeham: Yes, I can. I will start with the bundles of letters to the Post Office: that is a requirement of the Water Resources Act 1991. The legislation requires an advert in a print newspaper before a drought permit or order can be approved. The answer to that is the move into environmental permitting regulations, because it is unhelpful.

In terms of the broader question about drought permitting, water companies apply for drought permits when they want to take more water from the environment than is sustainable. So the starting point is, "We want to do a thing that will damage the environment. Can we do it?" It is entirely right that we make sure we do everything we can to understand the impact of that, and that water companies discuss that impact with other users of the water, NGOs, who are impacted by it. So the aim is to issue a drought permit within 12 days; in 2025, we managed that in 28 days on average. It is not first come, first served, we do it in priority order—so who needs the drought permit first. The longest period it took was 47 days and the reason it took 47 days was because it required a

² Note by witness: '...when it is needed.'

public hearing and the water company did not put in the formal request for the permit until some way through the process. The time could appear to be extended because we are having pre-application discussions with companies, and that is a good thing. I would not want to say that it is a bad thing for companies to make their applications early.

The best way to deal with permits promptly when they officially land with us is to make sure that pre-application work has been done and the water company is confident that other sectors that are affected know about it; that enables us to determine the permit quickly. What we do to make sure that we are as flexible and brisk as we can be is, when we are in a prolonged dry weather or drought situation, we set up a standing team of permitting officers who only work on droughts. So we are very confident that we are dealing with these permits and orders as quickly as we can do.

Paul Hickey: Just to add, Ofwat is not an operational organisation in drought, but one of the things we work closely with the Environment Agency on is to ensure that companies are match fit in terms of being prepared for drought. One of the things that can slow the permitting process is if the pre-work has not been done. There is a whole raft of things in terms of environmental evidence base and stuff that can be collected in advance, to make sure that, should the need be there, the agency has the information it has. It is really working rather than reacting to things to make sure that companies are prepared, and our role is to help.

Lord Rooker: Finally, just to go back to the issue of the 1991 legislation. Even in my time in government, I remember programmes to deregulate on a block basis to modernise legislation. We obviously missed this one; physical from 1991. Surely somebody must have raised the issue that that is an unnecessary red tape with modern means of communication. Has that been pushed on the Government at all?

Helen Wakeham: We have certainly been seeking a move into environmental permitting regulations for some time, and we are very pleased to see it in the water White Paper.

The Chair: Just to pick up on Lord Rooker's point, is that process to change the legislative constraints, which seem rather unnecessary now, in train?

Helen Wakeham: Yes, it is part of the water White Paper so we would expect to see it as part of the forthcoming water bill.

The Chair: Excellent. That is something that this committee can push on and encourage; thank you, Lord Rooker.

Helen Wakeham: That will be very helpful, thank you.

Lord Mancroft: Does that require primary legislation?

Earl Russell: Are you happy with the plans as you are aware of them?

Helen Wakeham: Yes, the legislation is essentially ready to lay and slot into the new water Bill.

Baroness McIntosh of Pickering: There are some environmental permitting regulations that the Government are late with; is that completely disconnected to this? It came up with SUDS; I understand that the Minister promised to come forward with some environmental regulations, which are clearly not part of the water Bill, but is that a separate issue?

Helen Wakeham: I do not know.

Baroness McIntosh of Pickering: I will look it up.

Helen Wakeham: Yes, I am very happy to take that separately.

The Chair: Thank you; we can write to you with clarification if necessary.

Q169 **Lord Trees:** What are your roles in ensuring that there are emergency drought plans to guide the water companies, and do you think emergency drought planning is being given sufficient consideration by the Government?

Helen Wakeham: Our plans for managing drought are quite clear and well developed; they had a good test in 2025. For prolonged dry weather and drought there are always lessons to learn, but we have a good plan. We are working on emergency drought planning guidance for companies and we are working really closely with Defra and the whole sector on emergency drought planning. What we would like to do is exercise our emergency drought plans in 2026.

Lord Trees: There seems to be some passing of the buck though; who is responsible for guiding priorities when there is a drought? We have heard from some witnesses and indeed the EA that the Government ought to be providing that prioritisation. Others suggest the EA should do it, or that the EA's guidance is inadequate in terms of prioritising particularly non-household users in the case of droughts.

Helen Wakeham: The responsibilities for drought are set out in the, often mentioned in this session, Water Resources Act 1991. The responsibility for management of severe drought is with the Government. The advice to companies is in line with the Security and Emergency Measures Direction and Defra is considering now whether additional guidance on priorities is needed.

Paul Hickey: This extends really beyond the remit of Ofwat because what you are talking about is how water is allocated across different sectors. The only additional comment I would make to what Helen said is that there is a link between learning from incident response and how we plan for the future. One of the things that we collectively do is learn from those and think about how we then bring that into things like water resource management planning. One thing that will happen in the formation of the new regulator is to streamline those planning processes,

so that we have a single plan for water supply; that has real opportunities to do much more in linking source to tap so that we are connecting things like raw water quality to water availability. Again, that is something that is going to be quite different in the future about how raw water quality can potentially limit the water availability. There is a real opportunity in how we shape the future regulatory framework to strengthen it in the face of changing climate and changing needs.

Helen Wakeham: We have talked already about the national framework for water resources and bringing different sectors into the planning for the next national framework, and we have talked already about drought plans for other sectors, which would be really helpful. We are working much more closely than before with organisations such as the Canal & River Trust. Some 20% of the Canal & River Trust network was shut due to lack of water this year, so drought planning for each sector and between sectors is really important; certainly for the regional water resources groups that have been set up in the last five years. Bringing different sectors into those groups will be really important for future planning.

Lord Trees: Do you have a clear idea in a drought, for example, which non-household uses are critical for national strategic purposes and should get what water is available, and can you redirect it from the normal household supply?

Helen Wakeham: That is the piece of work that we are doing with government now.

Lord Trees: Right, okay, thank you.

Earl Russell: Just as a side issue, what kind of tabletop exercises do you do to stress test these plans against really severe drought, climate change scenarios and other kind of stuff? How are you working with others across the sector to look, under those really severe—

Helen Wakeham: Yes, I have referred already to wishing to run that exercise in 2026. We want to do a multi-sector exercise this year.

Earl Russell: Could you just say a very quick word about that exercise and what it might look like?

Helen Wakeham: It is still in the planning so I cannot give details, but my sense is that we need to do something a little more substantial than a desktop exercise. What is it that we really need to test here? Perhaps we need to do a multi-stage exercise to make sure that we are well tested. The Environment Agency is an incident responder so we are very familiar with incident exercises and incident testing and that is what we will bring to bear on this.

Earl Russell: It is good to see that is on your mind; if it is something you could write to the committee within timeframes of what you are allowed to say that would be greatly appreciated.

Helen Wakeham: Yes, that is great.

Lord Ashcombe: Have you done this sort of thing before and, if so, when was the last one?

Helen Wakeham: I cannot answer that question; do you know, Paul? Paul is the previous head of water resources at the Environment Agency.

Paul Hickey: We have done: there was one a number of years ago called Exercise Arica. That was a multi-agency, multi-sector exercise to look at an extreme event and quite a lot of learning came from that.

Lord Ashcombe: It would be quite interesting to reference that.

Paul Hickey: The way that incident response exercises are done, it is very much about learning from the last one to build that into the next.

The Chair: Thank you. Before we leave prioritisation, it is a really important question that I think both Ofwat and Environment Agency would benefit from having greater clarity on. When we are in a situation where water needs to be rationed, we need to know who is going to be deemed the most important. Now that involves political trade-offs. Do you feel as though the Government have a good handle on what is required of them, and are you having those conversations that delivery will be forthcoming?

Helen Wakeham: Yes, in fact we were talking to officials about that yesterday. So while the emergency drought planning is the responsibility of government, the Environment Agency is an incident responder, environmental planner and regulator and is working with them on that.

Earl Russell: I presume that is an interaction with you and government on that.

Helen Wakeham: Yes, with Defra.

Q170 **Lord Mancroft:** What more could you, we, or anybody, do to reduce household and non-household water demand? At the same time, would rainwater harvesting and water reuse be part of that? It has obviously been hugely effective in Belgium; I do not know why it would not work here. Do any of these measures require the legislation that you are talking about?

Paul Hickey: I previously touched on the rollout of smart meters. Over the next five years, there will be an installation of 10.4 million new smart meters across England and Wales, and that is a fourfold step increase in terms of previous levels. That offers real opportunity to not just link people's knowledge of use in the home to their behaviours, but also to offer real insight to companies. What you tend to find in a network is that there is quite a tail in water use, so there is a small number of large users. It could be because there is a leak, it could be all sorts of different reasons, and that level of insight will allow companies to much more target interventions to address those areas. That in itself, alongside the

Water Efficiency Campaign and the other measures that I spoke about, offers a real powerful lever to help shift things in water efficiency, in households in particular, but also in industrial uses.

In terms of other ways of managing rainwater and other uses, yes, we should be trying to use those where they are appropriate, and they use them in other countries. The issue to be managed there is public health and the role of the Drinking Water Inspectorate to make sure that the water that people use is still wholesome. So often those sorts of sources are used for things like flushing toilets or watering gardens, and you need to make sure there is not the risk of cross-contamination or what have you. But very much that is a live area, making sure that we are doing that. Stepping back, we should not be using tap water to water gardens and what have you, as long as there are appropriate controls and we are happy around that—

Lord Mancroft: What do we need to do to make that happen? Do we need changes in the law? Is that part of the White Paper and the Bill? What else could happen?

Paul Hickey: There is a live area, particularly with the Drinking Water Inspectorate, that is being explored to make sure that those changes are done in a way so that public health is maintained. That is more something that the Drinking Water Inspectorate is directly involved in; I know there is live work to free up any issues in regulation, but maybe that is something we need to come back to you with in more detail.

Helen Wakeham: I have more. There is quite a lot in train: the Government's water efficiency label is imminent, and standards for appliances. There is also a consultation on building regulations reform; there is a little more that could be done there because the way the building regulations currently work around water efficiency is a sort of modelled approach for a house and a simple calculator as to how water efficiency has been applied. There are opportunities to make that more specific: have a fittings approach, so more evidence as to how a new property will manage its demand. There is something we can do outside household use, which is mandatory water reporting for high water users. For example, where are the water efficiency plans and the sector plans for high users of water? We would like to see smart metering everywhere. I do not think that means we need to mandate it, but we could encourage universal water metering.

In terms of rainwater harvesting, we know that techUK is actively looking at rainwater harvesting for data centres, for example, which would make a huge difference.

Then finally, I am going to put my National Drought Group hat on for one last time: the communication and engagement we do with the public when the weather is dry helps us to manage demand when it is not. After a successful approach in 2025, the National Drought Group is now looking at comms and engagement for drought and dry weather; a much more multi-sector approach that will bring in the water industry, horticultural

trades, Canal & River Trust, farming groups, Angling Trust, and all that helps us to build much more enthusiasm in the public for demand management.

Baroness McIntosh of Pickering: Just two quick points: are we using more potable water for purposes such as washing cars than any other country? Why have successive Governments been so resistant to introduce efficiency labelling and the standards on appliances to which you referred? Is it a cost issue to the householder?

Paul Hickey: On the first question, I genuinely do not know. We have high ambition for water efficiency. We have introduced a number of measures in terms of smart metering, ramping up the deployment of that, and the Water Efficiency Campaign. I mentioned the £100 million that is going to raise awareness and encourage water-efficient behaviour. I am very happy to take away an action on that.

Baroness McIntosh of Pickering: We spend so much making it so clean for drinking, and then we go and use it for other purposes that really are nonsensical.

Helen Wakeham: The picture across the world is very mixed. The picture of how people understand how people use water in Cape Town, for example, is necessarily very different to the way it is here; we will find a very mixed picture across the world. Water efficiency labelling is coming in now, and it was very interesting to see the water efficiency measures being applied in Cambridge to facilitate more growth in Cambridge. The Government's articulation of that was, "This is good for people, this will save these households £200 a year." So the story around water efficiency is changing, and those messages about it being good for the environment and good for people are really powerful.

Q171 **Earl Russell:** I could not help but notice your diplomatic language: "A little more could be done around these issues". I do not want to speak for the committee, but certainly I agree with you: it seems to me that grey water and recycling systems, both domestically and for industry, are not completely forgotten but policy has not really properly joined up across government, if you compare it to warm homes or other things like that. Do you think there is more that really should be done, particularly retrofitting, having joined-up policy across government for retrofitting homes and for having perhaps greater conditions on industry so that certainly part of their use should be recycled or harvested from rainwater systems? Would you like to see more joined-up policy across government?

Paul Hickey: Helen will come back on those specific points. There is a broader issue: I touched on the 12 projects we have to look at water recycling. Sorry, did you want me to stop?

The Chair: Yes, I did not want a broader issue; I just wanted a concise answer.

Paul Hickey: I mentioned the 12 water recycling projects that we have; there is a huge opportunity to extend that further, and I really see those as sort of trailblazers. The broad picture here is how we diversify the sources of water that are not rainfall dependent. So that is a really important part of our climate resilience toolkit.

Helen Wakeham: That cross-sector approach and that broad approach to water planning is really necessary. The water White Paper sets out a plan for water supply and water environment. That systems approach will really help us, and the events in 2023 and 2025 have certainly brought much more interest across government into water as part of our national infrastructure. That cross-sector planning and engagement is starting to happen, and we can see that, for example, in government funding for farmers to join the regional water resources groups, and other sectors joining the national framework. So yes, we need to do more of it, but yes, I am confident that we have started.

Q172 **Lord Ashcombe:** I will just follow on from that to a degree, where Lord Mancroft started with rainwater harvesting and water reuse. Obviously, the Government have a massive plan to build houses, as we all well know, and a lot of them are not going to be singly—individual—which you talked a little about earlier, but they are going to be in great clusters: housing estates, villages, towns, what have you. With the rainwater harvesting, if it is put in at the very start of the project, it is going to be a hell of a lot more efficient than trying to retrofit, and retrofitting is a nightmare at best. Do you think that should be now in the planning of these new conurbations?

Paul Hickey: I will express a personal view on that: we should put water management at the heart of those developments, particularly when some developments are in water-stress parts of the country. We can do that through sustainable systems and making homes and businesses water efficient, because not only is that good for the environment but otherwise we risk the need for expensive infrastructure. So my personal view is, yes, we should be making these new developments highly water efficient. As I say, done creatively, water in that way can be a real asset in terms of amenity, biodiversity and what have you.

Lord Ashcombe: Who makes that happen?

Baroness McIntosh of Pickering: We need to implement Schedule 3 of the 2010 Water Act, perhaps.

Earl Russell: Future home standard.

Lord Ashcombe: I did not quite get the answer to that.

The Chair: How do we make that happen?

Lord Mancroft: How do we make all these things happen?

Baroness McIntosh of Pickering: Could we get it on the record, Helen? Would it help if we implemented Schedule 3 of the 2010 Water and Flood

Management Act?

Helen Wakeham: Yes, it would help. In terms of how we make it happen, principally it is through building regulations. You would expect me as a water specialist to agree with the point that water management should be at the heart of everything, but I am mindful of the cost for a domestic property of having two sets of drainage systems, and it is not for the environmental regulator to mandate that and to force that to happen. But the consultation on building regs is live at the moment, so there is an opportunity to make the case.

Lord Mancroft: During the evidence you have given us in the last half hour or so, you have mentioned a lot of things that should be done, could be done, or we should be doing: why are we not doing it? Do we need changes in the law? Is it because government are not driving this? Why can we not get the various different things you have mentioned going?

Helen Wakeham: I suppose my observation is that this inquiry is happening at a time when a lot of things are happening: the RAPID schemes are getting off the page and spades in the ground, which is hugely positive; the Government approach to growth and taking water need into account in enabling growth to happen in Cambridge, as I have just mentioned, is really happening. The thing that will most help us is that expectation that other sectors do water planning too. The water industry has statutory water plans and that attracts attention, but actually 61% of our abstracted water is for public water supply; the other 39% is not. So what are our plans and how do we firm up our plans for water that is not going into public water supply?

Q173 **The Chair:** Thank you very much for being so generous with your time; before I let you go I wonder if I could ask you to write to the committee on something that we have not addressed at all in this session, but which came up in a very early session? Countries such as France have a lot of data on the impact of drought on houses, on important public infrastructure, roads, transport and hospitals as well. I noticed in your joint evidence that you sent to us in writing, you ask in Recommendation 8 that, "The Natural Environment Research Council and other organisations should start a new comprehensive research programme to aid future drought response". One of the key areas that you mention is drought impact capture. That is presumably referring to the sort of data that I outlined previously that seems to be lacking within the UK. How important do you think it is in terms of measures that the country needs to take to mitigate the impacts of future severe drought occurrences?

Helen Wakeham: I will write because the answer to the question is not a short one. But we know—we have touched on it already—some impacts of drought. There were 996 wildfires in 2025; that is not a record that we want to break. We know that 500,000 hectares of special sites were affected by drought; that is more than half of them. But that comprehensive, better understanding of the impacts would really help us to plan for future drought and make the case for future infrastructure.

The Chair: Yes, it is a serious omission in our data knowledge. Excellent, thank you very much; we are really looking forward to receiving that. And with that, I close the public session of today's meeting and thank you both very much again for your evidence.